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NURTURING HIGH-IMPACT ENTREPRENEURSHIP THROUGH EQUITY FINANCING; EXPERIENCE IN SOUTH AFRICA, KENYA, AND UGANDA

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Equity financing, venture capital, High-impact entrepreneurship, Quantile regression, Southern and East Africa.

ABSTRACT

The article primarily explores the impact of equity finance mechanisms on high-impact entrepreneurship with a special interest in Venture capital (VC). SMEs contribute approximately 90% of all business and create 50% of employment opportunities globally, nonetheless, the portfolio of equity-financing instruments available to these firms in many developing countries remains underdeveloped. We specifically examine the contribution of equity capital as a natural pathway to nurturing high-impact companies to enable them positively to contribute to economic growth. The study adopted a quantile regression approach, to analyze a cross-country dataset for 61 Venture capital companies in South Africa, Kenya, and Uganda, with a portfolio of 327 firms. Our study provides evidence that the earlier SMEs get access to equity capital, the higher their productivity and growth. Additionally, there was a lack of knowledge from the entrepreneurs about the benefits of using equity capital to nurture and sustain SMEs' growth over time. The study makes vital contributions to the ongoing debate about this topic. First, the article unveils the benefits of access to equity capital for high-impact companies in African nations. VC-funded firms are typically nurtured into well-known companies as VC investors fund risky high-impact companies where bank financing instruments are unreachable. Second, the study delivers new insights to entrepreneurs to expand their understanding of the choice of funding opportunities and VC investors' expertise, which is essential to boost the finance structure of firms.

INTRODUCTION

Several academics and policymakers have argued that SMEs relatively attract utmost potential growth than large firms, and positively contribute to economic growth across all countries (Ayyagari et al., 2005; Fraser et al., 2015; Kindström et al., 2022). SMEs

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underwrite approximately 90% of all business and create 50% of employment opportunities globally, nonetheless, the portfolio of equity-financing sources available to these firms in many developing countries remains underdeveloped (Ayyagari et al., 2011; Beck and Cull, 2013; World Bank, 2020). Quite the opposite, the relative role of high-impact entrepreneurship in nationwide economic development in Southern and East Africa is still inadequate since these firms considerably lack access to sustainable entrepreneurial finance, commonly observed in many surveys as a leading interruption to start-ups and high-growth firms (Tekera et al, 2016; Lortie, 2019; OECD, 2018; World Bank, 2020). Hence, increasing access to a portfolio of external finance is central to boosting entrepreneurial activities and economic growth. (Court & Arikekpar, 2022). Yet, we lack knowledge of how equity financing instruments can nurture and sustain high-impact entrepreneurship growth over time, particularly in low-income nations. Thus, exploring the government efforts in fostering VC progress and high-impact entrepreneurship in South Africa, Kenya and Uganda, seems primarily imperative in this current environment.

Recent shifts towards digital technologies have contributed to the proliferation of novel categories of new companies, new approaches to finance start-ups, and equity financial instruments, such as VC, angel financing and crowdfunding, disruptively changing the entrepreneurial finance ecosystem (Msweli & Oni, 2014; Bellavitis et al., 2017: Antarciuc et al., 2018). The new entrepreneurial finance approaches have potentially made it easier for small firms to raise a range of capital and grow. Albeit traditional bank lending is ordinarily trusted by high-growth companies as '*the new normal*' in sub–Saharan Africa, small firms find it difficult to access bank loans to realize their growth potential and investment needs due to a lack of collaterals and descent financial records (Abor & Biekpe, 2006; OECD, 2015). Similarly, while the pecking order theory advocates for internal funds contrary to equity financing instruments, these are commonly inadequate to escalate SMEs' consistent growth (Wonglimpiyarat, 2013). Moreover, some scholars still criticized the institutional theory that appears to advocate for the government's direct involvement to enhance equity financing for high-impact entrepreneurship (Robyn, 2019). Therefore, entrepreneurs are usually left with no choice but to seek equity financing sources.

It is remarkable to stress that whereas prior literature articulates the strength of a range of equity financing instruments (Pandey et al., 2003; Wonglimpiyarat, 2013; Gu et al., 2018; Baloyi & Khanyile, 2022), our debate in this monograph is restricted on VC investment as one source of equity financing instruments. VC is a widely used instrument for financing

SMEs in developed economies because it is associated with the largest and most successful firms in the world such as Google, Microsoft, Apple and Facebook, (Lerner & Nanda, 2020; Du, & Cai, 2020), to mention but a few. Precisely, the VC industry was one of the cornerstones of the great success of the entrepreneurship ecosystem in the United States (Bellavitis et al., 2017: Antarciuc et al., 2018; Gu et al., 2018; Greenwood et al., 2022). The Small Business Innovation Research (SBIR) coupled with the venture capitalists' VCs) appetite to invest in high-growth SMEs, was a key element to the development of Silicon Valley entrepreneurialism, currently a popular worldwide model for numerous nations (Timmons & Bygrave, 1986; Audretsch, 2019; Kindström et al., 2022; Coad & Karlsson, 2022). Bertoni & Tykvová, 2015; Du, & Cai, 2020).

