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NEXUS BETWEEN FINANCE ACCESSIBILITY AND FINANCIAL HEALTH OF BLUE ECONOMY MICRO, SMALL AND MEDIUM ENTERPRISES IN KENYA

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ABSTRACT

This study explored the nexus between finance accessibility and the financial health of Micro, Small, and Medium Enterprises (MSMEs) operating within Kenya's Blue Economy. Despite a reported national financial inclusion rate of 84.8%, the financial health of MSMEs remains critically low, with financial health index of 18.3%. Using a descriptive cross-sectional research design, a structured questionnaire was administered to 323 Blue Economy MSMEs in coastal and inland lake region counties of Kenya. Quantitative data was analyzed using SPSS and Structural Equation Modeling. Results revealed a significant negative relationship between finance accessibility and financial health, indicating that increased finance access without appropriate regulation may lead to high transaction costs, limited digital access, low savings, insufficient financial literacy, over-indebtedness and reduced enterprise resilience. This study supports the Public Good Theory, emphasizing the need for regulated finance to function as an enabling, equitable resource for development. It recommends targeted financial products, digital infrastructure development, and MSME-centered financial inclusion strategies to promote sustainability and resilience in the Blue Economy sector.

KEYWORDS: Finance accessibility, Blue Economy MSMEs, Financial Health

INTRODUCTION

The Blue Economy is increasingly recognized as a vital frontier for Kenya's socio- economic transformation, offering significant potential for sustainable growth across marine fisheries, aquaculture, coastal tourism, maritime transport, and ocean-based industries (Republic of Kenya, 2017; Ochieng, 2025). Micro, Small, and Medium Enterprises (MSMEs) form the bedrock of this emerging sector, contributing to employment creation, income generation, and food security, particularly in coastal and lake regions (UNCTAD, 2020). Despite their critical role, Blue Economy MSMEs in Kenya continue to face persistent financial health challenges that hinder their growth and resilience.

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Over the past decade, Kenya has made significant strides in advancing financial inclusion, largely driven by innovations in mobile money, agency banking, and digital finance (FSD Kenya, 2024). However, while access to finance has improved

quantitatively, questions remain about its qualitative impact particularly whether increased financial access translates into improved financial health for blue economy MSMEs. The Blue Economy in Kenya presents potential significant opportunities for inclusive economic development, particularly through micro, small, and medium enterprises (MSMEs) involved in marine fisheries, coastal tourism, and ocean-based trade. However, despite the growth of financial services and digital platforms, MSMEs within the Blue Economy continue to experience financial instability and limited resilience. National financial health indicators reveal a concerning trend, with the financial health index declining from 39.4% in 2016 to 18.3% in 2024. This suggests that increased financial access does not necessarily equate to the financial well-being of entrepreneurs and MSMEs in the Blue Economy.

Financial health in this context pertains to the capacity of an enterprise to manage its finances responsibly, sustain operations, fulfill financial obligations, invest in growth, and withstand economic shocks (Center for Financial Inclusion, 2019). Many MSMEs continue to face challenges such as limited working capital, weak credit histories, high interest rates, and inadequate financial management capabilities (World Bank, 2021), indicating a potential disconnect between access to finance and enterprise sustainability. This study, therefore, investigated the nexus between finance accessibility and the financial health of MSMEs within Kenya's Blue Economy. It addressed a critical gap in the existing literature, where most studies focus on financial inclusion as an end goal, rather than examining its influence on long-term business resilience and sustainability (Barajas, Beck, & Belhaj 2020; Demirgüç-Kunt et al., 2022). The primary objective of this research was to assess whether finance accessibility in its current form supports or undermines the financial health of Blue Economy MSMEs in Kenya. Specifically, the study aimed to evaluate the financial health status of Blue Economy MSMEs, examine the forms and channels of financial access available, and analyze how such access influences the operational sustainability and financial health of these enterprises.

STATEMENT OF THE PROBLEM

Global economies depend heavily on micro, small, and medium-sized businesses (MSMEs). Formal SMEs are estimated to make up 90% of all enterprises, 40% of the global GDP, and 50% of all jobs worldwide (World Bank 2020). Despite Kenya’s high and rising financial inclusion rate currently at 84.8% from 26.7% in 2016, the financial health of MSMEs operating in the Blue Economy has continued to deteriorate, with the national financial health rate dropping to 18.3% in 2024 from 39.4% in 2016 (FinAccess, 2024). This paradox highlights a concerning disconnect between access to

financial services and sustainable financial outcomes for enterprises. Blue Economy MSMEs, which hold significant potential for economic development, environmental sustainability, and job creation, (Taborda, Kumar, Dichtl & Potele, 2021), face persistent barriers to meaningful finance accessibility. These include stringent lending conditions, high interest rates, and the lack of tailored financial products, all of which hinder their capacity to achieve financial stability and long-term growth.

