PROCEEDINGS THE 5th INTERNATIONAL CONFERENCE ON ECONOMICS, BUSINESS, AND MANAGEMENT RESEARCH (ICEBMR)
"Digital Economy, Human Dignity, and Inclusive Transformation in Asia"
https://econference.usd.ac.id/index.php/ICEBMR | ISSN: 3032-596X | Vol 5, 2026

A DUAL OUTCOME FRAMEWORK FOR EVALUATING COOPERATIVE MICROCREDIT RELATIONSHIPS

Stephanus Eri Kusuma
Department of Economics, Sanata Dharma University
stephanuserikusuma@gmail.com
DOI: https://doi.org/10.24071/icebmr.v5i1.376

Abstract
The concept of microcredit success remains contested despite five decades of microfinance research and practice. Existing studies use diverse outcomes to define success, with the issue becoming more complex in cooperative microcredit, where members are simultaneously owners, savers, borrowers, and voters. This article develops a dual outcome framework combining business success at the member level and loan repayment performance at the member–cooperative relationship. The study integrates evidence from four microfinance handbooks and literature on credit constraints, financial intermediation, development economics, cooperative finance, and construct measurement. Four criteria guide the selection of outcomes: their correspondence with the member's dual identity, the possibility that outcomes diverge, their role in sustaining the credit cycle, and their feasibility of measurement at cooperative scale. The analysis identifies business success and loan repayment performance as distinct but complementary outcomes. Loan repayment performance is necessary for sustaining intermediation but does not by itself indicate business success, while neither outcome can serve as a proxy for the other. The framework therefore evaluates both outcomes separately rather than combining them into a compensatory index. It proposes a four-quadrant typology to guide future analysis on cooperative microcredit success.
Keywords: *microfinance, cooperative microcredit, business success, loan repayment, dual outcome framework*

1. Introduction

The question of the meaning of success in microcredit remains an unresolved conceptual issue, despite the development of microfinance practice and research over five decades. The debate is generally understood as a result of differing empirical findings on the impact of microcredit. A more fundamental issue lies in the lack of agreement on appropriate outcomes to define success. Gutiérrez-Nieto and Serrano-Cinca (2023) show that the differing directions of the relationship between financial and social performance in microfinance institutions largely stem from the diversity of definitions and measurements of social performance itself. These findings place the question of definition as a pre-eminent issue, prior to measurement and empirical evidence.

These issues become more complex in the context of cooperatives. Microfinance institutions, typically corporations or non-governmental organizations, separate owners, managers, and borrowers into distinct stakeholder groups, thus treating client well-being and the institution's sustainability as potentially interchangeable objectives. Cooperatives consolidate all these roles in members, who simultaneously act as owners, depositors, borrowers, and decision-makers through member meetings (Ledgerwood et al., 2013). This ownership structure alters the logical status of the trade-off between members' interests and those of the institution. The conceptual implications of these characteristics have not been systematically developed in the microfinance literature.

Based on these issues, this article poses one main research question, namely how the success of cooperative microcredit relationships should be conceptualized. This article specifically evaluates whether the combination of *business success* and *loan repayment performance* can be theoretically justified as a coherent evaluation framework. The scope of this article is limited to evaluating the credit relationship that has been established between the cooperative and its members, not to evaluating the cooperative's overall performance.

The contribution of this article lies in four areas. First, it provides explicit criteria for selecting evaluative outcomes from the range of outcomes used in the microcredit literature. Second, it defines the two focal outcomes and clarifies their boundaries and levels of analysis. Third, it shows

how the proposed framework differs from the established double bottom line by treating business success and loan repayment performance as distinct outcomes rather than combining them at the institutional level. Fourth, it develops a four-quadrant typology that can guide future analysis and evaluation practice. For microcredit providers, the framework offers a way to assess not only whether members repay their loans, but also whether their businesses are developing. This distinction can help providers identify different conditions within their loan portfolios and better understand whether repayment performance reflects sustainable business success.

The article is organized into four main sections. After the introduction, the literature review traces how microcredit success has been conceptualized, examines the different objectives of microcredit, and discusses the theoretical basis of business success and loan repayment performance. The research methods section explains the literature base and the approach used to develop the conceptual framework. The findings and discussion then develop the criteria for selecting the two outcomes, explain why they should be considered together, and examine their relevance to cooperative microcredit. This section also presents the dual outcome framework as the main contribution of this article. The article closes with its main conclusion.

2. Literature Review

2.1 Evolution of Microcredit Success

The conceptualization of success in microcredit has evolved through four phases, reflecting shifts in objectives and evaluation orientations. The first phase lasted until the early 1980s and focused on expanding credit disbursement through subsidized, directed credit models. Success during this period was primarily measured by disbursement volume and geographic coverage, while portfolio quality was viewed merely as an administrative matter. The transition to the next phase was triggered by critiques from the "Ohio School," which argued that sustained access to credit was more valuable to borrowers than subsidized interest rates, and that interest rates failing to cover costs actually undermined the financial infrastructure intended to be built (Adams & Von Pischke, 1992)—a position that subsequently formed the basis for the sustainability paradigm outlined in later literature (Ledgerwood, 1999; Hartarska & Cull, 2023).