Drawn on the VC Industry's success celebrated in developed economies like the United States, Australia and Europe, such exciting works have forced many entrepreneurs to seek external capital. Interestingly, even in bank-oriented market settings, VC is still recognized as a rational measure for bridging the financing gap that exists within the start-up's ecosystem (Black & Gilson,1998; Tekera et al., 2016; Boschmans & Pissareva, 2018). However, seeing that several surveys mainly focused on developed economies, this study has chosen to explore the realism of the equity financing experience of South Africa, Kenya and Uganda., on account of the dearth of research about the effect of private venture capital (PVC) investment on fostering high impact entrepreneurship (Portmann & Mlambo, 2013).

Many existing studies that have commonly surveyed the VC market generally lack robust attention to the high-growth firms (Colombo et al., 2019; Greenwood et al., 2022; Santos et al., 2022), while others have investigated VC and innovation of high-techno firms (Timmons & Bygrave, 1986; Kortum & Lerner, 2001; Metrick & Yasuda, 2021), and majority of these studies delve VC financing in the context of country-level investments in developed economies (Tekera et al., 2016; Colombo et al., 2019; Lerner, 2020; Gompers et al., 2020). Besides, even with the few existing surveys done in Africa, there has been a restricted focus on South Africa, Kenya and Uganda. Nonetheless, still, the question of how this funding approach can influence high-quality entrepreneurship financing in Africa, has continued to be unidentified. Therefore, we pursue this study to draw the attention of entrepreneurs and policymakers toward bridging the financing gap of early-stage innovative companies.

Grounded on such apparent demand, this article purposely examines how equity finance tools can nurture high-impact entrepreneurship. Using panel data of 61 VC firms in charge of 327 investment rounds, we engaged the quantile regression model in estimating the results in

contrast to numerous previous studies that have trusted the multi-regression approach. Additionally, unlike previous surveys which generally concentrated on firm-level performance (Teker et al., 2016; Du & Cai, 2020), this study focuses on cross-country firm-level growth that has essentially been ignored. Therefore, a lack of interest in this field offers great openings to explore how this financing method can foster the growth and prosperity of high-impact entrepreneurship. Based on the discrepancies in earlier works, we focus on growing the entrepreneur's and business fraternity's understanding of the impact of VC investment towards the sustenance and expansion of high-impact companies. Moreover, we contribute to the current literature by highlighting the position of government involvement through escalating VC supply and enactment of supportive policies which might lead to the development of entrepreneurial activities.

This raises our primary question.

Research Question: *To what extent does increasing VC investment impact high-impact entrepreneurship and economic growth?*

THEORETICAL UNDERPINNINGS AND HYPOTHESIS

Institutional Theoretical Underpinnings

The concept of how VC firms operate in surroundings that primarily fluctuate from those of the cutting-edge markets where VC funding was originally industrialized has only started to be noticed in recent years. VC is the practice of investing in innovative, fast-growing private companies which have long-term equity indebtedness potential (Lerner & Nanda, 2020). Earlier academics have reinforced the inspirations of institutional theory in shaping the growth of entrepreneurial activities in concurrence with the VC industry in any given country (Bruton & Ahlstrom, 2003; Zacharakis et al., 2007). It is argued that the institutional investment environment of a state hinge on comparatively steady public rules and procedures, and market structures. This declaration amasses sustenance from the findings of Guler & Guillen, (2010) who exposed that economies that bequeath VC investors without investment protection are connected with inadequate VC financing inflows mostly when these VCs are well-educated and financially oriented.

Indeed, a suitable institutional environment offers an essential business environment for entrepreneurs to identify business opportunities, unveil new innovative entrepreneurial activities and generally contribute to employment creation and economic growth (Bruton & Ahlstrom, 2003). Consequently, the growing achievement of the VC market in developed countries is attributable to the implementation of supportive government policies toward

high-impact entrepreneurship. In fact, the Small Business Innovation Research, (SBIR) in the US established the Silicon Valley global model that has inspired a duplication of several similar projects across the globe (Lerner, 2010). Against this backdrop, it is advisable that government policies in the three developing countries are well defined and observed to mitigate the entrepreneurs' risks of speculation and lack of confidence in investing in risk ventures. So that the VC investors are encouraged to engage in long-term contracts. In this article we also attempt to contribute to the extant literature by advancing the knowledge of VC philosophy and its relative importance to high-impact entrepreneurship in emerging markets.

Cognizant of the high pervasiveness of informal entrepreneurship in emerging countries, this recurrent problem has renewed the demand for nurturing high-impact entrepreneurship as a pathway to realize Sustainable Development Goals (SDGs), for instance, the design of new financing approaches to SMEs to increase job creation and economic growth by tolerating financial inclusion (Portmann & Mlambo, 2013). Several nations across advanced and developing countries have joined the race to regulate the VC industry while accepting the emergence of high-growth firms (OECD, 2015). The important strategy thus far is the current robust legal and regulatory institutions' support to adapt to VC investment policies with a positive connection to higher-impact entrepreneurial activities and enlarged risk-funding activities (Li & Zahra, 2012).

