Beyond the bank: Income irregularity and women's preference for village community banking—the mediating role of perceived flexibility

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https://doi.org/10.51867/scimundi.5.2.12

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ABSTRACT

Women in Tanzania's informal economy continue to be excluded from the formal financial sector due to a number of factors, primarily income irregularity and the inflexibility of formal financial structures. This paper explores the influence of women's income irregularities on their preference for informal financial institutions like Village Community Banks (VICOBA) and whether perceived financial product flexibility mediates this relationship. The study is based on institutional theory and is concerned with alignment between institutional design and user behaviour. A quantitative cross-sectional study design was used, which included a sample of 403 women aged 20-55 years in Tanzania from three regions: Dodoma, Mwanza, and Mbeya. Study participants were selected by multistage sampling to ensure representation across a wide range of informal economic activities, including farming, trading, and micro-entrepreneurship. Data were collected using structured questionnaires, which included three general constructs: income irregularity, perceived flexibility and preference for VICOBA over formal (formal credit) finance. SmartPLS 4.0 software was used for the analysis of Partial Least Squares Structural Equation Modelling (PLS-SEM). Analysis showed that all hypothesised relationships were statistically significant. Irregularity of income was found to be an important factor influencing women's preference for VICOBA and also determined perceptions of perceived flexibility. Perceived flexibility added another positive contribution to the preference for VICOBA. Mediational analysis supported the partial mediation of perceived flexibility in the relationship between income irregularity and preference for VICOBA, supporting complementary partial mediation. The results emphasise the role of institutional design, and especially flexibility, for the financial behaviour of women with irregular incomes. VICOBA emerges as a rational institutional choice based on the structural and cognitive needs of women in the informal economy. To better serve the financial needs of women, formal financial institutions need to reconceptualise products to reflect income irregularity and incorporate elements of flexibility. Bringing VICOBA and other women's financial institutions into the financial mainstream as legitimate business enterprises would help bridge the gap between formal finance and the economic realities of rural women.

Keywords: Income Irregularity, Institutional Theory, Perceived Flexibility, Tanzania, Women's Preference, VICOBA

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I. INTRODUCTION

Financial inclusion has become an important global development priority. It allows poor individuals to access financial services. These include savings, credit, and insurance. Access to finance can help people invest. It also helps them cope with shocks (Elda et al., 2024; Tay et al., 2022). Financial inclusion is shaped by gender dynamics, as access to financial services often reflects broader patterns of social and economic inequality between genders. Women face more financial exclusion than men. This is especially true in the Global South, where financial exclusion results from many factors. These include cultural norms and social expectations. Women often lack financial assets. They also have irregular income. These barriers reduce both access and demand (Pomerai, 2024; Zogning, 2022). Informal finance has emerged to bridge these women's financial inclusion gaps. These systems provide accessible, trusted, and community-based platforms for saving and borrowing, helping women who are excluded from formal banking due to a lack of collateral, documentation, or social constraints (Phil-Ugochukwu, 2024; Simba et al., 2024).

In Tanzania, one of the most prominent informal models is VICOBA. These are rotating savings and credit associations. VICOBA allow members to save and take loans. Members usually come from the same community. They trust each other. The model is flexible and simple. VICOBA are popular among women. Especially those with unstable income. Many women work in farming or petty trade. Their income is not fixed. This makes it hard to access formal loans. Banks demand regular income and documents. VICOBA fills this gap (Kimiti, 2024; Msambichaka, 2015).

VICOBA offers flexibility, social connection, and accessibility. These make it an attractive alternative to formal banks. Members decide on savings rules. They set loan terms together. This flexibility fits the lives of informal workers. Women use VICOBA to save. They also borrow for business or emergencies. Trust replaces collateral. Group pressure ensures repayment. This helps reduce default. The system is inclusive. It works even without formal IDs. For women, it offers dignity and control (Luvinga, 2025; Magali & Barhe, 2022).

Despite the availability of formal services, women continue to prefer informal institutions. The key reason may be income irregularity. Many women earn from small, informal activities. Their income varies by season or demand. Banks require fixed deposits and repayment. Irregular income makes this hard. VICOBA adjusts to members' income flow. Women feel more comfortable with it. It reduces financial stress. It allows them to meet goals. This is crucial for financial resilience (Oranu et al., 2020). Another key factor is perceived product flexibility. This is the belief that financial products can adapt. Flexibility includes features like grace periods and irregular payments. Women value these options. They help manage income gaps. Formal institutions are often rigid. They penalize late payments. They may block defaulters. VICOBA allows negotiation. It tolerates small delays. Women perceive this as understanding. It increases their satisfaction. They feel seen and supported (Luvinga, 2025).