The second phase spanned roughly from the mid-1990s to the mid-2000s, establishing institutional sustainability as the primary metric of success. Literature from this period developed institutional indicators such as operational self-sufficiency, financial self-sufficiency, portfolio at risk, and the subsidy dependence index, while also introducing the concept that microfinance institutions should be evaluated against a "double bottom line" (Yaron, 1994; Ledgerwood, 1999). Internal critiques emerged within this same paradigm, noting that high loan repayment rates did not always reflect true portfolio quality, thereby necessitating a more cautious interpretation of institutional indicators (Ledgerwood, 1999; Rosenberg, 1999). The rise of commercialization during the latter half of this phase introduced an additional outcome dimension: outreach. The success of certain institutions in achieving financial sustainability raised questions regarding who was actually being served. Navajas et al. (2000) addressed this question through a six-dimensional outreach framework: depth, value to the user, cost to the user, breadth, length, and scope. Copestake (2007) developed the concept of mission drift, using average loan size as a proxy. Consequently, the second phase focused on three simultaneous output clusters: institutional financial performance, portfolio quality, and outreach.

The third phase began in the late 1990s and peaked in the 2010s, marked by a shift in focus from the institution to the member. Advances in experimental evaluation drove the use of household- and enterprise-level outcomes, such as business profits, investment, consumption, education, and women's empowerment. This shift yielded methodologically more rigorous evidence while demonstrating that the impact of microcredit on well-being tended to be more modest than the industry's initial claims (Armendáriz & Morduch, 2010; Banerjee, Duflo, et al., 2015; Banerjee, Karlan, & Zinman, 2015). The fourth phase began in the mid-

2010s and encompasses two distinct developments. The first is a shift in discourse from poverty alleviation to financial inclusion, placing access to and usage of services at the center of system-level evaluations. The second involves efforts to build consensus regarding beneficiary-level outcome domains, covering changes in business activities, economic poverty, assets, resilience, and health (Hartarska & Cull, 2023).

The evolution of the concept of microcredit success has given rise to four clusters of microcredit performance measurement. The first cluster concerns institutional financial performance, encompassing operational self-sufficiency, financial self-sufficiency, return on assets, portfolio yield, and the subsidy dependence index (Ledgerwood, 1999; Ledgerwood et al., 2013). The second cluster relates to portfolio quality, covering delinquency rates, portfolio at risk, loans overdue by more than thirty days, and the ratio of renegotiated loans. The third cluster focuses on outreach, defined by the six dimensions formulated by Navajas et al. (2000). The fourth cluster addresses client impact, including business profits, consumption, assets, and poverty status.

These four clusters exhibit a striking conceptual disparity. The institutional financial performance and portfolio quality clusters are institutional in nature, internationally standardized, and derivable from institutional information systems at no additional cost (Ledgerwood, 1999; Ledgerwood et al., 2013). In contrast, the client impact cluster is individual-level; it entails significantly higher measurement costs and remains a subject of debate across almost every dimension—ranging from variable selection and measurement instruments to evaluation methodology (Hartarska & Cull, 2023). These differences in measurement costs and methodological legitimacy help explain why evaluation practices rely more heavily on institutional outputs. Mosley and Hulme (1998) documented that early microcredit studies often treated loan repayment as evidence of increased borrower income. The asymmetries in measurement costs and methodological legitimacy across these clusters help explain the persistence of such practices over several decades, although this explanation is interpretive and warrants further empirical testing.

The multidimensional evaluation framework is not a new concept in microfinance literature. Yaron (1994) proposed the "double bottom line" concept, which assesses microfinance institutions based on both financial and social performance simultaneously. Navajas et al. (2000) developed a six-dimensional outreach framework, while Copestake (2007) devised a social performance assessment to detect mission drift. All three frameworks position their dimensions at the institutional level, presuppose a separation between owners and service users, and are operationalized in practice through composite assessments or inter-dimensional weighting. However, the framework still presents several issues. First, the dimensions employed are generally assessed at the institutional level. Consequently, it remains unclear how to distinguish between the success perceived by members and the institution's ability to maintain credit sustainability. Second, the framework typically separates service owners from service users, whereas in cooperatives, both roles are embodied by the same members. Third, when multiple dimensions are combined into a single assessment, the results can mask situations where one dimension performs well while another is problematic. This issue is particularly significant in cooperative microcredit, as the success of a member's business and their ability to repay a loan represent distinct concepts, yet both are linked to the cooperative's sustainability.

