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CAJAS DE AHORRO INFORMAL COMO ALTERNATIVA DE INCLUSIÓN FINANCIERA EN EL CANTÓN LA MANÁ, ECUADOR

INFORMAL SAVINGS GROUPS AS A FINANCIAL INCLUSION ALTERNATIVE IN LA MANÁ CANTON, ECUADOR

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RESUMEN: La presente investigación tiene como objetivo principal evaluar la contribución de la caja de ahorro y crédito familiar "Familia Unida" como modelo alternativo de inclusión financiera frente a las barreras del sistema financiero formal, mediante un análisis socioeconómico en el cantón La Maná, provincia de Cotopaxi, durante el período 2021–2025, esta indagación permitió determinar que el acceso limitado al crédito continúa representando uno de los principales obstáculos para la inclusión financiera en las zonas rurales, situación que ha favorecido el desarrollo de mecanismos comunitarios de ahorro y préstamo basados en la cooperación y la confianza entre sus integrantes, esta investigación se desarrolló bajo la estrategia metodológica de estudio de caso integrando información obtenida mediante un censo aplicado a los 19 socios activos, entrevistas semiestructuradas y el análisis de los registros administrativos y financieros correspondientes al período 2021–2025. La evidencia documental permitió constatar un funcionamiento financiero estable, respaldado por aportaciones acumuladas de USD 11.210,00, ingresos por intereses de préstamos de USD 8.679,51 e ingresos complementarios de USD 5.182,90, lo que permitió mantener un valor USD 2.311,84 resultado de la diferencia entre los ingresos complementarios y los egresos registrados" además los datos de las encuestas coinciden con estos resultados reflejando una valoración favorable en cuanto a la rapidez en el acceso al crédito, flexibilidad de las condiciones de financiamiento y el modelo de gestión sustentado en la confianza mutua, estos hallazgos sugieren que las cajas de ahorro informal pueden complementar la oferta del sistema financiero formal en contextos rurales al reducir las barreras de acceso al crédito, pero su sostenibilidad dependerá del fortalecimiento de la gestión administrativa, del control interno y de mecanismos que contribuyan a consolidar su funcionamiento a largo plazo.

Palabras clave: barreras financieras, capital social, cajas de ahorro, economía popular y solidaria, inclusión financiera, microfinanzas comunitarias

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ABSTRACT: The main objective of this research is to evaluate the contribution of the "Familia Unida" family savings and credit group as an alternative model for financial inclusion against the barriers of the formal financial system, through a socioeconomic analysis in La Maná canton, Cotopaxi province, during the 2021–2025 period. This inquiry determined that limited access to credit continues to represent one of the primary obstacles to financial inclusion in rural areas—a situation that has fostered the development of community-based savings and loan mechanisms rooted in cooperation and mutual trust among members. The study was conducted using a case study methodological strategy, integrating data obtained through a census applied to all 19 active members, semi-structured interviews, and the analysis of administrative and financial records covering the 2021–2025 period. Documentary evidence confirmed a stable financial operation, supported by accumulated contributions of USD 11,210.00, loan interest income of USD 8,679.51, and supplementary income of USD 5,182.90, resulting in a net balance of USD 2,311.84 from the difference between supplementary income and recorded expenditures. Furthermore, survey data align with these results, reflecting a favorable assessment regarding the speed of credit access, the flexibility of financing terms, and a management model based on mutual trust. These findings suggest that informal savings groups can complement the formal financial system in rural contexts by reducing barriers to credit access; however, their long-term sustainability will depend on strengthening administrative management, internal control, and consolidation mechanisms.

Keywords: financial barriers, social capital, savings banks, popular and solidarity economy, financial inclusion, community microfinance

INTRODUCTION

Financial inclusion is widely recognized as an essential component of sustainable economic development, because it facilitates access and effective use of financial services under adequate conditions of cost, opportunity and security(1,2). Various studies have indicated that greater financial inclusion contributes to improving the economic resilience of households, reducing their vulnerability to adverse events and strengthening financial stability, particularly during periods of crisis and economic recovery (3,4).

