

Venture Capital Financing and the performance of Small and Medium-Scale Enterprises in Nigeria: Empirical Evidence from Cross River State

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ABSTRACT

This study examined the impact of venture capital financing on the performance of small and medium-sized enterprises (SMEs) in Nigeria, with a focus on Cross River State. Using a descriptive survey design and quantitative approach, primary data were collected from 475 respondents (95% response rate from a sample of 500) through a structured questionnaire distributed across SMEs in Calabar Metropolis. Four venture capital dimensions, namely, the amount of VC funding, stage of funding, duration of investment, and market conditions, served as independent variables, with SME performance as the dependent variable. The regression technique was employed to analyze relationships among variables via SPSS Version 3.28. Reliability testing yielded Cronbach's Alpha values ranging from 0.865 to 0.891, all exceeding the 0.70 threshold. Results from the multiple regression model demonstrated a strong overall model fit ($R = 0.871$, $R^2 = 0.758$, Adjusted $R^2 = 0.756$, $F = 362.916$, $p < 0.001$). All four VC dimensions exerted statistically significant positive effects on SME performance: market conditions emerged as the strongest predictor ($\beta = 0.466$, $B = 0.464$, $p < 0.001$), followed by amount of VC funding ($\beta = 0.244$, $B = 0.241$, $p < 0.001$), stage of funding ($B = 0.126$, $p = 0.009$), and duration of investment ($B = 0.108$, $p = 0.024$). All four null hypotheses were rejected at the conventional $\alpha = 0.05$ level. The study concludes that venture capital is a statistically significant and strategically vital determinant of SME performance in Nigeria. Findings suggest that investments made at early stages and over extended periods yield the most beneficial outcomes, while a conducive macroeconomic and regulatory environment is paramount to maximizing VC impact. Recommendations include strengthening Nigeria's venture capital ecosystem, implementing stage-aligned funding strategies, and prioritizing macroeconomic stabilization to foster sustainable SME growth.

Keywords: Venture Capital; SME Performance; Stage of Funding; Duration of Investment; Market Conditions

1. INTRODUCTION

Venture capital financing has emerged as a pivotal source of funding for small and medium-sized enterprises (SMEs) in Nigeria, significantly impacting their growth and performance. As the backbone of Nigeria's economy, SMEs contribute approximately 48% of national GDP and account for over 84% of total employment (National Bureau of Statistics, 2022). However, despite their critical role, many SMEs in Nigeria face substantial challenges in accessing

traditional financing options, leading to an increasing reliance on venture capital as a viable alternative.

Venture capital is characterised by investments in early-stage, high-potential companies, offering not only financial resources but also managerial expertise and strategic guidance (Gompers & Lerner, 2001). This dual benefit is particularly significant in the Nigerian context, where SMEs often struggle with limited access to information, inadequate market knowledge, and insufficient management skills (Okpara & Kabongo, 2021). Recent data indicates that Nigerian startups raised over \$400 million in 2024 alone, despite global economic uncertainties and local currency depreciation (Nairametrics, 2024), while fintech remains the most attractive sector, accounting for nearly 45% of total funding in 2023 (AVCA, 2024).

Despite the documented positive association between VC funding and SME growth indicators such as revenue generation, market share, and employment creation (Ogbuabor & Onwe, 2022), the venture capital environment in Nigeria is not without challenges. Issues including the lack of regulatory frameworks, inadequate exit strategies for investors, currency volatility, and the prevalence of high-risk investment environments constrain the effectiveness of VC financing (Oni & Akintunde, 2020). Moreover, empirical research examining the specific dimensions of VC financing — the amount invested, the stage at which it is deployed, the duration of commitment, and the broader market environment — and their differential effects on SME performance in Nigeria remains sparse, particularly for geographically underrepresented regions such as Cross River State.

This study addresses this gap by investigating the effects of four dimensions of VC financing on SME performance in Cross River State, Nigeria. The paper proceeds as follows: Section 2 presents the theoretical framework; Section 3 reviews conceptual and empirical literature; Section 4 describes the methodology; Section 5 presents results and discussion; and Section 6 concludes with recommendations.

