



RESEARCH ARTICLE

Impact of Commercial Banks and Microfinance Institutions on Retail SMEs' Performance

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DOI: 10.66699/98152w43

ABSTRACT

This paper examines commercial bank and microfinance institution (MFI) financing and its relationship to retail small and medium-sized enterprise (SME) performance in Tharaka South, Kenya, and assesses whether proprietor experience moderated these associations. A quantitative cross-sectional survey targeted 269 proprietors from 922 registered businesses in Marimanti and Nkondi wards; 266 usable questionnaires were analysed. The financing-specific analyses reported positive correlations with performance for commercial bank financing ($r = .6771$) and MFI financing ($r = .6440$). The simple models reported unstandardised coefficients of $B = 0.560$ and $B = 0.518$, with R^2 values of .458 and .415, respectively. These directions are consistent with the positive-association hypotheses, although conflicting subgroup counts and model summaries prevent fully verified inferential decisions. The expanded MFI slope was negative, and the interaction coefficients were not separately identified; neither moderation hypothesis can therefore be decided. The contribution is a local examination of two named financing channels and the proposed role of experience, compared with broader credit-constraint and capability studies. The findings concern performance scores among the surveyed businesses. They do not establish causal benefits of borrowing, effects on survival or differences in lender effectiveness. Reconciled analytic samples, scoring rules and model output are needed before firm inferential conclusions can be drawn.

Keywords: commercial bank financing, microfinance institutions, proprietor experience, retail SMEs, business performance

HOW TO CITE

Kithaka Njeru, N., Muleke, V., & Mwikamba, T. (2026). Impact of Commercial Banks and Microfinance Institutions on Retail SMEs' Performance. *Journal of Business and Finance in East and Horn of Africa*, 2(1), 21-30. <https://doi.org/10.66699/98152w43>

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Background

Financing small firms is a persistent concern in entrepreneurship research because access to external capital shapes the opportunities available to businesses with limited internal resources. The field encompasses different providers, financing arrangements and institutional settings, making it necessary to distinguish the availability of finance from the capacity to use it productively (Cumming et al., 2019). Evidence from developing countries also links better business practices with stronger firm outcomes, including higher survival rates and sales growth. These findings support examining finance and managerial capability together, without treating credit as a sufficient condition for success (McKenzie & Woodruff, 2017).

Across Africa, financial constraints remain relevant to enterprise development. Fowowe (2017), using data from 10,888 firms in 30 African countries, found that credit constraints were associated with slower firm growth. Nevertheless, the benefits of finance are not uniform across outcomes or settings. Adegboye and Iweriebor (2018) found that access to bank credit supported innovation among Nigerian SMEs, while increased access to finance could coincide with lower productivity. At the institutional level, Anarfo et al. (2020) showed that financial regulation and stability interact in shaping financial inclusion in sub-Saharan Africa. These findings support attention to both borrower-level capabilities and the conditions under which finance is supplied.

Kenya offers an instructive setting because substantial financial inclusion coexists with concerns about the suitability and productive use of financial services. The 2024 FinAccess survey reported that 84.8% of adults had formal financial access (Kenya National Bureau of Statistics [KNBS], 2024). This household statistic does not establish that retail SMEs obtain affordable business credit. Moreover, experimental evidence from Kenyan SMEs indicates that the timing of loans relative to business training can affect business practices and performance; immediate credit access did not necessarily strengthen the benefits of training (Ashraf & Lyons, 2026). National inclusion should consequently not be equated with an assured improvement in enterprise performance.

The local business environment provides a further reason to examine financing in Tharaka South. The Kenya Institute for Public Policy Research and Analysis (KIPPRA, 2022) identifies constraints affecting micro and small enterprises in Tharaka Nithi County, including restricted access to affordable, long-term finance, gaps in technical capacity and limited risk preparedness. Its county policy brief also notes weaknesses in the use of financial innovations and awareness of credit guarantees. These constraints provide the context for a local inquiry into financing and SME performance.

Commercial banks and MFIs constitute distinct formal channels of debt finance. Their relevance depends on the circumstances of the enterprise, the lending arrangement and the relationship between the borrower and the provider. Small firms' financing decisions also reflect individual, organisational and institutional factors, rather than a simple choice between obtaining finance and being excluded from it (Nguyen & Canh, 2021). Microfinance research similarly shows the importance of understanding how borrowing is embedded in everyday business practices (Bika et al., 2022). A preference for a provider, actual receipt of a loan and a favourable assessment of financing are therefore related but different measures.