The decision to prefer informal institutions may not be due to financial exclusion alone. It may be a rational and informed choice. Institutional Theory helps explain this. Institutions shape human behaviour. They do so through formal and informal rules. Formal finance favours salaried earners. Informal finance suits people with unstable work. VICOBA fits this context. It reflects users' realities. It serves their actual needs (Nguyen & Canh, 2020). That is why it is popular among Tanzanian women. Digital financial services are expanding fast. Mobile banking has reached many unbanked people. However, digital platforms largely still exclude women. Many, especially in rural areas, lack phones or internet access. Others struggle with digital literacy. Some platforms mimic formal systems. They demand regular repayments and a credit history (Elouardighi & Oubejja, 2023; Mpofu, 2023; Nzilano & Magoti, 2025). Informal female workers often cannot meet these terms, and therefore, financial exclusion persists. Digital finance is not a full solution. It must address the real needs of low-income women.

Perceived flexibility may also play a mediating role. It may explain how income irregularity leads to institutional preference. Women with irregular income may see banks as rigid. They expect rejection or penalties. They then seek flexible alternatives. VICOBA offers that flexibility. It becomes the preferred choice. This phenomenon is not solely driven by necessity. but due to perception. This perception shapes behaviour. It connects structural exclusion to actual choices (Afolabi & Akinlolu, 2021). Many studies on financial inclusion focus on income level. See, for example: Flores (2025); Gharbi and Kammoun (2023); Inoue (2024).None of these studies explored income irregularity. The focus was on how much people earn, rather than how stable or predictable their earnings are, which is the case under VICOBA, especially for rural women. Moreover, even fewer studies on financial inclusion examine informal institutions, such as VICOBA. Yet these are vital in many communities (Kamran & Uusitalo, 2024; Phil-Ugochukwu, 2024). Ignoring these concerns limits a better understanding. Such a one-size-fits-all approach limits generalizability.

This study aims to fill the gaps. It examines how income irregularity affects the preference for informal institutions. It also examines the mediation role of perceived flexibility. It tests the Institutional Theory in the study context. The findings can support inclusive design. They can guide better policy for the underserved population, in this case, rural women.

1.1 Statement of the Problem

Access to savings, credit, and insurance has been identified as a global development priority to enhance resilience and investment opportunities (Elda et al., 2024; Tay et al., 2022). Nevertheless, according to cultural norms, the absence of collateral, and especially unpredictable sources of income, women in Tanzania remain underrepresented in formal financial systems (Pomerai, 2024; Zogning, 2022). Banks and online services require consistent revenues and strict repayment terms, which cannot be met by many women in the informal sector. This leads them to resort to informal institutions like Village Community Banks (VICOBA), which offer flexible and trust-based and community-oriented financial solutions that are congruent with their volatile income (Kimiti, 2024; Luvinga, 2025). Even so, the literature related to financial inclusion often focuses on income levels or the overall access to finance without taking into account how income irregularity affects it and how informal institutions play a central role (Flores, 2025; Kamran & Uusitalo, 2024).

This is a critical gap since the disregard of income irregularity and mediating role of perceived flexibility constrains the design of inclusive financial systems. The flexibility, i.e., the possibility to negotiate repayments or manipulate contributions, is the reason why women can make the rational choice in favor of informal institutions instead of strict formal ones (Phil-Ugochukwu, 2024; Afolabi & Akinlolu, 2021). Unless these realities are tackled, formal institutions are likely to continue to maintain structural exclusion and not address the needs of women in the informal sector. Thus, the research project aims to respond to the question: How do income irregularity affect the choice of informal financial institutions, such as VICOBA, by women in Tanzania and what is the role of perceived flexibility in mediating the relationship between income irregularity and preference of informal financial institution?

1.2 Research Hypotheses

Ho1: Income irregularity has a positive effect on women's preference for VICOBA over formal financial institutions.
Ho2: Income irregularity has a positive effect on the perceived flexibility of VICOBA financial products.
Ho3: Perceived flexibility of VICOBA financial products has a positive effect on women's preference for VICOBA over formal financial institutions.
Ho4: The perceived flexibility of VICOBA financial products mediates the relationship between income irregularity and women's preference for VICOBA over formal financial institutions

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Institutional Theory as a Framework

Institutional Theory offers a broad framework for understanding how social structures, rules, and norms affect the decision-making process and organizational behavior of individuals. First developed by sociologists such as Scott and Christensen (1995The theory argues that human behaviour is not only influenced by economic rationality but also by the institutional context - formal and informal systems that determine what is "appropriate" behaviour in particular contexts. In the financial sector, this means institutions (e.g., banks, savings groups) organize access, rules and interactions in ways that affect user participation based on perceived legitimacy, efficiency and alignment with personal circumstances. This study makes use of Institutional Theory by Scott and Christensen (1995) in a dual sense, i.e., studying the effects of formal institutions (banks) imposing rigid rules based on assumptions of financial regularity and stability, and the effects of informal institutions (VICOBA) as adaptive responses to institutional misalignment, especially for women with irregular income. The theory helps to explain not only the exclusion of women from the financial sector, but also why women see VICOBA as a more legitimate and trustworthy financial option.