Having a formal financial system does not guarantee that the entire population can access its services on equal terms. For example, in rural areas and in economies with high levels of informality, barriers persist related to documentary requirements, credit history, required guarantees, costs associated with financing and the times required for loan approval(5); These limitations mainly affect households with variable incomes and small businesses, for which timely access to credit constitutes a determining element for the development of their economic activities(4,6).

In Ecuador, various initiatives have been promoted aimed at strengthening the popular and supportive financial system, but gaps in access to financing are still observed, especially in rural territories and in sectors with low levels of economic formalization

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according to the Central Bank of Ecuador (7), a significant part of the population still faces difficulties in obtaining credit through traditional mechanisms, a situation that has favored the development of community forms of savings and loans adapted to the economic and social characteristics of each locality. (8.9).

Within these alternatives, community-based family savings banks stand out, whose operation is based on the cooperation, trust and self-management of their members, allowing financial resources to be mobilized through simpler procedures and with fewer administrative demands than those observed in traditional financial institutions. Various studies indicate that these experiences constitute a practical manifestation of the principles of the popular and solidarity economy and represent a financing option for communities where the supply of formal credit is limited (10).

Beyond facilitating access to credit, the permanence of these organizations depends on their ability to adequately manage the resources they manage with a timely recovery of loans, transparency in financial management, risk management and the existence of reliable administrative records are aspects that directly affect their sustainability. operations.

Although the literature recognizes the contribution of savings banks to financial inclusion, there are still limited studies that integrate documentary evidence of their financial performance with the perception of their own members to jointly analyze their functioning and sustainability in small-scale community organizations, making it difficult to understand how these mechanisms respond to financing needs in rural contexts and what their contribution is in the face of the restrictions of the formal financial system (11–14).

Under this context, this research was developed with the objective of evaluating the financial and socioeconomic performance of the family savings bank "Familia Unida" and analyzing its contribution as an alternative for financial inclusion in the face of the limitations of the formal financial system in the canton of La Maná, using a case study with a mixed approach that integrated the review of the administrative and financial records corresponding to the period 2021–2025. This analysis allowed us to examine the evolution of the contributions, the income derived from credit activity, the administration of resources and the perception of the participants regarding the functioning of the system. Unlike research focused solely on the perception of participants or on isolated financial indicators, this study integrates documentary information, financial records and perception of members to offer a characterization of the operation of a community savings bank from a socioeconomic and financial perspective.

MATERIALS AND METHODS

The research was developed under the methodological strategy of case study, because the main interest consisted in understanding in depth the functioning of a community savings and credit organization within its real context, according to Yin (15) mentions that this design is pertinent when the phenomenon analyzed cannot be separated from

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the conditions in which it occurs and when it is required to integrate different sources of evidence, in addition Stake (16) points out that the case study allows understanding particular social processes rather than obtaining statistical generalizations, in addition the research is complemented with a scope descriptive-explanatory, integrating quantitative and qualitative information used in the analysis of financial performance and the contribution of a family savings bank as a mechanism of financial inclusion, with respect to the documentary component, a retrospective field and observational study was carried out with longitudinal analysis of the administrative and financial records generated between February 2021 and December 2025. In addition, information on the perception of the participants was collected through a non-experimental design applied to all the active members of the organization.

The present study was carried out in the canton of La Maná, province of Cotopaxi, Ecuador, taking as reference the family savings bank “Familia Unida”, made up of 19 active members who are the total of the samples obtained in the information collection process, respecting the ethical principles applicable to these studies, for which the 19 active members were informed about the objectives of the research, the academic nature of the study, the exclusive use of the information with scientific purposes and their right to participate voluntarily, obtaining the informed consent of all participants, with regard to the documentary analysis of the administrative and financial records of the savings bank “Familia Unida”, there was authorization from those responsible for the organization, these data were processed in an aggregate manner, under confidentiality criteria during all stages of the study without individually identifying the partners or disclosing personal or economic information that would allow their recognition.

