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**Impact Analysis of Venture Finance to Small and Medium Enterprises' Performance in Tanzania**

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**ABSTRACT:** *Venture capital firms (VCF) provide finance to growing companies to run their activities at initial development stage, to help them grow and succeed. Small enterprises (SMEs) in Tanzania constitute growing business however; they lack finance to undertake opportunities from scale operation, effective management and growth. This scarcity of finance undermines business owners to manage their start-ups, expansion and growth. Inherently, SMEs businesses experience low value of tangible assets, high potential value of intangible assets which pose distress to meet the desired collaterals to attract external finances from traditional bank lending sector. SMEs face adverse selection and moral hazard when borrowing from banks and traditional financial institutions. Numerous authors have proved that VC financing is a viable and sustainable financing model to drive SMEs' growth and performance. The Existence of the relationship between VCF and SMEs in Tanzania has influenced the importance of this study. The purpose of this paper is to analyze the impact of venture capital finance on SMEs' performance in Tanzania. We reviewed literature on relationship between venture capital providers and SMES help to identify the venture capital performance and its impact to SMEs. The literature on Venture capital providers' investments in Tanzania is well understood by analysis of traditional investment objectives for SMES. Equivalently, analysis of SMES suffering from exceptional failure rate, insignificant and; irregular finances and ineffective management is increasingly becoming important in Tanzania Mixed and exploratory research approaches were used to assess VC phenomena in Tanzania in search for literature, and talking to expert-narrative approach- in the subject. We used survey questionnaires to collect data from 70 respondents which include SMEs business received VC funds and SMEs never received VC funds. We used multiple regression analysis and correlation coefficient to analyze data. Descriptive and correlation analysis were used to measure variables and explain trends, characteristics and relationships between VC finance, sales growth, profitability and return on assets. Empirical evidence shows a significance growth in sales turnover, return on assets and Equity of venture-capital-backed SMEs businesses as compared to the non-venture-capital-backed SMEs. Further analysis shows that SMEs.*

**KEY WORDS:** venture capital finance, SMEs performance, venture capital auxiliary services, technical management support services

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## **INTRODUCTION**

### **Background to the Study.**

The existence of VC finance providers and SMEs in Tanzania has influenced the importance of this study. VC financing is becoming noticeable in developing economies as indispensable instrument that influence performance and development of SMEs businesses. Empirical evidence from developed countries recognize VC as a feasible financing model with the expertise to intensify accessibility of finance for SMEs' growth (Gompers and Learner, 2004; OECD, 2018).

SMEs are drivers of economic growth in both industrialized and developing economies. (Beck and Cull, 2014; Shanthi and Schneider, 2018). The majority of new jobs and future products are becoming the output of flexible and innovative forces of SMEs (Birch, 2002, Steward 1986). SME sector, in Tanzania accounts for 30-40% of labor force (Kirumba and Lyatuu, 2014). Despite the economic importance of the SME sector to Tanzania' and similar emerging economies, the failure rate of SMEs starting-up business or SMES stagnating growth have remained a challenge to business owners, policy-makers and development partners. In developing economies, 58.3% of new business formations do not survive beyond one year of their start-up (Hisrich D and Einar H. 2000, World Bank, 2016). The major constraints of SMEs at start and growth stage in developing economies like Tanzania is attributable to lack of finance, as compared to the rest of the world (World Bank, 2010). Although SMEs struggle to search for external debt capital to bridge the financing gap, financial intermediaries consider them as high-risk investment thus, reluctant to provide them with loans or financial credit). Most SME experiences low value of tangible assets, high values of intangible assets which distress collateralization value to attract external debts, (Hisrich D and Einar H, 2000).

### **Equity Gap to Growing business (SMEs)**

Some nitty years ago, the Macmillan Committee, (1931) identify the lack of long term capital termed equity gap as a significant constraint on the viability of SMEs growth in UK. Small firms relative to large one are characterized as having weaker liquidity, more volatile level of profitability, overdependence on short term finances and insufficient of shareholder's fund or equity (Bolton, 2010). Consequently, owner-managers of SMEs are heavily dependent on stringent and family finance for initial capitalization (Robert, 1991).The means by which SMEs can be identified and supported in their growth has become one of the most policy focus of governments in both developed and developing economies. The growth of new technology based SMEs and their impact on the economies of developed nations from 1960 to 1990 has encouraged developing nation to consider the reform policy to emulate these success in their own small enterprises, (Store et al 1989)

### **Distinct features of Venture Finance from other forms of finance**

Venture finance usually bears both feature of equity and debt with further attractive feature or auxiliary services that can be usefully to SMEs and other investees. Literatures explain venture finance as one of the financial contracting model where the contract made is open to monitoring and renegotiation (Hisrich D and Einar H. 2000; Gompers and Lerner 1999; OECD 2018). The capital investment is usually financed at different stages of business operation including seed or initial stage, research stage, development stage; start up stage, initial operation activities, expansion or growth stage and IPOs stage. The finance can be packed into various forms of equity capital, debt and quasi debt, and other forms of hybrid financial derivatives. Venture capital financing is a significant financial innovative asset in the 21st century. Several scholars have recognized it as a precursor for SMEs' growth, global technological development and employment generation (Hisrich D and Einar H. *ibid*); Arundale 2018; Ning, Wang and Yu 2015).

