



RESEARCH ARTICLE

The Impact of SACCO Financing and Government Support on Retail SMEs' Performance

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ABSTRACT

This paper examines how savings and credit co-operative society (SACCO) financing and Government Support Programmes (GSPs) relate to retail small and medium-sized enterprise (SME) performance in Tharaka South, Kenya, and whether proprietor experience moderated these associations. A quantitative cross-sectional survey targeted 269 proprietors from 922 registered businesses; 266 usable questionnaires were analysed. The separate simple models reported a positive SACCO coefficient ($B = 0.571$, $R^2 = .522$) and a positive but non-significant GSP coefficient ($B = 0.216$, $R^2 = .056$, reported $p = .218$). These results are directionally consistent with the SACCO hypothesis, whereas the reported GSP model does not support its positive-association hypothesis at the .05 level. Analytic case counts and SACCO model summaries contain inconsistencies, so inferential decisions remain conditional on reconciliation of the original output. Neither moderation hypothesis can be assessed because the interaction coefficients are not separately identified. The contribution is a local examination of co-operative and public-support financing scores within their respective analytic samples, rather than a controlled comparison of provider effectiveness. The evidence concerns questionnaire-based performance and does not establish effects on business survival or causal benefits of financing.

Keywords: SACCO financing, government support programmes, proprietor experience, retail SME performance, Kenya

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Background

Entrepreneurial finance encompasses different providers, financing arrangements and institutional settings (Cumming et al., 2019). Access to funds should be distinguished from the capacity to use them productively. McKenzie and Woodruff (2017) associate business practices with small-firm outcomes, including survival and sales growth. These distinctions motivate examining financing and proprietor capabilities together without treating credit as a sufficient condition for success.

Fowowe (2017), analysing 10,888 firms in 30 African countries, found that credit constraints were associated with slower firm growth. Adegboye and Iweriebor (2018) identify innovation benefits of bank credit among Nigerian SMEs alongside possible productivity declines. Anarfo et al. (2020) examine how financial regulation and stability interact in shaping financial inclusion in sub-Saharan Africa. This evidence motivates attention to borrower capabilities and financing conditions rather than assuming uniform benefits.

The 2024 FinAccess survey reports formal financial access among 84.8% of Kenyan adults (Kenya National Bureau of Statistics [KNBS], 2024). This household statistic does not establish affordable credit access among retail SMEs. Kenyan experimental evidence also shows that loans supplied immediately after business training do not necessarily strengthen its benefits (Ashraf & Lyons, 2026). Financial inclusion and enterprise performance therefore require distinct measurement and interpretation.

The Kenya Institute for Public Policy Research and Analysis (KIPPRA, 2022) identifies restricted access to affordable, long-term finance, gaps in technical capacity and limited risk preparedness among micro and small enterprises in Tharaka Nithi County. Its policy brief also notes weaknesses in the use of financial innovation and awareness of credit guarantees. These county-level constraints provide the context for examining financing in Tharaka South.

SACCOs and GSPs represent different institutional arrangements in this study. SACCOs provide co-operative savings and credit services, while the GSP category groups government support initiatives reported by respondents. Nassuna et al. (2024) examine how innovative practices supported the growth of selected Ugandan SACCOs, including their outreach and savings. Their unit of analysis is the co-operative institution; those findings cannot be treated as direct evidence that SACCO borrowing improves the performance of Kenyan retail firms. They provide a regional institutional comparison for the present borrower-level inquiry.

Government-supported lending adds another dimension to entrepreneurial finance. Crawford et al. (2024) review direct government finance through loans, guarantees and credit lines and identify the need to clarify the purpose of support and improve awareness of available instruments. Cowling and Dvoutely (2023) examine a UK start-up loan scheme and find that borrower circumstances are relevant to loan performance and the wider benefits of supported self-employment. Their findings concern a specific public lending scheme and do not establish the performance of Kenyan government credit programmes. They nevertheless motivate examining public credit alongside other financing channels rather than treating all external finance as interchangeable.

