
ACCESS TO CREDIT, BUSINESS DEVELOPMENT SERVICES AND PERFORMANCE OF MICRO AND SMALL ENTERPRISES IN KENYA

¹*Victor Oruko & ²Forah Obebo

Department of Applied Economics, Kenyatta University, Nairobi, Kenya

***Corresponding author email: vikioruko@gmail.com**

Publication Date: May, 2026

ABSTRACT

Purpose: To investigate the causal impact of credit access and Business Development Services (BDS) on Micro and Small Enterprise (MSE) performance in Kenya, and to examine the determinants of BDS uptake and complementarities between the two interventions.

Statement of the Problem: MSEs are central to Kenya's economic development yet remain constrained by limited credit access, low BDS uptake, regulatory bottlenecks, and weak market linkages challenges worsened by the COVID-19 pandemic. Despite evidence that credit and BDS independently enhance performance, no study has jointly examined their causal impact and complementarities locally.

Methodology: The study drew on the FinAccess Survey and the 2016 MSE Study. Propensity Score Matching assessed the treatment effect of credit access; multiple regression examined BDS contributions to enterprise outcomes; and binary logistic regression identified drivers of BDS utilization.

Findings: Only 31% of MSEs accessed credit and a mere 10% utilized BDS. Credit access improved enterprise performance by 32.6%, while 93.4% of BDS users reported positive outcomes, particularly in marketing, training, and business planning. Strong complementarities were evident: 67% of BDS users had credit access versus only 11% of non-users.

Conclusion: Credit and BDS are significant, mutually reinforcing drivers of MSE performance, yet most enterprises especially micro, rural, and female-owned remain excluded from both.

Recommendations: Interventions should prioritize collateral-free financing models, integrated credit-BDS programs, and targeted support for underserved enterprises.

Key words: *Access to Credit, Business Development Services, Micro and Small Enterprises*

INTRODUCTION

Micro and Small Enterprises (MSEs) play a pivotal role in driving socio-economic development through job creation, innovation, and the mitigation of income disparities. In Kenya, the MSE sector largely informal in nature constitutes about 77 percent of total employment, nearly all private sector enterprises, and roughly one-third of the national GDP. These enterprises provide critical economic opportunities for youth, women, persons with disabilities, and individuals with limited skills who might otherwise be excluded from formal employment. Despite their importance, MSEs continue to face persistent and emerging challenges, including constrained access to affordable finance, heavy taxation, regulatory bottlenecks, outdated technologies, limited markets, and inadequate managerial capacity. The predominance of informality further heightens uncertainty regarding the sector's long-term sustainability. (Wawire et al., 2018; Alumasa & Muathe, 2021).

Evidence from both developed and developing economies indicates high failure rates among small businesses. In advanced economies such as the United States, only a small fraction of micro and small firms survives beyond five years, with survival prospects even lower in developing countries (Boubakary, 2015). In Kenya, studies by the Federation of Kenya Employers and the International Labour Organization identify minimal utilization of Business Development Services (BDS) as a key contributor to enterprise failure. BDS include services such as market analysis, strategic planning, training, networking, and facilitation of access to finance (World Bank, 2020). While these services are widely recognized as catalysts for enterprise growth and resilience, their uptake among Kenyan MSEs remains limited due to low awareness and insufficient empirical evidence on their utilization (Asrat, 2022).

Beyond weak engagement with BDS, limited access to credit remains a major constraint to MSE development. Structural barriers such as lack of acceptable collateral and rigid legal and regulatory frameworks that do not accommodate innovative lending models have significantly restricted MSE financing (Omondi & Jagongo, 2018). These challenges are compounded by the sector's heavy reliance on informal operations. Business formalization entailing registration, licensing, and compliance with statutory requirements is a critical component of BDS and a prerequisite for accessing formal credit. However, many MSEs remain informal to maintain operational flexibility and adapt to volatile market conditions (Njuguna, 2016), often resulting in intense competition, thin profit margins, and financial vulnerability (Kariuki et al., 2019). Enterprise performance is closely linked to factors such as product quality, customer loyalty, and entrepreneurial networks, all of which can be strengthened through effective use

of BDS (Omondi & Jagongo, 2018). Profitability, a key indicator of business success, depends on the ability of enterprises to meet financial obligations while generating surplus for growth and reinvestment. Inadequate financing limits expansion in staffing, inventory, and operations, leading to stagnation and raising concerns about business continuity. Informal MSEs are particularly disadvantaged due to low financial literacy, poor record-keeping, and limited information on available financing options, factors that reinforce the perception of high risk among formal lenders.

Over the years, the Kenyan government has introduced numerous policy initiatives aimed at strengthening the MSE sector, including sessional papers, the Micro and Small Enterprises Act of 2012, and targeted financing programs such as the Youth Fund, Women Enterprise Fund, Uwezo Fund, and the Hustler Fund (Republic of Kenya, 1986; 1992; 2005; 2012; 2020). These interventions seek to promote entrepreneurship, enhance skills and technology adoption, expand markets, and improve access to affordable finance. Nevertheless, structural challenges persist, particularly in credit accessibility and innovation. A significant number of enterprises continue to close due to insufficient working capital, market constraints, and low productivity (World Bank, 2012a; Republic of Kenya, 2016). The continued perception of MSEs as high-risk borrowers has sustained stringent collateral requirements, with a substantial proportion of MSE loans classified as non-performing, underscoring the ongoing financing gap within the sector (CBK, 2020).

Despite the policy and programmatic efforts MSEs continue to experience weak performance, evidenced by widespread business closures and limited growth, with a significant proportion of enterprises reporting severe revenue declines and difficulties in meeting daily operating expenses (Mutwiri, 2021; FinAccess, 2021). Beyond financial constraints, high mortality rates among MSEs have been associated with limited utilization of Business Development Services, despite evidence of their positive impact on larger MSEs and their potential to improve enterprise outcomes

While the relationships between credit access, Business Development Services (BDS), and MSE performance are acknowledged, important gaps persist. First, although access to finance is widely recognized as a constraint, limited empirical work distinguishes the differential effects of formal versus informal credit on enterprise outcomes. Second, while BDS are promoted as complementary to finance, evidence on the determinants of their utilization and their impact on the performance of Kenyan MSEs remains scarce. Existing studies largely

focus on larger MSEs or examine credit and BDS in isolation, overlooking potential complementarities between financial and non-financial support. This study addresses these gaps by analyzing the effects of credit access and BDS utilization on MSE performance. Specifically, the study objectives are: (i) to assess the effects of credit access on the performance of MSEs in Kenya; (ii) to examine the determinants of BDS utilization by MSEs in Kenya; and (iii) to establish the effects of BDS on the performance of micro and small enterprises in Kenya.