### **Venture Capital finance package**

The components of Venture finance contract are broadly categorized as Venture finance and Venture auxiliary services. Empirically, Venture capital providers focus on the various forms of financial contract as major factors that influence the investment and finance decisions in VC industries. Developing economies like Tanzania are argued to have inefficient financial market, a phenomena which is described as inherent obstacles in setting both traditional and hybrid financial instruments like venture finance contract. (Bagari, 1992).

### **Venture finances**

The Venture capital providers enter VC contracts with the business entrepreneurs to provide equity, debt or quasi debt to finance business operation at early start stage, middle-level –mezzanine, expansion and growth stage in exchange for equity shares- ownership and control to protect the interests of both parties to the contract. Venture capitalists secure minority seats on the boards to maintain a sound business and add value to investee to get better return on equity (ROE) shares (Cumming and Johan, 2009; Lerner 1995).

### **VC Auxiliary Services to SMEs**

VC finance emerged as an alternative source to conventional funding to fill the equity gap and benefit the missing middle. Venture capitalist always offer both finance and auxiliary or supportive services such as technical skills and managerial support, business incubation facilities links to business partners, hiring executives, market link and sharing expertise.( Murtinu 2017). These auxiliary services uphold the legitimacy in augmenting the growth of SMEs and add value to the business, expecting good returns on investments (Gompers, Kaplan and Mukharylamov, 2015; Colombo and Murtinu, 2017).

### **Ownership and control of VC funded business**

Venture capital providers secure minority seats on the Board of Directors (BOD) of VC-backed firms in order to to control SMES financial performance to achieve high benchmark rates of returns or Targeted

rates of return on equity (ROE) shares, ROA, Profitability and sales growth rates. (Hisrich D and Einar H. 2000, Shaapiro,1986; Sagari, 1991); Contrary to the minority share held, literature show the minority share has absolute power over majority ordinary share that control board room decision (Sagari,1991).

## **LITERATURE RREVIEW**

### **Theories on VC providers' decision to finance SMEs**

VC providers assume the presence of certain factors in SMEs beyond convention financial investment practices in order to finance them. Theoretical foundation on VC investment approach developed by Tyebbye Bruno, (1984) argues such certain factors or investment criteria are influenced by market attractiveness, product uniqueness, and environment threats like adverse tax regimes. Market attractiveness influence expected return while environment threats influence investment risk and exit expectation (World Bank Report, 2016; Adongo, J., 2012). Other authors with model hyphenated; include Leopard Fromman (1998) –pick and Quick business plan, Bagari, et al (1991)- Technology and infrastructure investment criteria and Small Business Research Trust (1990)- benchmark rates of return as major investment criteria . Their analysis can be categorized into two perspectives -VC evaluation criteria and assessment of past return of VC investment. Both approaches are associated with significant impact on development of the funded companies. This paper focus on the analysis of the Impact of the VC on funded companies' in-spite the investment criteria set forth by VC providers.

### **Overview of global venture capital performance**

Empirical literature from developed countries recognizes VC as a suitable financing model, with proficiency to ease the barrier of lack of access to finance for SMEs growth (OECD, 2018). Global companies such as YouTube, Yahoo, Apple, Microsoft and Compaq benefited from VC financing. Total world VC investment in 2019 was USD 171 billion. United States of America (USA) constitute approximately 50% of the global total VC investment. China rank second with USD 52.6 billion of the global VC market (Wee Tracker 2019, Pitchbook, 2019). Total VC investment in Europe was USD 12 billion at declining rate (EVCA, 2019, In Japan, the total VC is approximately was USD 50 billion. Africa is the next favored destination for VC investment. Kenya and South Africa, are leading in venture capital investments in Africa while Tanzania is currently attracting VC investments (KPMG and EAVCA, 2019; Deloitte 2021). SMES growth in counties like Tanzania and Egypt are viewed as the next favored investee in Africa.

### **Empirical Evidence of Venture Capital Finance backed firms (VCBF) and None VCBF**

VC finance is a reality in augmenting the growth of SMEs. Unlike the debt-funding model, VC provides funds to start-up firms with growth potential without collaterals to offer in exchange for equity shares at some future date that attracts high ROE (Gompers and Learner, 2004; OECD, 2018). (Hisrich D and Einar H. *ibid*), disclosed that VC-backed firms outperformed the non-VC-backed firms across every level of investment before and after receiving VC. Jain and Kini (1995) identified growth in sales from the 3 years before and after the IPO significantly surpassed the non-VC-funded companies in United

State. Kaplan and Lerner (2009) disclosed that although only 0.2% received VC financing, 50% of the entrepreneurial IPOs in recent years were VC-backed companies.