Financing preferences, verified loan receipt and assessments of access are distinct constructs. Nguyen and Canh (2021) identify individual, organisational and institutional dimensions of small-business financing decisions, while Bika et al. (2022) examine relationships between microfinance and everyday business practice. These distinctions matter here because the questionnaire scores are not documented sufficiently to treat them as monetary loan amounts or exposure to a specific support intervention. The GSP label does not establish that every named programme supplied the same type or amount of support.

Proprietor experience offers a plausible capability-related explanation for differences in enterprise performance. Anwar et al. (2020) distinguish experience from financial literacy and associate both with opportunity recognition and performance. Abdallah et al. (2025) examine financial literacy alongside

financial access, while Battisti et al. (2019) link learning to resilient small-firm performance. These studies motivate an examination of experience, but they do not establish that experience necessarily moderates every financing–performance relationship. A main effect of experience and an interaction between experience and financing represent different empirical propositions.

The study evaluates whether SACCO financing and GSP scores are positively associated with performance in their respective models and whether proprietor experience changes either association. Its claim is confined to the measured scores and the surveyed businesses represented in each analysis. Business survival motivates the problem, but no closure outcome or survival duration is modelled.

The contribution is a financing-specific examination of co-operative credit and public support in the Tharaka South setting. Fowowe (2017) examines broader African credit constraints; Nassuna et al. (2024) study SACCO organisational growth in Uganda; and Crawford et al. (2024) review government financing instruments across settings. The present study instead examines SME performance scores and the proposed role of proprietor experience. Separate models with different and incompletely documented analytic samples cannot establish that SACCOs outperform public programmes. The evidence also does not establish a first-ever theoretical contribution or a finding applicable to all Kenyan SMEs.

Hypotheses

Agency and resource-based perspectives motivate examining financing constraints and resource use; the human capital perspective motivates examining proprietor capabilities. These perspectives guide the propositions rather than constituting separately tested theories. Heterogeneous microcredit returns involving prior business experience (Meager, 2019) motivate the moderation question without establishing the interaction expected in this setting. The following hypotheses organise the reported exploratory comparisons; their timing is not documented as pre-registered or prior to data collection.

- i. H1 SACCO financing is positively associated with retail SME performance in the SACCO simple model.
- ii. H2 GSP financing is positively associated with retail SME performance in the GSP simple model.
- iii. H3 Proprietor experience moderates the SACCO financing–performance association.
- iv. H4 Proprietor experience moderates the GSP financing–performance association.

For H1 and H2, the corresponding statistical null is a zero financing coefficient. For H3 and H4, the null is a zero financing $\times$ experience coefficient in a model including both main effects. The moderation hypotheses are non-directional because the reviewed evidence does not establish a consistently strengthening or weakening interaction.

Methodology

Research design and setting

The study used a quantitative cross-sectional survey within a positivist, deductive approach. The study collected structured responses at one point in time in Marimanti and Nkondi wards, Tharaka South Sub-County, Tharaka Nithi County, eastern Kenya. The design supports observed associations but cannot establish temporal ordering or isolate causal effects of financing. No qualitative analysis is documented.

Population and sampling

The population comprised 922 registered small-scale businesses as of June 2025. The planned sample was 269 proprietors, allocated between Marimanti and Nkondi wards in an intended 60:40 ratio. The analysis used 266 usable questionnaires. The source identifies 91 SACCO cases and 28 GSP cases for the separate regressions, but the reported residual degrees of freedom are inconsistent with those totals. Considering a financing source is also not equivalent to verified borrowing. Ward frame counts, participant selection, financing eligibility and complete-case rules require fuller specification. Transport and food-service categories require an eligibility definition consistent with the retail framing.

The stated finite-population sample-size expression is:

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

With $N = 922$, $\chi^2 = 3.841$, anticipated proportion $p = .50$ and margin of error $d = .05$, the expression gives 271.35, rounded upwards to 272. The actual target of 269 and analysed count of 266 are retained. This corrects the planning arithmetic without changing the observations. Precision-based sample planning does not itself establish sufficient power for subgroup or interaction analyses (Lakens, 2022).