REVIEW OF LITERATURE HYPOTHESIS DEVELOPMENT

Influence of equity capital on high-impact entrepreneurship and economic growth.

In this section, we extensively discuss and offer great insight into the impact of VC on high-growth entrepreneurship in orientation to the current literature. As earlier declared in the introduction section, several scholars have largely focussed on North America and Europe (Pandey et al., 2003; Court & Arikekpar, 2022). Accordingly, this practice of fewer entrepreneurship surveys in emerging nations led to considerable knowledge gaps demanding added empirical surveys. In recent times, a growing interest in encouraging high-impact entrepreneurship signifies the new developments in financial technology that have accelerated in one way or another reliable funding for SMEs (Lasak, 2022; Disse & Sommer, 2020). In light of the above, VC has confirmed its unswerving importance of nurturing high-growth firms deprived of the needed equity financial resources, particularly in advanced economies (Davila et al., 2003; Da-Rin & Nicodano, 2006; Colombo et al., 2016; Divakaran et al, 2018; Baloyi & Khanyile, 2022). Besides, VC is globally known for its magnificent

proficiency in nurturing early-stage firms from a meek process to today's internationally established companies we know, such as Google, Apple, Yahoo, and Albaba (Brusche, 2016; Du & Cai, 2020; Tykvova, 2018).

In contrast, the choice to VC in South Africa, Kenya, and Uganda is still relatively uncertain as equated with developed markets like the United States and Europe (KPMG, 2016; Kato & Chiloane-Tsoka, 2020). VC industry across African countries is still underdeveloped. In the year 2021, SAVCA, (2022) reported a skyrocket in VC growth in Africa but again, this purported improvement seemingly does not match the level of entrepreneurship growth in the region, in terms of innovation activities and the emergence of high-growth firms (Santos et al., 2022). Some scholars have generally argued that the adverse government policy is the focal cause hampering VC investor's interests to direct their capital into high-impact entrepreneurship expansion (Da-Rin & Nicodano, 2006; Lerner, 2010; Lerner & Nanda,2020; Edwards & Todtenhaupt, 2020). In fact, in Uganda and Kenya, there are no tax incentives on capital gains awarded during IPOs or trade sales. The pleasant update is that South Africa has made strides although government efforts have not translated positively into augmented maturity of early-stage firms ready for IPOs or trade sales. On the other hand, it is argued in a stream of literature that access to equity capital relates to significant prosperity in financial markets, innovation, new venture creation, new jobs, and internalization of companies (Davila et al., 2003; Lerner, 2010; Stuart & Sorenson, 2003; Lortie, 2019). However, the financial market environment in Sub-Saharan Africa is not well established to successfully stimulate the interests of VC investors and offer their shares for IPOs and trade sales (Agmon & Messica, 2009; Nuwagaba, 2013). Yet it is the eminent clear-cut exit strategy for PVC firms to search for future potential companies.

To shade a comparative picture of South Africa, Kenya and Uganda's stock exchange markets, the Johannesburg stock exchange (JSE) and Nairobi Stock Exchange are still wanting to tolerate IPOs and trade sales as equated to the London Stock Exchange and New York stock exchange markets. Undoubtedly, such delinquent trends hinder the VC market as PVC firms commonly invest in regions with established stock exchange markets that offer uninterrupted exits through either IPOs or trade sales to allow them to reap high returns (Tykvová, 2018; Lerner & Leamon, 2023). Similarly, the current stock exchange market in Uganda and Rwanda is still inadequate, with 14 listed companies on the Uganda stock exchange and only 4 listed companies on the Kigali stock exchange (Nuwagaba, 2013; Tumwebaze et al., 2022). Thus, the disparity between VC market progress matched to the

innovative entrepreneurial activities in South Africa, Kenya and Uganda, is a major concern for this article aims to explain. While the is evidence of replication of the next Silicon Valley models in Africa, such as, Cape Silicon Valley in South Africa, and Silicon Savannah Valley in Kenya (Hain & Jurowetzki, 2018), the question that has been left unanswered is whether these entrepreneurship models have translated into economic growth, increased job creation, and new venture creation in Africa

***H1**: Increasing access to equity capital has a positive and significant influence on high-impact entrepreneurship and economic growth.*

Role of government and venture capitalists' experience on high-impact companies

Whereas earlier scholars offer interesting results regarding the reputation of VC investment, in an ideal world, the VC investors seemingly focus on a few high-growth techno-industries with feasible business plans. Precisley, a recent report by NVCA revealed that for every 100 business applications submitted to VC investors, only one business plan is considered for funding (NVCA, 2021). Correspondingly, Kato and Tsoka, (2021) investigated the impact of VC financing on the performance of SMEs in Uganda and the results were similar, where only 1% of 100 business plans get funded. As result VCs pursue only viable investment ventures with proficiency to attract more returns. Undoubtedly, this exercise entails added time and expertise of the VCs to nurture the entrepreneurship sector is to be vibrant.