Critically, previous authors presented compelling results to support VC financing, however Hirukawa and Ueda (2008) found no significant relationship between using VC and an industry's growth. Venture capital-backed companies did not generate more sales and employment compared to non-VC-backed companies. They exposed that only VC-backed companies performing research and Development (R & D) realize higher sales turnover than non-VC-backed companies.

Several empirical studies on VC financing, focus on financial factors sales turnover and profitability for measuring VCBF growth. However, benchmark rates on ROA and ROE, is the core interest of the venture capital providers. This paper includes new alternative of ROE and ROA used in the measurement of SMEs' performance (enactdal).

On the other hand, non-financial factors, such as the tax regimes, and auxiliary services affect supply of VC capital. (Groh, Liechtenstein and Laser, 2010). In contrast, Hain et al. (2016) found that the design of a favorable policy framework eases access to VC financing. The government regulatory frameworks such as legal policy, tax regimes, wages framework, licensing, investment opportunities and technological support can positively or negatively affect the growth of the SME sector and venture capital decisions.

### **Venture capital development in Tanzania**

Growth of the VC industry in developing economies is attributable to the private equity investors' efforts to add value to the growing business, with a greater focus on SMEs' growth. (Gompers et al. 2015; Rusu and Toderescu 2016). Analysis of the impact of VC on the performance of SMEs in exposed a significant relationship between VC financing and SME business growth. Venture capital-backed companies demonstrated high growth in sales revenue, profitability and raising number of employees (Memba, Gakure and Karanja, 2012). Establishment of Venture Capital Association (EAVCA) headquartered in Nairobi, has accelerated the growth of Venture Capital in East Africa Region.

The concept of VC and development of VC industry in Tanzania is relatively new to most of SMEs' owners, managers and financial institutions. The initiative of Venture financing started since late 1990s were three European foreign firms- (PROPACO, SWDFUND and ICDC) jointly started their venture capital activities. Later on two American firms (CDC and USAID) joined the raw and supported the registration of the First Professional VCF firm o in Tanzania. Further private individuals register two professional venture capital firms (Venture Capital fund (TVF) and First Capital funds in 2002. By 2019, there were three active professional VC firms- Tanzania Venture Capital Firm-TVCF, First Capital Funds (FCP) and Lazer Fund Limited which manage investment portfolio of approximately total Tshs 21,416 million.

In 2021, President Office of United Republic of Tanzania through -Tanzania Investment Center organized the first annual finance conference to bring together all the stakeholders in the VC market to accelerate the growth of SMEs through alternative funding. These on-going collective efforts in Tanzania highlight that access to enduring capital by the small firms remains a national concern.

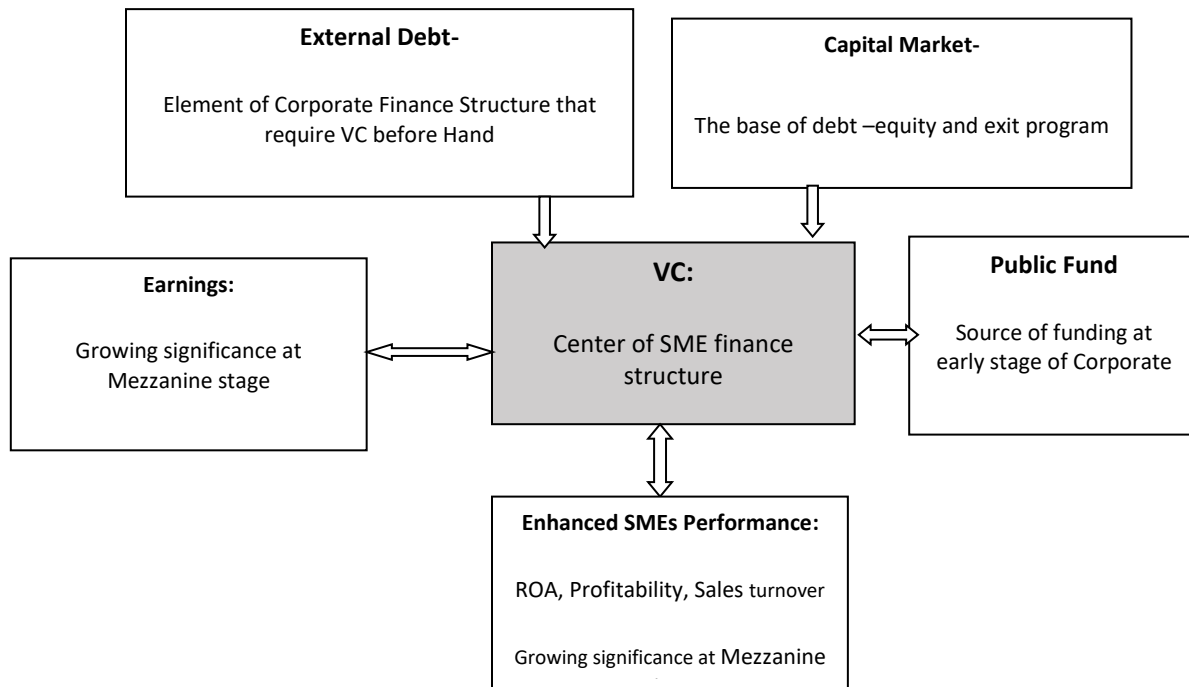
Empirical studies in developing economies underpin the influence of VC financing on SMEs' growth in Tanzania in order to exploit the untapped economic sector. The recent study carried by AVCA (2019) points out that Tanzania is one of the next destinations for private equity financing in Africa. However, few foreign and local firms have given a face-lift of the VC industry in Tanzania. Thus, empirically we deduce that VC financing stimulates the growth of start-up firms and is a sustainable solution to SMES performance. Access to VC finance is a challenge to SMES, particularly for fast-growing SMEs business. This challenge poses a negative effect on country's economic growth. There is little evidence documenting the effect of VC financing on the growth of SMEs in Tanzania. This paper, therefore, provides a new data set showing the impact of VC financing on the growth of SMEs in Tanzania.