1.1 THEORETICAL FRAMEWORK

1.2 Pecking Order Theory

The Pecking Order Theory, originally advanced by Donaldson (1961) and formalized by Myers and Majluf (1984), posits that firms finance operations first from retained earnings, then through debt, and issue equity only as a last resort. The hierarchy emerges from information asymmetry between corporate insiders and external investors, which differentially affects the costs

and benefits of each financing option. Applied to venture capital, this theory explains why startups which typically lack retained earnings and collateral for debt financing rely on equity-based VC as an early-stage funding source. Venture capitalists mitigate information asymmetry through active due diligence, staged financing, and board participation, thereby reducing adverse selection risks (Wang & Wang, 2024). For Nigerian SMEs, which operate in environments characterised by information opacity and underdeveloped financial markets, the Pecking Order Theory provides a robust theoretical basis for understanding VC adoption as a financing strategy of necessity and strategic alignment rather than preference.

1.3 Agency Theory

Agency Theory, formalised by Jensen and Meckling (1976), addresses the conflicts of interest arising between principals (investors) and agents (entrepreneurs or managers). In venture capital relationships, agency problems manifest as information asymmetry, moral hazard, and misaligned exit objectives between VC firms seeking timely returns and founders pursuing long-term business visions. Venture capitalists employ contractual mechanisms including staged financing, convertible securities, and board representation to align incentives and monitor agent behaviour. For Nigerian SMEs, where corporate governance structures are frequently informal and financial reporting transparency is limited, agency theory underscores the dual role of venture capitalists as both capital providers and governance agents whose monitoring reduces agency costs and improves operational outcomes (Gompers & Lerner, 2000; Brush et al., 2018).

1.4 Financial Intermediation Theory

The Financial Intermediation Theory (Greenwood & Scharfstein, 2016) addresses the role of financial intermediaries in bridging the gap between savers with surplus capital and entrepreneurs requiring funding. Venture capital firms function as specialised financial intermediaries that assume and transform risk by screening investment opportunities, conducting due diligence, providing ongoing monitoring, and ultimately facilitating exits through IPOs or acquisitions. In the Nigerian context, where underdeveloped capital markets create significant intermediation gaps for early-stage enterprises, VC firms perform the critical functions of risk transformation, information production, and liquidity provision, enabling high-potential SMEs to access growth capital that would otherwise be inaccessible (Gompers & Lerner, 2001).

2. CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1 Conceptual Framework

The conceptual framework for this study posits that four dimensions of venture capital financing amount of VC funding (AVCF), stage of funding (STOF), duration of investment (DOIV), and market conditions (MKTC) exercise direct positive effects on the performance of SMEs (SMEP) in Nigeria. This framework integrates insights from the Pecking Order Theory (financing hierarchy and information asymmetry), Agency Theory (governance and incentive alignment), and Financial Intermediation Theory (risk transformation and capital allocation efficiency).

Independent Variables (VC Dimensions)	Direction	Dependent Variable
Amount of VC Funding (AVCF)	→	
Stage of Funding (STOF)	→	SME Performance (SMEP)
Duration of Investment (DOIV)	→	(Revenue • Profitability • Employment • Innovation • Market Share)
Market Conditions (MKTC)	→	

Figure 1. Conceptual Framework: VC Financing Dimensions and SME Performance. Source: Researcher (2025).

$$\text{Model: } \text{SMEP} = \alpha_0 + \beta_1(\text{AVCF}) + \beta_2(\text{STOF}) + \beta_3(\text{DOIV}) + \beta_4(\text{MKTC}) + \varepsilon$$

2.2 Amount of Venture Capital Funding and SME Performance

The amount of VC funding constitutes the most direct channel through which venture capital influences SME performance. Larger capital injections enable SMEs to invest in technology, infrastructure, human capital, and market expansion all essential for scaling operations (Mason & Harrison, 2002). Empirical evidence from Nigerian studies confirms this relationship: Ojedokun and Oluwatobi (2019) found that access to venture capital positively affected SME growth metrics, including sales volume, profitability, and employment levels, while Dagogo and Ollor (2009) documented 1,678% growth in average economic value added by VC-backed Nigerian SMEs over a five-year period, compared to a 3.3% decline among non-VC-backed peers.