2.2 Empirical Review

2.2.1 The Influence of Income Irregularity on Women's Preference for VICOBA over Formal Financial Institutions

Institutional Theory posits that when formal structures do not meet the needs of marginalized groups, alternative institutions are developed to meet the gap. Women with income irregularity because of informal employment, seasonality or the burden of care also frequently become structurally excluded from access to a formal finance system. These systems require predictable income, fixed repayment terms, and formal identification, which are unsuitable for women's lived realities (Elda et al., 2024). As per Institutional Theory, such structural misalignment weakens the legitimacy and perceived usefulness of formal institutions and drives users towards more congruent structures such as VICOBA. In this context, VICOBA is an informal institution, based on social norms, trust and enforcement by the community. These attributes fit more closely with the income patterns and socio-cultural context of Tanzanian women, and are therefore a preferred alternative. Thus, income irregularity, through the lens of institutions, does not only mean that a financial barrier exists, it becomes a catalyst for institutional preference reconfiguration (Gajijime, 2023).

Ho1: Income irregularity has a positive effect on women's preference for VICOBA over formal financial institutions

2.2.2 The Role of Income Irregularity on the Perceived Flexibility of VICOBA Financial Products

Institutional Theory (Scott & Christensen, 1995) posits that informal institutions are more adaptable because they are less bound by legal formalism and more responsive to contextual norms. For women with irregular incomes, VICOBA's community-driven structure translates into high perceived flexibility. They can defer payments, vary savings, or negotiate terms. This is an institutional behavior that is rare in commercial banking (Elda et al., 2024). From a theoretical standpoint, this adaptability enhances institutional legitimacy in the eyes of income-insecure women. As women experience exclusion from formal systems, their appreciation of flexible systems deepens, leading them to attribute higher value to VICOBA's responsiveness (Phil-Ugochukwu, 2024).This strengthens the institutional feedback loop where structure (income irregularity) shapes perception (flexibility), which in turn influences behavior.

Ho2: Income irregularity has a positive effect on the perceived flexibility of VICOBA financial products

2.2.3 The Link between Perceived Flexibility of VICOBA Financial Products and Women's Preference for VICOBA over Formal Financial Institutions

Institutional Theory's normative pillar argues that individuals prefer institutions that align with their values, routines, and realities. Flexibility becomes a normative criterion: financial products that accommodate unpredictability are seen as more "appropriate" or trustworthy. In this light, perceived flexibility in VICOBA products enhances institutional legitimacy and encourages behavioral alignment. This perspective explains why even when formal institutions are physically accessible (e.g., through mobile banking), women still prefer VICOBA. The decision is not just logistical—it is institutional. VICOBA is seen as a legitimate financial actor because its structure reflects users' constraints and adapts accordingly (Elda et al., 2024; Kimiti, 2024).

Ho_3: Perceived flexibility of VICOBA financial products has a positive effect on women's preference for VICOBA over formal financial institutions

2.2.4 Mediation Role of Perceived Flexibility

Institutional Theory considers both structure and agency. This is useful for conceptualising the idea that women's structural constraints (irregular income) affect their subjective perceptions of those constraints (flexibility), which in turn influences behavioural choices (institutional preference). The cognitive pillar of the theory argues that individuals interact with institutions in light of the way they internalize institutional rules and expectations. Perceived flexibility, therefore, works as a cognitive mediator hence translating structural income irregularity into institutional trust and selection behavior. This mediation is consistent with theoretical perspectives reflecting the importance of users' perception in maintaining institutional legitimacy. Even if formal systems are technically accessible, low perceived adaptability affects their legitimacy, and users turn to institutions that are apparently more responsive. VICOBA, being an institution based on the adaptive social norms, benefits from this cognitive trust mechanism (Phil-Ugochukwu, 2024).

Ho_4: The perceived flexibility of VICOBA financial products mediates the relationship between income irregularity and women's preference for VICOBA over formal financial institutions

III. METHODOLOGY

3.1 Research Approach and Design

This study is of a quantitative, cross-sectional research design and follows a deductive research design in testing the derived theoretical hypotheses on the mediating role of perceived flexibility in the relationship between income irregularity and women's preference for VICOBA over formal financial institutions. The quantitative method is suitable in light of the statistical focus on the relationships between latent constructs, such as perceived product flexibility and institutional preference (Ahmed et al., 2024).A cross-sectional design allows for the efficient collection of data at one point in time for a demographically diverse population, which could be used for mediation analysis with structural equation modelling. The deductive approach permits the empirical testing of Institutional Theory in the Tanzanian informal finance context, linking the theoretical assumptions with the practical observations.