Proprietor experience may influence opportunity recognition, financial decisions and the deployment of borrowed resources. Anwar et al. (2020) distinguish business experience from financial literacy and associate both with opportunity recognition and SME performance. Abdallah et al. (2025) also connect financial literacy and financial access with SME performance, although their moderator is access to finance rather than prior business experience. Accordingly, this paper examines financing scores as predictors of retail SME performance and proprietor experience as a potential moderator. Business survival is a broader motivation for the inquiry, not a directly estimated outcome.

The article examines whether commercial bank and MFI financing scores are positively associated with questionnaire-based SME performance among the surveyed businesses, and whether those associations vary with proprietor experience. The empirical claim concerns the measured scores and the financing-specific analytic samples. Survival motivates the research problem, but the models contain neither a closure outcome nor survival duration. The design therefore cannot establish that borrowing prevents enterprise failure.

The contribution is a local examination of two named financing channels and a proposed experience-related explanation of their performance associations. Fowowe (2017) examines credit constraints across African firms, Mutsonziwa and Fanta (2021) compare formal and informal credit across Southern African economies, and Anwar et al. (2020) examine experience, financial literacy and opportunity recognition. This article brings the financing-specific questions to the surveyed Tharaka South businesses. Its separate models do not estimate a common-sample comparison of lender effectiveness, and the evidence does not establish that this is the first study of financing and experience. The proposed moderation analysis can contribute further only when the interaction terms and model reporting are reconciled.

Hypotheses

The agency and resource-based arguments motivate testing whether finance is associated with performance, while the human capital perspective motivates examining whether proprietor experience changes that association. The empirical literature reviewed above contains favourable and context-dependent findings, so the expected relationships are propositions to test rather than assumed benefits of borrowing. For example, Meager (2019) identifies heterogeneous microcredit returns involving prior business experience; this motivates the interaction question without establishing that it will hold in the present setting.

The following hypotheses organise the reported exploratory comparisons. Their timing is not documented, so they are not presented as pre-registered or as confirmed to have preceded data collection.

- i. H1 Commercial bank financing is positively associated with SME performance in the commercial bank model.
- ii. H2 MFI financing is positively associated with SME performance in the MFI model.
- iii. H3 Proprietor experience moderates the association between commercial bank financing and SME performance.
- iv. H4 Proprietor experience moderates the association between MFI financing and SME performance.

For H1 and H2, the corresponding statistical null is a zero-financing coefficient in the specified simple model. For H3 and H4, the null is a zero financing $\times$ experience coefficient in a model that also includes both main effects. The two moderation hypotheses are non-directional because the cited evidence does not establish a consistently strengthening or weakening interaction. A coefficient labelled experience alone cannot decide either moderation hypothesis.

Methodology

Research design and setting

This paper uses a quantitative cross-sectional survey within a positivist, deductive approach. Structured questionnaire responses were collected at a single point in time to examine associations between financing and retail SME performance. The design supports the estimation of observed relationships but cannot determine temporal ordering or isolate a causal effect of borrowing. The research was conducted in Marimanti and Nkondi wards in Tharaka South Sub-County, Tharaka Nithi County, in eastern Kenya.

Population and sampling

The sampling population comprised 922 registered small-scale businesses as at June 2025. Retail SME proprietors were the intended respondents, with financing-specific analyses drawing on responses concerning commercial banks or MFIs. The planned sample was 269, allocated between Marimanti and Nkondi wards in an intended 60:40 ratio. A total of 266 usable questionnaires was analysed. The sampling account does not establish the ward-specific population counts or the procedure used to select individual proprietors, so the allocation cannot be characterised as proportional random sampling.

The stated finite-population sample-size calculation used a 95% confidence level, an anticipated population proportion of .50 and a margin of error of .05:

$$s = \frac{\chi^2 N p (1 - p)}{d^2 (N - 1) + \chi^2 p (1 - p)}$$

Here, s is the required sample size, N is the population size, p is the anticipated population proportion, d is the margin of error and $\chi^2 = 3.841$ is the one-degree-of-freedom chi-square value corresponding to the stated confidence level. Substitution of $N = 922$, $p = .50$ and $d = .05$ yields $s = 271.35$, which rounds up to 272. The stated target of 269 was therefore three respondents below the rounded requirement. This arithmetic correction does not change the actual target or the 266 usable responses. Precision-based planning for population estimates also does not establish adequate power for financing-specific regressions or interaction tests (Lakens, 2022).

