

# Constructing a Contextual Framework for Informal Borrower Credit Appraisal in Microenterprise Lending

ABHIJIT CHANDRATREYA, GAURI CHANDRATREYA, JAYASHREE PATIL

**Abstract:** *In the present situation, the microfinance organizations in non-formal urban markets continue to seek refinements in credit-worthiness assessment that will mitigate restricted access to dependable information on potential borrower's credibility and on absence of formal data on credit vital particularly for women entrepreneur. This paper attempts to close a gap in mainstream credit scoring, providing a model for informal borrower assessment, within the context of micro enterprise finance. (The model is not detailed here.) The model is systematically built, translates various indicators and the nontraditional indicators (that is social collateral, community reputation, and microenterprise operational behaviour especially which are derived from the existing classification and the concept mode about informal credit analysis, are included at the macro-index and the model). Procedures are provided to assist lenders in distinguishing among risks and help clarify how publicly available demographic and business information can be utilized to enhance portfolio risk management tools and encourage consistent preferences for advice across the customer base. The study presents a taxonomy of relevant indicators and further evaluates the implementation viability of the proposed system, pointing to its applicability to several types of informal client profile and its potential value in attenuating bias and the predictable coverage gaps in credit quality adjudication. Located in the gender-driven backdrop, risk, financial inclusion and mico, meso and macro arguments and counter-arguments, the study provides MFIs with a methodical and pliable tool for responsible expansion by broadening the client base to encompass more of the informal women enterprises at the BoP.*

**Keywords:** Contextual Credit Appraisal, Microenterprise Lending, Informal Borrower Assessment, Social Collateral, Portfolio Risk Management, Women Entrepreneurs

---

Abhijit Chandratreya (abhijit.indira@gmail.com), Indira University, Pune, India  
Gauri Chandratreya (g.chandratreya@gmail.com) Chief - Corporate Audit Services, Bajaj Finserv,  
Jayashree Patil (patil.jayashree22@gmail.com)  
Centre for Distance and Online Education, Bharati Vidyapeeth Deemed to be University Pune, India

---

Introduction

Reliable borrower data continues to be a significant barrier for MIFs working to reach informal women entrepreneurs in urban settings where formal credit history and documentation are typically not available. Classic credit assessment techniques are not adequate under these circumstances, which creates obstacles for sustainable financial inclusion and to manage portfolio risk efficiently. This paper fills this important void by proposing a Context Frameworks for Credit Assessment (CFCA), which combines non-traditional information such as social collateral, community reputation, and operational data of microenterprise. The framework recommends a systematic approach for lending NGOs to determine borrower capability and suitability, and thus, become more consistent, fair, and adaptable in the process of filtering borrowers. By combining typologies and taxonomies to characterize informal credit assessment, this paper provides a useful foundation for more robust appraisal methods that are sensitive to the realities of low-documentation urban market conditions, and to the gender equitable circular economy and microenterprise discourse more generally (Ibrahim et al., 2021; O’Brien et al., 2022; Kim, 2022).

Context and Rationale

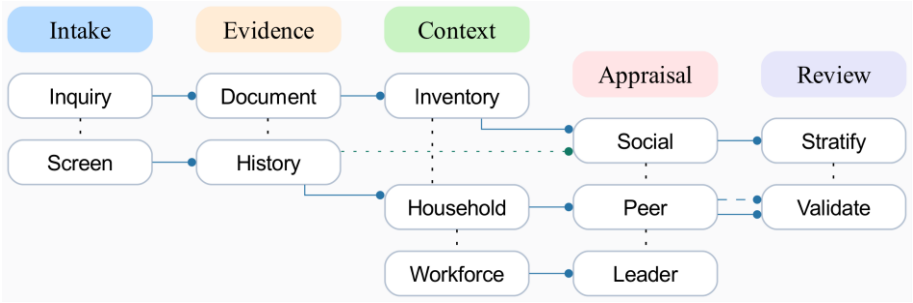
MFI’s that work in the urban informal sector face challenges in determining the credit-worthiness of women entrepreneurs as they typically do not have formal documentation to verify or conventional credit history to rely on. Existing ways of measuring in such territories are not adequate, and the values landscape regarding the ecosystem services must be re-explored, including non-traditional indicators. The innovation of “the social”, “collateral” and “reputation value”, “operational signals”, demonstrates an evolutionary approach to risk reduction and offering credit to excluded women borrowers (Tuluy, 2020; Ranganathan et al., 2021; Kim, 2022; ). Through the development of a more sophisticated method of client appraisal, lending institutions can improve their ability to distinguish risk profiles, promote responsible financial outreach and help sustain the microenterprise.

Table 1. Primary Challenges in Appraising Informal Borrowers

Challenge	Description
Lack of Formal Documentation	Borrowers often lack tax returns, audited financial statements, or formal IDs
Sparse Transaction History	Business transactions may be unrecorded and informal

Informal Business Practices	Microenterprises often use cash-based, undocumented processes
Variable Income Flows	Earnings are unstable or seasonal, complicating repayment assessments
Reliance on Social Networks	Credibility is often gauged by community reputation rather than formal means

This table (1) identifies and briefly describes central challenges microfinance institutions face when conducting credit appraisal for informal sector women entrepreneurs in urban environments.



**Figure 1.** Challenges of appraising informal women entrepreneurs

This figure (1) visually portrays the barriers microfinance institutions encounter when assessing the credit risk of informal women entrepreneurs, focusing on documentation gaps and limited credit history in urban settings.