LITERATURE REVIEW

Empirical evidence from Kenya shows that access to finance plays a significant role in improving household welfare and MSE performance, though existing studies reveal notable gaps. Obebo, Wawire, and Muniu (2018), using the 2016 FINACCESS dataset, found that participation in microfinance significantly increased household expenditure and MSE income through advanced econometric models such as probit and propensity score matching. Despite these positive outcomes, the study did not examine how Business Development Services such as marketing and training interact with credit access to influence income and participation. Drawing on the 2016 KNBS MSMEs survey, established a positive relationship between credit access and MSE growth, with factors such as seed capital, enterprise age, education, gender, and location further enhancing growth, particularly among micro-enterprises. However, this study narrowly focused on credit access alone, overlooking complementary support mechanisms like BDS, thereby limiting its explanatory power.

Other studies have explored alternative financial mechanisms and their implications for enterprise outcomes, though with constrained performance measures. Kirui (2021) analyzed the adoption of mobile money using KNBS and FinAccess data and found that households and MSEs utilizing mobile money experienced improved financial resilience and higher monthly incomes. Nonetheless, business performance was assessed solely through revenue growth, excluding other critical indicators such as employment creation. At a regional level, Kingston and Ashenafi (2021) compared the effects of formal and informal credit on micro and small enterprises across SADC countries using propensity score matching. Their findings indicated that formal credit yielded superior performance outcomes in certain contexts, such as Zimbabwe. However, reliance on self-reported turnover and methods assuming no unobserved confounders raised concerns about potential bias, highlighting the need for more robust causal techniques.

Broader African studies further reinforce the superiority of formal finance and structured support services in enhancing MSE performance. Mago and Modiba (2022), using World Bank data from thirteen African countries, found that enterprises financed through formal credit consistently outperformed those relying on informal sources, though performance varied across labor and sales distribution levels. Meanwhile, Asrat (2022), focusing on manufacturing MSEs in Addis Ababa, demonstrated that BDS-related factors particularly market access, infrastructure, and working capital management were strong predictors of enterprise performance. Despite these insights, the reliance on quantitative, cross-sectional designs and structured questionnaires limited contextual depth. To address these gaps, the current study integrates credit access and BDS while applying instrumental variable techniques within a Kenyan context to better account for endogeneity and unobserved factors influencing MSE performance.

THEORETICAL FRAMEWORK

The theory of the firm is a core framework in economics that explains how businesses behave and make decisions regarding production, pricing, and competition. As articulated by Coase (1991), the theory provides insight into how firms organize their activities to achieve optimal outcomes in the marketplace. Within this framework, firms are assumed to pursue profit maximization while operating under various constraints. In this study, firm performance is conceptualized through the lens of profit maximization, where access to credit and utilization of Business Development Services (BDS) are viewed as strategic inputs that enable enterprises to minimize costs and enhance output. Profit, therefore, serves as a proxy for performance, reflecting how effectively firms combine inputs to generate desirable outcomes.

Under the neoclassical perspective, a firm transforms inputs into outputs through a production function and seeks to operate at an optimal point where marginal cost equals marginal revenue. Profit is expressed as the difference between revenue generated from output and the costs incurred from inputs. This framework assumes well-defined production functions, diminishing marginal returns, and rational decision-making by firms. Changes in output prices or input costs directly influence profit levels, and firms respond by adjusting input demand accordingly. Optimal input choices are thus derived from prevailing market prices and production conditions, reinforcing the idea that firms continuously adapt to maximize returns (Julián & Bonavia, 2021).

Applying this reasoning to Micro and Small Enterprises (MSEs), the theory suggests that limited capital and weak utilization of BDS constrain their ability to operate efficiently. Many MSEs function below optimal scale due to insufficient financial resources and managerial

support. Empirical studies indicate that improved access to credit and effective use of BDS can expand input capacity, raise productivity, and ultimately increase profitability (Beck et al., 2005). Consequently, firms that integrate this support mechanisms are better positioned to enhance performance compared to those that do not.

The incorporation of credit access and BDS into the firm's profit function further illustrates their role in easing operational constraints. Credit availability influences production costs through interest and financing terms, while BDS contributes positively by improving skills, efficiency, and market access. Together, these factors relax the firm's isocost constraint, allowing higher levels of expenditure on productive inputs. As a result, firms can achieve higher output or profits, signifying improved performance. The outward shift of the isocost line symbolizes increased financial flexibility and growth potential arising from affordable credit and supportive services.

In summary, the theory of the firm posits that businesses aim to maximize profit subject to resource limitations. Extending this framework to MSEs implies that adoption of BDS and access to affordable credit can reduce cost constraints and improve performance outcomes. Decisions by MSE owners to participate in credit markets or utilize BDS are influenced by firm-specific and institutional characteristics, and performance differences arise from comparisons between participants and non-participants in these support mechanisms.

Random Utility Theory (RUT) complements firm theory by explaining decision-making from the perspective of individual entrepreneurs. The theory assumes that choices are based on the utility derived from available alternatives, with utility comprising both observable and unobservable components (McFadden, 2001; Manski, 1977). Entrepreneurs are assumed to select the option that yields the highest perceived utility, even though analysts cannot fully observe this process. In the context of MSEs, RUT is useful in modeling entrepreneurs' choices regarding credit sources and BDS utilization. Differences in enterprise performance are thus attributed to variations in utility gained from adopting or not adopting these options, highlighting that improvements in performance materialize when entrepreneurs perceive clear benefits from accessing credit and business development services.