The collection of information was developed with three complementary techniques, first a structured survey was carried out applied to the members, using a five-level Likert-type scale (1 = strongly disagree and 5 = strongly agree), with the purpose of evaluating the dimensions of accessibility to credit, perceived costs, trust between members, preference for the community system and socioeconomic impact, second was to apply semi-structured interviews aimed at those responsible for the administration and members with greater participation in the management of the organization, in order to understand aspects related to operational functioning. decision making, resource management and system sustainability and third was the documentary analysis of the administrative and financial records generated by the savings bank during the period between February 1, 2021 and December 31, 2025, examining records of monthly contributions, normal and emerging credit operations, internal payment vouchers, interest records, financial balances, complementary income and administrative minutes related to the approval and monitoring of financial operations. The cut-off date for the information corresponded to December 31, 2025, the closing date of the financial year analyzed. It is also noted that the surveys and interviews were carried out between January and February 2026, once the administrative closing of the 2025 financial year had concluded and the financial information used in the study had been consolidated.

To guarantee the traceability and consistency of the information, a documentary extraction matrix was prepared in which all the financial variables used in the study were

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systematized. The data were then subjected to a cross-verification process between the contribution records, the registered cash movements, the credit records and the interest income. It is also important to emphasize that the interest income was recorded in accordance with the administrative information of the organization and the individual values were not necessarily uniform among the partners, because their distribution responded to the criteria established in the internal regulations and the decisions adopted by the assembly of the savings bank, these identified differences were contrasted with the original documentation and verified together with the administrative managers of the organization, emphasizing that only the information supported by documentary records was incorporated into the analysis, while the data that could not be verified documentary was excluded from the analysis.

The variables analyzed included the contributions of the partners, the interest income generated by loans, the complementary income, the organization's expenses and the perception indicators related to accessibility to credit, trust, perceived costs, preference for the community system and socioeconomic impact, with the purpose of integrating into a single indicator variables expressed in different units of measurement, previously a normalization process was carried out using the Min–Max method. This procedure transforms each variable to a dimensionless scale between 0 and 1, preserving the relative differences between observations and allowing direct comparison between indicators of a different nature with the following formula, where Xi is the value of the indicator, Xmin is the minimum value recorded, Xmax is the maximum value recorded, and is the normalized value. $X_i^* = \frac{Xi - Xmin}{Xmax - Xmin}\ X_i^*$

Once the variables were normalized, the Socioeconomic Efficiency Index (IESE) was obtained through the simple arithmetic average of the normalized indicators that allowed the comparison between the community system and the formal financial system, which was obtained through the simple average of the three normalized indicators considered in the study: accessibility to credit (0.89), perceived costs (0.83) and socioeconomic impact (0.87). Each dimension was previously normalized on a scale between 0 and 1 and subsequently added using a simple arithmetic average, according to the following expression: , where Yi represents the normalized value of each dimension and n corresponds to the number of variables incorporated in the index. This procedure allowed the quantitative information to be synthesized into a comparable indicator of the socioeconomic performance of the community model. It should be noted that the simple arithmetic average was chosen because there was not enough empirical evidence to assign differentiated weights between the analyzed indicators. Under these conditions, it was assumed that all the dimensions evaluated contributed the same relative importance to the socioeconomic performance of the savings bank. Furthermore, this procedure has been widely used in the construction of composite indicators when objective criteria are not available to establish specific weights.$I\ ESE = \frac{\sum_{i}^{n=1} Yi}{n}$

Regarding the processing of the quantitative information, it was carried out through descriptive statistics, using absolute frequencies, percentages, means and standard deviations to summarize the information obtained in the surveys and in the financial

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records. The qualitative information was analyzed through thematic coding, grouping the testimonies into categories related to accessibility to credit, trust, administrative management, organizational functioning and financial sustainability. To validate the results, methodological triangulation was applied between the documentary information, the results of the survey and the semi-structured interviews. The reliability of the questionnaire was evaluated using Cronbach's Alpha coefficient, obtaining a value of 0.958, an indicator of a very high internal consistency between the items used to measure the dimensions of the study. Finally, the research respected the ethical principles applicable to studies with human participation, guaranteeing the informed consent of the participants and the confidentiality of the information provided.