### **Conceptual Framework, Research Design and Methodology**

The conceptual framework addresses the important implication of existence of venture capital providers and SMEs in Tanzania. The framework shows at every stage of SMEs' business growth, venture capital finance is pivotal on financing strategy of SMEs. The level of SMSEs' demand for VC changes with various stages of business development. The model investigates the relevance of VC finance to SMEs. We deduce that VC providers are more interested on financial returns rather than non-financial return. (Tyebjee and Bruno, 1984) like changes in regulatory environment. Further, the framework demonstrates how technical management support and finance packages can be effectively delivered to SMEs by VC finance contracting and arrangement.

### **Conceptual Framework**

The figure 1 (fig) below summarizes literature reviewed and shows the significance of VC finance to SMEs. Inversely the fig also shows SMEs with high potential growth magnetize VC finance. The resultant effect is enhanced SMEs business growth and economic development. This phenomenon manifested itself when other exogenous variables such as environmental threat or adverse tax regimes are constant.



**Fig 1 : Venture Capital- Critical Missing Middle of Financing Strategy of SMEs in Tanzania**

**Research Hypotheses**

**Hypothesis I**

*Venture capital providers’ decision to finance SMEs is influenced by the minimum targeted rates of return on investment. Literature reviewed postulate that significance benchmark of return constitute ROA, ROE, Profitability growth and sales growth rates. Thus we hypnotize that:*

*There is significance influence of VC financing to the growth of SMEs’, sales turnover, profitability and ROA*

**Hypothesis I Explanation**

*Supplies of VC Finance to SMEs fill the Equity finance gap that magnetize assets growth, and raise ability to generate cash from increased revenue turnover. Performance of VC backed firms outperform Non VC backed firms based on minimum recommended benchmark criteria on ROA and ROE. SMEs growth potential taped with VCF contribute positively to SMEs growth and country employment, and overall economic development.*

## **RESEARCH DESIGN AND METHODOLOGY**

We used exploratory research method to obtain insights understanding of Tanzania and Global VC industry. Mixed and complemented research approaches were used to qualify the objective of the research. (Robertson, 1992) in search for literature and talking to expert-narrative approach- in the subject. (Adams Schevaneveldt, 1991). The mixed-method strengthens the ideological and experimental paradigms that complement each other (Saunders, Lewis and Thornhill, 2012). Deductive approached was used to develop theory and hypothesis. Descriptive and correlation research approaches were used to systematically measure variables and explain trends, characteristics and relationships between VC finance, sales growth, profitability and return on Assets. Correlation approach was used to determine how well these variables are related.

### **Sample Selection, Sample Procedures, Size and data collection**

The study used a 5-point Likert scale questionnaire to collect primary and secondary data. A verbal analysis technique (Fee et al 1999) was also used to supplement the questionnaire. The respondents provided their scores from strongly disagree (1) to strongly agree (5). Stratified sampling frame were taken from a total population of 300 SMEs from manufacturing, mining, Transportation, tourism and agribusiness sectors operating in Dar es Salaam and Arusha regions. We categorized the SMEs into twofold variables - VC-backed and non-VC-backed firms. SMEs from the manufacturing sectors were chosen because they contributed 21.62% to the total national revenue collections, while agribusiness makes up 67% of Tanzania's economy. The primary source of data focus on individual and SMEs served by Small Industry Development Organization (SIDO), under the Ministry of Industry based Dar es Salaam and Tanzania Hot culture Association- A private Agriculture organization based in Arusha. SMEs included in the study were those classified by SIDO and International Development partners as the top-performing SMEs in 2018 and 2019. Also we engaged active VC firms and Association in Tanzania because they compose of knowledge and custody of the data required for the study. We interacted with the key players in the VC industry and compiled their understanding of VC performance, best practices and challenges.