Although these enterprises utilize various financial channels such as SACCOs, banks, MFIs, mobile money, and self-help groups, many of these systems focus on access without addressing financial health indicators, leaving MSMEs vulnerable to over-indebtedness and poor credit outcomes (Nsiah & Tweneboah, 2024; Avgeri, 2024). For instance, as inclusion through digital finance increases, so has the level of indebtedness among individuals' increases.

Globally, studies have examined access broadly as financial inclusion; how inclusion affects firm performance (Kumar et al., 2022; Khatib et al., 2022) health (Xiao & Tao, 2022) and empowerment (Hendriks, 2019). Nathan et al., (2022), Ndaba (2021) examined the link in a narrowly, however, the interest was on fintech and financial health of Vietnam. In Kenya, studies have examined the effects of financial inclusion on bank credit risk (Musau et al., 2018a), welfare such as poverty and employment (Mugo & Kilonzo, 2020) and firm performance (Oranga & Ondabu, 2018). Wandeda et al., (2022) examined the role of financial access on financial health of rural households in Kenya while Bett & Korir (2018) focused the analysis of personal loans and household financial health of teachers. All these studies focused on generally on financial inclusion and not specifically on the influence of this finance access on enterprise-level financial health, in the context of blue economy MSMEs in Kenya. This study addresses the critical gap in empirical literature by examining how access to finance influences the financial health of Blue Economy MSMEs in Kenya. Grounded in the Public Good Theory, the study posits that equitable access to finance should generate positive externalities for MSMEs and the broader economy.

OBJECTIVE OF THE STUDY

To examine the relationship between finance accessibility and financial health of Blue Economy MSMEs in Kenya

Research Hypothesis

H01: There is no significant relationship between finance accessibility and financial health of Blue Economy MSMEs in Kenya

LITERATURE REVIEW

Theoretical Framework

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The study adopted Public Good Theory of Financial Inclusion, introduced by Samuelson (1954). The theory posits that formal financial services should be considered a public good. This perspective asserts that financial services should be universally accessible, ensuring broad economic benefits and fostering inclusive development (Ozili, 2020). The theory postulates that finance accessibility should not be restricted, as financial inclusion benefits the entire economy. Mishra, Kandpal, Agarwal & Srivastava (2024), Kim et al. (2018), Ozili (2018), and Katnic, Katnic, Orlandic, Radunovic & Mugosa (2024), have emphasized that access to finance

extends beyond individual empowerment, contributing to macroeconomic stability, social cohesion, and economic resilience. As formal financial services are a public benefit, one individual's or business access does not preclude another's participation in the financial system.

The Public Good Theory posits that well regulated finance accessibility generates positive externalities benefiting the entire economy (Khan & Khan, 2023). Universal finance services provision fosters economic growth, poverty reduction, and social well-being (Ozili, 2020). Financial services, when designed and delivered equitably, can produce positive externalities such as reduced poverty, enhanced business resilience, and improved public welfare. In the context of MSMEs, especially those in vulnerable Blue Economy sectors, finance should be treated as a public utility essential for sustainable development. However, if financial access is accompanied by exploitative or inappropriate terms, it may result in systemic business failures, increased informality, and economic stagnation.

Conceptual Framework

A conceptual framework is a structure that delineates the relationship between dependent and independent variables, as derived from the theoretical framework (Chukwuere, 2021). According to Oluwabukunmi et al. (2024), a conceptual framework comprises the set of ideas, presuppositions, hypotheses, and theories that underpin and guide a study, thereby illustrating the logical components of the study. In this study, the independent variable was the finance accessibility and dependent variable was financial health. The conceptual framework adopted for the study is presented in figure 1.

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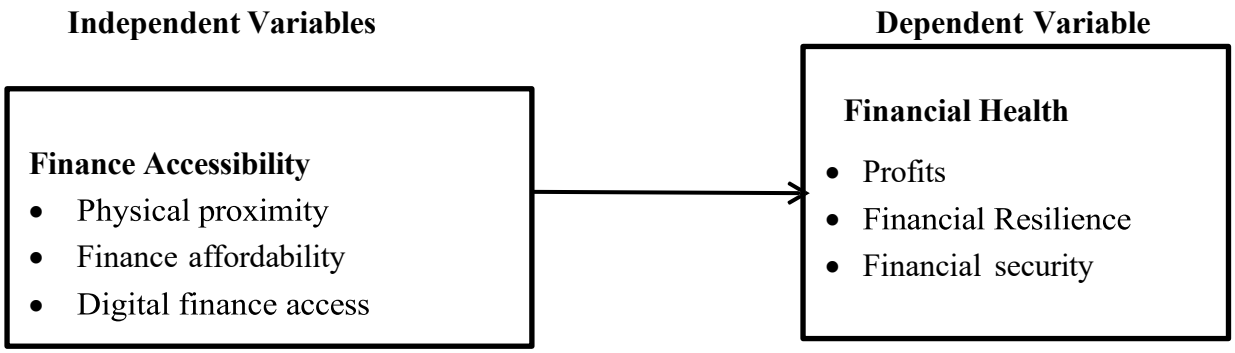