RESULTS

3.1 Financial structure and operational basis of the system

The records obtained show that during the period 2021–2025 the savings bank maintained a constant participation of 19 active members, generating accumulated values of USD 11,210.00 in reference to contributions and a total of USD 25,072.41 of resources managed throughout the period analyzed.

Table 1. Consolidated movement of managed resources (2021–2025).

Concept	Value (USD)
Partner contributions	11.210,00
Interest on loans	8.679,51
Complementary income	5.182,90
Managed resources	**25.072,41**
Amount placed in credits	24.350,00
Administrative and social expenses	2.871,06
Surplus complementary income	2.311,84

Source: Own elaboration based on the individual contributions and interest records of the "Familia Unida" savings bank.

Interest income presented a variable behavior, increasing from USD 456.00 in 2021 to USD 2,711.11 in 2024 and decreasing to USD 1,813.55 in 2025. These records allow us to describe this annual variation, although they do not contain sufficient information to individually identify the effect of the number, amount or term of the loans granted.

Table 2. Annual evolution of partner contributions and interest income generated by loans (2021–2025).

Year	Active members	Annual contributions (USD)	Interest income (USD)	Annual total (USD)
As of February 2021	19	2.090,00	456,00	2.546,00
2022	19	2.280,00	1.435,07	3.715,07
2023	19	2.280,00	2.263,78	4.543,78
2024	19	2.280,00	2.711,11	4.991,11
2025	19	2.280,00	1.813,55	4.093,55
Total	—	**11.210,00**	**8.679,51**	**19.889,51**

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Source: Own elaboration based on the individual contributions and interest records of the "Familia Unida" savings bank.

It is noted that the partners' contributions and interest income represented USD 19,889.51, constituting the main source of financial resources for the savings bank.

3.2 Complementary income and expenses

During the period 2021–2025, the complementary income of the savings bank was USD 5,182.90, coming mainly from raffles, contribution certificates and fines for late payment registered by the organization. In the same period, expenses reached USD 2,871.06, corresponding to social and mortuary aid, integration activities, acquisition of uniforms and administrative expenses.

Table 3. Complementary income, expenses and annual balance of the savings account, 2021–2025.

Year	Complementary income (USD)	Expenditures (USD)	Annual balance (USD)
2021	961,50	833,53	127,97
2022	1.011,90	613,00	398,90
2023	1.031,50	355,00	676,50
2024	1.024,00	380,00	644,00
2025	1.154,00	689,53	464,47
Total 2021–2025	**5.182,90**	**2.871,06**	**2.311,84**

Source: Own elaboration based on the records of complementary income and expenses of the "Familia Unida" savings bank.

According to the data in table 3, at the end of the 2025 fiscal year, the organization records a net remainder of the social fund of USD 2,311.84, which exclusively covers operational planning, integration activities and mortuary aid. This item is independent of the Operating Capital Fund (Savings and Interest), which is analyzed in a consolidated manner to safeguard the total assets of the partners."

It should be noted that due to the informal and self-managed nature of the 'Familia Unida' savings bank, the administrative records do not have a statement of financial position under international accounting standards, even so the reconciliation of cash flows executed in this investigation demonstrates a Net Equity of USD 22,201.35 at the end of 2025, given that the recovery rate of the credit portfolio was 100% at the end of each year, this total capital does not represent a loss or expense, but rather constitutes the available liquidity of the organization accumulated for the benefit of its 19 associates."

Table 4. Expenditures by type of expense of the "Familia Unida" savings bank, 2021–2025.

Type of discharge	2021	2022	2023	2024	2025	Total
Social aid	100,00	300,00	220,00	200,00	200,00	1.020,00
Mortuary aid	0,00	0,00	100,00	50,00	10,00	160,00
Integration activities	668,53	173,00	0,00	100,00	0,00	941,53
Uniforms and institutional identity	0,00	110,00	0,00	0,00	115,00	225,00
Administrative expenses	65,00	30,00	35,00	30,00	364,53	524,53
Annual total	**833,53**	**613,00**	**355,00**	**380,00**	**689,53**	**2.871,06**

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Source: Own elaboration based on the expenditure records of the "Familia Unida" savings bank.