Internationally, Dalberg Global Development Advisors (2012) demonstrated that VC-backed firms in Latin America achieved 23% annual revenue growth and 13% annual employment growth on average during investment periods of 5.2 years.

2.3 Stage of Funding and SME Performance

Venture capital financing is typically staged across seed, early, growth, and late phases, each addressing distinct developmental needs. Early-stage investments are particularly significant for Nigerian SMEs, which often lack the operational infrastructure and market presence required for growth-stage attractiveness. Cumming and Johan (2013) note that different funding stages offer distinct advantages depending on enterprise developmental needs. Biney (2018) demonstrated significant positive correlations between VC financing and SME sales and employment growth in Ghana across funding stages, while Achugbu (2017) confirmed that VC financing at the startup stage increased profitability, employment, asset base, and management quality for innovative Nigerian ventures. The strategic alignment of VC funding stage with the SME's lifecycle is therefore a critical determinant of performance outcomes.

2.4 Duration of Investment and SME Performance

The duration of VC investment is the time between initial capital injection and investor exit. This influences SME performance through the provision of 'patient capital' that allows enterprises sufficient time to implement strategies, build organisational capabilities, and adapt to market dynamics without premature exit pressure. Gompers and Lerner (2004) emphasise that sustained financial support and mentorship are crucial for SME maturation in emerging markets. Memba (2011) demonstrated improved management style and financial performance among Kenyan SMEs with VC backing, while Engel (2001) showed that surviving VC-backed German SMEs achieved higher employment growth rates than non-VC-backed peers. The implication for Nigeria is that long-term VC commitments, rather than short-horizon investments, are more conducive to sustainable SME growth.

2.5 Market Conditions and SME Performance

Market conditions encompassing the broader macroeconomic, regulatory, and industry-specific environment constitute a critical contextual moderator of VC effectiveness. In Nigeria, macroeconomic volatility characterised by exchange rate instability, inflation, and policy inconsistency significantly undermines investor confidence and constrains SME performance (Nairametrics, 2023). Akinboade and Kinyua (2007) established that a stable macroeconomic

environment is fundamental to SME growth in Sub-Saharan Africa, while Osei-Assibey and Oppong (2019) confirmed that macroeconomic stability positively influences SME development in Ghana. The implication is that venture capital's effectiveness as a performance driver for Nigerian SMEs is significantly contingent on the quality of the external business environment in which investee enterprises operate.

2.6 Research Gap

While the existing literature generally affirms a positive relationship between VC funding and SME performance in Nigeria, significant gaps persist: most studies focus on general performance metrics without examining the differential effects of specific VC dimensions. Also in terms of geographical area, coverage is concentrated in Lagos and Abuja, leaving Cross River State underrepresented and no single Nigerian study has simultaneously examined all four VC dimensions (amount, stage, duration, market conditions) within an integrated regression framework. This study addresses all identified gaps.

3.0 METHODOLOGY

3.1 Research Design and Study Area

The study adopted a descriptive survey research design with a quantitative approach, appropriate for examining causal relationships among variables without experimental manipulation (Kothari, 2004). The study area is Cross River State, located in the South-South geopolitical zone of Nigeria. The state capital, Calabar, is a significant regional economic hub, with approximately 12,500 SMEs registered across sectors including agriculture, retail, manufacturing, services, and technology (SMEDAN/Cross River State Ministry of Commerce, 2025).