Instrument

The structured questionnaire covered proprietor profiles, business characteristics, borrowing preferences and Likert-type financing and performance responses. The instrument paragraph in the source names bank and MFI items, although this manuscript analyses SACCOs and GSPs. The exact SACCO and GSP items, aggregation rules, scale ranges and experience coding therefore require confirmation from the questionnaire and codebook. Financing scores are not interpreted per shilling borrowed, and experience is not interpreted per year without its coding. Scale level matters for modelling Likert-type responses (Tutz, 2021).

The questionnaire was piloted with 27 small-scale business owners in Kiagu Ward, Meru County. Pilot responses were assessed for relevance and consistency to identify problems in the instrument. A Cronbach's alpha coefficient above .70 was reported. This result provides limited evidence of internal consistency; the lack of construct-specific coefficients and the underlying item structure prevents a fuller assessment of measurement reliability or validity.

Empirical Model

Responses were coded, entered Microsoft Excel and checked for missing or inconsistent entries. Descriptive statistics and Pearson correlations preceded separate simple linear regressions. Expanded models were described as moderation analyses, but their coefficient tables do not separately identify financing $\times$ experience terms. The hypotheses are therefore reported as exploratory propositions, with decisions conditional on the model evidence available.

$$Y = b_0 + b_1X + \varepsilon$$

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

Y denotes the performance score, X the relevant financing score and E proprietor experience. The first equation defines a simple model; the second specifies the complete test required for moderation. The second is a specification, not an assertion that the reported coefficients were estimated from that complete model. The error ε represents an unexplained component of an observation. Coefficients are unstandardised B values.

Diagnostic results for residual normality, multicollinearity and heteroscedasticity are unreported. Normality concerns regression errors, not a requirement that every predictor be normally distributed (Schmidt & Finan, 2018). Correlation case counts are also unspecified. Incompatible statistical entries are disclosed rather than replaced by assumed results.

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
Borrowing purpose	Improve operational efficiency	245	92.1
	Acquire new business skills	58	21.8
	Invest in a new product line	43	16.2

Characteristic	Category	<i>n</i>	%
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.

Reported correlations

SACCO financing and GSP scores had positive reported correlations with performance (Table 2). The case counts for those correlations are unspecified, so their significance and comparability with the regression samples cannot be verified. The GSP correlation of .2132 differs from the simple model’s reported $R = .236$; different cases or coding must be documented before these estimates are compared.

Table 2

Reported Correlations with SME Performance

Financing score	<i>r</i>
SACCO	.7239
GSP	.2132

Note. Valid case counts are unspecified. Coefficients retain the supplied precision. SACCO = savings and credit co-operative society; GSP = government support programme. Unverified correlation significance claims are not reproduced.

Simple financing models

The SACCO model reports $B = 0.571$, $R^2 = .522$ and $F(1, 90) = 98.468$. The direction is consistent with H1, but the residual degrees of freedom imply 92 observations under ordinary least squares with an intercept, rather than the stated 91. The GSP model reports $B = 0.216$, $R^2 = .056$ and $F(1, 27) = 1.593$, $p = .218$. Its positive coefficient is not statistically significant at .05 in the reported model. These degrees of freedom imply 29 observations, rather than the stated 28. The case counts must be reconciled before definitive inference.

Table 3

Coefficients for the Simple Financing Models

Model	Predictor	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
SACCO	Constant	6.014	0.571	10.527	< .001
	Financing	0.571	0.058	9.923	< .001
GSP	Constant	8.547	1.208	7.076	< .001
	Financing	0.216	0.171	1.262	.218

Note. *B* = unstandardised coefficient; *SE* = standard error. Entries follow the supplied coefficient tables; values printed as $p = .000$ are shown as $p < .001$. Stated analytic counts are 91 SACCO and 28 GSP cases, whereas the reported simple-model degrees of freedom imply 92 and 29. The significance values are conditional on unresolved source reporting.