Figure 1: Conceptual Framework

Empirical review

The relationship between finance accessibility and financial health has been examined across regions, with inconsistent findings. Le et al. (2019) found financial inclusion in form of access enhances efficiency in 31 Asian countries. Arner et al. (2020) highlighted digital financial infrastructure's importance for MSMEs in advancing SDGs. Tita and Meshach (2017) linked inclusive financial systems to economic growth in Asian countries. However, Machdar (2020) found no significant impact on sustainable growth in South African banks. Tita and Aziakpono (2017) showed financial inclusion may initially worsen income inequality in Sub-Saharan Africa. Chipunza and Fanta (2022) and Ndaba (2021) found "quality" financial inclusion reduces vulnerability. Arner et al. (2020) discovered inverse relationships between credit availability and financial health in OECD countries. Studies (Ajide, 2017; Mungar Telukdarie& Tshukudu, 2025; Damane & Ho, 2023; World Bank, 2025) confirm inclusive systems promote equitable growth. Musau et al. (2018a) linked financial inclusion to rising non-performing loans in Kenya. Bett and Kirui (2018) found adverse impacts of personal loans on teachers' financial health, while Wandeda et al. (2022) showed access alone doesn't ensure resilience. Ntwiga & Wafula (2023) and Kilonzo et al. (2022) identified barriers like collateral requirements affecting women and MSMEs. The literature shows finance accessibility has varied implications for financial health, influenced by region, product quality, literacy, and sectoral factors.

Several limitations exist in current research. The evidence mainly comes from Asia and South Africa, limiting applicability to micro, small, and medium enterprises (MSMEs) within Kenya's blue economy. Many studies rely on traditional accounting indicators rather than broader dimensions of financial health. Current methodologies offer limited causal inference, with few longitudinal designs capturing finance accessibility dynamics. Literature emphasizes access, while usability and service quality remain underexplored. In Kenya, research focuses on households or non-blue economy MSMEs, neglecting sector-specific challenges like seasonal income fluctuations. The review identifies key research gaps. Research examining blue economy MSMEs' financial health remains

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scarce, despite their importance in Kenya's coastal regions. Financial health is often reduced to basic metrics. Few studies use multidimensional measures including day-to-day management and resilience. Most research uses cross-sectional household data, overlooking blue economy enterprise-level nuances. While financial access has expanded, research rarely considers usability and service quality aspects essential for financial health. The role of finance access dimensions like proximity, affordability and digital access in improving outcomes remains poorly understood. This study addresses these gaps by investigating nexus between finance accessibility and financial health blue economy MSMEs in Kenya, using multidimensional measures and enterprise data.

RESEARCH METHODOLOGY

This study employed a descriptive cross-sectional research design to examine the relationship between finance accessibility and the financial health of blue economy Micro, Small, and Medium Enterprises (MSMEs) Kenya. The research targeted MSMEs engaged in various Blue Economy value chains, including fisheries, aquaculture, marine transport, coastal tourism, sea weed farming and marine-related manufacturing. Ratay & Mohnen, (2024), stated that stratified sampling techniques are applied to data that does not form a homogeneous character yet diverse in attributes. A stratified random sampling technique was used to ensure proportional representation across coastal and inland lake region counties; Mombasa, Kilifi, Kwale, Lamu, Taita Taveta, Tana River, Busia, Homabay, Kisumu, Migori and Siaya. The sample size for the study was attained by using Cochran's formula, in Equation 1, at a 95% confidence level and a 5% margin of error as;

$$n = \frac{z^2 pq}{e^2} \quad \ldots \quad (1)$$

Using equation 1.1, the sample size is given as;

$$n = \frac{1.96^2 \times 0.3 \times 0.7}{0.05^2}$$

$$\approx 323$$

Whereby; n = sample size; z = statistic corresponding to confidence; p= estimated proportion of a characteristic present within the population; q = 1-p which is an estimates of variance; e = acceptable margin of error. The study sampled of 323 MSMEs from participants from a group of 9632 licensed blue economy MSMEs.

Primary data was collected through structured questionnaires administered to business owners and managers. The key variables included, Independent Variable, Finance Accessibility (physical

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proximity, finance affordability, and digital finance access). Dependent Variable; Financial health (profitability, financial resilience and financial security).

Data were analyzed using SPSS v26. Descriptive statistics summarized key variables. Correlation and multiple regression analyses were used to test relationships between finance accessibility components and financial health. Structural Equation Modeling (SEM) was used to validate the conceptual model and examine the strength and direction of relationships.