METHODOLOGY

Methodological approach adopted in the study, detailing the research design, theoretical and analytical frameworks, data sources, variable measurement, and procedures for data analysis. It explains how the study was structured to examine the relationship between credit access,

utilization of Business Development Services (BDS), and the performance of Micro and Small Enterprises (MSEs) in Kenya, while ensuring methodological rigor and reliability of findings. The study employed a non-experimental cross-sectional research design since the variables were observed without manipulation or control. This design was appropriate because data were collected at a single point in time from a diverse and representative sample of MSEs across Kenya, allowing the study to capture real-world conditions. By providing a snapshot of enterprise characteristics and outcomes, the design supported an exploratory assessment of how credit access and BDS utilization influence MSE performance (Creswell & Creswell, 2017).

A conceptual and theoretical framework guided the analysis, linking explanatory variables formal and informal credit access and BDS utilization to MSE performance indicators such as turnover, capital size, and number of employees. Given that MSEs may use multiple credit sources and are influenced by firm-specific characteristics such as age, size, and location, the study applied Propensity Score Matching (PSM) to address selection bias in estimating the effects of credit access. In addition, Multiple Linear Regression was used to evaluate the impact of BDS on performance, while Binary Logistic Regression was applied to identify determinants of BDS utilization.

The analytical framework was grounded in firm theory and random utility theory. From the firm theory perspective, enterprises are assumed to maximize profit subject to production constraints, with credit access and BDS viewed as mechanisms that relax capital limitations and improve efficiency. Rosenbaum and Rubi's (1983) Firms are expected to adopt credit and BDS when the anticipated profits from participation exceed those from non-participation. Random utility theory further explains entrepreneurs' choices by assuming that MSE owners select credit sources or support services that yield the highest perceived utility, even though such utility is not directly observable and must be modeled using observable characteristics. Profit function for a firm considering a range of inputs and outputs can be expanded to encompass credit access and BDS as components influencing the performance of a firm (Jehle and Reny, 2011) as shown in equation below.

$$\pi(p, w, u, F^h) = pf(x^*(p, w, u) - wx^*(p, w, u) \dots\dots\dots (1)$$

Where $\pi(p, w, u, F^h)$ denotes the firm's profit, w and p represents the input and output prices respectively F^h is a firm's set, owner of the firm and organizational traits which have an effect on performance, x denotes vector factor on inputs, while u denotes firm credit access and utilization of BDS, where $u=1$ if a firm participates in the aforementioned and $u=0$, otherwise. (Kirui, 2021)

To empirically estimate these relationships, the study specified econometric models aligned with each objective. Propensity Score Matching, estimated through a probit model, was used to compare treated (credit-accessing) and untreated MSEs and to compute the Average For all the participant MSE entrepreneurs the difference in business performance will be dependent on the variation in utility derived from credit access, and otherwise. The owners of MSEs in Kenya will choose a particular credit source, if the utility derivable from using either of the aforementioned is higher than otherwise. It is worth noting that utilities are unobservable. Therefore, modelled using observable inputs in a binary choice structure (Kassie *et al.*,2012). Let M_i^* represent the variation in the utility of credit access for the i^{th} for utilization of credit access (U_{i1}) and otherwise (U_{i2}) (Kirui, 2021); such that,

$$M_i^* = U_{i1} - U_{i2} \dots \dots \dots (2)$$

and

$$M_i^* = X_i \beta + \mu_i \quad \text{Where } M_i = (1 \text{ if } M_i^* > 0, \text{ or } 0 \text{ if otherwise})$$

where M_i^* represents the limit of utility derivable in utilization of credit access which can be observed, M_i is the dependent variable which is can be observed (formal and informal credit) and equals to 1 if the MSE owner is utilizing credit and null if not utilizing, β denotes a vector whose coefficient us unknown X_i is a non-stochastic vector of the MSEs owners, organizational and social and financial factors which could influence the choice of utilizing formal or informal credit and μ is a random error term (Kirui, 2021). Treatment Effect on the Treated (ATT) for performance outcomes. Multiple Linear Regression was employed to assess the magnitude and direction of BDS effects on MSE performance while controlling for firm and owner characteristics. Binary Logistic Regression was used to analyze factors influencing the likelihood of BDS utilization, producing odds ratios that facilitate interpretation of determinants.

To study the effects of formal and informal credit access on MSE performance in Kenya, Rosenbaum and Rubin's (1983) Propensity Score Matching (PSM)) was utilized. This model extracts MSEs with no credit access like those without credit history, correcting treatment effect estimation and reducing selection bias. In matching the propensity to score, a comparison between the treated and control groups was made, where the difference in average treatment effect (ATE) on the treated (ATET) in the turnover, capital and number of employees could be associated to credit access. The average treatment effect on the treated (ATT) measures the variations in results between those who accessed formal or informal credit and those who did not, capturing the effect of the credit market treatment, which is given as

$$ATT = E\left[\frac{(Y_{1i}-Y_{0i})}{T_i}=1\right] = E\left[E\left(\frac{(Y_{1i}-Y_{0i})}{T_i}=1, P(X_i)\right)\right] \dots\dots\dots (3)$$

$$L = E_{P(X_i)}\left\{ E\left(\frac{Y_{1i}}{T_i}=1, P(X)\right) - \frac{\left[E\left(\frac{Y_{0i}}{T_i}=0, P(X)\right)\right]}{T_i} = 1\right\} \dots\dots\dots (4)$$

where:

ATT = Average Treatment Effect on the Treated

Y_{1i} = The expected result after treatment

Y_{0i} = Outcome for non-participating firms

$P(X)$ = Probability of utilizing formal or informal credit

$[Y_{1i} - Y_{0i} / T_i]$ = The causal effect of credit access on MSEs performance

T_i = Variable indicator of an individual MSE treatment i.e ($T_i = 1$, credit Access, $T_i = 0$, otherwise)

A probit model was used in estimating the propensity scores for every data point attributable with probability estimates ranging from 0 to 1. The independent variable (credit access) is dichotomous, continuous, and categorical, taking value 1 of the business access credit and 0 is otherwise. The resultant variable which is MSEs performance was measured as a ratio of turnover to capital size to full time employees. Firm performance was used as a resultant variable, while access to credit (formal and informal) was used as a treatment variable

The Multiple Linear Regression model was employed to analyze the effects of Business Development Services (BDS) on the performance of Micro and Small Enterprises (MSEs). This model allows examination of the interrelation between MSE performance (dependent variable) and BDS utilization (primary independent variable), while controlling for other factors that may influence performance (Julián & Bonavia, 2021). The model is expressible as.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \dots + \beta_nX_n + \varepsilon \dots\dots\dots (5)$$

where Y represents MSE performance, X_1 is BDS utilization, X_2 to X_n are covariates such as size of the firm, entrepreneur’s education level, years of operation, and industry sector (Karlan & Valdivia, 2011). β_0 is the intercept, β_1 to β_n are the parameters denoting the effect of each independent variable on MSE performance, and ε is the residual term. This model enables estimation of the magnitude and direction of BDS's effects on MSE performance while accounting for other relevant factors (Julián & Bonavia, 2021).