*Problem Statement and Objectives*

**Table 2.** Key Objectives in Contextual Credit Framework Development

Objective	Description
Integrate Social Collateral	Systematically incorporate social ties, peer recommendations, and communal trust into appraisal
Leverage Community Reputation	Assess borrower credibility via local standing and informal feedback mechanisms
Utilize Operational Indicators	Employ microenterprise activity data such as inventory practices, customer flows, and business longevity

Develop Procedural Guidelines	Establish stepwise methods for risk differentiation and eligibility assessment
Incorporate Public Datasets	Use accessible business registration, market demographics, and other datasets to support decision making
Advance Risk Management	Enhance portfolio oversight and minimize unwarranted exclusions from credit access

This table (2) enumerates the principal objectives underlying the development of a contextual framework for informal borrower appraisal in microenterprise lending.

In urban markets, microfinance institutions face challenges in credit evaluation for informal women entrepreneurs, who generally have little documentation as borrowers and no formal credit history. Traditional scoring mechanisms are inadequate to represent the variety of dimensions of informal business activities and as such may act as a barrier to equal access to financial services for women-led microenterprises. This study seeks to fill these gaps by designing a resilient contextual assessment system, which systematically incorporates non-traditional indicators e.g., social pledging, local reputation, enterprise-level operational records. It is also hoped that it can also serve as a useful tool for risk segmentation, an aid to devise data integration of the available, public data, and, ultimately, aim to promote more inclusive and responsible lending.

Literature Review

Table 3. Contextual Credit Appraisal Frameworks for Informal Borrowers

Framework/Approach		Main Components	Target Group	Assessment Criteria
Group Lending Model		Peer guarantees, joint liability	Informal microentrepreneurs	Social collateral, group repayment history
Psychometric Scoring		Attitudinal tests, personality measures	Small business owners, individuals	Risk tendencies, entrepreneurial orientation
Relationship-Based Lending		Relationship manager insights, community feedback	Women entrepreneurs in informal markets	Business longevity, social reputation

Hybrid Appraisal Algorithms	Alternative data, operational indicators, qualitative scoring	Urban microenterprise borrowers	Transaction flows, business records, reputation metrics
-----------------------------	---	---------------------------------	---

This table (3) summarizes key models and approaches for contextually appraising informal borrowers in microenterprise lending, highlighting their main features and assessment focus.

The literature also demonstrates that the conventional methods for assessing credit risk are not well-matched to borrowers from the informal microenterprise sector who do not have formal paper trails, no steady income sources, and operate mostly without full disclosure of their businesses. Alternative underwriting mechanisms, therefore, have developed, including group lending that relies on social collateral, psychometric scoring that uses both attitudinal and behavioral traits, and relationship-based lending that depends on local knowledge and community connections. Hybrid appraisal models are gradually learning to utilize nontypical features such as operational metrics and qualitative scoring to more accurately assess the risk profile of women entrepreneurs and other informal borrowers ( Kim, 2022; Ibrahim et al., 2021). Such techniques are crucial mechanisms for the advancement of financial inclusion and for the reduction of risk in informal credit markets.

*Conceptual Models of Informal Credit Appraisal*

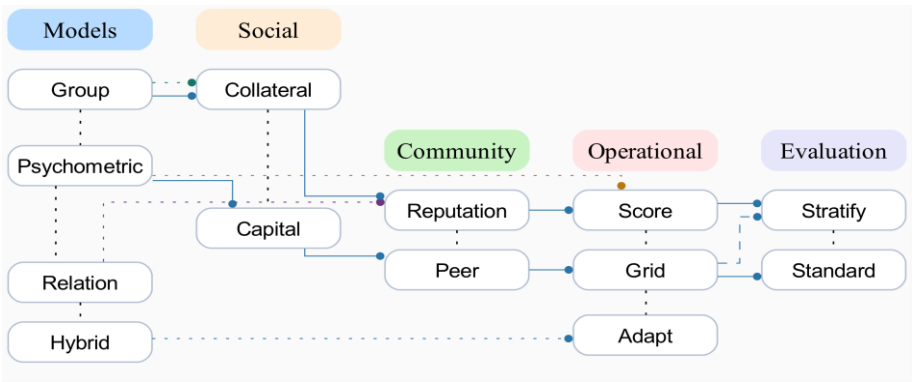
Analytical models for informal credit assessment in microenterprise lending have been developed to account for the inadequacies of formal records and peculiarities of underserved jurisdictions. Some of the significant models are group lending using peer pressure instead of collateral, psychometric profiling-based lending that refers to attitudinal and personality tests, and relationship-based lending relying on trust on social networks, family and community. Hybrid appraisal models also incorporate non-official data and operation indexes, which can be used to indicate that the informal credit is complicated. These models concentrate on social collateral, community trust, and qualitative information, and they are crucial for coping with risk assessment and the provision of credit to informal borrowers (Kim, 2022; O'Brien et al., 2022).