VCs actively participate in the management of the funded portfolio companies by normally taking board seats. Owing to the reputation of innovative young firms and the continued demand for sustainable external financing, the vital role the VCs play in nurturing high-impact entrepreneurship is inevitable (Gu, Qian & Lu, 2018). VCs not only provide financing but also play a critical role in delivering to the portfolio companies with bundles of value-added activities (Gompers and Lerner 2001 Brusche, 2016; Jilltoft & Westman, 2016).

In a different line of thought, while PVC firms have struggled to create active VC markets in South Africa, Kenya and Uganda, their efforts are frustrated due to the government's reluctance to relax the public policy instruments. Prior literature has described this practice as an "institutional design challenge" demanding the right mixture of substantive legal and regulatory procedures to boost foreign capital inflows (Da-Rin, Nicodano & Sembenelli, 2006). As a result, the global VC industry has seen the success of GVC initiatives, such as the Australian Innovation Investment Fund, Yozma Funds in Israel, and the California Silicon Valley. Therefore, in this article we argue that government's role in promoting the VC

market, especially in growing Government Venture Capital (GVC) funds and enactment of favorable policies that inspire foreign investments is essential.

In a nutshell, there is evidence of a remarkable impact of VC investment on early-stage firms' performance (Jilltoft & Westman, 2016), nonetheless, quantifying these results has remained a big problem. Yet, we trust that no firm can survive if deprived of equity financing at its early stage. We, therefore, use the current literature to build the second hypothesis.

H2: *Role of government and venture capitalists' experience has a positive impact on high-impact companies.*

METHODOLOGY

Sample and Data sources

The underpinning theoretical constructs of the role of VC firms in high entrepreneurship and economic growth were constructed on an institutional theory technique, founded on mixed composed data (quantitative & qualitative) to estimate the results. Albeit the Multi Linear Regression (MLR) analysis is the typically recognized method applied to estimate results in economics, finance, and entrepreneurship research, it can only estimate the conditional mean (Powell, 1986). Against this background, the quantile regression (QR) technique was found suitable as it provides the opportunity to appreciate the relations between the predictor's variables and outcome variables beyond the conditional mean of the data, hence, making it a suitable method to measure non-normally distributed results that have nonlinear relations with predictor variables. Besides, the QR can encounter the unique modeling demands of each quantile (e.g., 25^{th}, 0^{th},75^{th}, or 95^{th}) rather than being frustrated to fit a one-size-fits-all model that predicts the conditional mean. Moreover, the MLR model cannot curtail the number of absolute values of the residual errors.

For this reason, we chose to engage in a causal-comparative research design involving both quantitative and qualitative research methods to facilitate an augmented data analysis procedure (Baskarada, 2014; Yin, 2009). The study mostly relied on datasets from multidisciplinary sources, such as South Africa Revenue Services (SARS), Southern Africa Private Equity and Venture Capital Association (SAVCA), Uganda Investment Authority [UIA], and Africa Venture Capital Association (AFVCA), which are constant datasets that enabled to screen out the PVC firms that participated in the study, including secondary information for instance, VC funds' annual reports, VC companies' websites were also collected to support the primary data. Although self-reporting with these companies may

sometimes lead to biased results, several studies have trusted these umbrella organizations for providing consistent data for supporting VC research (Manigart et al., 2002).

Recent growing stream of literature discloses that firms' growth relates to nonlinearity in various contexts; First, it is argued that the growth of a firm tends to reduce with age. While others show that it reduces with the expansion of scope (Serrasqueiro et al., 2009). Cognizant of these variances and prospects connected with the VC-backed firms, it is likely that nonlinearity in the firms 'financial performance and development might be observed. Hence, we apply a QR model to mitigate the nonlinearity connected with firms' growth. We particularly focused on measuring the statistical significance of the impact of equity financing in a broader cross-country-level perspective, involving South Africa, Kenya and Uganda. While previous studies have paid attention to a firm's growth through the lens of an entrepreneur (Cumming & MacIntosh, 2003), in this article we look at it from the perspective of the VC investors because this aspect has not been well presented. VCs directly get involved in the managing of VC-funded companies and usually, their managerial expertise transforms the growth and performance of small firms (Manigart, et al., 2002). Therefore, given that they are deep-rooted in contextual and business likelihoods, the demand for in-depth knowledge is important.

The study used online Lime-survey questionnaires to collect panel data from 61 VC firms including 12 interview sessions with VC investors trusted with affluence of knowledge in the VC industry. Besides, our choice of online Lime-survey approach was stimulated by the trials of the Covid-19 pandemic and the demand to adhere to Covid-19 protocols during 2021-2022, among others; to minimize physical collaboration as a measure to mitigate against multiple infections of the disease. Prior surveys have engaged VC investors as the primary respondents because they have the proficiency for fostering innovation and development of the high-impact companies we know today (Cumming & MacIntosh, 2003; Nanda & Lerner, 2020; Gompers et al., 2020). Similarly, the primary respondents involved top management for the PVC companies which had a physical existence and operations in South Africa, Kenya, and Uganda. Our major focus was to get a greater insight into how VCs contribute to high-impact companies' development. We identified PVC firms that dispensed funds to high-growth companies from 2015 to 2022, and then, we excluded angel investors and impact investors. It is important to note the VC firms that had their commercial operations across the three countries, were identified as independent respondents to the study. We also manually

cross-checked each dataset if it matched other commercial databases for any possible outliers, and to ensure the validity of the observations.