Ethical approval was secured from the Technical University of Mombasa Ethical Review Committee and NACOSTI, with all participants giving informed consent.

The regression model is illustrated below in Equation 2;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon \quad (2)$$

Where: Y = Financial Health {FH} $\beta\theta$ = {Constant}; 1= { Finance Accessibility {FA}; and β_1, represents the coefficients of independent variable.

RESEARCH FINDINGS

Response Rate

The outcomes of the response rate are presented in Table 1.

Table 1 Response Rate

Kenyan coastal and inland lake region Counties	Response	Percentage
Returned Questionnaire	297	92%
Not returned	26	8%
Total	**323**	**100%**

Results in Table 1 indicate a substantial response rate of 92%, achieved through consistent follow-up, virtual communication, and research assistant involvement. Such a high response rate ensured findings represented the target population. Scholars agree that a 50% response rate effectively measures research objectives. According to Wu et al., (2022), Mugenda and Mugenda (2013) and Ellingson et al. (2023), a 50% response rate is suitable for analysis, while rates above 70% are ideal. The high response rate suggested strong participant engagement and increased reliability of findings.

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Descriptive Statistics

Table 2 Finance Accessibility Descriptive Statistics

Opinion Statement	SD	D	N	A	SA	MEAN	Std
Proximity to financial institutions, ATMs, and agency banking outlets makes accessing financial services more convenient.	(1.0%)	(11.1%)	(17.5%)	(46.8%)	(23.6%)	3.8025	.96748
Being close to diverse financial services and products positively impacts my business's financial health.	(1.0%)	(13.2%)	(6.2%)	(38.7%)	(40.7%)	4.0453	1.05333
Opening an MSME bank account at an affordable fee and with low operational costs has been manageable for my business	(2%)	(4.9%)	(14.0%)	(54.3%)	(25.1%)	3.9630	.85924
The affordability of withdrawals, money transfers, and other financial transactions significantly contributes to the financial health of my MSME.	(3.3%)	(26.3%)	(7.0%)	(35.4%)	(28.0%)	3.5844	1.23820
Affordable access to credit facilities and loans helps improve the financial health of my MSME.	(2.1%)	(15.2%)	(31.7%)	(34.6%)	(16.5%)	3.4815	1.00549
Accessing multiple credit facilities without additional requirements has been beneficial for my MSME.	(10.7%)	(9.5%)	(5.8%)	(50.2%)	(23.9%)	3.6708	1.23927
Digital lending and e-payment technologies have improved the financial health of my business.	(10.8%)	(3.0%)	(4.3%)	(56.8%)	(25.1%)	3.8272	
I rely on digital platforms for most payment and receipt transactions.	(1.6%)	(7.8%)	(7.8%)	(63.6%)	(19.2%)	3.9218	
My business can easily access and retrieve financial data and records whenever needed.	(2.7%)	(2.7%)	(5.1%)	(40.7%)	(48.8%)	4.3128	
Finance Accessibility						**3.8455**	

Table 2 showed that the Overall Mean of finance accessibility is 3.8455 indicating that there was a general agreement by the respondents that finance accessibility is essential for blue economy MSMEs financial health falling within the “Agree” range (3.6-4.5). The mean values for various metrics related to finance accessibility e.g., physical proximity and finance affordability are generally above 3,

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indicating a tendency towards positive responses, (Taber, 2021).

Proximity to financial institutions, ATMs, and agency banking outlets mean of 3.80 The majority of respondents (70.4%) agreed or strongly agreed that they have convenient access to financial institutions and related services. A mean of 3.80 indicates that most MSMEs are generally satisfied with the proximity of these services. However, a standard deviation of 0.967 indicates moderate variability in the responses. Presence of variety of financial services and affordability had mean of 4.04. This factor scored highly, with over 79% agreeing or strongly agreeing. The mean of 4.04 suggests that MSMEs perceive a wide range of affordable financial services as accessible. The standard deviation of 1.053 suggested there was some variability in responses, but generally, the perception is positive. Opening MSME bank accounts with low operational costs mean of 3.96. 79.4% of respondents agreed or strongly agreed that they could open MSME bank accounts at low costs, with a mean score of 3.96 indicating satisfaction. The low standard deviation of 0.859 indicates that opinions are relatively consistent.