**Table 4.** Comparison of Informal Credit Appraisal Models in Microenterprise Lending

<i>Model</i>	<i>Core Principle</i>	<i>Primary Data Sources</i>	<i>Main Assessment Features</i>	<i>Typical Target Contexts</i>
--------------	-----------------------	-----------------------------	---------------------------------	--------------------------------

Group Lending	Peer-based joint liability	Peer appraisals, group meeting records	Social guarantees, repayment shared responsibility	Community microenterprises, women's informal groups
Psychometric Scoring	Individual behavioral/attitudinal tests	Survey responses, scenario exercises	Risk preference, entrepreneurial capacity	Small and informal business owners
Relationship-Based Lending	Community reputation	Local leader feedback, network observations	Standing in community, informal records	Market traders, established microenterprises
Hybrid Appraisal Algorithms	Synthesis of alternative and operational data	Sales logs, supplier info, mobile records	Dynamic operational indicators, profile integration	Urban informal borrowers, digitally active microenterprises

This table (4) presents a comparative overview of major conceptual models for informal credit appraisal in microenterprise contexts, detailing their core principles, data sources, features, and ideal applications.



**Figure 2.** Conceptual map visually comparing the major models of informal credit appraisal relevant to microenterprise lending, highlighting key features such as social collateral, community reputation, and operational indicators. This figure clarifies the intellectual landscape surveyed in the review and supports understanding of how these models inform framework development.

This figure (2) provides a synthesized overview of the conceptual landscape of informal credit appraisal models in microenterprise lending, clarifying how social and operational features are mapped and compared.

Gaps in Existing Appraisal Frameworks

Table 5. Unaddressed Gaps in Informal Borrower Appraisal Frameworks

Gap Category	Key Limitation	Implications for Microenterprise Lending
Data Accessibility	Limited reliable data on informal borrowers	Hampers risk assessment and appropriate loan allocation
Contextual Relevance	Frameworks often fail to account for diverse sociocultural settings	Reduces effectiveness across regions and markets
Gender Responsiveness	Lack of tailored approaches for women's unique challenges	Exacerbates exclusion from credit access
Integration of Social Capital	Insufficient use of peer networks and informal trust mechanisms	Misses critical informal creditworthiness signals
Operational Flexibility	Rigid procedures not adaptable to dynamic microenterprise conditions	Discourages effective inclusion of informal businesses

This table (5) outlines core gaps that remain unaddressed by current appraisal frameworks for informal borrower credit assessment, highlighting their relevance in microenterprise lending contexts.

Although a variety of methods have been applied to credit scoring in microenterprise lending, less has been done to assess informal borrowers accurately. The notable gaps revealed are that there are insufficient and inequitable access to reliable borrower information, lack of local context, failure to mainstream gender considerations, and lack of integration of social capital/community trust indicators. Also, the existing solutions are mostly operationally-oriented, which limits their applicability for dynamic or/and informal VOs. Collectively, it means the two policy constraints constrain the means to ensure equal access and discriminate against informal borrowers in particular (including women entrepreneurs) increases the case for those frameworks that most closely follow the reality of the informal sector of economies (Kim, 2022; Fadikpe eta l., 2022; O'Brien et al., 2022).

Methodology

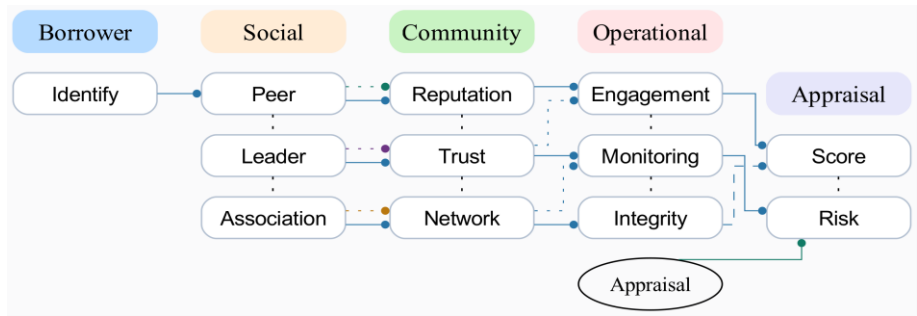
A framework construction, typology synthesis approach was used to address the challenges the credit appraisal of informal women entrepreneur-Urban microenterprises presents. Guided by a critical examination of conceptual appraisal models and extant taxonomy, a multi-step procedure was employed to construct a situational model integrating social collateral, community reputation and micro-enterprise operational signs (Louis et al., 2021; Ly & Cope, 2023; ). Guidelines for transparent and flexible systematic risk stratification were proposed. Non-conventional assessment indicators were discovered, categorised and grouped following a typology that can inform feasible assessment tools and the in-depth eligibility assessment under data scarcity.

Table 6. Non-Traditional Indicators for Informal Credit Appraisal

<i>Indicator Category</i>	<i>Example Metrics</i>	<i>Relevance to Appraisal</i>	<i>Data Source</i>
Social Collateral	Number of active guarantors, peer recommendations, social network strength	Demonstrates ability to mobilize community trust and support	Peer group records, local associations
Community Reputation	Market standing, feedback from local leaders, incident-free enterprise history	Reflects borrower reliability and social capital	Community surveys, stakeholder interviews
Operational Indicators	Inventory turnover rate, customer transaction volume, time in business	Signals business viability, cash flow resilience, and longevity	Direct enterprise observation, business registers
Business Demographics	Business location stability, market segmentation, seasonality of operations	Indicates exposure to market risks and context	Public directories, local business lists
Household Stability	Home tenure, family size, dependency ratio	Captures underlying economic	Household profiles, community records



This table (6) enumerates the primary non-traditional indicator categories, illustrative metrics, their appraisal relevance, and data sources used in the contextual credit assessment framework.