2.2 Theoretical Objectives of Microcredit

The literature distinguishes five groups of objectives underlying microcredit, none of which can be reduced to a single, solitary goal. The first objective is development. From this perspective, microcredit is viewed as an instrument to alleviate credit constraints that hinder productive capital accumulation among households lacking collateral. Its theoretical underpinnings include occupational choice models with liquidity constraints (Evans & Jovanovic, 1989) and models linking wealth distribution to development (Banerjee & Newman,

1993; Galor & Zeira, 1993; Aghion & Bolton, 1997). These models carry significant implications for this article: a household's initial wealth determines who can utilize credit access, meaning initial wealth has the potential to simultaneously influence both business outcomes and repayment outcomes. Sen's (1999) capability perspective expands the development objective from mere income growth to the expansion of substantive freedoms. This expansion creates a tension with the framework proposed in this article, as the latter narrows development outcomes to business performance. This tension is openly acknowledged and addressed through a statement on construct boundaries in Section 6, rather than through a claim that business performance encompasses all dimensions of capability.

The second objective is financial sustainability. This perspective posits that an institution's ability to cover operating costs, the cost of funds, and loan losses is a prerequisite for the continuous provision of financial services. Ledgerwood (1999) asserts that without a minimum of 100 percent financial self-sufficiency, the long-term provision of financial services relies on donor funding. Robinson (2001) identifies sustainability as a prerequisite for the microfinance revolution. Cull et al. (2018) demonstrate that, in the aggregate, microfinance business models generate relatively modest profits while subsidies persist; thus, sustainability is best understood as a gradient rather than a binary status. The third objective is institutional. This group of objectives focuses on the development of financial markets as a system, rather than the growth of a single institution. Ledgerwood et al. (2013) conceptualize microfinance as a financial market system comprising core functions, support functions, and interconnected rules and norms. Von Pischke (1991) complements this perspective with the concept of debt capacity—the limit on borrowing ability jointly determined by the borrower's circumstances and the institution's capacity to assess risk.

The fourth objective concerns member welfare. Member-owned institutions do not aim to maximize profits for external owners; instead, they provide benefits to members through better service pricing, more secure access, and the distribution of surplus earnings. Ledgerwood et al. (2013) note that well-managed cooperatives often offer loans at lower interest rates than other microfinance institutions while simultaneously returning surpluses to members in the form of dividends. The fifth objective relates to cooperative principles. This group of objectives is normative and organizational in nature, encompassing shared ownership, democratic control based on the "one member, one vote" principle, member economic participation, autonomy, and concern for the community (International Co-operative Alliance, 1995). Hansmann (1996) explains the advantages of user-ownership models in specific instances of market failure. Guinnane (2001) demonstrates how rural credit cooperatives in Germany functioned as information mechanisms capable of mitigating information asymmetry at the local level.

These five groups of objectives differ in their levels of analysis and logical status. Development objectives and member welfare objectives operate at the individual and household levels. Financial sustainability and institutional objectives operate at the organizational and systemic levels. Cooperative objectives operate at the governance level and are procedural rather than outcome-based. A coherent outcome framework must explain how these various levels of analysis are mapped and justify the selection of specific objectives as the focus of evaluation. Failure to do so is a primary source of conceptual confusion in the literature.

2.3 Business Success and Loan Repayment Performance

Business success, in this article, is defined as the improvement in the economic capacity of the member's business unit financed by the cooperative—manifested through the accumulation of productive capital, the scale of operations, and the business surplus over the course of the credit relationship. This construct operates at the level of the member and the business unit, rather than at the level of the household as a whole. It is essential to clearly define these conceptual boundaries. Business success here does not encompass changes in household consumption, resilience to shocks, or the expansion of capabilities in the sense defined by Sen

(1999), even though these are all legitimate development goals. This narrower focus is adopted because the credit being evaluated is productive credit explicitly intended to finance members' businesses; consequently, changes within the business unit represent the domain most directly aligned with the purpose of the financing.

The theoretical justification for this concept of business success rests on credit constraint theory. Poor households lacking collateral face credit rationing driven by information asymmetry—a phenomenon formalized by Stiglitz and Weiss (1981) through mechanisms of adverse selection and risk-taking incentives that worsen as interest rates rise. Such rationing causes the marginal product of capital in micro-enterprises to exceed the cost of funds, resulting in socially efficient investments that fail to materialize (Evans & Jovanovic, 1989; Banerjee & Newman, 1993). Alleviating these constraints should manifest at the business level—specifically in terms of working capital, productive assets, scale of operations, and surplus.

Loan repayment performance is defined as the behavior of members in fulfilling payment obligations according to the agreed schedule, without arrears exceeding cooperative policy thresholds and without restructuring that masks an inability to pay. This construct operates at the level of member behavior in relation to the cooperative. Portfolio ratios at the institutional level—such as "portfolio at risk"—are treated as aggregates of this behavior rather than as the same construct, given that portfolio ratios are also influenced by write-off policies and portfolio growth rates (Ledgerwood, 1999; Rosenberg, 1999).