To analyze the determinants of Business Development Services (BDS) utilization among Micro and Small Enterprises (MSEs) Binary Logistic Regression model was employed. This

approach is particularly suitable for examining a dichotomous outcome variable - in this case, whether an MSE has used BDS or not (Saha *et al.*,2020). The model allows for the simultaneous evaluation of multiple potential determinants, providing comprehensive insights into factors influencing BDS utilization (Saha *et al.*,2020). It can be expressed as:

$$\ln(p/(1-p)) = \beta_0 + \beta_1X_1 + \beta_2X_2 + \dots + \beta_nX_n, \dots \dots \dots (6)$$

Here, p denotes the statistical chance of BDS utilization, while X_1 to X_n denote potential factors such as size of the firm, owner education level, and firm age of BDS (Saha *et al.*,2020). The coefficients β_1 to β_n quantify the effect of each determinant on the likelihood of BDS utilization. This model yields odds ratios, offering readily interpretable measures of how various factors affect the probability of MSEs engaging with BDS (Saha *et al.*,2020).

The study relied on secondary data from the FinAccess March 2023 Micro and Small Enterprise Tracker Survey and the KNBS 2016 MSMEs dataset. The FinAccess data, drawn from 1,478 respondents across all 47 counties, provided up-to-date information on credit access and performance indicators, while the KNBS 2016 dataset offered detailed insights into BDS utilization. Data analysis was conducted using SPSS version 29 and involved both descriptive and inferential statistics. Diagnostic tests including goodness-of-fit, multicollinearity, specification, and heteroskedasticity tests were conducted to validate model assumptions, ensuring robustness and credibility of the study's findings.

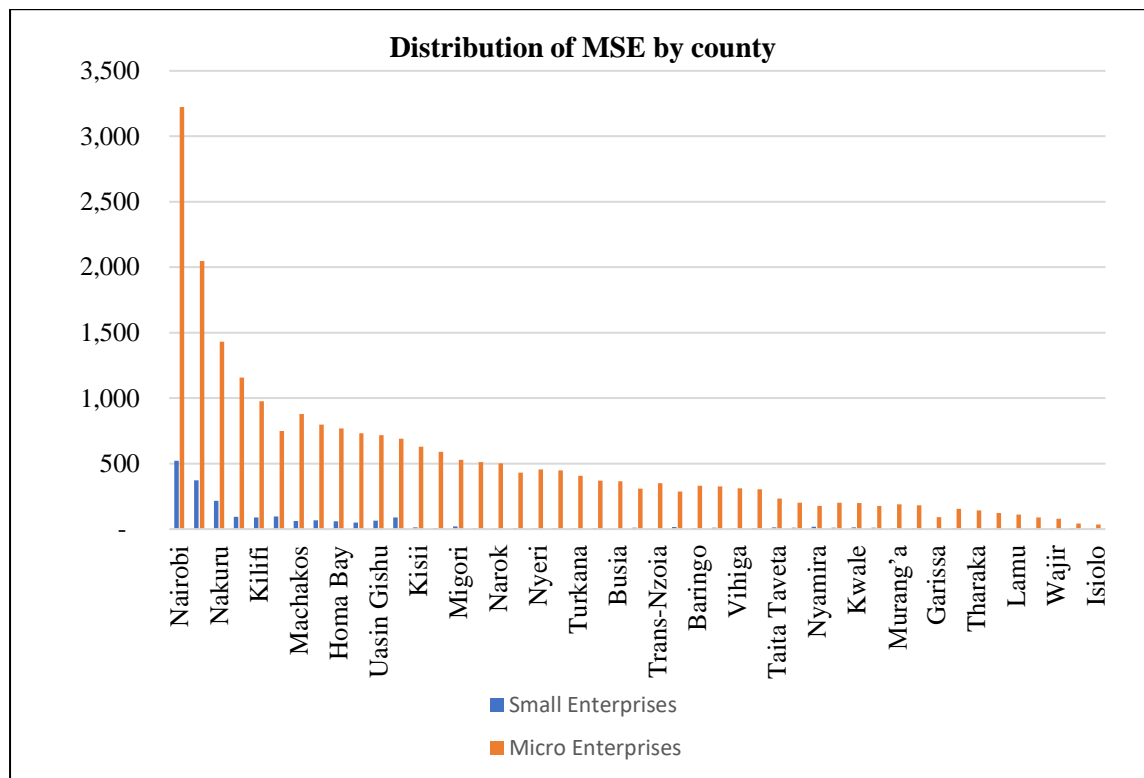
FINDINGS AND DISCUSSIONS

Descriptive Statistics

The descriptive statistics presented offer a snapshot of the key characteristics of Micro and Small Enterprises (MSEs) in Kenya, with particular emphasis on enterprise categorization, access to credit, utilization of Business Development Services (BDS), and core operational attributes. These summary statistics synthesize information drawn from the study sample and provide an overall profile of the MSE sector, while also offering preliminary insights into variables that are central to the study's objectives.

Distribution of MSEs by county

Figure 1: Distribution of MSE by county



Source: KNBS 2016

The results summarized in figure 1 above, indicate that the MSE landscape in Kenya is heavily skewed toward micro enterprises, which account for 92.1 percent of the sector, compared to only 7.9 percent represented by small enterprises. This distribution suggests that the majority of businesses operate at a very small scale, often with minimal capital investment, few or no employees, and a strong reliance on localized markets. While this structure reflects widespread entrepreneurial activity and self-employment, particularly in informal urban areas and rural centers, it also points to persistent growth constraints that limit the progression of micro enterprises into larger and more sustainable business entities.