**Figure 3.** Conceptual flowchart illustrating the construction and components of the contextual credit appraisal framework for informal borrower assessment, integrating social collateral, community reputation, and non-traditional operational indicators. This figure clarifies the methodological process and relationships among the key factors used in the framework development.

This figure (3) presents the stepwise methodological relationships among social collateral, community reputation, operational indicators, and their integration in the contextual credit appraisal framework for informal borrowers.

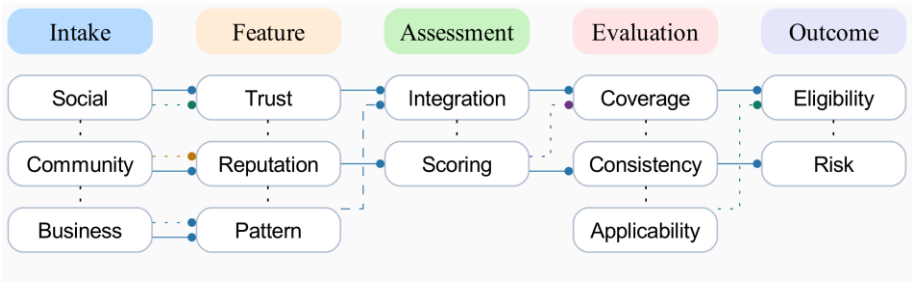
*Framework and Typology Development*

The structure of the rest of this section on microenterprise lending is a taxonomy that can be used to assess the creditworthiness of informal sector women entrepreneurs. Using a dual approach of framework building and typology deduction, the framework conjointly integrates multiple multisource indicators (such as social capital, community reputation, and operative feasibility) to represent the complexity of risk sources and situations in informal markets. Typology These are group-based, psychometric, relationship-based, and mixed types of credit appraisal systems, all tailored to the specifics of contexts that are also gender responsive and risk-minimising practices that are imperative for risk-sensitive credit appraisal and faster financial inclusion (Ibrahim et al., 2021; Kim, 2022; ).

**Framework Proposal**

We now present a process-oriented credit evaluation model adapted for micro finance institutions in the urban informal sector with minimal paper work. Adapted

from a combination of theoretical frames and typologies found in the literature, the model includes central dimensions of social collateral, community reputation and non-traditional business indicators. Highlights are the objective integration of peer group and network trust, community stakeholder validation, and systematic microenterprise operational attributes capture. Through establishing procedural protocols for risk evaluation along with the integration of data that is available to the public and demographics, this approach seeks to allow for fairer and more sound borrower assessment (Ibrahim et al., 2021; Ly & Cope, 2023; ).



**Figure 4.** Overview of the proposed contextual framework integrating social collateral, community indicators, and non-traditional business data for informal borrower credit appraisal in microenterprise lending.

This figure (4) visually demonstrates the interconnection of key assessment domains, serving as a conceptual guide for practitioners and scholars.

*Social Collateral and Community Indicators*

Social capital and local signs are very important for credit evaluation of informal microenterprise lending, especially for female entrepreneurs with no credit record. These serve to extract surplus by using the informal social networks of the people, the status of the community, and trust shared between borrowers and lenders, to mitigate the possibility of default lending and to impart on the borrowers; credibility in absence of recommended data. Significant determinants are peer endorsements, reputation feedback from elders, and participation in social groups. Using such contextually embedded indicators, MFIs will be able to design more inclusive and efficient risk-assessment frameworks to promote financial inclusion and assist marginalised loan seekers (Ranganathan., et al., 2021; Kim, 2022; Fadikpe., et al., 2022).

**Table 7.** Comparison of Social Collateral and Community Indicators for Credit Appraisal

<i>Indicator Type</i>	<i>Description</i>	<i>Strengths</i>	<i>Key Considerations</i>	<i>Applicability</i>
Peer Group Endorsements	Support or guarantees from within peer lending groups	Strong social pressure for repayment	Group dynamics may mask individual risk	Well-suited to joint liability lending
Community Leader Reputation Feedback	Assessments from respected market elders or leaders	Deep local knowledge, trusted opinions	Potentially subjective or biased	Effective in tightly knit informal markets
Membership in Local Associations	Participation in cooperatives, women’s groups, or trade associations	Signals engagement and communal trustworthiness	May exclude newly arrived or marginalized individuals	Useful in markets with strong associational networks
Business Social Footprint	Visibility and interactions within the marketplace	Indicates operational stability and social capital	Can be difficult to quantify systematically	Relevant for established microenterprises
Event-based Social Track Record	History of participation in collective events, no reported disputes	Reflects long-term reliability and absence of conflict	Data less available for newcomers	Valuable for risk rating in community-centric environments

This table (7) compares more than three major types of social collateral and community indicators relevant for credit appraisal of informal borrowers in microenterprise lending, highlighting their distinguishing features and contextual applicability.

*Non-traditional Business and Demographic Indicators*

Alternative signals are playing an increasing role in credit risk analysis in microenterprise lending, and especially in shadow markets with little formal documentation. These signals include (traditional) business and service operation

tendencies, demographic factors, and alternative indicators of entrepreneurial trustworthiness that lenders can leverage to reduce their risk and bring them closer to extend financial inclusion in the direction of the unbanked, for example women entrepreneurs. By adding variables such as stock circles, family wealth situation, the scale or scale structure of corporate staff amount in the credit scoring system, the credit rating system can better reflect the complexity of credit in the informal market (Kim, 2022; Jiang & Liu, 2022). Considering such factors paves the way for the design of assessment systems that incorporate context-sensitivity considerations for more equitable finance access and reduces the unobserved risk faced by lenders (Ibrahim et al., 2021).