The theoretical justification for loan repayment performance rests on financial intermediation theory. The social value created by intermediary institutions stems from savings in monitoring costs. Diamond (1984) demonstrated that individual savers lack both the incentive and the capacity to monitor every borrower; consequently, monitoring is delegated to an intermediary capable of diversifying its portfolio. Such savings are realized only if the intermediary can recover its claims, as a failure to recover destroys the basis for saver confidence and terminates the delegation. The informational advantages of intermediaries—analyzed by Leland and Pyle (1977) and Fama (1985)—also hold value only as long as the intermediary remains operational. Loan repayment performance is, therefore, not merely an administrative indicator but a condition determining whether the intermediation function retains value for those who delegated the monitoring task.

Loan repayment performance serves three distinct theoretical functions. The first function is informational, as repayment behavior reveals hidden information regarding borrower types and actions that cannot be directly observed; consequently, repayment data are used to test competing theories of group lending (Ahlin & Townsend, 2007). The second function is incentive-based, as eligibility for subsequent loans—contingent upon the repayment of current ones—creates a non-collateralized disciplinary mechanism (Armendáriz & Morduch, 2010). The third function is relational, as payment history serves as the basis for accumulating personal knowledge that enables incremental increases in loan amounts, consistent with the relationship lending literature in small business finance (Petersen & Rajan, 1994; Boot, 2000; Berger & Udell, 2002; Hartarska & Cull, 2023).

This insight holds particular significance for cooperatives. In a cooperative, the parties delegating monitoring are the saving members, while the parties being monitored are the borrowing members; thus, the delegation occurs among members who jointly own the institution. Consequently, a failure to recover loans does not shift losses to external shareholders but rather to fellow members.

The literature documents various concrete situations where loan repayment performance remains high despite a lack of improvement in members' business conditions. Refinancing is the most widely documented mechanism, with some markets recording refinancing loans that account for up to half of all disbursements (Hartarska & Cull, 2023). A debt spiral occurs when

members borrow from other sources to meet installment payments and subsequently borrow again from the institution to repay those sources (Armendáriz & Morduch, 2010). Social pressure can maintain repayment discipline, albeit at a cost borne by the borrower beyond their business operations (Rahman, 1999). Compulsory savings—which cannot be withdrawn while a loan is active—serve as collateral, meaning that a portion of the repayment effectively comes from the members' own funds (Ledgerwood, 1999). These four mechanisms yield repayment figures indistinguishable from repayments funded by business surpluses, yet their welfare implications are diametrically opposed.

The reverse scenario is also documented. Besley and Coate (1995) formalized the concept of strategic default by borrowers who are actually capable of repaying. Ledgerwood (1999) reported a more striking case: group members who became wealthier began to disregard group pressure to repay because they felt they had less at stake, thereby becoming defaulters due to their newfound wealth rather than an inability to pay. Such cases demonstrate that improvements in members' economic conditions do not automatically strengthen repayment discipline; indeed, they can weaken it when enforcement mechanisms rely on members' dependence on access to credit.

The methodological implications of these two bodies of evidence are fundamental. One outcome cannot serve as a proxy for the other. An evaluation measuring only repayment rates would classify painful repayment processes as successes. Conversely, an evaluation measuring only business performance would classify cooperatives experiencing capital erosion as successful. The two errors are in opposite directions and cannot correct each other.

3. Research Methods

3.1 Approach and Nature of the Conceptual Contribution

This article is a conceptual piece employing an integrative approach. This approach is used to synthesize various concepts and arguments from literature spanning multiple theoretical traditions into a coherent framework (Jaakkola, 2020). This approach aligns with the article's objective: not to estimate relationships between variables, but to address the question of how microcredit success should be conceptualized. Consequently, the expected outcome of this analysis is not an empirical estimate, but rather criteria for selecting outcomes, conceptual definitions for the chosen outcomes, a typology of relationships between outcomes, and propositions testable in future research. This article is neither a systematic review nor a meta-analysis. The literature serves as a foundation for constructing and examining conceptual arguments, rather than claiming to cover all existing research on microcredit.

3.2 Key Literature and Selection Criteria

The article's core literature consists of four microfinance handbooks: Ledgerwood (1999), Armendáriz and Morduch (2010), Ledgerwood et al. (2013), and Hartarska and Cull (2023). These four handbooks were selected because they represent the evolution of microfinance knowledge across different periods. By utilizing these four sources, it is possible to trace changes over time in how the literature conceptualizes microcredit success. Handbooks serve as the primary sources because each was compiled to synthesize the body of knowledge developed within the field of microfinance. Thus, these sources facilitate the identification of outcomes that are long-established and widely recognized in the literature, avoiding reliance on the perspective of any single study. Supporting literature was drawn from references cited in the four handbooks and supplemented by literature from five areas. The first area comprises credit constraint theory and development economics, providing a basis for understanding outcomes at the enterprise level. The second area is financial intermediation theory, which helps explain the significance of outcomes within credit relationships. The third area encompasses literature regarding microcredit contracts and factors influencing loan repayment. The fourth area concerns cooperative finance and the governance of member-owned institutions. The fifth area involves construct measurement, used to assess whether various outcomes should be treated separately or combined.