3.2 Study Area and Population

The research was carried out in three different areas of Tanzania (Dodoma, Mwanza and Mbeya). They are strategically chosen so as to represent their combination of urban, peri-urban, and rural demos. Urban, peri-urban and rural areas have a wide variation in access to financial services. Urban centers often have superior financial infrastructure whereas peri-urban and rural areas are faced with more barriers, including distance, lower digital literacy, and fewer formal institutions. Peri-urban areas are populated by a significant proportion of the population and frequently serve as a link between the urban and rural economy, although they suffer from service gaps. Rural areas are particularly underserved, with women more likely to use informal financial mechanisms and to be excluded from formal financial service delivery (Adewoyin et al., 2022; Cattaneo et al., 2021; Liu et al., 2021). Rural areas represent various levels of access to financial services and have large populations of women who are engaged in informal income-generating activities, including farming, trading, and micro-entrepreneurship.

The study population included women who were between 20 and 55 years of age and were actively involved in the informal sectors of the economy. This age group was chosen because of its great participation in household financial management and its susceptibility to income irregularity - issues that are of paramount importance in the development of financial behavior (Alemu et al., 2021; Islam et al., 2022).Targeting women within this cohort is also harmonious with the design of VICOBA, which historically targets the women who are excluded from formal finance.

Participants were recruited from a variety of socio-economic backgrounds in order to increase generalizability. The population consisted of those who were members of existing VICOBA groups, self-employed women and informal vendors. This varied choice allows for more insight into the relationship between income irregularity and product flexibility across varied informal economic realities.

3.3 Sampling and Sample Size

In the current study, a multistage stratified random sampling technique was used. First, the selection of the three regions, Dodoma, Mwanza and Mbeya, was made purposively as they are characterized by a high prevalence of VICOBA activity and women's engagement in informal sector employment (Kimiti, 2024).Within each region, administrative wards were stratified by economic activity (i.e., markets, farming, microenterprises). Women were then randomly selected from within each stratum, using local VICOBA group rosters and informal sector lists.

While there are claims in some sources that PLS-SEM works fine for smaller samples, there seems to be a growing consensus that bigger samples (e.g., 200-400+, or more) are better for robust mediation analysis with multiple latent constructs and indirect paths. This is particularly the case when seeking generalizability and replicability in research findings (Hair & Alamer, 2022; Jhantasana, 2023). Based on this, a sample of 420 participants was targeted for possible dropouts or invalid entries. After data cleaning, 403 valid responses remained for final analysis. 403 responses is a sample size with ample statistical power for bootstrapped mediation analysis and enough for complex models involving multiple constructs and mediation pathways.

3.4 Data Collection Methods

Data were gathered with a structured, self-administered questionnaire, which was developed on the basis of validated instruments, modified for the Tanzanian informal finance context. The questionnaire covered four main constructs: (1) income irregularity, (2) perceived flexibility of financial products, (3) usage of VICOBA, and (4) preference over formal financial institutions. Items were measured with a Likert scale of 5, expressing respondents' agreement with economic statements related to income regularity, perceived flexibility and VICOBA preference.

The questionnaire had been based on and relied on previous work to ensure reliability and validity, including the instruments. Piloting was carried out amongst 30 respondents in Morogoro to ensure clarity and cultural relevance.

A dual-mode data collection strategy was utilized. To reach those respondents who have limited digital literacy, enumerators carried out surveys on paper at VICOBA meetings, market centres, and community groups. Second, online surveys (Google Forms) were sent via women's financial empowerment WhatsApp groups and community leaders. This hybrid approach ensured the best reach among digital and non-digital populations (Elda et al., 2024).Moreover, A dual-mode data collection strategy that combines physical and online surveys enhances response rates, better demographic coverage and data quality as both modes will capitalize on the advantages of each and reduce the limitations of using only one (Guzman et al., 2021; Shino et al., 2022).

3.5 Data Analysis

The collected data have been cleaned, coded and entered into SmartPLS 4.0 for statistical analysis. Missing values, outliers and skewed distributions were resolved by data preprocessing. This increases the quality of data, reduces bias and improves the accuracy of models (Vinisha & Sujihelen, 2022). The analysis followed a two-stage PLS-SEM process as recommended by Hair et al. (2021). First is the measurement model evaluation. Constructs were tested for internal consistency using Composite Reliability (CR), convergent validity using Average Variance Extracted (AVE) and discriminant validity using the Fornell-Larcker criterion and HTMT ratio.