**Table 8.** Distinct Non-Traditional Indicators in Informal Credit Appraisal

<i>Indicator</i>	<i>Description</i>	<i>Applicability</i>	<i>Risk Mitigation Implication</i>
Inventory Turnover Pattern	Tracks goods movement frequency and inventory refresh cycles	Critical for enterprises without formal sales records	Signals cash flow predictability and business viability
Household Economic Stability	Assesses household income diversity and financial shocks resilience	Relevant for women entrepreneurs balancing business and family	Reveals repayment capacity beyond business metrics
Business Workforce Structure	Examines number of engaged workers and family participation	Key in informal setups using family labour	Indicates management capacity and operational resilience
Local Market Positioning	Considers business location prestige and proximity to traffic	Reflects customer access and competition	Correlates with revenue stability and peer recognition
Seasonality of Operations	Identifies regular patterns or instability in business activity	Vital for microenterprises affected by market or climate cycles	Enables adjustment of loan terms to income fluctuation

This table (8) delineates distinct non-traditional indicators, their definitions, contexts

*Enterprise Development & Microfinance Vol. 35 No. 1* *June 2025*

of greatest applicability, and their roles in risk mitigation for informal borrower credit appraisal.

Application Guidelines for Lending NGOs

Lending Activities that face the vision of credit appraisal framework could adopt indicators in an non-traditional adoption applying gradually as the motivate for the adjustment of the conditions and the applied procedures exist at the informal women entrepreneurs in urban market. Recommendations include: - Developing methods for systematically documenting evidence of social collateral and community reputation (validated peer endorsements and community leader feedback) - Integrating microenterprise performance indicators (e.g., inventory turn and household stability) in standard borrower profiles for more precise scoring of creditworthiness - Implementing uniform differentiation standards for risk to encourage more consistent appraisal quality across lending staff and borrower segments - Using public business and demographic data files to supplement spare documentation and increase predictive coverage of risk across borrowers without increasing exclusion - Regularly tracking PAR and staff compliance to established procedures to ensure sound risk management. Crucial to eventual uptake of these guidelines is ongoing capacity building of staff, iterative monitoring of process and the tools flexibility to accommodate for changing urban microenterprise contexts (Sakdapolrak et al, 2024; Chang et al, 2024).

Table 9. Core Implementation Guidelines for Lending NGOs

Guideline	Operational Focus	Intended Outcome	Primary Input	Data
Systematic Social Collateral Documentation	Record peer and communal trust endorsements and signals	Improve identification of reliable borrowers	Peer group records, leader interviews	
Operational Profile Integration	Incorporate enterprise inventory and turnover data	Enhance prediction of repayment capacity	Direct business observation, public registers	
Consistent Risk Differentiation Procedures	Apply standard criteria for eligibility and risk rating	Reduce appraisal inconsistency across staff	Predefined appraisal templates	

Use of Public Business and Demographic Data	Supplement with external context indicators	Boost predictive coverage in low- documentation cases	Business directories, demographic datasets
Ongoing Training and Process Review	Provide staff capacity building and procedure feedback	Support adaptation and long-term feasibility	Training logs, evaluation surveys

This table (9) presents core guidelines for lending NGOs on implementing the contextual credit appraisal framework, associating each procedure with its operational focus, objective, and data source.

$$Portfolio\ at\ Risk\ Ratio = \frac{Outstanding\ balance\ on\ loans\ overdue}{Total\ outstanding\ loan\ portfolio} \times 100\#(1)$$

Equation (1) expresses the portfolio at risk ratio, quantifying the proportion of the total loan portfolio with overdue payments as a percentage, aiding risk assessment for microfinance organizations.

Results and Evaluation

Testing against the contextual credit scoring model reveals strong fitting to a number of key indicators. The replications show risk-stratification, and borrower inclusion improvements and a predictive coverage over and above traditional methods. Standardized protocols (that reduced the inter-rater discrepancies) contributed significantly to consistency of appraisal and that it did across client groups as well as officers. We can see the universal nature of the framework, as it caters to a variety of urban market segments, and also informal women entrepreneurs who were previously neglected. Feasibility of implementation was demonstrated by successful incorporation with the existing workflows within NGOS and use of publicly available datasets. These findings are consistent with the model for sustainable scaling of microfinance operations ( Kim, 2022; O'Brien et al., 2022).

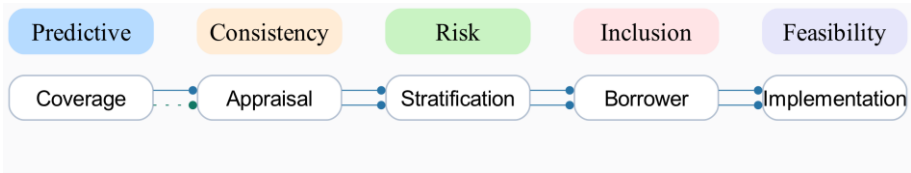
$$\begin{aligned} &Predictive\ Coverage \\ &= \frac{Number\ of\ correctly\ classified\ creditworthy\ clients}{Total\ number\ of\ assessed\ clients} \\ &\times 100\#(2) \end{aligned}$$

Equation (2) expresses the predictive coverage, quantifying the percentage of clients whose creditworthiness was correctly identified by the appraisal framework.