Affordable withdrawals, money transfers, printing of bank statements, and other transactions had a mean of 3.58. With a mean of 3.58, the responses are more mixed, though most are positive, with 63.4% agreeing or strongly agreeing. A higher standard deviation of 1.238 showed a wider spread in opinions, suggesting that some MSMEs may still face challenges with transaction affordability, indicating a moderate spread of responses around the mean (Doane & Seward, 2021). Affordable credit facilities and loans contribute positively to MSME financial health with a mean of 3.48. This item has a mean of 3.48, indicating a slightly lower level of agreement. Only 51.1% agreed or strongly agreed. The higher standard deviation of 1.005 suggested there is considerable variability in how MSMEs perceive the affordability and impact of credit facilities on their financial health. Access to multiple credit facilities with minimal new requirements had a mean of 3.67. 74.1% agreed or strongly agreed that they could access multiple credit facilities without additional requirements. However, a standard deviation of 1.239 suggested significant variation in the responses. Access to a variety of digital lending and e- payment technologies had a mean of 3.83. Most respondents 81.9% agreed that they have access to digital financial tools, with a mean of 3.83. The standard deviation of 1.161 indicated some variation, though overall, digital tools are seen as accessible. Use of digital payment platforms had a mean of 3.92. A large majority 83.1% agreed or strongly agreed that they frequently use digital infrastructure for payments and receipts, with a consistent mean of 3.92 and a low standard deviation 0.831, indicating little variability in the response. Ease of accessing and retrieving financial data & records Mean: 4.31. This was the highest-rated item, with 89.7% of respondents agreeing or strongly agreeing that they can easily access and retrieve financial data. A mean of 4.31 and a low standard deviation 0.877 suggest that MSMEs are highly satisfied with this aspect of financial accessibility. In conclusion, 73% of MSMEs used mobile banking platforms, but only 28% reported

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access to formal business loans.

Table 3 Descriptive Test Results for Financial Health Dependent Variable

Statement	SD	D	N	A	SA	MEAN	Std
Customer invoices for our MSME have increased over the past 48 months.	(0.4%)	(3.3%)	(9.1%)	(61.3%)	(25.9%)	4.0905	.71584
Gross revenue for our MSME has steadily risen over the past 48 months.	(2.1%)	(13.2%)	(16%)	(39.1%)	(29.6%)	3.8107	1.06657
Profits generated by our MSME have significantly contributed to its growth over the past three years.	(4.5%)	(0.8%)	(6.2%)	(57.2%)	(31.3%)	4.0988	.89910
Our MSME has effectively managed loan repayments and avoided any risk of CRB listing.	(1.6%)	(19.3%)	(42.0%)	(21.4%)	(15.6%)	3.3004	1.00632
We have maintained our workforce without cutting staff, hours, or downsizing operations in the past three years.	(5.3%)	(15.6%)	(31.3%)	(36.6%)	(11.1%)	3.3251	1.03914
Our MSME has not relied on additional loans or asset liquidation to cover expenses or settle debts.	(7%)	(21.8%)	(21%)	(29.2%)	(21%)	3.3539	1.22906
Our MSME has hired additional employees in the past three years, reflecting growth.	(1.2%)	(23.9%)	(25.1%)	(41.2%)	(8.6%)	3.3210	.97269
Sales have increased through a wider variety of inventory and the addition of new business lines.	(2.1%)	(10.3%)	(16%)	(50.2%)	(21.4%)	3.7860	.96396
Offering discounts to clients who pay early has helped us improve cash flow and attract more clients.	(2.1%)	(9.1%)	(20.6%)	(41.6%)	(26.7%)	3.8189	.99593
Financial Health						**3.6561**	**.57063**

Key Scale: Ranked 1-1.5 Strongly Disagree (SD); 1.6-2.5 Disagree(D), 2.6-3.5:3.6-4.5 Agree(A); 4.6-5.0 Strongly Agree (SA)

Results in Table 3 reported an Overall Mean of 3.6561.A majority of respondents 87.2%, agree or strongly agree that their customer invoices have increased, indicating positive sales trends. It had highest mean of 4.09 and the relatively low standard deviation of 0.716, suggesting that this is a