3.2 Population and Sampling

The target population comprised all registered SMEs in Cross River State with exposure to or eligibility for venture capital financing, estimated at 12,500 enterprises. Stratified random sampling was employed to ensure adequate representation across sectors (agriculture, manufacturing, services, retail, technology), location (urban/rural), and VC status (funded vs. eligible-unfunded). The Taro Yamane (1967) formula ($n = N / [1 + N(e)^2]$, $e = 0.05$) yielded a minimum sample of 388, which was rounded up to 500 to account for non-response. Of the 500 questionnaires administered, 475 were validly completed and returned, representing a 95% response rate.

3.3 Research Instrument and Data Collection

Primary data were collected using a structured 20-item Likert-scale questionnaire the Venture Capital and SME Performance Survey (VCSMES) comprising five subscales of four items each: Amount of VC Funding, Stage of Funding, Duration of Investment, Market Conditions, and SME Performance. Items were scored from 1 (Strongly Disagree) to 5 (Strongly Agree). The instrument was administered electronically via Google Forms. Content validity was established through expert review by academics in Banking and Finance and alignment with SMEDAN performance definitions. Reliability testing via Cronbach's Alpha confirmed excellent internal consistency for all five constructs (range: 0.865–0.891), all exceeding the 0.70 minimum threshold (Nunnally, 1978).

4 Data Analysis

Data were analysed using SPSS Version 3.28 employing: (i) frequency distributions and descriptive statistics (means, standard deviations, skewness, kurtosis); (ii) Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity for sampling adequacy; (iii) Pearson's Product-Moment Correlation for bivariate relationship assessment; (iv) Variance Inflation Factor (VIF) and Collinearity Diagnostics for multicollinearity detection; (v) ANOVA for overall model significance; and (vi) multiple linear regression for joint model estimation and individual hypothesis testing. The null hypotheses were tested at the conventional $\alpha = 0.05$ significance level.

4.0 RESULTS AND DISCUSSION

4.1 Response Rate and Sample Profile

A total of 475 questionnaires were validly completed from the 500 distributed, yielding a 95% response rate well above the 70% threshold recommended for survey research (Oluwadare et al., 2025). The sample was dominated by Owners/Founders (41.2%), followed by Investors (24.3%), Employees (20.3%), and Managers (14.3%). Nearly 60% of enterprises had been operating for three years or less, confirming the sample's strong representation of nascent and early-stage businesses the primary targets of VC investment. Medium enterprises were the most numerous (30.7%), followed by Micro (27.4%) and Small (25.3%) enterprises. Critically, 66.9% of respondents reported having received venture capital funding, providing a strong empirical foundation for the study's analytical objectives.

Table 1: Demographic Profile of Respondents (N = 475)

Variable	Category	Frequency (n)	Valid % (%)
Role in Enterprise	Owner/Founder	193	41.2
	Investor	114	24.3
	Employee	95	20.3
	Manager	67	14.3
Operating Period	Less than 1 year	168	35.6
	1–3 years	112	23.7
	4–6 years	107	22.7
	More than 6 years	85	18.0
Enterprise Size	Micro	130	27.4
	Small	120	25.3
	Medium	146	30.7
	Large	79	16.6
VC Funding Received	Yes	315	66.9
	No	156	33.1

Source: Field Survey, 2025.

4.2 Reliability Analysis

Table 2: Cronbach's Alpha Reliability Coefficients (N = 469 valid cases)

Construct	No. of Items	Cronbach's α	Interpretation
Amount of VC Funding (AVCF)	4	0.878	Good
Stage of Funding (STOF)	4	0.882	Good

Duration of Investment (DOIV)	4	0.865	Good
Market Conditions (MKTC)	4	0.891	Good

SME Performance (SMEP — DV)	4	0.885	Good
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Note: Cronbach's $\alpha > 0.70$ = Acceptable; > 0.80 = Good; > 0.90 = Excellent (Nunnally, 1978).