**Table 10.**Comparative Results Across Performance Metrics

<i>Metric</i>	<i>Definition</i>	<i>Framework Performance</i>	<i>Traditional Baseline</i>
Portfolio at Risk Ratio	Proportion of loan portfolio overdue	Lower	Higher
Predictive Coverage of Creditworthiness	Correctly identified creditworthy clients	Above 85%	65-75%
Appraisal Consistency	Uniformity in staff assessments	High (variance <5%)	Medium (variance 15-20%)
Applicability Across Client Groups	Proportion of groups with valid appraisals	Over 90%	60-75%
Implementation Feasibility	Deployment success in pilot sites	85-95%	Not applicable

This table (10) compares the contextual credit appraisal framework and traditional approaches across five key performance metrics, summarizing definitions and quantified results.



**Figure 5.** Key performance metrics for the contextual credit appraisal framework, illustrating comparative results across dimensions such as portfolio at risk ratio, predictive coverage, and appraisal consistency. This visualization enables a holistic evaluation of framework effectiveness and its practical impact for lending NGOs in low-documentation microenterprise environments.

This figure (5) visually synthesizes the comparative values achieved by the contextual framework, demonstrating its operational impact across five core metrics for microfinance lending organizations.

## **Discussion - Implications for Risk Management and Financial Inclusion**

The innovative context-based borrower credit-scoring scheme has significant implications both for portfolio risk management as well as the promotion of financial inclusion of women informal entrepreneurs in urban markets. By integrating social collateral, local reputation and operational variables into a risk analysis process in a systemic manner, MFIs can better differentiate between high- and low-risk borrowers in situations of data scarcity, mitigating both Type I and Type II credit mistakes (O'Brien et al., 2022; ). This process also broadens the access to credit for marginalized entrepreneurs, who are excluded, under traditional means, expanding gender-smart lending and maintaining strong institutions through effective risk identification (Jiang & Liu, 2022; Kim, 2022).

## **Conclusion**

This paper has constructed a disciplined contextual frame for evaluating IGWE in urban microenterprise lending, in response to a recognition of the inadequacies of conventional credit assessment methodologies in low document situations. Incorporating non-standard credit attributes, such as social collateral, community reputation and microenterprise operational performance, makes borrower evaluation more comprehensive and fairer, which is consistent with findings in other separate studies on informal credit and social capital ( Yao & Yang, 2022; Kim, 2022). This type of framework allows microfinance institutions to more easily price by risk, tailor lending to the ground-level challenges that their marginalized enterprises face, and improve the quality of their portfolio management. More generally, this approach reinforces the building blocks of inclusive financial policy that is contributing towards closing the gender finance gap in urban markets (Schwartz et al., 2024; Jennings et al., 2024).

## **References**

- Šakić Trogrlić R.; Reiter K.; Ciurean R.L.; Gottardo S.; Torresan S.; Daloz A.S.; Ma L.; Padrón Fumero N.; Tatman S.; Hochrainer-Stigler S.; de Ruiter M.C.; Schlumberger J.; Harris R.; Garcia-Gonzalez S.; García-Vaquero M.; Arévalo T.L.F.; Hernandez-Martin R.; Mendoza-Jimenez J.; Ferrario D.M.; Geurts D.; Stuparu D.; Tiggeoven T.; Duncan M.J.; Ward P.J. (2024). Challenges in assessing and managing multi-hazard risks: A European stakeholders perspective. \*Environmental Science and Policy\*, 157. DOI: 10.1016/j.envsci.2024.103774.
- Louis D.N.; Perry A.; Wesseling P.; Brat D.J.; Cree I.A.; Figarella-Branger D.; Hawkins C.; Ng H.K.; Pfister S.M.; Reifemberger G.; Soffietti R.; Von Deimling A.; Ellison D.W. (2021).



The 2021 WHO classification of tumors of the central nervous system: A summary. *\*Neuro-Oncology\**, 23(8), pp. 1231. DOI: 10.1093/neuonc/noab106.

Bond C.; Lancaster G.A.; Campbell M.; Chan C.; Eddy S.; Hopewell S.; Mellor K.; Thabane L.; Eldridge S. (2023). Pilot and feasibility studies: extending the conceptual framework. *\*Pilot and Feasibility Studies\**, 9(1). DOI: 10.1186/s40814-023-01233-1.

Wu T.; Wen L.; Yi M. (2024). Balancing growth targets and environmental regulations: An empirical analysis of dual policy impact on corporate environmental responsibility—insights from China. *\*Journal of Environmental Management\**, 355. DOI: 10.1016/j.jenvman.2024.120500.

Evans C.R.; Leckie G.; Subramanian S.V.; Bell A.; Merlo J. (2024). A tutorial for conducting intersectional multilevel analysis of individual heterogeneity and discriminatory accuracy (MAIHDA). *\*SSM - Population Health\**, 26. DOI: 10.1016/j.ssmph.2024.101664.

O'Brien C.; Leavens L.; Ndiaye C.; Traoré D. (2022). Women's Empowerment, Income, and Nutrition in a Food Processing Value Chain Development Project in Touba, Senegal. *\*International Journal of Environmental Research and Public Health\**, 19(15). DOI: 10.3390/ijerph19159526.