$$\hat{Y} = 6.014 + 0.571X \quad (\text{SACCO})$$

$$\hat{Y} = 8.547 + 0.216X \quad (\text{GSP})$$

Each slope describes a fitted performance-score difference for a one-unit difference in the relevant financing score. The intercept is the fitted outcome at $X = 0$. If both predictor and outcome scores are means restricted to 1–5, both lines predict outcomes above five throughout that predictor range. Summed or differently coded outcomes would require different interpretation; score construction must therefore be confirmed. The separate slopes cannot rank provider effectiveness without comparable scoring and analytic samples.

Expanded models and proprietor experience

The expanded tables report financing and a variable labelled proprietor experience (Table 4). The SACCO coefficient is 0.604; the GSP coefficient is 0.226 in the table, accompanied by a positive t value. The narrative's negative GSP sign is inconsistent with those entries. No separately labelled interaction is available, so neither the change in a financing coefficient nor the experience coefficient establishes moderation.

Table 4

Coefficients Reported for the Expanded Financing Models

Model	Predictor	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
SACCO	Constant	6.644	0.902	7.365	< .001
	Financing	0.604	0.068	8.874	< .001
	Proprietor experience	0.476	0.084	5.567	.031
GSP	Constant	8.230	2.622	3.139	.004
	Financing	0.226	0.187	1.203	.240
	Proprietor experience	0.023	0.167	0.137	.892

Note. Labels and estimates follow the supplied tables. The SACCO experience row is internally inconsistent: B/SE is approximately 5.667, not the reported $t = 5.567$, beyond three-decimal rounding; $t = 5.567$ with the reported residual $df = 89$ would give $p < .001$, not .031. The values are preserved for reconciliation rather than replaced. The GSP table gives positive $B = 0.226$, whereas the narrative gives -0.226 . No separately identified interaction coefficient is reported.

For SACCOs, reported expanded $R = .816$, $R^2 = .661$ and $F(2, 89) = 49.541$ do not form a coherent model summary. The F statistic and degrees of freedom imply $R^2 \approx .527$, while $R = .816$ cannot round to a squared value of .661. These conflicts prevent using the reported fit increase as evidence of moderation. For GSPs, $F(2, 26) = 0.777$ and $p = .470$ are an overall model test, not an incremental interaction test. The non-significant experience row also cannot establish absence of moderation.

Table 5

Relationship Between the Hypotheses and Reported Results

Hypothesis	Proposition	Reported evidence	Decision
H1	Positive SACCO association	$B = 0.571$; reported $p < .001$	Direction consistent; inference unverified
H2	Positive GSP association	$B = 0.216$; reported $p = .218$	Not supported in reported model
H3	Experience moderates SACCO association	No identified interaction; inconsistent fit	Not assessable
H4	Experience moderates GSP association	No identified interaction	Not assessable

Note. H1 and H2 concern the simple models. Decisions are conditional on reported estimates and unresolved analytic counts. In the reported GSP model, the zero-coefficient null is not rejected at .05; this does not establish that the population effect is zero. Neither moderation hypothesis is accepted or rejected from an unidentified interaction.

Discussion

The reported positive SACCO slope is consistent in direction with broader evidence linking financing constraints and enterprise outcomes. Fowowe (2017) associates credit constraints with slower growth across African firms, while Semegn and Bishnoi (2021) report positive microcredit–performance associations in Ethiopia. Those settings and financing measures differ from SACCO borrowing; directional convergence does not validate the present estimates. Nassuna et al. (2024) examine growth in SACCO outreach and savings at institutional level, which should also be distinguished from the performance of member enterprises.

The reported GSP result does not support H2 at .05. It should not be interpreted as proof that government support is ineffective. Cowling and Dvoutely (2023) examine borrower circumstances and benefits within a specific UK government-backed loan scheme; Crawford et al. (2024) emphasise the diversity of public finance instruments and the importance of clarifying their purpose. The present composite GSP score, small stated subgroup and uncertain case count cannot establish the effects of any named Kenyan programme.