The expenditure structure shows that social aid represented the main accumulated component, with USD 1,020.00, followed by integration activities, with USD 941.53. Administrative expenses amounted to USD 524.53 over the five years. The composition of the expenditures confirms that a relevant part of the complementary resources was allocated to social and organizational purposes, in addition to administrative functioning.

In relation to the financial indicators, the Operational Self Sufficiency (OSS) formula was adapted, which is calculated using the formula. Due to the community and informal nature of the organization studied, the Operational Self Sufficiency indicator was adapted considering only the income generated by the financial activity and the expenses actually recorded in the administrative books. It was not possible to incorporate provisions for portfolio at risk or external financial costs because the organization does not maintain third-party financing or record accounting provisions in accordance with the regulations applicable to the formal financial system. Based on the formula, operating income was used, the sum of interest generated by the loans (USD 8,679.51) and complementary income from raffles, contribution certificates and fines for late payment (USD 5,182.90), which together totaled USD 13,862.41. The administrative and social expenses recorded during the same period (USD 2,871.06) were considered operating expenses, reaching an approximate value of 4.83 (483%), which indicates that the income generated by the organization was sufficient to broadly cover its operating costs during the analyzed period. $\boldsymbol{OSS} = \frac{\boldsymbol{ingresos\ operativos}}{\boldsymbol{gastos\ operativos}}$

3.3 Evolution of the credit portfolio and recovery

The analysis of the credit activity of the "Familia Unida" savings bank during the period 2021-2025 reveals a trend of accelerated growth in the placement of resources, as seen in Table 5, the number of loans granted annually quintupled, going from 3 operations in 2021 to 15 in 2025, reflecting proportionally in the total amount lent per year, which started at USD 900.00 and reached USD 10,550.00 at the end of fiscal year 2025. Regarding the late fees collected, they showed a decreasing behavior in relative terms, decreasing drastically from 4.17% in 2021 to 0.22% in 2024, experiencing a slight rebound at 0.43% in 2025. This dynamic suggests a maturation in the internal control and compliance mechanisms on the part of the partners as the organization consolidated over time.

Table 5. Evolution of loans granted and late fees (2021–2025).

Year	Credits	Capital placed	Interest generated	Total Default	Recovery (%)
2021	3	900	456,00	37,5	100
2022	7	1500	1.435,07	53,9	100
2023	11	4500	2.263,78	22,5	100
2024	14	6900	2.711,11	15	100

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2025	15	10550	1.813,55	45	100

Source: Own elaboration based on the administrative records of the "Familia Unida" savings bank.

According to the reviewed administrative records, all the credits granted during the period were recovered at the close of each financial year. Therefore, the organization did not record a past-due portfolio outstanding as of December 31, 2025. It also presents a total of 50 credits granted with a total value of USD 24,350.00 and a total of USD 8,679.51 of interest generated

3.4 Comparison of access conditions to credit between the savings bank and the formal financial system

Based on the information collected through interviews with the main cooperatives and banks of La Maná and through the operating records of the "Familia Unida" savings bank, differences were identified in the conditions of access to credit between both systems. The main differences are related to the approval time, the documentary requirements, the guarantees required, the costs associated with the credit and the degree of flexibility during the credit process. granting.

Table 6. Comparison between formal financial system and savings bank.

Variable	Formal financial system	Family savings bank
Interest rate	11.25% – 22% annually	1% – 2% monthly
Approval time	5 – 8 days	1 – 3 days
Requirements	≥ 5 documents	Simplified documentation and internal validation between partners
Guarantees	Mortgage or guarantor	Solidarity guarantee based on trust and commitment between partners
Additional costs	(receipts, insurance, contributions)	Fixed contribution of 1% according to the amount
Flexibility	Low	High

Source: Own elaboration based on information collected in local financial institutions and the administrative records of the "Familia Unida" savings bank.