These findings carry important policy implications. They emphasize the need for differentiated interventions that recognize variations in enterprise scale and capacity. For micro enterprises, policy priorities should focus on enhancing financial inclusion, easing regulatory requirements, strengthening access to affordable credit, and improving basic business skills. At the same time, deliberate strategies are required to support enterprises with growth potential to transition into small enterprises through targeted training, incubation support, improved market access,

managerial capacity development, and tailored financial products. Addressing this imbalance is essential to avoid an economy dominated by subsistence-oriented businesses and to enable the MSE sector to play a more meaningful role in employment creation, productivity enhancement, and inclusive economic growth.

Composition of Micro and Small Enterprises

The descriptive findings presented in Table 1 indicate that out of the 26,119 MSEs sampled across Kenya’s 47 counties, 14,172 enterprises, representing approximately 54.4 percent, are concentrated in just 12 counties, pointing to a pronounced geographical imbalance in the distribution of enterprises.

Table 1: Composition of Micro and Small Enterprises

Variables	Measurement of Variable	Total		Micro Enterprises		Small Enterprises	
		n	%	n=24,038	%	n=2,081	%
Credit Access	Yes	8,105	31.0	7,023	29.1	1,082	56.7
	No	18,014	69.0	17,187	70.9	827	43.3
Owner education level	None	1,593	6.1	1,541	6.4	52	2.4
	Primary	12,171	46.6	11,538	48.0	633	30.2
	Secondary	8,018	30.7	7,342	30.5	676	32.3
	Tertiary	3,265	12.5	2,764	11.5	501	23.9
BDS Utilization	Yes	2,603	9.9	1,723	7.2	583	29.4
	No	23,516	90.0	22,115	92.7	1,401	70.6
Owners Gender	Male	14,862	56.9	13,341	55.5	1,521	73.1
	Female	11,257	43.1	10,697	44.5	560	26.9
Industrial Sector	Primary	3,709	14.2	3,485	14.5	224	10.7
	Secondary	16,481	63.1	15,384	64.0	1,097	52.6
	Tertiary	5,929	22.7	5,168	21.5	761	36.5
Business address	Fixed	7,757	29.7	6,300	25.9	1,457	81.3
	Not Fixed	18,362	70.3	18,028	74.1	334	18.6
Business Location	Urban	12,093	46.3	10,577	44.5	1,516	64.1
	Peri-urban	10,317	39.5	9,615	40.4	702	29.7
	Rural	3,709	14.2	3,563	15.0	146	6.1

This concentration, largely within Nairobi, Mombasa, Nakuru, Kiambu, and other urban or peri-urban areas, reflects disparities in development levels, infrastructure availability, financial systems, and market size. The pattern is consistent with Kenya's broader economic landscape, where urban centers attract business activity due to better market access, skilled labor, and stronger financial inclusion, while rural regions remain constrained by weaker infrastructure, lower purchasing power, and limited access to financial services. As a result, MSEs in urban areas are more likely to access credit through formal and digital channels, whereas rural enterprises face challenges such as remoteness from financial institutions, lack of collateral, and low financial literacy. The heavy concentration of enterprises in a small number of counties raises concerns that policy interventions may disproportionately benefit urban areas, underscoring the need for differentiated approaches that promote enterprise growth and innovation in urban centers while strengthening financial access, infrastructure, and market linkages in rural counties, and highlighting geography as a key factor influencing MSE performance and credit access in Kenya.

The results reveal significant structural and operational divides between Micro and Small enterprises. A stark disparity is evident in access to credit; while a majority of Small Enterprises (56.7%) reported access, only 29.1% of Micro Enterprises did. This means that while approximately 1,082 Small Enterprises secured financing, an overwhelming 17,187 Micro Enterprises operated without external financing, severely limiting their ability to invest and grow compared to their smaller counterparts.

The educational background of owners further reflects capacity challenges, particularly within the Micro segment. Close to half (48%) of Micro enterprise owners, had only primary-level education, compared to 30% in Small enterprises. Conversely, university-level training was attained by only 3.5% of Micro enterprise owners versus 10.9% of Small enterprise owners. This educational gap likely hinders the ability of many Micro enterprise owners to adopt advanced business practices and financial services.

BDS utilization was strikingly low across the board but was critically low for Micro enterprises, with only 7.2% reporting use compared to 29.4% of Small enterprises. This suggests a widespread disconnect, particularly for the smallest businesses, from institutional support mechanisms.

Stability and formality were also major differentiators. Only 25.9% of Micro enterprises had a fixed business address, while 81.3% of Small enterprises did. This high mobility among the

vast majority of Micro enterprises reflects their informal nature and creates a fundamental barrier to accessing credit and formal markets. Geographically, Micro enterprises were more dispersed, with 15% in rural areas, while Small enterprises were heavily concentrated in urban centers (64.1%).

From a sectoral perspective, both groups were primarily in the secondary sector, but a larger proportion of Small enterprises (36.5%) were engaged in the tertiary sector compared to Micro enterprises (21.5%), indicating a closer tie to services and trade. Gender distribution showed that women owned 44.5% of Micro enterprises but only 26.9% of Small enterprises. Male counterparts owned 55.5% of Micro enterprises and 73.1% of the small businesses. This disparity suggests a potential barrier to growth for female-led ventures.