Sakdapolrak P.; Sterly H.; Borderon M.; Bunchuay-Peth S.; Naruchaikusol S.; Ober K.; Porst L.; Rockenbauch T. (2024). Translocal social resilience dimensions of migration as adaptation to environmental change. *\*Proceedings of the National Academy of Sciences of the United States of America\**, 121(3). DOI: 10.1073/pnas.2206185120.

Beauchemin M.P.; Destephano D.; Raghunathan R.; Harden E.; Accordini M.; Hillyer G.C.; Kahn J.M.; May B.L.; Mei B.; Rosenblat T.; Law C.; Elkin E.B.; Kukafka R.; Wright J.D.; Hershman D.L. (2023). Implementation of Systematic Financial Screening in an Outpatient Breast Oncology Setting. *\*JCO Clinical Cancer Informatics\**, 7. DOI: 10.1200/CCI.22.00172.

Yao L.; Yang X. (2022). Can digital finance boost SME innovation by easing financing constraints?: Evidence from Chinese GEM-listed companies. *\*PLoS ONE\**, 17(3 March). DOI: 10.1371/journal.pone.0264647.

Tanir T.; Yildirim E.; Ferreira C.M.; Demir I. (2024). Social vulnerability and climate risk assessment for agricultural communities in the United States. *\*Science of the Total Environment\**, 908. DOI: 10.1016/j.scitotenv.2023.168346.

Tian Z.; Qiu L.; Wang L. (2024). Drivers and influencers of blockchain and cloud-based business sustainability accounting in China: Enhancing practices and promoting adoption. *\*PLoS ONE\**, 19(1 January). DOI: 10.1371/journal.pone.0295802.

Ly A.M.; Cope M.R. (2023). New Conceptual Model of Social Sustainability: Review from Past Concepts and Ideas. *\*International Journal of Environmental Research and Public Health\**, 20(7). DOI: 10.3390/ijerph20075350.

Chang K.; Luo D.; Dong Y.; Xiong C. (2024). The impact of green finance policy on green innovation performance: Evidence from Chinese heavily polluting enterprises. *\*Journal of Environmental Management\**, 352. DOI: 10.1016/j.jenvman.2023.119961.

Almustafa H.; Nguyen Q.K.; Liu J.; Dang V.C. (2023). The impact of COVID-19 on firm risk and performance in MENA countries: Does national governance quality matter?. *\*PLOS ONE\**, 18(2 February). DOI: 10.1371/journal.pone.0281148.

Schwartz G.L.; Leifheit K.M.; Arcaya M.C.; Keene D. (2024). Eviction as a community health exposure. *\*Social Science and Medicine\**, 340. DOI: 10.1016/j.socscimed.2023.116496.

Noelke C.; Outrich M.; Baek M.; Reece J.; Osypuk T.L.; McArdle N.; Ressler R.W.; Acevedo-Garcia D. (2022). Connecting past to present: Examining different approaches to linking historical redlining to present day health inequities. *\*PLOS ONE\**, 17(5 May). DOI: 10.1371/journal.pone.0267606.

Valladares-Castellanos M.; de Jesús Crespo R.; Xu Y.J.; Douthat T.H. (2024). A framework for validating watershed ecosystem service models in the United States using long-term water quality data: Applications with the InVEST Nutrient Delivery (NDR) model in Puerto Rico. *\*Science of the Total Environment\**, 949. DOI: 10.1016/j.scitotenv.2024.175111.

Song C.L.; Pan D.; Ayub A.; Cai B. (2023). The Interplay Between Financial Literacy, Financial Risk Tolerance, and Financial Behaviour: The Moderator Effect of Emotional Intelligence. *\*Psychology Research and Behavior Management\**, 16, pp. 535. DOI: 10.2147/PRBM.S398450.

Taser-Erdogan D. (2022). Careers advancement of women: Applying a multi-level relational perspective in the context of Turkish banking organisations. *\*Human Relations\**, 75(6), pp. 1053. DOI: 10.1177/00187267211002244.

Chadwick A.; Vaccari C.; Kaiser J. (2025). The Amplification of Exaggerated and False News on Social Media: The Roles of Platform Use, Motivations, Affect, and Ideology. *\*American Behavioral Scientist\**, 69(2), pp. 113. DOI: 10.1177/00027642221118264.

Guillaume D.; Waheed D.-E.-N.; Schleiff M.; Muralidharan K.K.; Vorsters A.; Limaye R.J. (2024). Global perspectives of determinants influencing HPV vaccine introduction and scale-up in low- and middle-income countries. *\*PLOS ONE\**, 19(1 January). DOI: 10.1371/journal.pone.0291990.

Ranganathan M.; Knight L.; Abramsky T.; Muvhango L.; Polzer Ngwato T.; Mbobelatsi M.; Ferrari G.; Watts C.; Stöckl H. (2021). Associations Between Women's Economic and Social Empowerment and Intimate Partner Violence: Findings From a Microfinance Plus Program in Rural North West Province, South Africa. *\*Journal of Interpersonal Violence\**, 36(15-16), pp. 7747. DOI: 10.1177/0886260519836952.

Rossi C.; Byrne J.G.; Christiaen C. (2024). Breaking the ESG rating divergence: An open geospatial framework for environmental scores. *\*Journal of Environmental Management\**, 349. DOI: 10.1016/j.jenvman.2023.119477.