### **Data analysis**

We analyzed quantitative data using descriptive statistics, inferences, financial ratio analysis and excel. The multiple regression model statistically measured the relationship between VC financing and SMEs' performance.

In measuring the SMEs' performance, we considered sales turnover, ROA and profitability to determine the extent to which the independent variable influences the dependent variables. The multiple regression model is illustrated as:

$Y = \alpha + \beta X_1 + \beta X_2 + \beta X_3 + \epsilon$ , where: •  $Y = VC$ , •  $\beta X_1 =$  annual sales, •  $\beta X_2 =$  profitability, •  $\beta X_3 = ROA$ , •  $\alpha =$  intercept, •  $\epsilon =$  residual (error), • VC-backed and non-VC-backed are binary variables allocated 1 if SMEs received VC financing and 0 if they did not receive VC financing.



### **Operationalization of the study Variables**

The questionnaires give a set of measured perceptions and importance for SMEs to use V capital finance. Descriptive analysis was used to analyse respondents 'perception in VC. SMEs' Business performance was used by business researcher to assess the survival and growth of firms. Scholars in business finance define business performance as a parameter(s) used by enterprises to measure the capacity of total assets to generate revenue.

### **Hypotheses**

We hypothesize that VC financing enhances the growth of SMEs' sales turnover, profitability growth and ROA. Sales turnover, profitability growth and ROA were performance variables analyzed. Financial ratios were used to analyze business financial performance, such as sales turnover, profitability and ROA. They facilitate a realistic way to compare companies of different industries and assist to match business enterprises across different sectors, to recognize their strengths and weaknesses.

### **Computation of financial Ratio**

Working capital ratio Price-Earnings (P/E) Ratio Return on assets (ROA): Returns on equity (ROE) are key financial ratio that's considered particularly effective at measuring, illustrating, and summarizing a company's financials snapshot of liquidity, efficiency and profitability in relation to its competitors or peers. VC commonly used ROA ratio

Return on assets is a profitability ratio that provides how much profit a company is able to generate from its assets. ROA measures how efficient a business management is in generating earnings from their economic resources or assets on their balance sheet. ROA is shown as a percentage, and the higher the number, the more efficient a company's management is at managing its balance sheet to generate profits.

### **Calculating Return on Assets (ROA)**

Average total assets are used in calculating ROA because a company's asset total can vary over time due to the purchase or sale of an asset during the year vehicles, land or equipment, inventory changes, or seasonal sales fluctuations. The formula for ROA is:  $ROA = \text{Net Income} / \text{Average Total Assets} * 100$ .

Net income is the amount of total revenue that remains after accounting for all expenses for production, overhead, operations, administrations, debt service, taxes, amortization, and depreciation, as well as for one-time expenses for unusual events such as lawsuits or large purchases. VCA usual invest in business with minimum range of 30%-45% ROA (Tyebjee and Bruno, 1984).

Industry	Average ROA
Transportation	40%
Retail	8.20%
Healthcare	15%
Tobacco and liquor	15.89%
Tourism	60%
Grocery stores	33.50%
<b>Consulting services</b>	<b>51.43%</b>
Source: Survey results	

**Table 1 :** Industry Average ROA ratio

### Calculating sales turnover ratio

Sales turnover refer to a company's revenue for a year or for another accounting period. Sales turnover is also used as a measure of the speed by which inventory is sold. Company managers and investors alike, use sales turnover as tools for evaluating a firm's performance. The higher the turnover rate, the more efficiently the company turns money spent on purchasing goods into profits. Venture capitalist use sales turn over ration as one of key to evaluating a firm's performance for their investment decision.

### Validity and reliability of data

Validity is the extent to which the research findings reflect the phenomena under study (Collis and Hussey 2009). We evaluate data for face validity; construct validity, content validity or discriminant validity using SPSS. The questionnaires were evaluated for reliability using Cronbach's alpha coefficient with a 95% significant confidence level (Table 1 ) and the fig 2 below.

$$\rho_T = \frac{k}{k-1} \left( 1 - \frac{\sum_{i=1}^k \sigma_i^2}{\sigma_X^2} \right)$$

**Figure 2: Cron-banch's Alpha Coefficient Model**

where

k= number of scale items

$\sigma^2$  Variance associated with items

$\Sigma$ = Symbol for variable summation

PT= Coefficient = 0.855

Coefficient 's alpha	Coefficient's alpha based on standardized item	Number of items
<b>0.855</b>	0.859	70
<b>Source: SPSS</b>		

**Table 2: Reliability of statistics**

Alpha coefficient measure reliability and content validity, as recommended by Nunnally and Bernstein, (1994). The results showed 85% confidence level of the questionnaire and a margin error of 1%. Implicitly internal consistency values of individual variable surveyed was within acceptable range.