Secondly, there is Structural Model Evaluation, where the Direct and indirect effects were tested by bootstrapping (5,000 resamples). Path coefficients were calculated to determine the strength of the model. The mediation hypothesis (perceived flexibility mediating the link between income irregularity and VICOBA preference) was tested using indirect effect significance testing.

The use of PLS-SEM is justified because of the model's emphasis on latent constructs, non-normal data distribution, and ability to test complex mediation pathways in small-to-medium sample sizes.

IV. FINDINGS & DISCUSSION

4.1 Demographic Characteristics of Respondents

The study involved 403 women in total from three regions in Tanzania, namely Dodoma, Mwanza and Mbeya. These were selected because of their diversity of informal economic activities and strong presence of VICOBA groups. These respondents came from a broad range of socio-economic and educational backgrounds, providing insights into the influence of income irregularity and perceived product flexibility on financial behavior in a real-world informal finance setting.

The mean age of respondents was 38.5 years (SD = 8.2) with ages ranging from 20 to 55 years. This age range represents a financially active and economically involved female population, many of whom are the decision-makers for household budgeting, business investment and informal savings.

In terms of educational attainment, a plurality of the women had undertaken undergraduate education (40.45%) and diplomas (25.81%), indicating moderate to high levels of education among the participants. Secondary education was 21.34%, primary education was 10.42% which reflected a strong representation from different levels of education. It is interesting to note that only 1.99% (n=8) of the respondents mentioned that they had completed postgraduate studies, so while most people were literate and economically competent, few had further advanced academic exposure.

The economic roles of the participants were diverse and dominantly informal. The highest percentage (40.20%) was active members of VICOBA, so the leading segment of the research in question. Additionally, 22.58% were self-employed women, often with small-scale businesses, 18.62% were casual laborers and 12.02% were mainly informal traders. An extremely small number of the respondents reported being unemployed (6.95%), so we can say that the majority of the participants in the research were economically engaged and financially active.

This demographic profile represents a sample not only that is relevant for the analysis of financial inclusion in Tanzania, but also is a strong foundation for exploring the behavioral dimensions of financial decision-making among women who face income irregularity. Their varied experiences with education and informal employment confirm the importance of assessing the role that institutional design, especially product flexibility, plays in mediating the use and preference for financial services.

Table 1

Demographic Characteristics of Respondents

Variable	Category	Mean (SD)	Range
Age (years)		38.5 (8.2)	20-55
		Frequency	**Percent**
Education Level	Primary	42	10.42%
	Secondary	86	21.34%
	Diploma	104	25.81%
	Undergraduate	163	40.45%
	Postgraduate	8	1.99%
Economic Role	Member	162	40.20%
	Self-employed	91	22.58%
	Casual laborer	75	18.62%
	Trader	47	12.02%
	Unemployed	28	6.95%

4.2 Measurement Model Assessment

The reliability and validity of the reflective measurement model were examined by following the guidelines of Hair et al. (2021). This assessment ensured that each latent construct: Income Irregularity, Perceived Flexibility and VICOBA Preferences was measured reliably and validly through respective indicators.

Indicator reliability was initially investigated by assessing the standardized outer loadings. All items had loadings well above the recommended threshold of 0.70, indicating good item reliability and good representation of the underlying latent variables. Specifically, loadings for Income Irregularity (IR1-IR4) were between 0.947 and 0.989, for Perceived Flexibility (PF1-PF4) between 0.906 and 0.949 and for VICOBA Preferences (VP1-VP4) between 0.967 and 0.971. These values support the fact that each indicator is a strong reflection of the associated construct.

To test the reliability of internal consistency, both Cronbach's Alpha and Composite Reliability (CR) were used. All constructs scored above the conservative level of 0.70, with Income Irregularity resulting in a Cronbach's alpha (α) of 0.876, CR of 0.878; Perceived Flexibility, $\alpha = 0.850$, CR = 0.852; VICOBA Preferences, $\alpha = 0.878$, CR = 0.879. These results confirm high internal consistency, meaning that the items within each construct are measuring the same concept.

Convergent validity was examined by using Average Variance Extracted (AVE), which is the degree to which a construct is related to the variance that is explained by error variance. All AVE values were greater than the 0.50 benchmark, while Income Irregularity = 0.734, Perceived Flexibility = 0.698 and VICOBA Preferences = 0.721, which showed that all the constructs explained more than 50% variance in their indicators - thus confirming satisfactory convergent validity (Hair et al., 2021).