The results show that the main difference between both models lies in the mechanisms of access to credit because formal financial institutions require documentation, guarantees and previously established evaluation processes, the savings bank bases the approval of loans on mutual knowledge between partners, the trust built within the organization and compliance with internal agreements.

3.5 Characteristics of the credit offered by the formal financial system

The review of the credit conditions given by local financial institutions allowed us to identify that the minimum financing amount corresponds to USD 1,000, with minimum terms of 12 months and annual interest rates between 11.25% and 22%, recording an average of 16.09% also approved times ranged between 5 and 8 days, with an average of 5.5 days. Additionally, average accessory costs of USD 87.07 were identified,

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equivalent to 8.71% of the requested amount, mainly associated with insurance, mandatory contributions and other administrative charges.

Table 7. Conditions and accessory costs of credit in the formal financial system.

Indicator	Result
Minimum observed amount	$1000
Minimum observed term	12 months
Annual interest (min–max)	11.25% – 22%
Average annual interest	16.09%
Approval time (min–max)	5 – 8 days
Average approval time	5 days
Average accessory costs (individual credits)	$87.07
Average accessory costs over the amount	8.71%
Range of accessory costs (individual)	4.5% – 13%
Range of accessory costs (group)	0.7% – 24%

Source: Own elaboration

The results show that in addition to the interest rate, formal credit incorporates complementary costs that increase the effective cost of financing. In individual credits, these costs represented on average 8.71% of the requested amount, while in group products a greater variability was observed, with values between 0.7% and 24%. These differences reflect the heterogeneity of the credit policies applied by the financial institutions included in the study.

3.6 Comparison of financing scenarios for a loan of USD 1,000

With the purpose of illustrating the differences in the cost and conditions of access to financing, a credit scenario of USD 1,000 with a term of 12 months was compared, using information collected from the "Familia Unida" savings bank, from the Grupo Solidario product of the Bank Pichincha and the Futuro Lamanense Savings and Credit Cooperative. The comparison considered the total amount paid, the approval time, the documentary requirements and the type of guarantee required for each financing alternative.

Table 8. Comparison of a $1000 loan for 12 months.

Concept	Savings bank	Group Solidario Banco Pichincha	Cooperativa Futuro Lamanense
Amount requested	1000	1000	1000
Deadline	12 months	12 months	12 months
Nominal rate	2% monthly	depending on product	depending on product
Total payment	1144,68	1275	1350

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Monthly fee	94.56 + contribution = 95.39	—	—
Approval time	1–3 days	5–8 days	5–8 days
Guarantee	Trust	Mutual trust between the members of the group	Guarantor with financial solvency

Source: Own elaboration based on information collected from the "Familia Unida" savings bank, Cooperativa Futuro Lamanense and Banco Pichincha.

Table 6 shows that the total cost of financing continues to be lower in the savings bank, while maintaining advantages related to the speed of approval and the reduction of documentary requirements, indicating that the main strength of the community model does not lie solely in the interest rate, but in the combination of accessibility, operational flexibility and lower costs associated with the process of obtaining credit. The comparative simulation of the credit was prepared using the financial simulator used by the "Familia Unida" savings bank itself, based on an amortization scheme with monthly installments, a nominal rate of 2% per month and an additional contribution of 1% annually destined to strengthen the social fund of the organization. This contribution does not constitute a financial interest, but rather an internal capitalization mechanism approved by the partners.

3.7 Member perception results

The survey applied to the 19 members shows a broadly favorable assessment of the functioning of the family savings bank in all the dimensions evaluated. These scores reflect a positive perception regarding the accessibility of credit, trust among the members, the costs associated with financing and the impact generated on the family economy.

Table 9. Aggregate results of members' perception of the functioning of the savings bank.