Instrument

The questionnaire covered respondent profiles, business characteristics, duration of operation, borrowing preferences and Likert-type items relating to commercial bank financing, MFI financing and business performance. Proprietor experience was included in the expanded models. The number of scale points, item wording, aggregation rules and the coding of experience are not documented sufficiently to determine the units or possible ranges of the resulting scores. Accordingly, a financing score is not interpreted as a monetary loan amount, and a performance score is not treated as an observed survival rate. Appropriate modelling of Likert-type responses requires explicit attention to their scale level and coding (Tutz, 2021).

Model

Usable questionnaire responses were coded, entered into Microsoft Excel and checked for missing or inconsistent entries. Descriptive statistics summarised respondent and business characteristics. Pearson correlations and simple linear regression models examined financing–performance associations. Expanded models were presented to explore the role of proprietor experience. Normality, multicollinearity and heteroscedasticity were identified as diagnostic checks, but their results were not reported. Regression assumptions therefore are not empirically demonstrated; in particular, the normality assumption concerns the regression errors, not a requirement that all predictors be normally distributed (Schmidt & Finan, 2018).

The financing-specific model descriptions state 30 commercial bank cases and 116 MFI cases. These counts cannot be reconciled with the reported model summaries. The case count for each Pearson correlation is also unspecified. Correlation and regression estimates are therefore not assumed to represent identical analytic samples. Coefficients are labelled B because the results tables identify them as unstandardised estimates; they are not reported as standardised β coefficients.

Results

Descriptive results

Table 1 consolidates the respondent, enterprise and borrowing characteristics. Marimanti accounted for 161 respondents (60.5%) and Nkondi for 105 (39.5%). Women comprised 55.3% of the sample, and 199 respondents (74.8%) were aged 31–50 years. Most enterprises had a single owner, and 167 (62.8%) had no regular employees. Incomplete or potentially overlapping categories are identified in the table note.

Table 1

Respondent, Enterprise and Borrowing Characteristics

Characteristic	Category	<i>n</i>	%
Ward	Marimanti	161	60.5
	Nkondi	105	39.5
Sex	Female	147	55.3
	Male	119	44.7
Age (years)	21–30	20	7.5
	31–40	100	37.6
	41–50	99	37.2
	51 and above	20	7.5
Business category	General merchandise	53	19.9
	Food-related businesses	44	16.5
	Grocery	30	11.3
	Transport services	26	9.8
	Electronics, electrical goods and appliances	23	8.6
	Home, furniture and kitchenware	9	3.4
Number of owners	One	245	92.1
	Two	17	6.4
	Three	2	0.8
	More than three	2	0.8
Management	Proprietor alone	152	57.1
	Proprietor with a family member or spouse	114	42.9
Regular employees	No regular employees	167	62.8
	One	59	22.2
	Two	28	10.5
	More than two	12	4.5
Duration of operation	More than three months but less than one year	14	5.3
	1–2 years	39	14.7
	2–3 years	30	11.3
	3–4 years	65	24.4
	4–5 years	39	14.7
	5 years	79	29.7

Characteristic	Category	<i>n</i>	%
Borrowing purpose	Improve operational efficiency	245	92.1
	Acquire new business skills	58	21.8
	Invest in a new product line	43	16.2
Preferred finance source	Microfinance institutions	117	44.0
	SACCOs	91	34.2
	Government credit support programmes	28	10.5
	Commercial banks, including M-Shwari	31	11.7
Borrowing frequency	Once per year	98	36.8
	Once every six months	126	47.4
	Once every three months	32	12.0
	Weekly	10	3.8

Note. *N* = 266. Percentages use $n/266 \times 100$. SACCOs = savings and credit co-operative societies. Age categories total 239, leaving 27 cases unaccounted for. Business categories are a selected breakdown. Duration labels may overlap, including “4–5 years” and “5 years”. Borrowing purposes total 346 and preferred financing sources total 267; multiple-response status or exclusivity requires clarification.

Pairwise financing correlations

Commercial bank financing and MFI financing had positive reported correlations with SME performance. The other correlations were smaller, particularly the relationships between the two financing scores and between MFI financing and proprietor experience. Table 2 reports the coefficients without reproducing significance claims that cannot be assessed against identified case counts.

Table 2

Reported Pearson Correlations

Variable pair	<i>r</i>
Commercial bank financing and SME performance	.6771
MFI financing and SME performance	.6440
Commercial bank financing and MFI financing	.0575
Commercial bank financing and proprietor experience	.2763
MFI financing and proprietor experience	.0950

Note. The valid case count for each pair is unspecified. Coefficients are retained to four decimal places to preserve the reported values. Their significance and direct comparability with the financing-specific regressions require reconciliation of the analytic samples.