Finally, discriminant validity was determined by using the Heterotrait-Monotrait Ratio (HTMT). All HTMT values were below the conservative threshold of 0.90, which would suggest that the constructs are empirically distinct from one another and not measuring overlapping concepts. This serves to reinforce the conceptual independence and theoretical clarity of the model dimensions. Taken together, these results support the psychometric properties of the measurement model across all latent constructs. This validation helps provide a sound basis for interpreting the structural relationships tested in the next phase of the analysis.

Table 2
Measurement Model Summary

Latent Variable	Indicator	Loading	AVE	Composite Reliability	Cronbach Alpha	HTMT<0.9
Income Irregularity	IR1	0.989	0.734	0.878	0.876	Yes
	IR2	0.947				
	IR3	0.961				
	IR4	0.969				
Perceived Flexibility	PF1	0.906	0.698	0.852	0.85	Yes
	PF2	0.933				
	PF3	0.942				
	PF4	0.949				
VICOBA Preferences	VP1	0.969	0.721	0.879	0.878	Yes
	VP2	0.971				
	VP3	0.969				
	VP4	0.967				

4.3 Structural Model Evaluation
4.3.1 Direct Path

The structural model was evaluated to test the hypothesized relationships between the latent constructs: Income Irregularity (IR), Perceived Flexibility (PF) and VICOBA Preference (VP). Path coefficients (β), t-statistics, and p-values were estimated using bootstrapping with 5,000 resamples; these estimates follow guidelines by Hair & Alamer (2022).

Hypothesis H1, which posited that income irregularity has a positive effect on perceived flexibility, was supported. The path coefficient from IR to PF was $\beta=0.319$ indicating a moderate and statistically significant relationship. Hypothesis H2, which predicted a positive direct effect of income irregularity on VICOBA preference, was also supported. The IR →VP path resulted in a strong coefficient of $\beta = 0.557$ Hypothesis H3 which hypothesized that perceived flexibility would positively influence VICOBA preference, was also confirmed. The PF → VP path yielded a coefficient $\beta = 0.223$. These results confirm that all direct hypotheses were statistically significant and in the direction expected.

Table 3
Summary of Direct Effects

Path (Hypothesis)	β (Path Coefficient)	T-Statistic	P-Value	Decision
IR → PF (H1)	0.319	5.97	<.001	Supported
IR → VP (H2)	0.557	9.42	<.001	Supported
PF → VP (H3)	0.223	4.78	<.001	Supported

4.3.2 Mediation Role of Perceived Flexibility

The study also tested Hypothesis H4, which proposed that perceived flexibility mediates the relationship between income irregularity and VICOBA preference. Mediation was assessed using a bootstrapping procedure (5,000 resamples). The results are summarized below.

Table 4
Mediation Results

Path	Effect Type	β (Effect Size)	T-Value	p-Value	Mediation Decision
IR → PF → VP	Indirect	0.171	4.31	<.001	Significant Mediation
IR → VP (Direct)	Direct	0.557	9.42	<.001	Remains Significant

The indirect effect of income irregularity on VICOBA preference through perceived flexibility was statistically significant ($\beta = 0.171$, T= 4.31, $p < .001$), while the direct effect also remained significant ($\beta = 0.557$, T = 9.42, $p < .001$). According to Hair et al. (2021), this pattern indicates complementary partial mediation, where both the direct and indirect paths are significant and move in the same direction.