Quantile Regression approach

Drawing on the nonlinearity of SMEs' growth rates, we use the QR method to estimate how equity financing influences high-growth firms' expansion. QR has a great advantage of assessing the conditional median of the response variable, by extending MLR when the conditions of linearity or normality are not met (Powell, 1986). We formulate our model as *HGFs f (VC, VCs, Govt'p*) extended from the multiple linear regression (MLR) since this fails to estimate nonnormality distribution data.

MLR model equation takes the following form:

$$y_i = \beta_0 + \beta_1 x_{i1} + \cdots + \beta_p x_{ip} \quad i = 1, \ldots, n \qquad (1)$$

We substitute the study variables into the regression model.

HGF(y) = β0 + β1 VC1 + β2VCs2 + β2 Govt3 ... + ε i (2)

Where.

- HGF = dependent variable denoted as High-growth firms
- VC= venture capital (1st independent variable)
- VCs =Venture capitalists 'experience (2nd independent variable)
- Govt =Government policy & involvement (3rd independent variable)
- ***εi*** = random error (is identically distributed with mean zero and unknown variance σ2
- β0 = intersection of the regression line with the y-axis, the intercept.

The above model shows that the creation of HGF is the function of ***VC, VCs, and Govt***. Where the intercept is captured by β0, and the slopes are captured by β1, β2, and β: Furthermore, I in the subscript demonstrates identically distributed data with mean zero, while **e** represents the random error term of the model. Given that QR comprises the median regression as a superior circumstance to deliver a comprehensive picture of the covariate effect when a set of percentiles is modeled, it can seize vital structures of data that may be lost by models that average over the conditional distribution. As a result, considering that VC investment relates to the endogenic performance that overstates the factors inducing performance, we chose to apply a quantile regression approach to mitigate the endogeneity of the outcomes by measuring the distribution of results across the different percentiles of HGFs rate, such as the 25th, 50th and 75 percentiles.

RESULTS

Descriptive Statistics and Normality tests of samples

Descriptive data are beneficial in shaping whether there are subcategory variances across the distribution of the dependent variable of attention. To present descriptive statistics about the role of equity financing on high-impact entrepreneurship proportions, we subject data to a normality test to ensure that our data are significantly symmetrical We specifically direct our focus on a range of skewness of data from the mean. Skewness measures if data is normally distributed, and where data is close to zero then it denotes asymmetric distribution. Although several statistical approaches have been used to measure the normality of data, there has not been an acceptable gold standard method to defend how big skewness data must appear to validate non-normality. In this case, the eyeball test of (e.g., n > 50) models might be beneficial for small models (Kim, 2013). Considering our sample of 61 VC firms, we found this approach suitable to test the normality of data.

Table 1. Summary of Descriptive Statistics and Normality Tests of Samples

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
Variables	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Qn22. VC value-adding activities	61	1	2	1.62	.489	-.520	.306	-1.789	.604
Qn15. Venture Capital	61	1	2	1.64	.484	-.595	.306	-1.703	.604
Qn6. High-growth Firms and entrepreneurial activities.	61	1	3	1.67	.507	-.351	.306	-.974	.604
Qn7.VCs' role in productivity & innovative capabilities.	61	1	2	1.79	.413	-1.437	.306	.065	.604
Qn 23. SMEs and entrepreneurship growth.	61	1	3	1.80	.440	-.941	.306	.532	.604
Qn11. VC's board seat.	61	1	2	1.84	.373	-1.862	.306	1.514	.604
Qn18. Increasing VC supply to HGFs.	61	1	2	1.84	.373	-1.862	.306	1.514	.604
Qn8. Venture capitalists experience	61	1	3	1.87	.386	-1.298	.306	2.457	.604
Qn12. Entrepreneurship & regional trade markets	61	1	3	1.89	.370	-1.394	.306	3.226	.604
Qn9. Active VC market.	61	1	2	1.89	.321	-2.479	.306	4.284	.604
Qn13.VCs' local presence in small tickets	61	1	3	1.90	.351	-1.491	.306	4.195	.604
Qn19. VC investors focus on market share and growth.	61	1	4	1.92	.493	.664	.306	5.543	.604

Qn14. VC policies aimed at creating a new VC industry	61	1	4	1.93	.793	1.155	.306	1.770	.604
Qn21. Expansion & success of start-up companies	61	1	4	1.95	.384	1.312	.306	15.223	.604
Qn10. Scaling-up and growth of SMEs	61	1	4	2.00	.577	1.612	.306	6.128	.604
QnNo of employees	61	1	5	2.21	1.018	1.120	.306	1.183	.604
Qn17. Public policy on VC markets.	61	1	5	2.28	.799	1.478	.306	2.284	.604
Qn16. Govt' and regional programs	61	1	5	2.31	.807	1.529	.306	2.035	.604
Qn20. New organizational & marketing practices.	61	1	5	2.48	.959	1.126	.306	.265	.604
Valid N (listwise)	61								

Source: Primary data, (2022)

Referring to Table 2, we could conclude all the data appear to gratify the hypothesis of normality since many variables indicate a skewness close to 0, suggesting a perfectly symmetrical data set. However, we found that some of the variables (e.g., 11. VC's board seat = -1.862, 18, increasing VC supply to HGFs =-1.862 raising concerns as they are slightly close to 1.96, while an active VC market = -2.479) are above. These specific results do not appear as a symmetrical distribution. The rule of thumb proposes that if the sample data is equal ($n < 300$), and absolute z-results for skewness are higher than 1.96, then reject the null hypothesis (Kim, 2013).