3.3 Synthesis Procedure

The analysis was conducted in four stages. The first stage involved tracing how success is conceptualized in key literature and identifying the outcomes used to measure it. These outcomes were then categorized based on the level of analysis and the data sources employed. This categorization was primarily derived from indicators discussed in the four handbooks and subsequently cross-referenced with literature on outreach and social performance. The second stage involved examining the theoretical underpinnings of each outcome category. At this stage, core literature from the five aforementioned areas was used to understand why specific outcomes are deemed important and the objectives they aim to achieve. The third stage involved comparing the conceptual relationships among relevant outcomes. Particular attention was paid to the possibility that business success and loan repayment performance do not always move in tandem. This stage is crucial because the article does not assume that business success automatically leads to good loan repayment, or vice versa. The fourth stage utilized the findings from the previous three stages to formulate a typology and propositions. Consequently, the resulting typology does not stand in isolation but emerges from the mapping of outcomes and the discussion regarding the relationships between them.

3.4 Development of the Conceptual Framework

Once the outcomes were mapped and their theoretical underpinnings explored, the conceptual framework was developed through four steps. The first step involved formulating criteria for outcome selection based on arguments found in the literature. These criteria were then applied to the various groups of outcomes that had been identified. The second step entailed formulating conceptual definitions for the two selected outcomes: business success and loan repayment performance. These definitions encompassed the meaning of each outcome, its dimensions, the level of analysis, and its conceptual boundaries. The third step involved constructing a typology by positioning business success and loan repayment performance as two distinct axes. Combinations of high and low levels for these two outcomes yielded four possible conditions, which were then used to build a four-quadrant typology. The fourth step was to derive propositions from the framework. Each proposition was formulated in a way that allowed for empirical testing and the possibility of falsification. Consequently, the resulting framework does not remain merely a conceptual depiction but serves as a foundation for subsequent empirical research.

4. Research Findings and Discussion

4.1 Selecting the Two Outcomes

Selecting outcomes within an evaluation framework requires explicitly stated criteria, given that the literature offers at least four clusters of outcome variables and five distinct groups of objectives. Without such criteria, the selection of outcomes might appear to be a decision made prior to the analysis itself. This article employs four criteria, all derived from arguments found within the core body of literature. The first criterion is correspondence with the members' dual identity. Selected outcomes must represent members' interests in both of their roles simultaneously: as business operators and as collective owners of the shared fund (Ledgerwood et al., 2013; Hansmann, 1996). The second criterion concerns the possibility of divergence. Only pairs of outcomes that can empirically move in opposite directions warrant retention as separate dimensions; outcomes that consistently move in the same direction fail to provide additional discriminatory information (Campbell & Fiske, 1959). The third criterion is status as a necessary condition for the sustainability of the credit cycle. Institutional-level outcomes must determine the recurrence of credit disbursement, rather than merely describing the financial condition at a single point in time (Diamond, 1984; Von Pischke, 1991). The fourth criterion is availability at the cooperative level without the need for an experimental evaluation design. Selected outcomes must be capable of routine monitoring by small-scale cooperatives, taking into account the previously outlined asymmetries in measurement costs across the different clusters.

Applying these four criteria led to the selection of business success and loan repayment performance. Business success meets the first criterion by representing the interests of members as business owners, and the fourth criterion because some of the necessary information is already available during the credit assessment process conducted by the cooperative. Loan repayment performance meets the first criterion because a member's arrears reduce the value of other members' savings, and the third criterion because loan recovery determines fund availability for the subsequent cycle. Together, these two outcomes satisfy the second criterion, as the literature documents instances where they move in opposite directions.

The institutional financial performance cluster was not selected because most of its indicators are arithmetic derivatives of portfolio quality and cost structure; thus, they do not provide additional discriminatory information beyond what is captured by loan repayment performance. Broader household welfare outcomes—such as consumption, health, and empowerment—were excluded because they failed to meet the fourth criterion in the context of small-scale cooperatives, even though all four represent legitimate development goals. Outreach was not included as a dimension of the framework because it pertains to the stage preceding the establishment of a credit relationship, as explained in the following boundary statement.

4.2 Why the Two Outcomes Should Be Evaluated Together

Business success and loan repayment performance play distinct roles in assessing the success of microcredit. Business success examines whether a member's business grows after obtaining credit, whereas loan repayment performance looks at whether the member is able to meet their obligations to the cooperative. The differences between the two can be observed in terms of the level of analysis, objectives, timing of measurement, theoretical basis, the member's role, and measurement methods. These differences indicate that the two outcomes cannot be treated as alternative ways of measuring the same thing. Business success provides information on a member's economic progress, while loan repayment performance offers insights into the sustainability of the credit relationship. Relying on only one of these metrics would result in the loss of significant information regarding the success of microcredit.