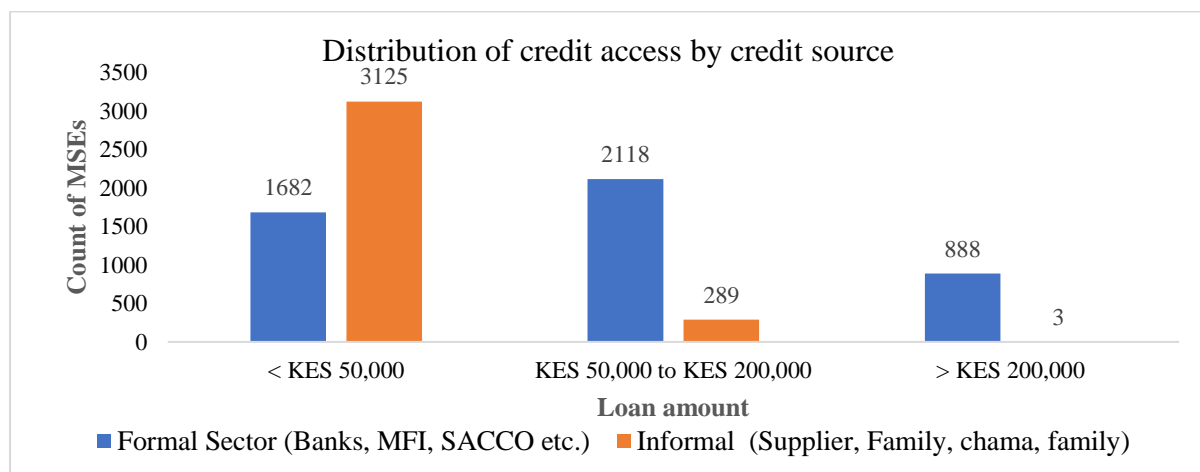


Figure 2. Access to Credit by MSEs

Source: Author

Figure 2 above shows a very clear picture of how Micro and Small Enterprises (MSEs) access credit, with informal and formal lenders playing different roles. Informal sources like suppliers, family, and *chama* groups are the main option for small loans under KES 50,000, making up 3,125 out of 4,807 loans. This shows that most small businesses rely on informal borrowing to meet daily expenses, manage cash flow, and cover small capital needs. For larger loans, however, formal institutions such as banks, SACCOs, and microfinance organizations are preferred. They provided 2,118 out of 2,407 loans in the KES 50,000 to KES 200,000 range and nearly all loans above KES 200,000 (888 out of 891). This makes it clear that formal lenders are the main source of serious growth capital, but they remain less accessible for smaller, everyday borrowing needs.

The preference for informal loans is likely because they are easier to access, with little or no collateral requirements, simple processes, and quick approval. Trust and familiarity also play a big role, since many businesses borrow from people or groups they already know, and because dealing with formal institutions often feels complicated and intimidating. This creates a big challenge for businesses and policymakers. While informal credit acts as a safety net that keeps most small businesses running, many remain stuck at a survival level because they cannot access the larger loans needed for real growth. To address this, financial institutions and policymakers need to create new credit products that are as simple and accessible as informal loans but also provide the larger funding capacity of formal lenders. Options like digital microloans, asset-based financing, or blended schemes could help bridge this gap, opening the door for MSEs to expand and making the financial system more inclusive.

Effects of credit access on the performance of MSEs in Kenya

To assess the effects of Credit on the performance of the MSEs, Propensity Score Matching model was used. The test employed three steps, Probit Model, Nearest Neighbor Matching and lastly Average Treatment Effect on the Treated. A probit model was first used to estimate the probability that an MSE accesses credit given its observable characteristics, and the results are summarized in table 2 below.

Table 2: Probit Regression Results with Marginal Effects

Variable	Coef.	Std. Err.	z	p-value	Marginal Effect
Business Age (Years)	0.042	0.009	4.67	0.000	0.010
Owner Education ((Tertiary/Univ vs Primary/Secondary)	0.325	0.075	4.33	0.000	0.082
Gender (Male = 1)	0.058	0.051	1.14	0.254	0.014
Firm Size (Small vs Micro)	0.410	0.090	4.56	0.000	0.103
Location (Urban vs Rural)	0.210	0.070	3.00	0.003	0.052
Industrial Sector (Secondary vs Primary)	0.185	0.061	3.03	0.002	0.046
Collateral Security Provided (Yes = 1)	0.890	0.065	13.69	0.000	0.223
Cost of Credit	-0.15	0.050	-3.00	0.003	-0.03
Constant	-1.324	0.152	-8.70	0.000	-

The results, presented in table 2 above, identify the key determinants influencing whether Micro and Small Enterprises (MSEs) in Kenya are able to obtain formal credit, revealing a clear ranking of factors that financial institutions prioritize when evaluating loan applications. Among these, the ability to provide collateral emerges as the most critical requirement, exerting a far stronger influence than any other variable. Enterprises that can offer acceptable security are substantially more likely to access formal finance, effectively making collateral a primary gateway to credit within Kenya's lending environment.

Beyond collateral, firm-level characteristics significantly shape credit outcomes. Small enterprises are notably more likely to access loans than micro enterprises, reflecting lenders' perception that larger firms possess greater stability, operational capacity, and repayment ability. Similarly, business age plays a meaningful role, as enterprises that have operated longer tend to enjoy higher chances of securing credit, suggesting that experience and an established track record enhance credibility. These findings underscore how lenders rely heavily on observable indicators of business maturity and sustainability when making credit decisions.

Owner-specific attributes further affect access to finance, particularly education. Entrepreneurs with tertiary or university education are more likely to secure loans than those with lower levels of schooling, implying that lenders associate higher education with stronger managerial skills, financial awareness, and informed decision-making. In contrast, gender does not appear to significantly influence credit access once business and structural factors are controlled for, indicating that lending decisions are driven more by enterprise fundamentals than by personal characteristics of the owner.

Spatial and sectoral differences also contribute to unequal access to credit. Enterprises located in urban areas enjoy an advantage over rural firms, likely due to closer proximity to financial institutions, stronger business networks, and more dynamic markets. Likewise, firms operating in the industrial sector are more likely to obtain loans than those in primary activities, reflecting lender preferences for businesses perceived to generate higher value addition and possess more reliable or tangible assets. Although interest rates play a comparatively smaller role, rising borrowing costs still discourage credit uptake by reducing the likelihood that firms will seek or qualify for loans. The study further, employs Propensity Score Matching (PSM) and Nearest Neighbor Matching (NNM) techniques to estimate the Average Treatment Effect on the Treated (ATT) and assess the impact of credit access on the performance of Micro and Small Enterprises (MSEs) in Kenya. Table two below summarizes the ATT estimation of the results from matching.

Table 3: ATET Estimation Results from Matching

Group	Mean Perf.	Std. Err.
Treated (credit=1), matched	3.17	0.03
Matched controls (credit=0)	2.39	0.03
ATET = Treated – Control	0.78	0.10

The results indicate that enterprises with access to credit recorded a mean performance score of 3.17 compared to 2.39 for matched non-credit counterparts, yielding an ATET of 0.78. This represents a substantial 32.6% improvement in performance, underscoring the critical role of credit in enhancing business outcomes. Additionally, covariate balance diagnostics reveal that pre-matching imbalances across key variables such as business age, firm size, owner education, and collateral provision were significantly reduced after matching, with standardized mean differences falling below the acceptable 10% threshold. This indicates that the matching process effectively minimized selection bias, ensuring comparability between treated and control groups. Consequently, the observed performance differences can be more confidently attributed to credit access. Overall, the findings demonstrate that overcoming barriers to formal credit significantly enhances MSE growth, operational capacity, and sustainability in Kenya. Together, the findings, presented in table 3 below, emphasize the need for policies and lending models that reduce collateral constraints, address spatial and sectoral disparities, and combine financing with business development support to unlock the growth potential of MSEs.