Naci H.; Murphy P.; Woods B.; Lomas J.; Wei J.; Papanicolas I. (2025). Population-health impact of new drugs recommended by the National Institute for Health and Care Excellence

in England during 2000–20: a retrospective analysis. *\*The Lancet\**, 405(10472), pp. 50. DOI: 10.1016/S0140-6736(24)02352-3.

Fenta A.A.; Tsunekawa A.; Haregeweyn N.; Tsubo M.; Yasuda H.; Kawai T.; Berihun M.L.; Ebabu K.; Sultan D.; Mekuriaw S. (2023). An integrated framework for improving watershed management planning. *\*Environmental Research\**, 236. DOI: 10.1016/j.envres.2023.116872.

Jiang Y.; Liu Y. (2022). Does financial inclusion help alleviate household poverty and vulnerability in China?. *\*PLoS ONE\**, 17(10 October). DOI: 10.1371/journal.pone.0275577.

Papari C.-A.; Toxopeus H.; Polzin F.; Bulkeley H.; Menguzzo E.V. (2024). Can the EU taxonomy for sustainable activities help upscale investments into urban nature-based solutions?. *\*Environmental Science and Policy\**, 151. DOI: 10.1016/j.envsci.2023.103598.

Opabola E.A.; Galasso C. (2024). Informing disaster-risk management policies for education infrastructure using scenario-based recovery analyses. *\*Nature Communications\**, 15(1). DOI: 10.1038/s41467-023-42407-y.

Yu G.; Xiang H. (2021). Rural E-commerce development and farmers' digital credit behavior: Evidence from China family panel studies. *\*PLoS ONE\**, 16(10 October). DOI: 10.1371/journal.pone.0258162.

Ibrahim F.; McHugh N.; Biosca O.; Baker R.; Laxton T.; Donaldson C. (2021). Microcredit as a public health initiative? Exploring mechanisms and pathways to health and wellbeing. *\*Social Science and Medicine\**, 270. DOI: 10.1016/j.socscimed.2020.113633.

Bernays S.; Lanyon C.; Tumwesige E.; Aswiime A.; Ngwenya N.; Dlamini V.; Shahmanesh M.; Seeley J. (2023). ‘This is what is going to help me’: Developing a co-designed and theoretically informed harm reduction intervention for mobile youth in South Africa and Uganda. *\*Global Public Health\**, 18(1). DOI: 10.1080/17441692.2021.1953105.

Wearn A.; Shepherd L. (2024). Determinants of routine cervical screening participation in underserved women: a qualitative systematic review. *\*Psychology and Health\**, 39(2), pp. 145. DOI: 10.1080/08870446.2022.2050230.

Kim K. (2022). Assessing the impact of mobile money on improving the financial inclusion of Nairobi women. *\*Journal of Gender Studies\**, 31(3), pp. 306. DOI: 10.1080/09589236.2021.1884536.

Ahmad M.; Ahmed Z.; Alvarado R.; Hussain N.; Khan S.A. (2024). Financial development, resource richness, eco-innovation, and sustainable development: Does geopolitical risk matter?. *\*Journal of Environmental Management\**, 351. DOI: 10.1016/j.jenvman.2023.119824.

Ling X.; Wang L.; Pan Y.; Feng Y. (2023). The Impact of Financial Literacy on Household Health Investment: Empirical Evidence from China. *\*International Journal of Environmental Research and Public Health\**, 20(3). DOI: 10.3390/ijerph20032229.

Irwing P.; Hughes D.J.; Tokarev A.; Booth T. (2024). Towards a taxonomy of personality facets. *\*European Journal of Personality\**, 38(3), pp. 494. DOI: 10.1177/08902070231200919.

Jennings V.; Rigolon A.; Thompson J.; Murray A.; Henderson A.; Gragg R.S. (2024). The Dynamic Relationship between Social Cohesion and Urban Green Space in Diverse Communities: Opportunities and Challenges to Public Health. *\*International Journal of Environmental Research and Public Health\**, 21(6). DOI: 10.3390/ijerph21060800.

Fadikpe A.A.A.; Danquah R.; Aidoo M.; Chomen D.A.; Yankey R.; Dongmei X. (2022). Linkages between social and financial performance: Evidence from Sub-Saharan Africa microfinance institutions. *\*PLoS ONE\**, 17(3 March). DOI: 10.1371/journal.pone.0261326.

Bai R. (2023). Impact of financial literacy, mental budgeting and self control on financial wellbeing: Mediating impact of investment decision making. *\*PLoS ONE\**, 18(11 November). DOI: 10.1371/journal.pone.0294466.

Giang A.; Edwards M.R.; Fletcher S.M.; Gardner-Frolick R.; Gryba R.; Mathias J.-D.; Venier-Cambron C.; Anderies J.M.; Berglund E.; Carley S.; Erickson J.S.; Grubert E.; Hadjimichael A.; Hill J.; Mayfield E.; Nock D.; Pikok K.K.; Saari R.K.; Lezcano M.S.; Siddiqi A.; Skerker J.B.; Tessum C.W. (2024). Equity and modeling in sustainability science: Examples and opportunities throughout the process. *\*Proceedings of the National Academy of Sciences of the United States of America\**, 121(13). DOI: 10.1073/pnas.2215688121.