On the contrary, (George & Mallery, 2010; Agarwal et al., 2022) argue that to meet the statistical assumption of normality, both skewness and kurtosis statistics should be below an absolute value of 2.0. If the statistic is above an absolute value of 2.0, then the continuous distribution is assumed to be non-normal. In this case, we observe several skewness and kurtosis variables violating the rule for instance, Qn16 Govt' and regional programmes=2.035, Qn17. Public policy on VC marts=2.284, Qn21 expansion & success of start-up companies=15.223, Qn10. Scaling-up and growth of SMEs= 6.128 and Qn8. Venture capitalist's experience= 2.457. We can therefore deduce that our sample data presents a non-normal distribution.

To respond to this question associated with assessing normality through skewness and kurtosis, we once more ran normality tests on account of the Shapiro-Wilk test and Kolmogorov-Smirnov Tests of Normality in a way to ratify if our data is from a normal distribution for. It is important to note this approach may not be suitable for large samples of more than n>300 (Kim, 2013).

Table 2. ***Shapiro-Wilk test and Kolmogorov-Smirnov Tests of Normality***

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
Research questions	**Statistic**	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Qn6. High-growth Firms and entrepreneurial activities.	.397	61	<,001	.664	61	<,001
Qn9. Active VC market.	.525	61	<,001	.371	61	<,001
Qn21. Expansion & success of start-up companies	.469	61	<,001	.382	61	<,001
Qn23. SMEs and entrepreneurship growth.	.459	61	<,001	.580	61	<,001
Qn27. Economic growth & job creation.	.374	61	<,001	.646	61	<,001

a. Lilliefors Significance Correction
Source; Primary data, (2022)

As can be seen in Table 2, the Shapiro-Wilk test of normality was conducted to determine if high-growth firms 'rates, commercial entrepreneurship, SME marketing practices, and economic growth are normally distributed. The p-values for (Qn6, Qn9, Qn21, Qn23 & Qn27) outcome variables in both the Shapiro-Wilk test and Kolmogorov-Smirnov Tests of Normality are less than ($p < 0.001$). This has degrees of freedom that equal the number of data points, specifically 61. We observe p-value indicated for Kolmogorov-Smirnov is .000 reported as $p < .001$). In this circumstance, we can reject the null hypothesis because our data reveals a normal distribution. Consequently, we move ahead to apply a non-parametric quantile regression given that the normality hypothesis is not essential to deliver a better depiction between the predictor variables and the outcome variables across the distribution.

Modeling the Impact of Venture capital funds on SMEs and entrepreneurship growth

Considering the drawbacks of the OLS model, the application of the QR analysis was run to meet the test requirements of the model. Whereas a large some of the results indicated compliance to the normality assumptions, we further estimate if the relationships between explanatory variables and response variables are statistically significant.

Table 3. Multiple Linear regression model summary and ANOVA results

Model Summary

Model	R	R Square	Adjusted R Square	Std. The error in the Estimate	Durbin-Watson
1	.420[a]	.176	.133	.410	2.489

a. Predictors: (Constant), 17. Effectiveness of public policy on the creation of VC markets., 8. Venture capitalists experience, 15. Venture Capital
b. Dependent Variable: 23. SMEs and entrepreneurship growth.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.049	3	.683	4.059	.011
	Residual	9.590	57	.168		
	Total	11.639	60			

a. Dependent Variable: 23. SMEs and entrepreneurship growth.
b. Predictors: (Constant), 17. Effectiveness of public policy on the creation of VC markets., 8. Venture capitalists experience, 15. Venture Capital.
*p < .05. **p < .01. ***p < .001
Source: Primary data, (2022)

As can be seen in Table 4, a multiple regression analysis was performed with a sample of (n=61) VC firms to measure whether VC investment, VCs' presence in the local market, and government policies significantly impact the growth of entrepreneurship and SME growth. Before this, we conducted preliminary analyses to ensure that the normality and collinearity assumptions were not violated. We find a significant regression equation stated as F (3, 57) =4.059, P-value<0.011, with R^2 of 0.176 The model indicates that 17.6% variability in the response variable (SME growth) is described by deviations in the predictor variables, whereas the larger residual of 82.4% of the variance is caused by factors other than the predictors included in this model. Therefore, there is sufficient evidence to conclude that VC investment supported by the VCs' presence in the VC-backed firms and conducive government policies, significantly enhances the growth rates of small firms.