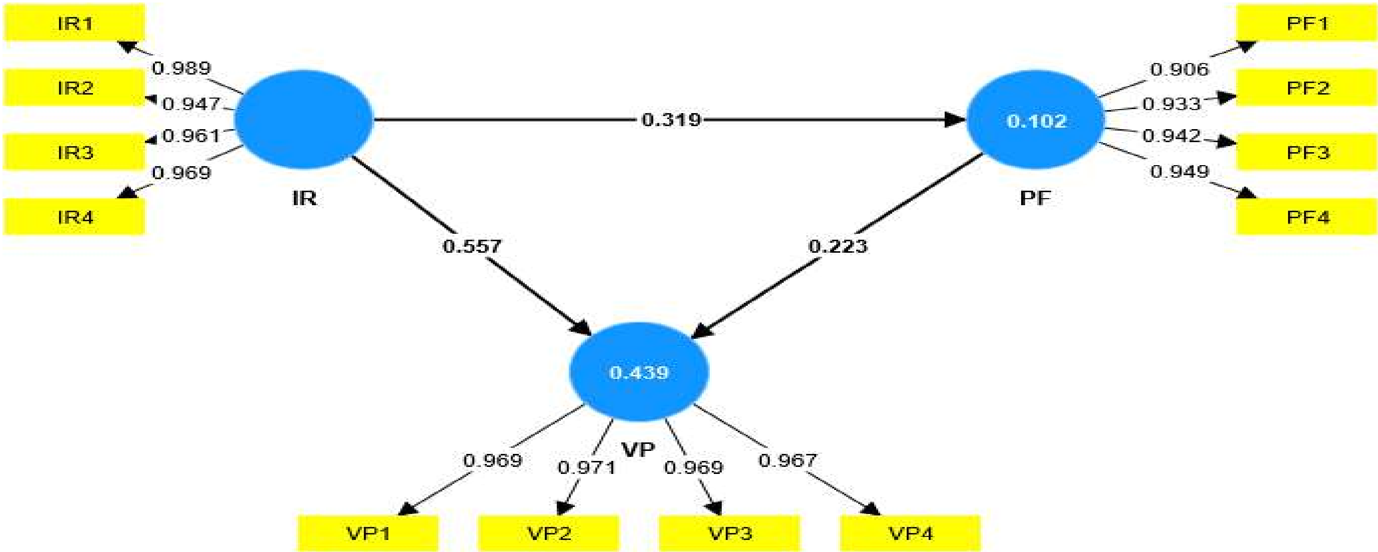

Figure 1
Path Model Results

4.4 Discussion

The results from this study support the proposed conceptual model that income irregularity and perceived flexibility by institutions are important predictors of women's financial behaviour, especially when it comes to informal financial systems such as VICOBA in Tanzania. All four hypotheses were supported, providing empirical evidence and a theoretical contribution to the understanding of the interplay between structural income conditions and perceptions of product design to construct women's financial preferences.

The positive relationship between income irregularity and perceived flexibility seems to emphasize the ways in which the character of irregular income patterns shapes institutional perceptions. This is in line with Institutional Theory, which states that users judge the institutions in terms of how well they are structured in accordance with lived realities. Women who earn income through informal, seasonal or casual labour tend not to view formal financial institutions as accessible or responsive. Instead, they perceive informal mechanisms such as VICOBA, where repayment can be negotiated, savings can be paused, and peer relationships govern accountability as more flexible and trustworthy. This finding is congruent with studies of Elda et al. (2024 and Phil-Ugochukwu (2024) which shows that income irregularity is associated with greater reliance on adaptable, community-based financial systems.

The direct impact of income irregularity on VICOBA preference adds further to the view that formal financial structures, with their rigid eligibility criteria and inflexible repayment models, are ill-suited to women in the informal economy. This is particularly true in Tanzania, where land ownership, formal employment, and access to credit histories are often not easily accessible to the majority of women. The findings of the study confirm that exclusion from formal finance is not only a question of distance or awareness, but a structural mismatch between income realities and institutional design. VICOBA fills this institutional gap by providing a participatory, trust-based model that reflects women's social and economic lives. This argument was echoed by Kimiti's (2024) study on Tanzanian SMEs.

The positive role of perceived flexibility on VICOBA preference shows the importance of institutional design in shaping financial behavior. Perceptions that a financial system can accommodate financial shocks, allow for flexible contributions and engage users in a respectful way are critical in driving participation. Women are mainly driven to join VICOBA because of the flexible loan repayment terms, accessibility and affordability. This flexibility implies that members are able to save, access credit and invest in income-generating activities without the rigid requirements that are associated with formal financial institutions. Flexibility in loan disbursement and repayment helps in sustaining participation and engagement since VICOBA is a preferred choice for women seeking financial inclusion and empowerment (Luvinga, 2025).

Finally, confirmation of perceived flexibility as a mediator between income irregularity and VICOBA preference provides for a more layered understanding of the decision-making process. While structural constraints such as income instability are clear drivers of women's disengagement from formal finance, it is women's perception of the flexibility of alternative systems that turns this constraint into behavioral choice. This supports the complementary partial mediation model, in which both the direct structural driver (income irregularity) and the perceptual mediator (flexibility) have significant influences on behavior. This is a reflection of what Institutional Theory (Scott et al.,1995) calls a dual logic of institutional choice, where decisions are affected by both structural constraints and cognitive assessment of legitimacy and fit.

Taken together, these results stress the interplay between economic structure and institutional perception on women's financial behavior in Tanzania. They suggest expanding financial inclusion for women requires more than access to formal services. It requires rethinking how institutions are designed so that they fit the realities of income volatility, caregiving responsibilities, and the structure of social trust networks. The results also weigh up the case for a revaluation of informal systems such as VICOBA, not as interim solutions, but as legitimate financial institutions in their own right. They are adaptive, inclusive and deeply embedded in local realities.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

This study aimed to investigate the effect of income irregularity on preference for VICOBA by women, with special attention given to the mediation effect of perceived flexibility of financial products on women's preference for informal financial systems such as VICOBA in Tanzania. The findings provide relevant empirical and theoretical insights as to how structural income patterns and institutional design features interact to influence financial decision-making among women in informal economies.