Table 1. Conceptual Differences between the Two Outcomes

Dimension	Business Success	Loan Repayment Performance
Level of analysis	Member and business	Member–cooperative relationship and loan portfolio
Main role	Shows business development	Supports continued credit provision
Time orientation	Result of the current creditcycle	Supports the next credit cycle
Main theoretical basis	Credit constraint and development economics	Financial intermediation and credit contract theory
Member role	Member as entrepreneur	Member as borrower, owner, and saver
Measurement	More difficult and costly to measure	More standardized and usually available from cooperative records

Source: The author

This distinction is further highlighted by the fact that the two outcomes do not always move in tandem. A member might repay a loan on time even if their business is not growing. Conversely, a member's business might flourish while loan repayments remain problematic. Such scenarios necessitate viewing the two outcomes separately. Loan repayment performance can remain high even when a member's business conditions do not improve. Refinancing can enable members to continue making repayments without demonstrating meaningful business growth (Hartarska & Cull, 2023). A debt spiral can also occur when members use loans from other sources to meet existing obligations (Armendáriz & Morduch, 2010). Social pressure can

sustain repayment even when the cost must be covered by resources outside the business (Rahman, 1999). Furthermore, mandatory savings—which cannot be withdrawn while the loan is active—can serve as a source of repayment, meaning that settlement does not necessarily stem from business earnings (Ledgerwood, 1999). These conditions demonstrate that good loan repayment performance does not automatically imply business success. If a cooperative focuses solely on loan repayment performance, members who repay through refinancing, other loans, or personal resources may appear indistinguishable from those who repay because their businesses are genuinely thriving.

The reverse scenario is also possible: a member's business may grow, yet loan repayments remain problematic. Besley and Coate (1995) demonstrated that borrowers who are actually capable of repaying may choose to engage in strategic default. Ledgerwood (1999) also notes a scenario where members who become wealthier find it easier to ignore group pressure to repay, as their reliance on the credit relationship diminishes. Consequently, business growth alone cannot serve as an indicator of a healthy credit relationship. If a cooperative focuses solely on business success, a member's business growth might appear positive even as repayment quality deteriorates and the cooperative's ability to continue extending credit comes under threat.

These two conditions illustrate why one outcome cannot simply substitute for the other. Relying solely on loan repayment performance might lead a cooperative to view repayment as a success even if the member's business is not growing. Conversely, focusing only on business success might cause the cooperative to overlook repayment issues that could jeopardize the sustainability of the credit arrangement. However, utilizing both outcomes does not imply they should be aggregated into a single score. Such an approach could obscure distinctions that are crucial to understand. For instance, a situation where both business success and loan repayment performance are high differs significantly from a scenario where one is high while the other is low. Although both conditions might yield a similar aggregate value, they carry different implications for the cooperative.

Therefore, this study maintains both outcomes as distinct measures while situating them within a unified evaluation framework. Business success indicates whether the credit has fostered the member's business growth, whereas loan repayment performance indicates the viability of the credit relationship. By examining both simultaneously, the evaluation can distinguish between scenarios where both objectives are achieved, where only one is met, and where neither is realized.

4.3 Why Cooperative Microcredit Requires a Dual Outcome Perspective

The dual-outcome framework finds stronger justification in the context of cooperatives compared to other forms of microfinance. This distinction lies not in the characteristics of the credit disbursed, but rather in five structural features absent in other institutional forms.

The first feature is the dual identity of members. Ledgerwood et al. (2013) define financial cooperatives as member-owned service providers organized according to basic cooperative principles—lacking external shareholders, with members acting as owners, and operating on a "one member, one vote" basis. This structure eliminates the separation between those who benefit from business success and those who bear the burden of loan losses. An individual member's arrears reduce the value of other members' savings and capital contributions; consequently, loan repayment performance is not an external owner's interest competing with members' interests, but rather a matter of the members' own interests in different capacities. Hansmann (1996) provides the theoretical basis for this claim through an analysis of the costs associated with patron ownership.

The second feature is the dominance of internal capital. Ledgerwood et al. (2013) note that member savings and capital contributions serve as the primary funding mechanism for

cooperatives, providing a relatively stable and low-cost source of funds. The absence of an external capital buffer means that loan losses are borne directly by the members' capital base; thus, the sensitivity of member welfare to portfolio quality is far higher than in institutions with external shareholders.

The third feature is the structural conflict between net savers and net borrowers. Ledgerwood (1999) identifies the conditions necessary for a cooperative to function effectively: a group small enough for members to know one another, and a regular rotation of member roles between net saver and net borrower. When these conditions are not met, the cooperative becomes unstable, and structural conflict arises between borrowers—who desire low interest rates and lenient repayment pressure—and net savers, who seek high returns and highly prudent management of savings. The two outcomes in this framework directly represent the interests of these two member factions, which must be balanced.

The fourth feature is governance vulnerability. Ledgerwood et al. (2013) state that governance is one of the cooperative sector's greatest challenges; that general cooperative supervisory authorities often lack the expertise to oversee financial intermediaries; and that weak supervision, combined with poor governance, can jeopardize the security of financial cooperatives, particularly when the savings of the poor are at stake. Cuevas and Fischer (2006) and Fonteyne (2007) elaborate on agency problems specific to cooperatives, while Cook (1995) identifies horizon and free-rider problems inherent in cooperative property rights structures. An outcome-based framework that monitors only member business performance will fail to detect the erosion of governance until the institution faces serious distress.