Referring to ANOVA in Table 3, the overall regression was statistically significant (R2 = F (3, 57) = 4.059, p-value <.011. The results indicate that VC financing significantly impacts SMEs and entrepreneurial activities ($\beta = 4.059$, $p < .001$), which is less than the 1% level of significance for the regression. Therefore, our model is the best fit for the data. Implying a one-unit change on a predictor variable has a significant effect on a response variable. Therefore, we can conclude that the growth rates of SMEs are significantly influenced by VC, VC's experience, and policies on the new VC industry as the predictive variables.

We further analyze the results using unstandardized coefficients since ANOVA is limited to only presenting the statistical significance of the datasets. In the table below we illustrate the mathematical significance of each of the independent variables.

Table 4. Unstandardized coefficients to test for the statistical significance

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.749	.359		2.087	.041
	8. Venture capitalist's experience	.153	.137	.134	1.113	.270
	15. Venture Capital	.349	.110	.383	3.162	.003
	17. Effectiveness of public policy on the creation of VC markets.	.086	.067	.157	1.294	.201

a. Dependent Variable: 23. SMEs and entrepreneurship growth.

Source: Primary data, (2022)

While the ANOVA results can determine how sound a regression model fits a dataset, it does not tell us the entire story. We accordingly examine the unstandardized coefficient variables to assess the degree of numerical significance of each of the explanatory variables. We discover as explained in Table 5 that the t-values represent VC <.001 whereas the constant is

=.006. In this case, p < .001, we can deduce that these coefficients are statistically different from 0 (zero). However, VCs' experience and policies on new VC markets p-values are >.05, indicating this sample data provide an insignificant correlation. Taking into consideration these diverse results, we again engage a quantile regression model for further investigation to resist the influence of outlying observations. On a generous note, previous literature confirms a growing interest in foreign VC firms in Africa. Previous works of (African Venture Capital Association [AfVCA], 2021) revealed that South Africa, Kenya, Nigeria, and Egypt attracted the largest percentage of VC investment in the continent. Notwithstanding the increasing attention in VC, SMEs from East and Southern African nations are still grappling equated to developed nations like the US, Canada, the UK, and so on.

Quantile regression coefficients at different quantiles

In recent times, the QR has engrossed substantial study interest and is broadly pragmatic in estimating the financial performance of firms (Huang et al., 2017). QR model was mainly offered as a full-bodied regression method that settles for estimates where the typical hypothesis of normality of the error term might not be firmly gratified (Koenker & Bassett, 1978). To determine the relationship between the three predictor variables (venture capitalists' experience, VCs' presence on the Board, and Vs' experience) and the response variable (HGFs and entrepreneurial activities), we performed an inference quantile regression model to estimate the growth rates at the different quantiles i.e., (25^{th}, 50^{th} & 75^{th}).

Table 5. Regression Model Results Illustrating HGFs and entrepreneurial activities

Model Quality[a,b,c]

	q=0,25	q=0,5	q=0,75
Pseudo R Squared	.350	.000	.000
Mean Absolute Error (MAE)	.2951	.2295	.2295

a. Dependent Variable: 23. SMEs growth.
b. Model: (Intercept), 14. VC policies aimed at creating a new VC industry, 8. Venture capitalists experience, 15. Venture Capital
c. Method: Simplex algorithm

Parameter Estimates by Different Quantiles [a,b]

Parameter	q=0,25	q=0,5	q=0,75
(Intercept)	.000	2.000	2.000
14. VC policies aimed at creating a new VC industry	1.110	.000	.000
8. Venture capitalist's experience	.000	.000	.000
15. Venture Capital	1.000	.000	.000

a. Dependent Variable: 23. SMEs growth.
b. Model: (Intercept), 14. VC policies aimed at creating a new VC industry, 8. Venture capitalists experience, 15. Venture Capital

Table 6. Quantile Regression Coefficients at Different Quantiles

Quantile =0.25 Parameter Estimates,b

Parameter	Coefficient	Std. Error	t	df	Sig.	95% Confidence Interval Lower Bound	Upper Bound
(Intercept)	.000	1.038	.000	57	1.000	-2.079	2.079
14. Policies on a new VC industry	1.110	2.186	5.078	57	**<,001**	6.725	1.548
8. Venture capitalist's experience	.000	4.400	.000	57	1.000	-8.812	8.812
15. Venture Capital	1.000	3.569	2.801	57	**.000**	1.000	1.000

a. Dependent Variable: 23. SMEs growth.

b. Model: (Intercept), 14QnVC policies aimed at creating a new VC industry, Qn 8. Venture capitalists experience, Qn15.Venture Capital

Source; Primary data, (2022).

Table 6 provides more details about the parameter estimates in terms of the hypothesis test statistics and the confidence intervals. For the independent variables, the MLR summary model suggests that the independent variable Qn15.Venture capital positively influences the dependent variable (SMEs growth). The results of the MLR model describe the statistical significance of the impact of VC investment on a firm's growth and performance. We find that the p-values of the predictor variables are <.001, characterized by company location. Considering that the p-values < 0.001, then this term denotes a statistical significance at the 95% confidence level. These results suggest that the application of quantile regression to examine the impact of equity financing instruments on SMEs' productivity and performance is very much beneficial as it indicates the distribution of growth at different quantiles.