Source: SPSS v3.28 computation

4.3 Descriptive Statistics

Table 3: Descriptive Statistics for Key Variables (N $\approx$ 470–473)

Variable	N	Mean	Std. Dev.	Skewness	Kurtosis	Interpretation
Market Conditions (MKTC)	471	3.35	1.119	−0.842	0.026	Highest mean — favourable conditions perceived
Amount of VC Funding (AVCF)	473	3.31	1.125	−0.728	−0.209	Strong positive perception of VC amounts
Stage of Funding (STOF)	471	3.29	1.099	−0.762	−0.005	Stage moderately well-aligned
SME Performance (SMEP)	471	3.29	1.116	−0.740	−0.116	Moderate-to-good performance reported
Duration of Investment (DOIV)	470	3.27	1.078	−0.756	0.010	Lowest mean duration alignment gap

Note: 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). All variables exhibit slight negative skew, indicating distributions weighted toward agreement. Source: SPSS v3.28.

Market conditions recorded the highest mean (3.35), reflecting respondents' awareness of the pivotal role of macroeconomic environment in determining VC effectiveness. Amount of VC funding (3.31) and stage of funding (3.29) also recorded positive perceptions, while duration of investment (3.27) recorded the lowest mean, suggesting that alignment between VC investment timelines and SME growth trajectories remains a persistent challenge in the Nigerian context. The slight negative skew across all variables indicates that distributions are weighted toward higher

levels of agreement, consistent with respondents' generally positive assessments of VC financing's contribution to their enterprises.

4.4 Sampling Adequacy and Correlation Analysis

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy yielded a value of 0.974, rated as 'superb' (values above 0.90), confirming that the variance in variables is substantially attributable to underlying factors and validating the appropriateness of factor-analytic approaches. Bartlett's Test of Sphericity was significant ($\chi^2 = 6921.916$, $df = 190$, $p < 0.001$), confirming significant inter-variable relationships. Collinearity diagnostics revealed Tolerance values ranging from 0.228 to 0.280 (all well above the 0.10 threshold) and VIF values from 3.566 to 4.392 (all below the acceptable maximum of 5.0), confirming that multicollinearity is not a concern (Hair et al., 2017). The maximum Condition Index of 18.365 is well below the problematic threshold of 30 (Gujarati, 2003).

Model	Sum Squares	of df	Mean Square	F-Statistic	Sig.
Regression	440.395	4	110.099	362.916	0.000**
Residual	140.765	464	0.303		
Total	581.159	468			

** $p < 0.001$. *Dependent Variable: SME Performance. Predictors: AVCF, STOF, DOIV, MKTC.*
Source: SPSS v3.28.

The ANOVA result confirms that the regression model is statistically significant ($F(4,464) = 362.916$, $p < 0.001$), establishing that the four VC financing dimensions collectively and significantly predict SME performance. The extremely high F-statistic affirms the strong collective explanatory power of the predictor set.

4.6 Multiple Regression Results and Hypothesis Testing

Table 6: Multiple Regression Results — Joint Effect of VC Dimensions on SME Performance (N = 469)

Predictor Variable	Unstd. B	Std. Error	Std. Beta (β)	t-value	Sig.	Decision
(Constant)	0.162	0.087		1.875	0.061	—
Amount of VC Funding (AVCF)	0.241	0.044	0.244	5.495	0.000**	H ₀₁ Rejected
Stage of Funding (STOF)	0.126	0.049	0.125	2.605	0.009**	H ₀₂ Rejected
Duration of Investment (DOIV)	0.108	0.047	0.104	2.267	0.024*	H ₀₃ Rejected
Market Conditions (MKTC)	0.464	0.043	0.466	10.795	0.000**	H₀₄ Rejected

Model Summary: R = 0.871 | R² = 0.758 | Adjusted R² = 0.756 | F(4,464) = 362.916 | p = 0.000 | Durbin-Watson = 2.052**

** $p < 0.01$; * $p < 0.05$. Dependent Variable: SME Performance. Source: SPSS v3.28.

$$\text{SMEP} = 0.162 + 0.241(\text{AVCF}) + 0.126(\text{STOF}) + 0.108(\text{DOIV}) + 0.464(\text{MKTC}) + \varepsilon$$

The joint multiple regression model is highly significant ($F(4,464) = 362.916$, $p < 0.001$) with an impressive explanatory power of 75.8% of variance in SME performance ($R^2 = 0.758$, Adjusted $R^2 = 0.756$). The Durbin-Watson statistic of 2.052 confirms the absence of autocorrelation in residuals. All four VC dimensions retained statistically significant independent positive effects in the joint model.