Simple financing models

The simple commercial bank model reported a positive financing coefficient of $B = 0.560$ and $R^2 = .458$. The MFI model reported $B = 0.518$ and $R^2 = .415$. R^2 describes the proportion of observed variance in SME performance accounted for by a fitted model within its analytic sample; it is not the proportion of variation “in the association”. Because subgroup counts and model summaries conflict, these values should be treated as reported model estimates whose inferential precision remains unresolved.

Table 3*Coefficients for the Simple Financing Models*

Model	Predictor	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Commercial bank	Constant	5.073	1.072	4.734	< .001
	Financing	0.560	0.111	5.034	< .001
MFI	Constant	5.171	0.546	9.466	< .001
	Financing	0.518	0.057	9.066	< .001

Note. *B* = unstandardised regression coefficient; *SE* = standard error. The model descriptions state 30 commercial bank cases and 116 MFI cases, but these counts are inconsistent with the associated model summaries. Values printed as *p* = .000 are expressed as *p* < .001. Reported *R*² is .458 for commercial bank financing and .415 for MFI financing. Significance statements require confirmation from reconciled statistical output.

The two reported fitted lines are:

$$\hat{Y} = 5.073 + 0.560X \quad (\text{commercial bank financing})$$

$$\hat{Y} = 5.171 + 0.518X \quad (\text{MFI financing})$$

$\hat{Y}$ denotes fitted SME performance and *X* the relevant financing score. The slope represents the fitted change in performance score associated with a one-unit difference in that financing score; its substantive interpretation depends on the coding. The constants 5.073 and 5.171 are intercepts, not standardised beta coefficients. An intercept above five is not automatically invalid, since *X* = 0 may lie outside the observed range. However, if both scores are means restricted to 1–5, these fitted lines would predict performance above five throughout that predictor range. Verification of score construction and fitted values is therefore essential.

Expanded models and proprietor experience

The expanded coefficient tables include financing and a predictor labelled proprietor experience (Table 4). The commercial bank coefficient changes from 0.560 to 0.607, while the MFI coefficient changes from 0.518 to –0.627. Neither change establishes moderation. Although an interaction variable is described in the analysis account, its coefficient is not separately identified, and it is unclear whether the final predictor is experience itself or the financing × experience product.

Table 4*Coefficients Reported for the Expanded Financing Models*

Model	Predictor	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Commercial bank	Constant	5.821	1.669	3.487	.002
	Financing	0.607	0.138	4.411	< .001
	Proprietor experience	0.092	0.156	0.589	.560
MFI	Constant	8.047	0.339	23.715	< .001
	Financing	–0.627	0.072	–8.727	< .001
	Proprietor experience	0.159	0.009	17.854	.014

Note. Predictor labels and numerical estimates are retained as reported. No separately identified interaction estimate is available. The additional standalone value *B* = 1.544 is omitted because its model is unidentified. The reported *p* = .014 is incompatible with *t* = 17.854 under conventional coefficient testing; neither value has been replaced by an assumed correction. The expanded-model fit statistics are also inconsistent and cannot substantiate a claim of moderation.

A clearly specified moderation model would include financing, experience and their product:

$$Y = b_0 + b_1X + b_2E + b_3(X \times E) + \varepsilon$$

E represents proprietor experience, and *b*₃ estimates the financing–experience interaction. This equation specifies the test required for moderation; it is not a claim that the reported estimates came from that complete model. Without an identified interaction coefficient, its uncertainty and a consistent change in

model fit, the evidence does not establish the presence or absence of moderation for either financing source.

The reported simple-model slopes are positive, consistent with the directions proposed in H1 and H2. The supplied significance values are retained in Table 3, but inconsistent analytic case counts and model summaries prevent definitive verification of the null-hypothesis decisions. H3 and H4 cannot be assessed from an unidentified interaction term. Table 5 distinguishes consistency with a predicted direction from a verified inferential conclusion.

Table 5

Relationship Between the Hypotheses and Reported Results

Hypothesis	Proposition	Reported evidence	Decision
H1	Positive bank association	$B = 0.560$; $r = .6771$	Direction consistent; inference unverified
H2	Positive MFI association	$B = 0.518$; $r = .6440$	Direction consistent; inference unverified
H3	Experience moderates bank association	No separately identified interaction	Not assessable
H4	Experience moderates MFI association	No separately identified interaction	Not assessable

Note. B = unstandardised coefficient; r = Pearson correlation. H1 and H2 concern the simple models. The MFI slope reverses in the expanded model, so the simple positive association is not a robust adjusted finding. "Not assessable" does not mean that a moderation hypothesis is supported or rejected. Non-significance of a main effect does not establish absence of an interaction.