consistent observation across respondents, pointing towards financial growth. Rising Gross Revenue had a mean of 3.81, indicating that 68.7% of respondents agree or strongly agree that their gross revenue is rising, the mean score of 3.81 reflected moderate revenue growth. The relatively higher standard deviation of 1.067 suggested more variability, with some respondents experiencing higher revenue growth than others, indicating differences in financial health among the businesses. A large portion of respondents, 88.5%, reported profit growth over the past three years, with a mean of 4.10. The standard deviation of 0.899 was moderate, suggesting that while most respondents had experienced profit growth, the degree of growth varied across businesses. No threat of being listed on CRB only 36.9% of respondents agreed or strongly agreed that they were not threatened by being listed on the CRB, while a significant portion of 61.3% expressed some level of concern. The relatively low mean of 3.30 and higher standard deviation of 1.006 suggested that many businesses face credit-related challenges, reflecting potential issues with loan repayment or financial instability. 47.7% of respondents agreed or strongly agreed that they have not had to cut staff in the past three years, with a mean of 3.33. The relatively high standard deviation of 1.039 indicated variability, with some businesses facing workforce reductions while others remained stable. This signaled economic pressures on certain businesses. About 50.2% of respondents agreed or strongly agreed that they had not taken on additional debt, but the mean score of 3.35 suggested moderate financial stability. The high standard deviation of 1.229 indicated that some businesses have been forced to incur additional debt, reflecting different levels of financial burden across respondents. Less than half (49.8%) of respondents agreed or strongly agreed that they had hired more employees, resulting in a mean of 3.32. The relatively high standard deviation of 0.973 suggested variation in employment growth, with some businesses expanding their workforce while others have not. A majority (71.6%) of respondents reported increasing their sales inventory, with a mean score of 3.79. This indicated business expansion in terms of product availability, and the standard deviation of 0.964 showed that while inventory growth is common, the rate of increase varied among businesses. A large portion, 68.3% of respondents agreed or strongly agreed that they offered early payment discounts to customers. The mean of 3.82 reflected positive cash flow strategies aimed at encouraging faster payments, and the moderate standard deviation of 0.996 indicated that this practice is relatively widespread but varies slightly across businesses. The overall mean of 3.66 indicated that respondents generally agreed that their businesses are in reasonably good financial health. However, the moderate standard deviation of 0.571 suggested some variability in financial well-being across businesses, with certain firms experiencing more financial challenges than others.

The results suggested that on average, respondents are experiencing positive financial outcomes, such as increasing customer invoices, gross revenue, and profit growth over the past three years. However, challenges remain, particularly around credit risk (CRB listing), workforce stability, and debt management. The variability in responses across different financial indicators indicated that while

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many businesses are thriving, others are facing significant financial pressures, especially in relation to workforce reductions and the need to take on additional debt.

Overall, the financial health of the businesses surveyed was moderately strong, 48%, with 52% of respondents were unable to meet operational expenses without external support.

Normality Results

This is also evident that a normal distribution of data is established when the normal probability to probability (P-P) plots tend to follow a linear distribution pattern (Kothari & Garg, 2019).

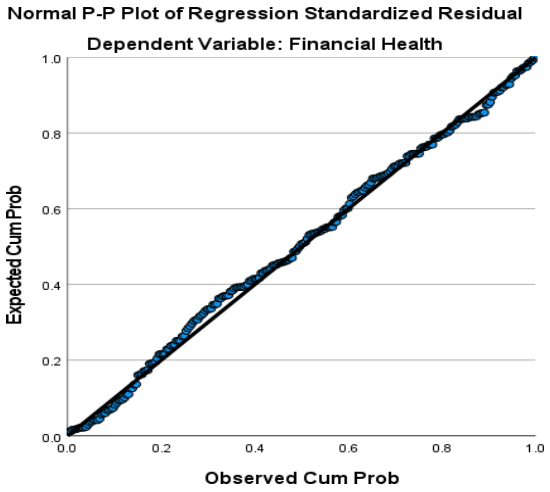

Figure 2: P-P Plot: Test for Normality

Finance Accessibility Linearity Test

A scatter diagram was plotted between financial health and finance accessibility as presented in figure 3.

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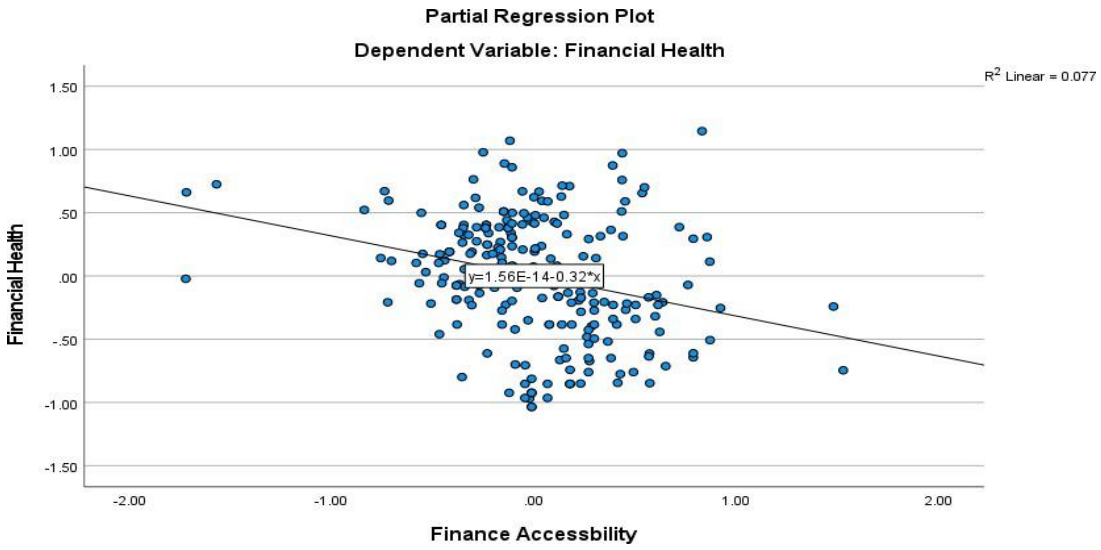

Figure 3: Scatter Plot: Test for Linearity

Figure 3 shows that there is a negative weak relationship between financial health and finance accessibility.