A fifth characteristic is the long-term relationship grounded in collective norms. Loan funds are derived from the savings of fellow members; consequently, the repayment obligation is owed to the collective rather than to a third party. Ostrom (1990) demonstrates that the management of common-pool resources can be sustainable if the user group is capable of devising, monitoring, and enforcing its own usage rules. Repayment discipline within cooperatives can be understood within this framework—specifically, as a rule governing the use of a shared resource that is enforced by the users themselves. Guinnane (2001) illustrates how rural credit cooperatives successfully transformed local information into an institutional asset that underpinned such enforcement. Thus, loan repayment performance serves as a measure of the health of the collective norms sustaining the shared fund, rather than merely an indicator of the institution's cash inflows.

4.4 The Dual Outcome Framework

The proposed conceptual model positions business success and loan repayment performance as the two dimensions constituting the success profile construct of cooperative microcredit relationships. The three underlying theories operate at different points within the model. Credit constraint theory explains why credit disbursement can alter members' business performance. Financial intermediation theory explains why loan recovery is a prerequisite for repeated lending. Cooperative finance theory explains why both outcomes are inherent to the same economic agent; thus, integrating them into a single evaluation framework is a consequence of the ownership structure rather than merely a methodological choice.

The typology within this model utilizes the individual member as the primary unit of analysis. Each member is positioned based on their business unit's performance and their loan repayment behavior throughout the credit relationship. This choice of unit of analysis aligns with the previously defined constructs and avoids errors that arise when inferring member behavior from portfolio ratios at the institutional level. While the cooperative level can still be analyzed, it does not serve as a single point within the typology. Cooperatives are characterized by the distribution of their members across the four quadrants; consequently, two cooperatives with identical portfolio ratios may exhibit vastly different success profiles if their member compositions differ.

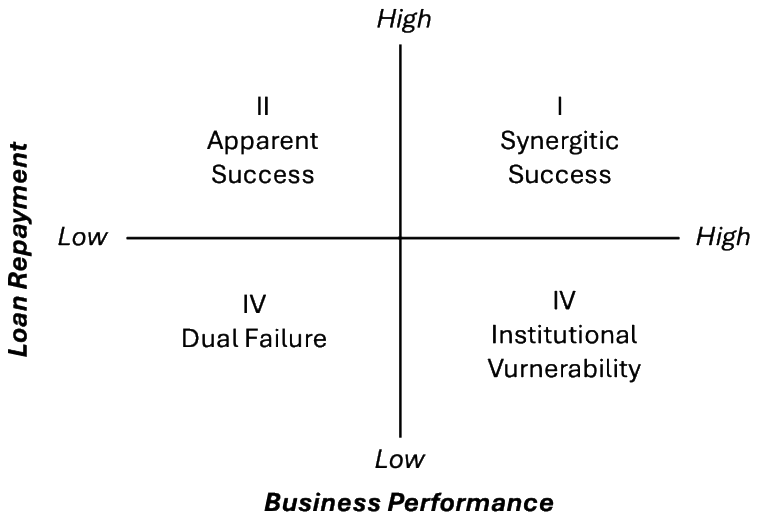


Figure 1. Dual Outcome Framework for Cooperative Microcredit
Source: The author

The typology is constructed by placing business success on the horizontal axis and loan repayment performance on the vertical axis, with quadrant numbering following the counter-clockwise convention starting from the top-right quadrant. The threshold setting between "high" and "low" categories is contextual and should be determined relative to the member distribution within the specific cooperative, rather than through absolute thresholds applied across cooperatives. This approach reflects the framework's nature as an internal diagnostic tool for cooperatives, rather than a tool for ranking cooperatives against one another.

5. Conclusion

This study concludes that the success of cooperative microcredit relationships cannot be adequately represented by a single outcome. Business success and loan repayment performance reflect different levels of analysis and serve different purposes, and neither can serve as a proxy for the other.

The strongest justification for integrating these two outcomes stems from cooperative finance rather than mainstream microfinance literature. The members' dual identity as both owners and borrowers eliminates the analytical separation between member interests and institutional interests, meaning the two outcomes represent the interests of the same economic actor. This characteristic distinguishes the proposed framework from the "double bottom line" tradition, which situates all dimensions at the institutional level and presupposes a separation between owners and service users.

The proposed framework is formulated as a non-compensatory profile construct featuring a four-quadrant typology. Its practical value lies in its ability to distinguish synergistic success from apparent success and institutional fragility—three conditions that cannot be differentiated through single-outcome evaluations.

References

Adams, D. W., & Von Pischke, J. D. (1992). Microenterprise credit programs: Déjà vu. *World Development, 20*(10), 1463–1470.

Aghion, P., & Bolton, P. (1997). A theory of trickle-down growth and development. *The Review of Economic Studies, 64*(2), 151–172.

Ahlin, C., & Townsend, R. M. (2007). Using repayment data to test across models of joint liability lending. *The Economic Journal, 117*(517), F11–F51.