Discussion

The positive financing–performance associations are compatible with the proposition that external finance can ease constraints on enterprise activity. This interpretation converges with Fowowe's (2017) cross-country African evidence and with the positive loan-size and training associations reported for Ethiopian micro and small enterprises by Semegn and Bishnoi (2021). The latter study uses enterprise outcomes and a different setting, however, so agreement in direction does not verify the coefficients or causal interpretation of the Tharaka South models.

Evidence also qualifies a uniformly favourable interpretation of credit. Mutsonziwa and Fanta (2021) found performance gains associated with formal credit in Zimbabwe, but not comparable gains across all the other Southern African countries examined. Adegboye and Iweriebor (2018) distinguish the innovation benefits of finance from possible productivity declines. These results show why a positive association with one performance measure should not be generalised to every enterprise outcome or institutional context.

The microfinance evidence is similarly heterogeneous. Meager (2019), synthesising seven randomised experiments, finds average effects on household business and consumption outcomes that are unlikely to be transformative, alongside larger but more variable effects among households with previous business experience. In Uganda, Fiala (2018) found loan benefits for male-owned enterprises but no short-run effects for female-owned enterprises. These studies show both convergence and divergence: some entrepreneurs benefit, but credit does not consistently improve outcomes for every borrower. The present sample's female majority therefore provides no basis for assuming the same financing relationship for women and men without a corresponding subgroup analysis.

Kenyan experimental evidence provides a particularly relevant contrast. Ashraf and Lyons (2026) found that access to loans immediately after training could divert attention from improving business practices; borrowers spent less time on their businesses and experienced weaker revenue outcomes. Their intervention, loan terms and causal design differ from this survey, but the findings challenge a blanket

recommendation to expand borrowing. Appropriate timing, loan suitability and the intended use of funds deserve attention alongside access itself.

Experience remains a plausible capability-related factor, although its moderating role is not demonstrated here. Anwar et al. (2020) associate experience with opportunity recognition and performance, while Battisti et al. (2019) emphasise relationships between learning and resilient small-firm performance. Abdallah et al. (2025) examine financial literacy and access, not the experience defined in this study. These constructs should not be treated as interchangeable. Nor should the negative financing coefficient in an expanded MFI model be interpreted as an adverse causal effect or as proof of moderation before the predictor definitions and model specification are reconciled.

From a resource-based perspective, the findings align with examining how capital and proprietor capabilities combine, rather than assuming finance alone generates a durable advantage. Bika et al. (2022) focus on the relationship between microfinance and business practice. The stronger interpretation is therefore conditional: suitable finance may support business activity when proprietors can deploy it productively, but the present design does not identify this mechanism or measure subsequent survival.

Limitations and scope of inference

The cross-sectional design cannot establish causation, and self-reported financing and performance measures may share reporting influences. The questionnaire's scoring rules and the definition of proprietor experience require fuller specification. Financing-specific eligibility and complete-case counts are unclear, while the reported regression summaries contain numerical inconsistencies. Several descriptive categories are incomplete or potentially overlapping, and diagnostic results are unavailable. These limitations constrain statistical inference, comparison across financing sources and generalisation beyond the surveyed businesses.

Conclusion

The reported simple-model slopes are positive, consistent with H1 and H2, but conflicting analytic case counts and model summaries prevent verified null-hypothesis decisions. The negative expanded MFI slope further limits the interpretation of a positive financing association. H3 and H4 remain unassessable without identified interactions and consistent model output. The contribution is a financing-specific examination of questionnaire-based performance and a proposed role for proprietor experience in the surveyed Tharaka South businesses. These results do not establish causal benefits, survival effects or differences in lender effectiveness. Reconciled measurement, analytic samples and diagnostics are required before stronger conclusions can be drawn.

Enterprise support should help proprietors assess loan suitability, cash flow and repayment capacity alongside financial record-keeping and business planning. The findings do not justify recommending borrowing to every entrepreneur or assuming that experience removes debt risks.

Further analysis should reconcile descriptive categories and financing-specific case counts, document score construction and estimate clearly specified financing × experience interactions. Longitudinal follow-up with defined performance and closure outcomes is needed to examine business survival.

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