The study confirmed that income irregularity is a significant predictor of women's choice for VICOBA, thus confirming that women with unstable and inconsistent income streams are more likely to shun formal financial institutions for informal systems, which they perceive as more adaptable. This supports the claim that financial exclusion is not only a question of access but of structural incompatibility; formal institutions often cannot accommodate the financial rhythms of women in informal, seasonal or precarious employment.

Further, the analysis showed that the perception of flexibility is positively affected by the irregularity of income. Women who are inconsistent in their earnings are more sensitive to institutional responsiveness and value products that provide for negotiated repayment, intermittent saving, and community-based enforcement. This relationship underlines the significance of institutional perception in financial choices, particularly in circumstances where trust and adaptability are essential.

The study also showed that perceived flexibility directly improves women's preference for VICOBA. As a result, women who perceive the VICOBA products as flexible are more likely to use these systems in place of rigid, formal ones. This finding reinforces the role of design-centred financial inclusion - that the structure and delivery of financial products matter as much as whether it is available.

Importantly, the study confirmed that perceived flexibility partially mediates the relationship between income irregularity and VICOBA preference, providing a better understanding of how structural realities translate into financial behavior. While income irregularity is a direct driver for women to turn to informal institutions, this effect is explained better when women see those institutions as responsive to their financial conditions. This pattern of complementary partial mediation suggests behavior is shaped by both structural exclusion and by the cognitive assessments of institutional fit.

The contribution of the study to the theory and practice is to validate a structure-perception-behavior framework grounded in Institutional Theory (Scott & Christensen 1995). It affirms the fact that exclusion from formal finance is not only due to the level of income but also to how institutions are perceived in terms of adaptability and accessibility. For practitioners and policy makers, these findings speak to the need to design gender sensitive financial systems which respond to the realities of income irregularity, particularly among women in the informal sector.

In the Tanzanian context, where many women are economically active but are structurally excluded, VICOBA emerges as not necessarily a fallback but a preferred institution. They are trusted, adaptive and socially embedded. Enhancing financial inclusion, therefore, requires more than extending formal infrastructure; it requires recognition and integration of informal systems that already operate with high levels of legitimacy, flexibility, and alignment to users.

5.2 Recommendations

In light of the findings of the study, there are a few important recommendations that arise for improving women's financial inclusion and the institutional responsiveness in Tanzania. First, formal financial institutions should question the design of their products to reflect more the realities of irregular income among women in the informal sector. Flexible repayment schedules, seasonally adjusted loan products, and customized savings plans are essential to accommodate the unpredictable income flows that characterize a lot of women's work in agriculture, trading, and casual labor. Such adjustments would make substantial contributions to the perceived legitimacy and accessibility of formal financial services for women.

Second, there is an urgent need to appreciate and incorporate VICOBA as a valid part of the national financial ecosystem. These informal financial systems have proven to be not only adaptive, but socially embedded, leading them to be highly relevant for women who value flexibility, trust and a shared responsibility. Policymakers and regulators should seek to support VICOBA through capacity-building programmes, digital innovations and light-touch regulation that protects their informal strengths and enhances transparency and resilience.

Third, financial literacy initiatives should broaden the scope to include awareness of product-level characteristics such as repayment leniency, contribution flexibility and peer-based enforcement. By emphasising these attributes, women will be better able to make informed choices between formal and informal options, based not only on access, but on institutional fit. Further, financial service providers, including fintech platforms, should partner with women's groups to co-develop digital financial products with the same relational flexibility of VICOBA and increased accessibility through technological tools. Solutions like mobile group savings, voice-activated planning tools or peer-guaranteed lending apps hold great promise, as long as they are co-designed for the end users.

Fourth, national financial inclusion frameworks should go beyond accessing account ownership and instead include indicators that measure the degree to which products are perceived as flexible, trustworthy and responsive to users. This would better represent an accurate representation of functional inclusion, especially for populations that are navigating structural and socio-cultural barriers. Lastly, it is critical to include VICOBA leaders, community finance champions, and grassroots women's networks in policy development and reform processes. Their lived experiences and contextual knowledge can provide practical understandings of what flexibility looks like in the daily financial management process and how institutional reform can be better suited to women's needs.

Collectively, these recommendations call for a move away from top-down, access-based models of inclusion to a participatory, gender-sensitive approach that prioritises flexibility, trust and user alignment. By building institutional adaptability into the heart of financial systems, Tanzania can get closer to achieving meaningful financial inclusion of its most economically active, yet historically excluded demographic (women) in the informal economy.

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