Business Development Services (BDS) utilization on MSE performance

This study applied a binary logistic regression model to identify the determinants of Business Development Services (BDS) utilization among Micro and Small Enterprises (MSEs). Diagnostic tests confirmed the absence of multicollinearity, validating the model's robustness. The results are summarized in table 4 below.

Table 4: Logistic Regression Results for Determinants of BDS Utilization by MSEs

Predictor	Coefficient (β)	Odds Ratio (Exp(β))	Marginal Effect	Std. Error	p- value
Firm-Size	0.210	1.23	0.042	0.08	0.007
Sector (Secondary & Tertiary)	0.450	1.57	0.090	0.22	0.041
Sector (Primary)	0.320	1.38	0.064	0.25	0.092
Years_in_Operation	0.150	1.16	0.030	0.05	0.003
Loan_Cost	-0.098	0.91	-0.020	0.04	0.018
Gender (Male)	0.045	1.05	0.009	0.15	0.762
Credit_Access	0.820	2.27	0.164	0.29	0.004
Geographical_Location	0.39	1.43	0.078	0.08	0.008
Constant	-1.900			0.55	0.001

The results above, indicate that access to credit is the most influential factor, significantly increasing the likelihood of BDS uptake. Firm size, years of operation, and geographical location also have positive and statistically significant effects, suggesting that larger, more experienced, and urban-based enterprises are more inclined to utilize BDS. Sectoral differences further reveal that enterprises in secondary and tertiary sectors are more likely to adopt BDS compared to those in the primary sector.

In contrast, the cost of credit negatively affects BDS utilization, indicating that high borrowing costs limit firms' capacity to invest in such services. Gender was found to have no significant influence on BDS uptake. These findings highlight key structural and financial barriers affecting equitable access to BDS. Policy efforts should focus on integrating affordable financing with BDS provision, expanding outreach in rural areas, and promoting cost-effective service models to enhance inclusivity and support MSE growth.

The study, further, examined the effect of Business Development Services (BDS) utilization on the performance of Micro and Small Enterprises (MSEs) in Kenya using an Ordinary Least Squares regression framework with heteroskedasticity-robust (HC3) standard errors to enhance the reliability of the estimates. Enterprise performance was measured using an index, while BDS utilization served as the key explanatory variable, coded to distinguish users from non-users, as summarized in table 5 below.

Table 5: Regression results for effects of Business Development Services (BDS) utilization on MSE performance

Regressors	(1) Baseline	(2) Full controls	(3) Full + BDS×Credit
BDS (1=yes)	0.62 (0.06)	0.71 (0.08)	0.58 (0.09)
Credit (1=yes)	0.54 (0.05)	0.63 (0.06)	0.65 (0.7)
Loan_Cost (%)	-	-0.03 (0.01)	-0.03 (0.01)
Credit Collateral (1=yes)	-	0.38 (0.10)	0.47 (0.10)
Business_Age (years)	-	0.16 (0.01)	0.23 (0.01)
Education (1 - 4)	-	0.11 (0.05)	0.17 (0.05)
Urban (1=yes)	-	0.38 (0.08)	0.42 (0.08)
Sector_Secondary	-	0.30 (0.06)	0.33 (0.06)
Sector_Tertiary	-	0.14 (0.08)	0.19 (0.08)
SmallFirm (1=yes)	-	0.08 (0.09)	0.10 (0.09)
BDS × Credit	-	-	0.24 (0.09)
Constant	1.89 (0.09)	1.42 (0.09)	1.41 (0.09)
Observations	2,603	2,603	2,603
R ² / Adj. R ²	.121 / .121	.268 / .267	.270 / .269
RESET p-value	.21	.27	.25
BP (heterosk.) p-value	<.001	<.001	<.001

To isolate the independent contribution of BDS, the model incorporated several control variables, including access to credit, cost of borrowing, collateral availability, firm age, owner education, business location, firm size, and sector of operation, thereby reducing the risk of omitted variable bias. Prior to interpreting the regression results, diagnostic tests were conducted to validate the suitability of the OLS approach. The Park Test for heteroskedasticity yielded a statistically insignificant result, indicating stable error variance across observations and confirming that the model's assumptions were adequately satisfied. As a result, the estimates could be interpreted with confidence, and the use of robust standard errors further strengthened the credibility of the findings.

Three regression specifications were estimated to capture different dimensions of the BDS–performance relationship. The first model included only the core explanatory variables, while

the second introduced a full set of control variables to account for firm and owner characteristics. The third model incorporated an interaction term between BDS utilization and credit access to assess whether the performance gains from BDS were enhanced when enterprises also had access to financing. All models were estimated using the full sample of BDS-utilizing enterprises, ensuring comprehensive coverage and robustness of the analysis.

The regression results provide compelling evidence that BDS utilization has a strong and statistically significant positive effect on enterprise performance. In the baseline model, firms that used BDS achieved substantially higher performance scores than non-users, translating into an improvement of over one-fifth relative to the average performance of non-users. This positive effect became even stronger after controlling for additional firm and owner characteristics, indicating that BDS remains a key driver of enterprise success regardless of differences in access to finance, education, location, or firm size. Compared with other determinants such as credit access, business age, education, and sector, the magnitude of the BDS effect was consistently among the largest, underscoring its central role in improving MSE outcomes.

Further analysis revealed that BDS and access to credit are complementary interventions. The positive interaction between BDS utilization and credit access suggests that enterprises benefiting from both services experience additional performance gains beyond those achieved through either intervention alone. Improvements in model fit, together with specification and diagnostic tests, confirm the robustness of the results. Overall, the findings demonstrate that BDS significantly enhances MSE performance and that its impact is amplified when combined with financial access. This underscores the importance of integrating BDS into small enterprise development strategies, particularly when targeting younger, smaller firms and those with strong growth potential, as a means of promoting sustainable and inclusive economic growth in Kenya.