## FINDINGS AND DISCUSSION OF RESULTS

### Questionnaire and Interview

Data was extracted from 45 or 65% of all questionnaires with response rate of 50% which was sufficient for numerical data analysis. 15 interview sessions with business owners and managers, VCs and government agencies were conducted out of 30 targeted interviews. We extracted the data from audited reports and accounts, management, financial and reports and open-ended questionnaires. The annual revenue growth, annual turnover rate, ROA growth and profitability for 3 years (2018–2020) were also computed using financial ratio analysis techniques aforementioned. The financial ratios minimized the subjectivity associated with other data collection methods and help to supplement data collected by using the Likert scale questionnaires (Dess and Robinson, 1984).

### Variance analysis (ANOVA)

Using SPSS we conducted descriptive statistics, multiple linear regression, Pearson's correlation coefficient and analysis of variance (ANOVA), to determine any relationship between VC financing and SMEs' performance.

### Sales Growth for the VC-backed and non-VC-backed firms from 2019 to 2020.

Figure 1 shows that VC-backed firms had a higher revenue growth rate across all years from 2019 to 2020. In 2017, VC-backed firms recorded above 20% growth rate as compared to 10% for non-VC-backed firms. In 2017, the growth rate increased to 22%, whereas non-VC-backed firms registered 14%, and in the third year, the VC-backed firms indicated 18% versus 10% for the non-VC-backed firms.

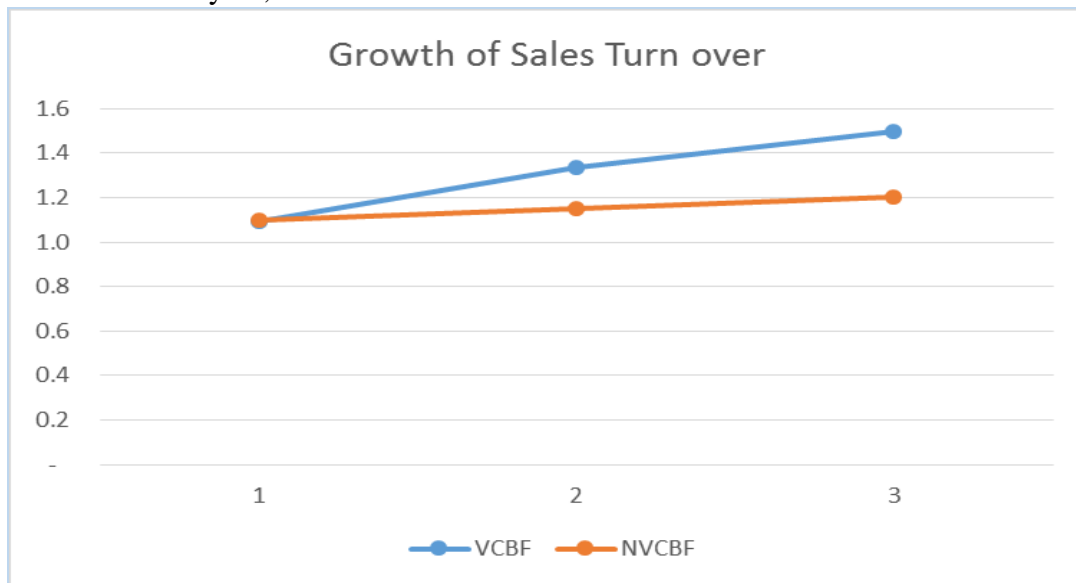


Figure 1: Sales Growth for the VC-backed and non-VC-backed firms from 2019 to 2020.

Source: SPSS

The analysis of the revenue trends shows that VC-backed firms outperformed non-VC-backed firms for all the 3 years. The maximum revenue turnover for VC-backed SMEs was TZS 10 billion against TZS 4 billion for the non-VC-backed firms for 2017–2020. We conclude that VC financing leads to increased sales revenue growth, which was consistent with previous studies (Adongo, J., 2012; Kwame, 2017; Memba et al. 2012).

### Pearson's Correlation Coefficient

Pearson's correlation coefficient tests to determine the relationship between VC financing and sales turnover. Table 2 displays the correlation coefficient results for sales revenue at 0.000. The correlation is significant when  $p < 0.01$  and  $p < 0.05$ . The results are below  $p < 0.01$ , demonstrating a significantly strong relationship between VC financing and the sales revenue growth for VC-backed firms. Thus, changes in the sales revenue growth for the VC-backed companies are explained by VC financing. Sales revenue went up after receiving VC.