Heteroscedasticity Results

The Breusch-Pagan test is a statistical test used to detect heteroskedasticity in regression models. Heteroskedasticity occurs when the variance of the errors is not constant across all levels of the independent variables, which can lead to inefficient estimates and invalid inference in regression analysis.

Table 4 Breusch Pagan Results

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	43.404	4	10.851	6.426	.182[b]
	Residual	401.866	292	1.689		
	Total	445.271	296			

a. Dependent Variable: Residual Squared

b. Predictor: (Constant), Finance Accessibility

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Key Breusch Pagan test p-value >0.05 indicates absence of heteroscedasticity; P= of 0.182

The results presented in Table 4, indicated a P value of 0.182, an indication that the regression model does not exhibit significant heteroskedasticity. Consequently, this affirms that the assumptions of ordinary least squares (OLS) regression are met, allowing for valid inference and reliable coefficient estimates (Wooldridge, 2021). The Breusch-Pagan test results indicated that there is no significant evidence of heteroskedasticity in the regression model, as the p-value exceeds the conventional threshold for significance. This finding supported the validity of the regression analysis conducted.

Pearson's Correlation Analysis Results

The Pearson's correlation analysis statistics were generated and presented in Table 5

Table 5 Pearson's Correlation Results

Variables		1	2
Finance Accessibility (1)	Pearson Correlation	1	
	Sig. (2-tailed)	.000	
	N	297	
Financial Health (2)	Pearson Correlation	**-.250****	1
	Sig. (2-tailed)	.000	
	N	297	297

The Pearson's correlation analysis results presented in Table 5 shows that there was significant relationship between the independent variable and the dependent variable. The correlation coefficient between Finance Accessibility and financial health of MSMEs indicated a moderate, negative correlation ($r=-0.250$, $p < 0.01$), suggesting that as finance accessibility increases, financial health tends to decrease, ceteris paribus.

Regression Analysis

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Table 6 Model Summary

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.930	1	9.930	34.700	.000[b]
	Residual	68.870	295	.286		
	Total	78.800	296			

a. Dependent Variable: Financial Health

b. Predictors: (Constant), Finance Accessibility

The regression coefficients presented in Table 7 were generated to determine the specific nature of the relationship between financial accessibility and the financial health of blue economy MSMEs in Kenya.

The results presented in table 7 indicated that the P value is less than 0.05 hence the null hypothesis was rejected. This finding demonstrated that financial accessibility had a significant influence on the financial health of blue economy Micro, Small, and Medium Enterprises (MSMEs) in Kenya, confirming the model's adequacy.

Table 8 Regression Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.480	.180		24.89	.000
	Finance Accessibility	-.145	.025	-.355	-5.89	.000

a. Dependent Variable: Financial Health

Results in table 8 presented indicates that the Constant ≈ 4.48 → baseline Financial Health when Finance Accessibility = 0. Finance Accessibility has a negative, slight but statistically significant influence on Financial Health (Beta = –0.355, $p < .001$).The constant (B = 4.480, t = 24.889, $p < .001$) indicated that even when Finance Accessibility is zero, Financial Health is significantly positive, starting from a baseline of about 4.48 units. The regression analysis indicated that Finance Accessibility is a significant predictor of Financial Health. The unstandardized coefficient (B = –0.145, $p < .001$) showed that for each unit increase in Finance Accessibility, Financial Health

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decreases by 0.145 units, holding other factors constant. The standardized coefficient (Beta = –0.355) confirmed a modest but statistically significant negative relationship, consistent with the model summary (R^2= 0.126). The results presented in Table 8 demonstrated that finance accessibility significantly worsen financial health of blue economy MSMEs in Kenya. Equation 3 provides the model that resulted from this relationship as;

FH= 4.480 - 0.145FA (3)

Where; FH is Financial Health (dependent Variable and FA is Finance Accessibility (independent Variable). Equation 3 that for every unit change in finance accessibility, financial health decreases by 14.5% keeping other factors constant. From the result in Table 5 to 8 above, the decision is to reject the null hypothesis H01 that finance accessibility has no significant influence on the financial health of blue economy MSMEs in Kenya and that finance accessibility has significant negative influence on financial health of blue economy MSMEs in Kenya.