Dimension	Medium	Dev. Standard	Index (0–100)	Interpretation
Credit accessibility	4.56	0.42	89.0	Very favorable
Perceived costs	4.32	0.48	83.0	Favorable
Trust between partners	4.72	0.36	93.0	Very high
Financial preference	4.40	0.51	85.0	Favorable
Socioeconomic impact	4.48	0.45	87.0	Very favorable
Overall average	**4.50**	**0.44**	**87.5**	**Highly favorable**

Source: Own elaboration

The trust dimension between partners obtained the highest rating (mean = 4.72), which shows the importance of cooperative relationships and collective commitment as elements that support the functioning of the organization, thus explaining that the approval of loans can be carried out through mechanisms of mutual trust, reducing the

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need for formal guarantees. Regarding accessibility to credit, it reached an average of 4.56, indicating that participants perceive an agile, flexible financing process with fewer administrative requirements than those observed in the formal financial system.

In relation to the socioeconomic impact, the average obtained (4.48) demonstrates that the members' perception is that the family savings and credit model has contributed to strengthening their savings capacity, meeting unforeseen economic needs and improving their financial stability.

The dimensions financial preference (4.40) and perceived costs (4.32) also presented favorable evaluations, which confirms that the participants consider the savings bank as a competitive alternative to the formal financing options available in the canton, in general the perception reached 87.5 points out of 100, reflecting a broadly favorable evaluation of the operation of the organization and the benefits perceived by its members.

The documentary results and the information obtained through the survey show a high coherence between the financial performance of the organization and the perception of its members, thus evidencing the high levels of trust, accessibility and satisfaction with the operation of the community model. The high internal consistency of the questionnaire ($\alpha = 0.958$) supports the reliability of the results obtained based on the normalized dimensions of accessibility, perceived costs and socioeconomic impact. The Socioeconomic Efficiency Index (IESE) reached a value of 0.86, a result that summarizes the favorable assessment of the performance of the community model by its members.

DISCUSSION

The administrative records of the “Familia Unida” savings bank show that during the period 2021–2025, accumulated contributions reached USD 11,210.00 and interest income amounted to USD 8,679.51. alone, it does not allow us to affirm that the organization has achieved financial sustainability given that; The permanence of community savings systems depends on multiple factors, including portfolio recovery, membership stability, quality of governance, and administration of financial resources (17,18). The complementary income amounted to USD 5,182.90 and the expenses totaled USD 2,871.06, with an accumulated difference of USD 2,311.84. This result corresponds only to the difference between the complementary income and the recorded expenses, without representing a comprehensive financial balance. The distribution of expenditures shows that USD 1,020.00 were allocated to social aid and USD 941.53 to community integration activities, reflecting that the organization fulfills social functions in addition to facilitating savings and access to credit, a characteristic characteristic of popular and solidarity economy organizations described by Dávila Pinto et al. (19) Hidalgo Romero et al. (12), who point out that these entities direct part of their resources to strengthening collective well-being and social cohesion.

The partners' responses support the information obtained in the administrative records, emphasizing that trust reached the highest average rating, followed by accessibility to credit and the perceived socioeconomic impact, demonstrating that social capital

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constitutes one of the main assets of the organization. Salinas Vásquez et al. (10) identified similar results in Ecuadorian cooperatives, where trust between members reduces risk perception and facilitates credit management. Dávila Pinto et al. (19) maintain that solidarity finance strengthens local development processes through cooperative relationships between its members, while Hidalgo Romero et al. (12) highlight that the popular and solidarity economy preserves management mechanisms based on the participation and co-responsibility of the partners. The positive assessment expressed by the participants represents a perception of the organization's functioning and not a direct measurement of the economic impact generated. The absence of formal procedures to evaluate the payment capacity and document the recovery of the portfolio constitutes an aspect that can be strengthened, especially if the number of financial operations or the number of associates increases.