The wider credit literature also qualifies favourable interpretations. Mutsonziwa and Fanta (2021) find different formal-credit performance patterns across Southern African economies, and Adegboye and Iweriebor (2018) distinguish innovation benefits from possible productivity declines. Meager (2019) reports modest average microcredit effects and heterogeneous returns; Fiala (2018) identifies different enterprise outcomes by gender in Uganda. Kenyan experimental evidence from Ashraf and Lyons (2026) shows that the timing of loans alongside training can matter. These findings do not justify recommending borrowing to every proprietor or assuming that access alone secures business continuity.

The experience propositions remain unresolved. Anwar et al. (2020), Abdallah et al. (2025) and Battisti et al. (2019) examine experience, financial literacy and learning, respectively; these are related but distinct constructs. A coefficient labelled experience cannot substitute for a financing × experience term. Until the SACCO experience row and both expanded-model specifications are reconciled, neither a strengthening SACCO interaction nor the absence of a GSP interaction is established.

Limitations

The cross-sectional design cannot isolate causation, and self-reported financing and performance may share reporting influences. Financing eligibility, complete-case counts, scale construction and diagnostic results remain incompletely documented. The correlation and regression samples cannot be assumed identical. SACCO model-fit and coefficient inconsistencies, the GSP sign conflict and incomplete descriptive categories constrain inference. Combining several public initiatives in one GSP category also limits programme-specific interpretation. The separate analyses cannot establish lender rankings or generalisation beyond the surveyed businesses.

Conclusion

The reported positive SACCO simple-model coefficient is directionally consistent with H1, but its inferential status requires reconciled output. The reported GSP coefficient is positive and non-significant, so H2 is not supported at .05 and its zero-coefficient null is not rejected in that model. H3 and H4 remain unassessable without identified interactions. The contribution is a local examination of SACCO and GSP performance-score associations within their separate samples. The findings do not establish causal financing benefits, effects on survival or superiority of one financing channel.

Support should help proprietors assess loan suitability, repayment capacity and business record-keeping. Further analysis should recover the questionnaire and original output, reconcile samples and estimates, report diagnostics and estimate complete interaction models if moderation remains the research question. Defined longitudinal performance and closure outcomes are needed to examine business survival.