Pearson's correlation coefficient	Variable	Venture Capital	Sales Revenue
Venture capital	Pearson Correlation sig -2 tail	1	0.424 *
	Significance	-	.000
	N	70	70
Sales revenue growth	Pearson Correlation sig -2 tail	0.424	1
	Significance	.0000	-
Source: SPSS	N	70	70

**Table 3: The level of significance between VCF and sales revenue growth**

Significance level between VCF and its influence on sales revenue growth for venture capital-backed firms. When  $p < 0.05$  results indicate a significant correlation between venture capital Finance and sales revenue. Correlation is significant at the 0.05 level (2-tailed) of  $p < 0.05$ ; correlation is significant at the 0.01 level (2-tailed)

### ROA growth for both the VC-backed and non-VC-backed firms

In the approach to measuring the growth in assets, we computed ROA growth for both the VC-backed and non-VC-backed firms to adequately compare whether VC financing influences asset growth. Fig 3 and 3b below show the computed results for ROA growth rate.

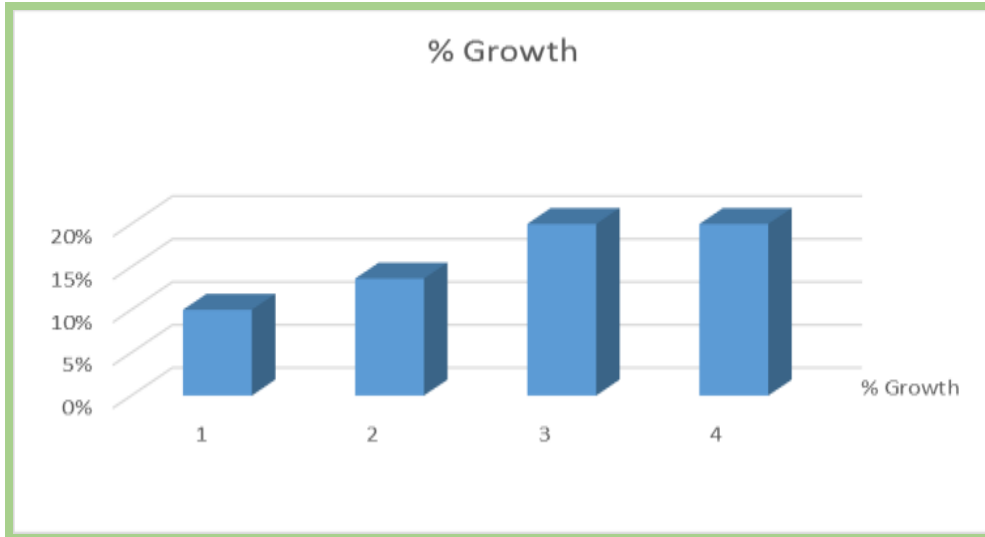


Figure 3 Return on Asset (ROA) – None VCBF

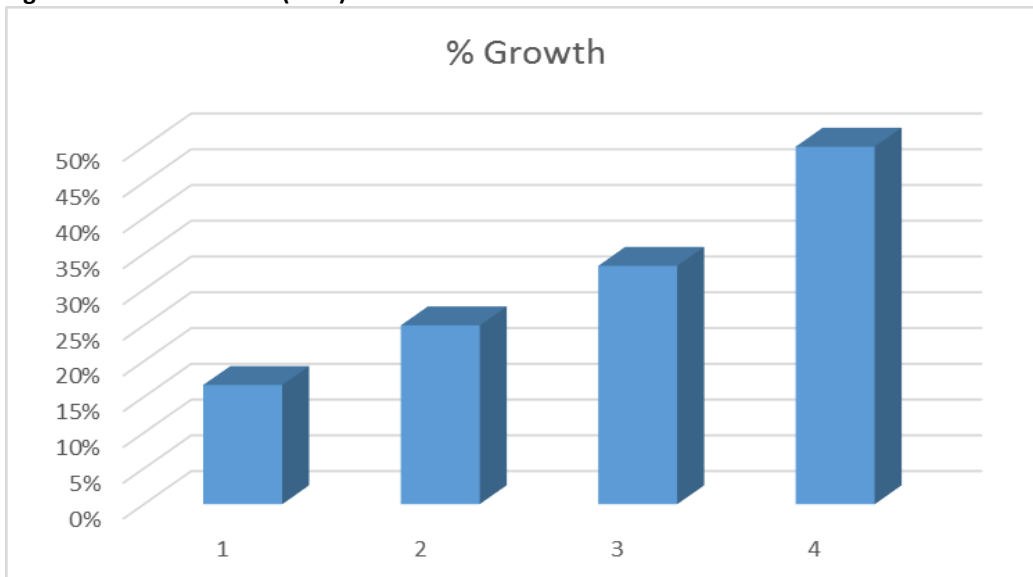


Figure 3b Return on Asset (ROA) VCBF Backed firms

The year 2017, the results show an increase in ROA by 15% for the VC-funded firms as compared to 8% for the non-VC-funded firms. In the second year of VC financing, ROA increased to 11% compared to 25% for the non-VC-backed firms. However, in 2018, VC-backed increased by 45% and non-VC-backed firms had increased by 18% in ROA growth. The results indicate that VC-backed firms generated more sales revenue as pointed by other scholars.