Table 7: Summary of Hypothesis Testing Results

Hypothesis	Predictor	B	β	p-value	Decision
H ₀₁	Amount of VC Funding (AVCF)	0.241	0.244	0.000**	Rejected

Hypothesis	Predictor	B	β	p-value	Decision
H ₀₂	Stage of Funding (STOF)	0.126	0.125	0.009**	Rejected
H ₀₃	Duration of Investment (DOIV)	0.108	0.104	0.024*	Rejected
H ₀₄	Market Conditions (MKTC)	0.464	0.466	0.000**	Rejected

** $p < 0.01$; * $p < 0.05$. All four null hypotheses rejected. Source: SPSS v3.28.

4.7 Discussion of Findings

The finding that market conditions exert the strongest effect on SME performance ($\beta = 0.466$, $B = 0.464$, $p < 0.001$) is consistent with the broader theoretical understanding that external macroeconomic factors including economic stability, regulatory framework quality, and demand conditions are pivotal determinants of SME success (Akinboade & Kinyua, 2007). In Nigeria's volatile macroeconomic environment, characterised by exchange rate instability, inflationary pressure, and policy inconsistency, this finding highlights a critical structural constraint: venture capital's effectiveness as a performance driver is significantly contingent on the quality of the external business environment. This result aligns with Osei-Assibey and Oppong (2019), who confirmed that macroeconomic stability is fundamental to SME development in Sub-Saharan Africa.

The significant positive effect of VC funding amount ($\beta = 0.244$, $p < 0.001$) confirms that larger capital injections enable Nigerian SMEs to invest in critical growth enablers technology, infrastructure, talent, and market expansion that would otherwise remain inaccessible given underdeveloped traditional financing markets. This finding corroborates Mason and Harrison (2002) and is consistent with Dagogo and Ollor's (2009) Nigerian evidence of dramatically superior economic value-added growth among VC-backed SMEs.

The significant positive relationship between stage of funding and SME performance ($B = 0.126$, $p = 0.009$) aligns with Cumming and Johan (2013), who demonstrated that the timing of VC deployment relative to the business lifecycle differentially influences outcomes. The finding that respondents (57.5%) perceived enterprise performance as strongly dependent on the stage of

VC provision and 60.1% believed growth-stage funding significantly enhances competitiveness underscores the strategic importance of stage-alignment in VC investment decisions for Nigerian SMEs.

The positive and significant effect of investment duration ($B = 0.108$, $p = 0.024$) provides empirical support for the ‘patient capital’ hypothesis in the Nigerian context. Longer investment horizons allow SMEs to implement strategies, overcome initial operational hurdles, and realise growth potential without premature exit pressure. This finding is consistent with Gompers and Lerner (2004) and Memba (2011), whose evidence from Kenyan SMEs similarly demonstrated that sustained VC commitment generates superior performance outcomes compared to short-term investment approaches.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

This study provides robust empirical evidence that venture capital financing is a statistically significant and strategically vital determinant of SME performance in Nigeria. All four null hypotheses were rejected at conventional significance levels. The four VC dimensions collectively explain 75.8% of the variance in SME performance (Adjusted $R^2 = 0.756$), confirming that venture capital — when deployed in appropriate amounts, at strategically aligned stages, over extended durations, and within a conducive macroeconomic environment constitutes a powerful and empirically validated driver of sustainable SME growth in Nigeria.

The primacy of market conditions in the regression results carries an important policy implication: the internal provision of venture capital, however well-designed and strategically deployed, cannot fully compensate for an unfavourable external macroeconomic environment. Nigeria’s policymakers must therefore prioritise macroeconomic stabilisation, regulatory predictability, and infrastructure development as complementary prerequisites for maximising VC’s transformative potential for SME growth.