DISCUSSION OF KEY FINDINGS

The study aimed to compute the correlation between finance accessibility and financial health of blue economy MSMEs, examining the relationship between physical proximity; finance affordability, digital finance access and financial health. Descriptive results showed that MSMEs generally agreed they had good access to financial institutions, variety of services, and digital tools with an overall mean score of 3.85, falling within the “Agree” range 3.6-4.5. However, there was variability in affordability and access to physical facilities SD of 0.693, reflecting differing experiences with finance access across regions, with the marginalized region scoring low. This finding agreed with that of Sang’ (2021), indicating that financial institutions are relatively accessible, although some MSMEs in remote and marginalized regions still face challenges. It is also in agreement with Ibrahim (2024), found that MSMEs in Nigeria face challenges in accessing financial services due to geographical barriers, lack of banking infrastructure, and high costs associated with formal financial services. Their study emphasized the need to improve financial access points to support business sustainability.

A correlation analysis between the two variables was conducted using Pearson's correlation coefficient. Findings indicated that financial accessibility plays a significant influence on financial health of blue economy MSMEs, however, the

relationship is complex. The results indicated a negative correlation R = -0.250, p- value = 0.000, suggesting that increased financial accessibility does not necessarily result in improved financial health for blue economy MSMEs. This result aligns with the dissatisfaction theory of financial inclusion Herzberg, (1959); Ozili, (2020), which highlights how dissatisfaction with financial

accessibility, due to stringent lending conditions or poorly tailored financial products which can lead to lower financial health for blue economy MSMEs. The findings are also in agreement with previous studies by Makina (2019); Tinta et al. (2022) and Kumar (2017), which suggest that mere access without adequate financial literacy can lead to a decrease in financial health.

The hypothesis testing for the direct relationship in Table 8 resulted in the rejection H01 because the p-value of 0.000 was less than the minimum threshold of 0.05 and $\beta 1 \neq 0$ (-0.145). This conclusion implied that finance accessibility has a significant negative influence in the financial health of blue economy MSMEs in Kenya. For each unit increase in financial accessibility, financial health decreases by 0.145 units, indicating that while MSMEs have access to financial services without proper regulation, they may encounter challenges such as transaction costs, limited digital access, high debt, low savings, or insufficient financial literacy. The significant influence in finance accessibility result aligns with the research of Ali and Ngari (2023); Makina 2019; Tinta et al. 2022 and Kumar (2017) which reported that declining financial health trends are associated with low financial literacy levels, high debt-income ratios, and low savings rates among Kenyans despite increased access to financial services and products. Most MSMEs do not have appropriate financial health from the respondents examined in Africa and Asia, Ali et al., (2018), despite their high financial inclusion. In addition to this, the findings are also affirming the December 2024 Finance Access report published (FSD, 2024). The findings are in agreement with traditional studies like Ibrahim (2024) which focused heavily on conventional banking, overlooking the role of digital finance in improving financial accessibility, Sun & Zhang (2024) assumed widespread digital infrastructure, which may not be the case in some Kenyan marginalized blue economy regions with limited connectivity, Candraningrat et al. (2021) emphasized fintech's role but do not account for challenges such as digital illiteracy, cybersecurity risks, and regulatory constraints. The study finding however, disagreed with that of Sang' (2021) who stated that financial access and financial performance are significant, in a study influence of financial inclusion on performance of micro and small enterprises in Kericho County, Kenya. The research study is also in disagreement with various Sub Saharani related studies, Ajide (2017), Tita and Meshach (2017), Damane and Ho, (2023) and World Bank Group (2025), have empirically examined the relationship between financial inclusion with financial access as one of the dimension and inclusive growth in Sub-Saharan Africa, utilizing panel data from 46 countries. The findings suggested that financial inclusion in form of access significantly contributes to inclusive growth, reinforcing the importance of expanding access to financial services to achieve broad-based economic development. The researcher thus concludes that the findings of the study implies that re-evaluation of the finance accessibility is imperative if blue economy MSMEs have to be financially healthy.

CONCLUSIONS

The study concludes that finance accessibility in its current form does not positively influence the

financial health of Blue Economy MSMEs in Kenya. On the contrary, poorly structured financial services contribute to debt stress, low liquidity, and enterprise fragility. This outcome supports the Public Good Theory by highlighting the need for socially responsible and inclusive financial services. Unless deliberate action is taken to restructure financial access systems, Kenya's Blue Economy MSMEs will continue to underperform, undermining national goals related to sustainable development and inclusive economic growth.

RECOMMENDATIONS

The study suggests that, for optimal finance access usage and financial health of blue economy MSMEs, Policy Action is required on lending practices regulation and enforce MSME protections against predatory credit terms. Promote financial sector accountability in developing MSME-targeted credit facilities. Financial institutions should develop user-friendly, digitally enabled, and sector-specific financial solutions. Digital Infrastructure Investment by Expanding mobile banking, fintech, and agency networks in remote coastal regions to support inclusive finance. Training and mentorship programs should be implemented to help MSMEs better understand and manage financial products. Advancement in technologies is contingent upon the attitudes and perceptions of management.

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