A Pearson's correlation coefficient test was also conducted to examine if there is any relationship between VC financing and Returns on Assets (ROA).

Table 3 shows the correlation coefficient  $r$  for ROA at 0.05. The correlation coefficient is significant when the  $p$ -values are  $p < 0.01$  and  $p < 0.05$ . The results show a  $p < 0.05$ . These results confirm there is a strong positive relationship between VC financing and changes in ROA. The higher the ROA, the more effective is the use of assets to the advantage of shareholders. These results imply that VC financing is positively correlated to ROA, implying that the asset for the VC-backed firms produced higher sales following receipt of VC financing.

Pearson's correlation coefficient	Variable	Venture Capital	Sales Revenue
<b>Venture capital</b>	Pearson Correlation sig -2 tail test	1	0.326#
	Significance	-	.000
	N	70	70
<b>ROA, return on assets.</b>	Pearson Correlation sig -2 tail	0.326	1
	Significance	.0000	-
<b>Source: SPSS</b>	N	70	70

**Table 4: Correlation coefficient  $r$  for ROA and VCF**

Correlation is significant at the 0.05 level (2-tailed) of  $p < 0.05$ ; #, correlation is significant at the 0.01 level (2-tailed)

### **Descriptive statistics measured profitability growth.**

Likert scale measure: 1 – Strongly disagree and 5 – Strongly agree, and accepted a mean score of 3.5 (agree). Table 4 shows a mean score of 3.7 and 0.68279 above the acceptable score for agreeing of 3.5. The findings indicate that 68% of the respondents confirmed the growth of their companies' profits being attributable to VC financing. Besides, the results also indicated a mean score of 3.8 and a standard deviation (SD) of 0.87836 for the VCs' direct involvement in SME management, while the market share recorded a mean score of 3.7 and an SD of 0.74549. These results show a profitability growth after VC financing, VCs' direct involvement in SMEs' management contributed to the increase in the profitability growth, and VC-funded companies improved their market share and expansion.

Variable	Max	Minimum	Mean	Standard Dev
Profitability growth	5	2	3.7	.65
VC Direct Involvement	5	1	3.5	.78
Market share and Expansion	5	2	3.7	.71
	N	70	70	

**Table 5: Descriptive statistics measurement**

We conducted multiple regression tests for the statistical relationship between VC financing and profitability growth (Table 5).

Source	Type II sum of Squares	df	Mean Square	F	Significance
Mean Squares	10.71 ( R2)	5	2.1	6.54	.0000
Residual	20.49	95	0.342		.0000
Total					
Source: SPSS	N	70	70		

**Table 6: Tests between venture capital financing and profitability growth effects.**

The results in Table 5 show profitability growth at 0.000, a significant positive relationship between VC financing and profitability. This shows that a change in VC financing positively affects profitability growth. Furthermore, the least-squares is  $R^2 = 0.322$  and adjusted  $R^2 = 0.278$ , showing that the variations in the dependent variable (profitability growth) of 34.2%. We conclude that VC financing contributed to profitability growth by 34.2%. These findings were consistent with the study (Biney 2018; Carvalho et al. 2013; Kwame 2017; Paglia and Harjoto 2014).

## CONCLUSION

This study researched on the performance of VC-backed and non-VC-backed firms from 2018 to 2022. We analyze the impact of VC financing on SMEs' performance in Tanzania. Venture capital financing affects the performance of VC-backed firms. We observed that sales revenue increased for VC-backed firms, higher than non-VC-backed firms. Venture capital-backed firms disclosed a maximum sales revenue of TZS 18 billion as compared to TZS 4.6 billion for non-VC-backed firms.

Furthermore, the profitability for VC-backed firms increased by 28.9%, while the ROA increased by 71% because of the increased demand for local exports in the East African community.

### **Implication to Research and Practice**

The paper supports the government's efforts and development partners in their engagements to foster SMEs' access to finance and inspires a philosophy of policy assessment. We have proved that VC financing is a sustainable financing model pushing SMEs' growth. Tanzania's VC industry is developing with limited number of VC finance transactions.

### **Future Research**

Empirical evidence shows a significance growth of venture-capital-backed SMEs businesses as compared to the non-venture-capital-backed SMEs. Contrary to this positive result SMEs Managers were defensive to technical management services or auxiliary services usually packed with VC finance. The paper concluded that venture capital finance is one of the fundamental components of finance that enhances SMES performance and development in developing economies like Tanzania. We recommended research on linkage of venture capital financing and management style of SMES managers and owners. Also we suggest research in this sector to assess how VC influences IPOs or trade sales in the emerging financial markets like Dar es Salaam Stock Exchange and developing economies respectively.

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