References

- Abdallah, W., Harraf, A., Ghura, H., & Abrar, M. (2025). Financial literacy and small and medium enterprises performance: The moderating role of financial access. *Journal of Financial Reporting and Accounting*, 23(4), 1345–1364. <https://doi.org/10.1108/JFRA-06-2024-0337>
- Adegboye, A. C., & Iweriebor, S. (2018). Does access to finance enhance SME innovation and productivity in Nigeria? Evidence from the World Bank Enterprise Survey. *African Development Review*, 30(4), 449–461. <https://doi.org/10.1111/1467-8268.12351>
- Anarfo, E. B., Abor, J. Y., & Osei, K. A. (2020). Financial regulation and financial inclusion in Sub-Saharan Africa: Does financial stability play a moderating role? *Research in International Business and Finance*, 51, Article 101070. <https://doi.org/10.1016/j.ribaf.2019.101070>
- Anwar, M., Shuangjie, L., & Ullah, R. (2020). Business experience or financial literacy? Which one is better for opportunity recognition and superior performance? *Business Strategy & Development*, 3(3), 377–387. <https://doi.org/10.1002/bsd2.103>
- Ashraf, A., & Lyons, E. (2026). Complementing business training with access to finance: Evidence from SMEs in Kenya. *Journal of Development Economics*, 179, Article 103645. <https://doi.org/10.1016/j.jdeveco.2025.103645>
- Battisti, M., Beynon, M., Pickernell, D., & Deakins, D. (2019). Surviving or thriving: The role of learning for the resilient performance of small firms. *Journal of Business Research*, 100, 38–50. <https://doi.org/10.1016/j.jbusres.2019.03.006>
- Bika, Z., Subalova, M., & Locke, C. (2022). Microfinance and small business development in a transitional economy: Insights from borrowers' relations with microfinance organisations in Kazakhstan. *The Journal of Development Studies*, 58(1), 183–203. <https://doi.org/10.1080/00220388.2021.1956472>
- Cowling, M., & Dvoutely, O. (2023). UK government-backed start-up loans: Tackling disadvantage and credit rationing of new entrepreneurs. *International Small Business Journal*, 41(7), 714–733. <https://doi.org/10.1177/02662426221124733>
- Crawford, J., Cui, Z.-Y. A., & Kewley, D. (2024). Government finance, loans, and guarantees for small and medium enterprises (SMEs) (2000–2021): A systematic review. *Journal of Small Business Management*, 62(5), 2607–2637. <https://doi.org/10.1080/00472778.2023.2246061>
- Cumming, D., Deloof, M., Manigart, S., & Wright, M. (2019). New directions in entrepreneurial finance. *Journal of Banking & Finance*, 100, 252–260. <https://doi.org/10.1016/j.jbankfin.2019.02.008>
- Fiala, N. (2018). Returns to microcredit, cash grants and training for male and female microentrepreneurs in Uganda. *World Development*, 105, 189–200. <https://doi.org/10.1016/j.worlddev.2017.12.027>
- Fowowe, B. (2017). Access to finance and firm performance: Evidence from African countries. *Review of Development Finance*, 7(1), 6–17. <https://doi.org/10.1016/j.rdf.2017.01.006>
- Kenya Institute for Public Policy Research and Analysis. (2022). *MSEs' business environment in Tharaka Nithi County* (Policy Brief No. 41/2021–2022). <https://kippra.or.ke/download/mses-business-environment-in-tharaka-nithi-county-pb41-2021-2022/>
- Kenya National Bureau of Statistics. (2024). *2024 FinAccess household survey*. <https://repository.knbs.or.ke/handle/knbs-ke-repo/417>
- Lakens, D. (2022). Sample size justification. *Collabra: Psychology*, 8(1), Article 33267. <https://doi.org/10.1525/collabra.33267>
- McKenzie, D., & Woodruff, C. (2017). Business practices in small firms in developing countries. *Management Science*, 63(9), 2967–2981. <https://doi.org/10.1287/mnsc.2016.2492>
- Meager, R. (2019). Understanding the average impact of microcredit expansions: A Bayesian hierarchical analysis of seven randomized experiments. *American Economic Journal: Applied Economics*, 11(1), 57–91. <https://doi.org/10.1257/app.20170299>
- Mutsonziwa, K., & Fanta, A. B. (2021). Small business performance: Is it access to formal or informal credit that matters? *Journal of African Business*, 22(4), 550–563. <https://doi.org/10.1080/15228916.2020.1826854>
- Nassuna, A. N., Jeppesen, S., & Balunywa, W. (2024). Leveraging growth of savings and credit cooperatives through innovative practices-cases from Uganda. *African Journal of Economic and Management Studies*, 15(4), 781–792. <https://doi.org/10.1108/AJEMS-02-2023-0044>
- Nguyen, B., & Canh, N. P. (2021). Formal and informal financing decisions of small businesses. *Small Business Economics*, 57(3), 1545–1567. <https://doi.org/10.1007/s11187-020-00361-9>
- Schmidt, A. F., & Finan, C. (2018). Linear regression and the normality assumption. *Journal of Clinical Epidemiology*, 98, 146–151. <https://doi.org/10.1016/j.jclinepi.2017.12.006>

Semegn, A. A., & Bishnoi, N. K. (2021). Analysis of effect of microfinance on the performance of MSEs in Amhara National Regional State, Ethiopia. *The Journal of Entrepreneurship*, 30(1), 153–178. <https://doi.org/10.1177/0971355720974822>

Tutz, G. (2021). Hierarchical models for the analysis of Likert scales in regression and item response analysis. *International Statistical Review*, 89(1), 18–35. <https://doi.org/10.1111/insr.12396>