CONCLUSION AND RECOMMENDATIONS

This study provides compelling empirical evidence that access to credit and Business Development Services (BDS) are critical determinants of Micro and Small Enterprise (MSE) performance in Kenya. Using a mixed-methods approach and robust econometric techniques, the findings demonstrate that access to credit significantly enhances enterprise performance, with firms obtaining credit experiencing a 32.6% improvement in performance compared to similar firms without credit. However, access to credit remains highly constrained and

unevenly distributed across enterprises. Collateral requirements emerged as the most powerful predictor of credit access, followed by firm size, the owner's level of education, and geographical location, with urban enterprises enjoying a measurable advantage over rural firms. At the same time, the study reveals an extremely low utilization of Business Development Services, with only about one in ten enterprises accessing these services despite their strong positive impact on performance. Firms that utilized BDS recorded a 26% improvement in performance, highlighting the importance of managerial training, market intelligence, and advisory support in strengthening enterprise productivity, competitiveness, and resilience.

The findings collectively demonstrate that the persistent underperformance of Kenya's MSE sector is largely driven by a dual exclusion from both affordable credit and essential business support services. These constraints are deeply interconnected, as enterprises with access to credit are significantly more likely to utilize BDS, suggesting that financial liquidity enables engagement with strategic business support. Consequently, addressing financial barriers alone is insufficient to unlock the sector's growth potential. Effective policy responses must therefore prioritize integrated interventions that simultaneously expand inclusive financing mechanisms and scale up access to affordable, decentralized BDS programs. Policymakers and financial institutions should promote innovative lending models that move beyond strict collateral requirements, including cash-flow-based lending, asset financing, and credit guarantee schemes, while also embedding training and advisory support within financing programs. Equally important is the need to strengthen entrepreneurial capacity through improved financial literacy, formalization of enterprises, and participation in cooperative structures that enhance access to credit and knowledge networks. Future research should further investigate barriers to BDS utilization, gender and regional disparities in financial access, and the role of alternative financing models, while longitudinal studies would provide deeper insights into the long-term effects of credit and BDS on enterprise growth, employment creation, and sustainability.

REFERENCES

- Alumasa, S., & Muathe, S. (2021). Mobile Credit and Performance: Experience and Lessons from Micro and Small Enterprises in Kenya. *Journal of Applied Finance & Banking*, 11(4), 135-161.

- Asrat, B. (2022). Effects Of Business Development Service on The Performance of Micro and Small Manufacturing Enterprises in Addis Ababa, The Case of Nefas Silk-Lafto Sub-City (Doctoral Dissertation, St. Mary's University).
- Beck, T., Demirgüç-Kunt, A. S. L. I., & Maksimovic, V. (2005). Financial and legal constraints to growth: does firm size matter?. *The journal of finance*, 60(1), 137-177.
- Boubakary. (2015). The influence of the personal values of the leader on the growth of SMEs in Cameroon. *International Strategic Management Review*, 3(1–2), 15–23.
- Coase, R. H. (1991). The nature of the firm (1937). *The nature of the firm*, 18-33.
- Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approach. Sage Publications.
- Finaccess (2021). How Has Covid-19 Impacted Micro Firms? Retrieved from; <https://www.centralbank.go.ke/wp-content/uploads/2021/12/FinAccess-MSE-COVID-19-Tracker-Survey-Wave-3.pdf>.
- Julián, M., & Bonavia, T. (2021). Understanding unethical behaviors at the university level: a multiple regression analysis. *Ethics & Behavior*, 31(4), 257-269.
- Kariuki, A. W., Kibet, K. K., & Maina, M. W. (2019). Factors Influencing the Performance of Informal Micro and Small Enterprises in Kenya: A Case of Nairobi Central Business District. *Journal of Economics and Sustainable Development*, 10(1), 116-124.
- Kingstone M. & Ashenafi B. F. (2021). Small Business Performance: Is It Access to Formal or Informal Credit that Matters? *Journal of African Business*, 22:4, 550-563, DOI: 10.1080/15228916.2020.1826854.
- Kirui, E. (2021). Utilization Of Mobile Money Services In Enhancing Household's Financial Resilience And Performance Of Micro And Small Enterprises In Kenya (Doctoral Dissertation, Kenyatta University).
- Kjær, T. (2005). A review of the discrete choice experiment-with emphasis on its application in health care.
- Mago, S., & Modiba, F. S. (2022). Does informal finance matter for micro and small businesses in Africa? *Small Business International Review*, 6(1), e415.
- Manski, C. H. 1977, "The Structure of Random Utility Models", *Theory and Decision*, vol. 8, pp.229-254.

- McFadden, D. 1974, "Conditional logit analysis of qualitative choice behaviour," in *Frontiers of Econometrics*, P. Zarembka, ed., Academic Press, London, U.K., pp. 105-142.
- Mutwiri, N. M. (2021). Covid-19 financial distancing for MSMEs in Kenya. *International Journal of Research in Business and Social Science (2147-4478)*, 10(3), 357-362.
- Njuguna, J. M. (2016). The Dynamics of the Informal Sector in Kenya: A Case of Micro and Small Enterprises in Nairobi. *International Journal of Business and Social Science*, 7(4), 1-14.
- Obebo, F. M., Wawire, N. H., & Muniu, J. M. (2018). Effects of participation of micro and small enterprises in microfinance on their performance in Kenya. *International Journal of Economics and Finance*, 10(7).
- Obebo, F. M., Wawire, N. H., & Muniu, J. M. (2018). Effects of participation of micro and small enterprises in microfinance on their performance in Kenya. *International Journal of Economics and Finance*, 10(7).
- Omondi, R. I., & Jagongo, A. (2018). Microfinance services and financial performance of small and medium enterprises of youth SMEs in Kisumu County, Kenya. *International Academic Journal of Economics and Finance*, 3(1), 24-43.
- Rosenbaum, P. R., & Rubin, D. B. (1983). Propensity Scores in the Design of Observational Studies for Causal Effects. *Biometrika*.
- World Bank (2020). Trading for Development in the Age of Global Value Chains. Retrieved from: <https://documents1.worldbank.org/curated/en/310211570690546749/pdf/World-Development-Report-2020-Trading-for-Development-in-the-Age-of-Global-Value-Chains.pdf>.