The savings bank has more agile approval processes, fewer administrative requirements and greater proximity between those who request and approve loans, conditions that favor the financial inclusion of people with difficulties accessing the formal financial system (20). Karim et al. (4) point out that community financial organizations reduce access barriers through internal evaluation mechanisms based on direct knowledge of the applicants. Ozili (5) maintains that financial inclusion depends on both the availability of services and the ease of access and the costs associated with the financing process. The Central Bank of Ecuador (7) and Sierra Lara et al. (8) recognize that popular and solidarity economy organizations play a relevant role in expanding access to credit for sectors traditionally excluded from the financial system. The monthly nominal rate of 2% applied by the savings bank may appear higher than that offered by some financial institutions when expressed in annual terms; However, the effective cost of the credit is also conditioned by the amortization system, the required guarantees, additional charges and the time required to complete the approval process. These transaction costs can represent a greater economic burden than the interest rate itself for liquidity-constrained households (4–6,21).

The results obtained correspond to an organization made up of 19 partners, where the closeness between the participants favors the monitoring of agreements and compliance with financial obligations. An increase in membership to 50 or 100 partners would modify the current operating conditions and would require more structured administrative processes, standardized procedures for credit evaluation, stronger internal controls and supervision mechanisms that guarantee transparency in the management of resources. The evidence presented by Aganze et al. (17), Atahau et al.(22) and Mamun and Várallyai (18) indicates that the permanence of community financial organizations depends on the ability to strengthen their governance as the volume of operations and the number of participants increases. Organizational growth requires balancing trust between partners with technical tools that preserve administrative efficiency and financial sustainability.

Credit risk management constitutes another relevant aspect for the continuity of the organization. During the period analyzed, no losses were recorded that compromised the operation of the fund; However, the lack of provisions intended to cover possible bad debts represents a potential vulnerability to default scenarios. The accumulation of

operations increases exposure to financial risk, so it is advisable to incorporate policies for portfolio classification, systematic monitoring of loans and the gradual constitution of preventive reserves. Gutiérrez-Nieto et al. (6) highlight that adequate credit risk management favors the sustainability of microfinance institutions, while Salinas Vásquez et al. (10) show that social capital reduces part of the risk of non-compliance, although it does not replace formal financial control mechanisms. The incorporation of these practices would contribute to strengthening the organization's ability to maintain liquidity and guarantee the continuity of financial services offered to its members.

The results must be interpreted considering the methodological characteristics of the study. The research was developed through a case study applied to a single community savings bank made up of 19 active members, a condition that limits the generalization of the findings to other organizations with different organizational structures, sizes or territorial contexts. Further research could incorporate comparative analyzes between various savings banks and cooperatives of popular and solidarity economy, as well as longitudinal studies that allow evaluating the evolution of financial sustainability, risk management and socioeconomic impact in different organizational growth scenarios.

CONCLUSIONS

The “Familia Unida” savings bank constitutes for its members as a complementary mechanism for access to financing. Its internal functioning is characterized by simpler validation processes and shorter response times based on regulations and internal decisions of its organization, unlike those identified in the financial products consulted in the town of La Maná. In addition, the results of the survey applied to the members showed a favorable assessment of the functioning of the fund, especially in the dimensions of trust and accessibility to credit. demonstrating the importance that partners attribute to cooperation and mutual knowledge, but these perceptions obtained do not replace the objective measurement of variables such as portfolio recovery, delinquency, profitability or impact on family income and it is emphasized that this conclusion is limited to the case studied and does not imply that all savings banks present the same conditions.

It can be seen that during the 2021–2025 period, accumulated contributions of USD 11,210.00 and interest income of USD 8,679.51 were recorded, in addition, complementary income reached USD 5,182.90 and expenses associated with social, organizational and administrative activities totaled USD 2,871.06, generating a cumulative difference of USD 2,311.84 value that corresponds to the net result of complementary income less social and administrative expenses, so it should not be interpreted as a comprehensive financial balance of the organization.

El alcance de los resultados está limitado por el estudio de una sola organización, el reducido número de participantes y la disponibilidad de registros administrativos consolidados para fortalecer el funcionamiento de la caja se recomienda mejorar el registro individual de las operaciones de crédito, documentar la recuperación de capital e intereses, establecer controles contables periódicos y definir procedimientos internos para el tratamiento de posibles incumplimientos.

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6. Validation: Sonia Aracely Diaz Puruncaja
7. Visualization: Sonia Aracely Diaz Puruncaja
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