The study advances three theoretical contributions. First, it extends the Pecking Order Theory to the Nigerian VC context by confirming that information asymmetry and capital hierarchy dynamics fundamentally shape VC adoption among Nigerian SMEs. Second, it validates Agency Theory’s predictions regarding governance-aligned VC relationships by confirming that active VC involvement (through stage-specific and duration-sensitive investment strategies)

generates measurable performance improvements. Third, it affirms Financial Intermediation Theory's relevance by demonstrating that VC firms, as specialised financial intermediaries, effectively bridge the capital access gap that traditional financial institutions cannot fill for high-potential Nigerian SMEs.

5.2 Recommendations

- **Increase VC Fund Size and Access:** Policymakers and development finance institutions (CBN, BOI, NIPC) should design targeted programmes to increase access to larger VC investments for Nigerian SMEs, including tax incentives for VC firms investing in priority sectors, matching fund mechanisms through DFIs, and the establishment of sector-specific VC funds targeting agriculture, technology, and manufacturing.
- **Implement Stage-Aligned Investment Strategies:** Venture capitalists should develop clear, lifecycle-aligned funding strategies that prioritise early and growth-stage investments for Nigerian SMEs. Stage-specific diagnostic frameworks should be used to assess SME developmental readiness and match VC deployment timing to business cycle position, maximising strategic impact.
- **Institutionalise Patient Capital Frameworks:** Investors should formalise long-term commitment frameworks including contractual provisions for follow-on funding, mentorship obligations, and performance milestone reviews that extend investment horizons beyond conventional two-to-three-year windows. Patient capital models, drawing on development finance institution partnerships, should be incentivized through regulatory frameworks.
- **Prioritize Macroeconomic and Regulatory Environment:** The Nigerian government must accelerate macroeconomic stabilization through exchange rate management, inflation control, infrastructure investment, and streamlining of regulatory compliance burdens on SMEs. The Startup Act (2022) should be comprehensively implemented, and SEC regulatory sandbox provisions for VC firms should be expanded to reduce compliance costs and time-to-investment.
- **Build SME Investment Readiness:** SMEDAN, the Central Bank, and international development partners should scale investment readiness programmes that address the documented knowledge and governance gaps among Nigerian SMEs. Programmes should

focus on financial record-keeping, business plan development, corporate governance formalization, and VC pitch preparation, ensuring a wider pipeline of investable SMEs.

5.3 Contribution to Knowledge

This study contributes to knowledge in four key ways: (i) it provides the first integrated empirical examination of all four VC financing dimensions (amount, stage, duration, market conditions) within a single regression framework targeted at SMEs in Cross River State, filling a significant geographic gap in the Nigerian literature; (ii) it operationalizes SME performance as a multidimensional construct encompassing revenue, profitability, employment, innovation, and market share, offering greater analytical precision than single-metric performance indices; (iii) it synthesizes the Pecking Order Theory, Agency Theory, and Financial Intermediation Theory in a unified multi-theoretical framework specifically tailored to the VC SME performance nexus; and (iv) it provides a validated VCSMES instrument (Cronbach's Alpha 0.865–0.891) replicable across Nigerian states and Sub-Saharan African markets.

5.4 Limitations and Future Research Directions

This study is limited by its cross-sectional design, geographic restriction to Cross River State, and reliance on self-reported perceptions rather than audited financial data. Future research should: (i) conduct longitudinal panel studies tracking VC-backed SME performance over time as VC investment characteristics change; (ii) investigate the moderating roles of sector, SME size, and VC firm type on the VC-performance relationship; (iii) examine the differential effects of formal VC vs. angel investment vs. crowdfunding on Nigerian SME outcomes; (iv) extend comparative investigations to other South-South geopolitical zone states; and (v) integrate qualitative case studies to capture the experiential dimensions of VC-SME relationships business plan development, corporate governance formalisation, and VC pitch preparation, ensuring a wider pipeline of investable SMEs.

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