Armendáriz, B., & Morduch, J. (2010). *The economics of microfinance* (2nd ed.). MIT Press.

Banerjee, A., Duflo, E., Glennerster, R., & Kinnan, C. (2015). The miracle of microfinance? Evidence from a randomized evaluation. *American Economic Journal: Applied Economics, 7*(1), 22–53.

Banerjee, A., Karlan, D., & Zinman, J. (2015). Six randomized evaluations of microcredit: Introduction and further steps. *American Economic Journal: Applied Economics, 7*(1), 1–21.

Banerjee, A. V., & Newman, A. F. (1993). Occupational choice and the process of development. *Journal of Political Economy, 101*(2), 274–298.

Berger, A. N., & Udell, G. F. (2002). Small business credit availability and relationship lending: The importance of bank organizational structure. *The Economic Journal, 112*(477), F32–F53.

Besley, T., & Coate, S. (1995). Group lending, repayment incentives and social collateral. *Journal of Development Economics, 46*(1), 1–18.

Boot, A. W. A. (2000). Relationship banking: What do we know? *Journal of Financial Intermediation, 9*(1), 7–25.

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56*(2), 81–105.

Cook, M. L. (1995). The future of U.S. agricultural cooperatives: A neo-institutional approach. *American Journal of Agricultural Economics, 77*(5), 1153–1159.

Copestake, J. (2007). Mainstreaming microfinance: Social performance management or mission drift? *World Development, 35*(10), 1721–1738.

Cuevas, C. E., & Fischer, K. P. (2006). *Cooperative financial institutions: Issues in governance, regulation, and supervision* (World Bank Working Paper No. 82). World Bank.

Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2018). The microfinance business model: Enduring subsidy and modest profit. *The World Bank Economic Review, 32*(2), 221–244.

Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *The Review of Economic Studies, 51*(3), 393–414.

Evans, D. S., & Jovanovic, B. (1989). An estimated model of entrepreneurial choice under liquidity constraints. *Journal of Political Economy, 97*(4), 808–827.

Fama, E. F. (1985). What's different about banks? *Journal of Monetary Economics, 15*(1), 29–39.

Fonteyne, W. (2007). *Cooperative banks in Europe: Policy issues* (IMF Working Paper No. 07/159). International Monetary Fund.

Galor, O., & Zeira, J. (1993). Income distribution and macroeconomics. *The Review of Economic Studies, 60*(1), 35–52.

Guinnane, T. W. (2001). Cooperatives as information machines: German rural credit cooperatives, 1883–1914. *The Journal of Economic History, 61*(2), 366–389.

Gutiérrez-Nieto, B., & Serrano-Cinca, C. (2023). Assessment of microfinance institutions and their impact: Evidence from a scientometric study. In V. Hartarska & R. J. Cull (Eds.), *Handbook of microfinance, financial inclusion and development* (pp. 41–66). Edward Elgar Publishing.

Hansmann, H. (1996). *The ownership of enterprise*. Harvard University Press.

Hartarska, V., & Cull, R. J. (Eds.). (2023). *Handbook of microfinance, financial inclusion and development*. Edward Elgar Publishing.

International Co-operative Alliance. (1995). *Statement on the co-operative identity*. International Co-operative Alliance.

Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS Review, 10*(1–2), 18–26.

Ledgerwood, J. (1999). *Microfinance handbook: An institutional and financial perspective*. World Bank.

Ledgerwood, J., Earne, J., & Nelson, C. (Eds.). (2013). *The new microfinance handbook: A financial market system perspective*. World Bank.

Leland, H. E., & Pyle, D. H. (1977). Informational asymmetries, financial structure, and financial intermediation. *The Journal of Finance, 32*(2), 371–387.

Mosley, P., & Hulme, D. (1998). Microenterprise finance: Is there a conflict between growth and poverty alleviation? *World Development, 26*(5), 783–790.

Navajas, S., Schreiner, M., Meyer, R. L., Gonzalez-Vega, C., & Rodriguez-Meza, J. (2000). Microcredit and the poorest of the poor: Theory and evidence from Bolivia. *World Development, 28*(2), 333–346.

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.

Petersen, M. A., & Rajan, R. G. (1994). The benefits of lending relationships: Evidence from small business data. *The Journal of Finance, 49*(1), 3–37.

Rahman, A. (1999). Micro-credit initiatives for equitable and sustainable development: Who pays? *World Development, 27*(1), 67–82.

Robinson, M. S. (2001). *The microfinance revolution: Sustainable finance for the poor*. World Bank.

Rosenberg, R. (1999). *Measuring microcredit delinquency: Ratios can be harmful to your health* (CGAP Occasional Paper No. 3). Consultative Group to Assist the Poorest.

Sen, A. (1999). *Development as freedom*. Oxford University Press.

Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review, 71*(3), 393–410.

Von Pischke, J. D. (1991). *Finance at the frontier: Debt capacity and the role of credit in the private economy*. World Bank.

Yaron, J. (1994). What makes rural finance institutions successful? *The World Bank Research Observer, 9*(1), 49–70.