While the MLR model suggests increasing access to VC investment by the SMEs significantly impacts the growth rates, given that the p-value <0.001, the model does not tell us at what quantile level is it significant. Accordingly, the QR comes into play to provide an extra extended understanding of the impact of the independent variable. The impact at the Q1(0.25) quantile with coefficient estimates = 1.11 VC policies on new markets, whereas Qn14 venture capital with coefficient estimates =1.00. The impact appears to be more robust than is proposed by the MLR.

Alternatively, the goodness of fit for each quantile regression model is represented by the value of Pseudo R2, as shown in Table 4. We observe that the impact of the independent variable is significant at the 50th percentile (Pseudo R2= 0.000) and 75th percentile (Pseudo R2 =0.000) except for the 25th percentile = 0.350. Consequently, this demonstrates that the projected model at the 50th and 75th quantile is satisfactory and can be accepted. We also discover that the Qn8-venture capitalist's experience is not significant, indicating a null

relationship with the growth of the firms. The R2 value = .271, that is 27.1% of the response variables variations can be elucidated by the explanatory variables at the 75th percentile. Thus, the 75th quantile values present a more adequate model that could be accepted for forecasting.

Hypothesis 1. *Increasing access to equity capital has a positive and significant influence on high-impact entrepreneurship and economic growth.*

SMEs face several setbacks that hinder their contribution to employment creation, productivity, and economic growth mostly in developing countries (Ayyagari et al., 2011; Beck and Cull, 2013; Allen et al., 2011; Lortie, 2019; OECD, 2018; World Bank, 2020). Our results of a p-value of 0.03 exposed that VC investment positively influences the performance of high-growth firms. We can, therefore, conclude that unlocking access to VC funding can assist to uphold the sustenance of the HGFs and eventually economic growth in East and Southern Africa.

On the contrary, countries in East and Southern Africa seem to be moving slowly to adopt VC financing technology as a natural solution to the problem of equity financing gaps in the regions. The slow growth rates of SMEs have been recognized as a major hindrance to global economic growth in both developed and developing nations. Undoubtedly, it has diverse effects on the community, for instance, lower income growth. According to Omondi & Jagongo, (2012), lack of rational collateral, and asymmetric financial records were the hindrances that impede the growth of SMEs in Kenya. Moreover, the greatest number of SMEs in Kenya were not aware of the presence of VC firms as a practical solution to their funding gaps. As a result, boosting the productivity of SMEs through equity financing instruments is inevitable to enhance a nation's growth because they quickly adapt proven technologies and practices more than bigger enterprises (Albaz et al., 2020).

These results support the literature review and respond well to our first hypothesis(H1). We can, therefore, conclude that VC investment and improvement of government policies are most desirable to enhance early-stage firms' growth. In contrast, while Hoang et al., (2019) exposed that the size of the company has a direct positive connection with its financial performance on the different quantiles, the core factors such as fixed asses' acquisitions, working capital ratio, and capital structure compositions revealed undesirable connection with business performance.

It is imperative to underline that the median regression is robust to non-normal errors and outliers because it permits us to consider the effect of a covariate on the entire distribution of

y, not merely its conditional mean. The hypotheses were tested and control variables for instance VC policies were included in this model. The results of ($\beta = -0.049$, $p < 0.05$ show that VCs' role in promoting productivity and innovative capabilities positively impacts VC-backed firms in terms of inspiring innovation and economic growth. When p-values <0,05, this implies that the results are more likely not to be equivalent to zero; therefore, the model is statistically significant confirming a significant impact of predictor variables on the outcome variable. The above argument suggests that there may be noticeable variances in the elasticity of firms' growth in connection with VC investment across the distribution. When the p-value >0.05, we cannot deduce that the predictor variable affects the dependent variable. In this case, it implies that VC financing does not have any impact on the SMEs and entrepreneurship.

Our model results are quantitatively in line with the evolution of the U.S. Silicon Valley firm growth distribution over the previous three decades (Sundal & Doguhan, 2021). We also compare our data to the U.S. successful entrepreneurship model, using both recent country cross-sectional data and historical data on average firm growth in East and Southern Africa. Our results conform to the previous studies of Lerner (2010) that revealed a significant positive connection between equity financing on firms 'growth and increased entrepreneurial activities. Consequently, there is sufficient evidence to support this model in countries where the VC industry received great government attention, for instance, US, UK, Canada, and China. In a nutshell, with the correct funding support, SMEs could suggestively increase productivity and economic development if governments can fully support the entrepreneurs through direct government VC funding and co-investment into private VC firms. Unfortunately, the VC markets in East and Southern African countries are still immature, and often cannot fulfill the needs of SMEs.

Hypothesis 2: *Role of government and Venture capitalists' experience have a positive impact on the growth of high-growth companies.*

To determine the relationship between the three predictor variables (Venture capitalists' experience, VCs' presence on the Board, and Vs' experience) and the response variable (SMEs' financial performance & growth), we performed an inference quantile regression model to estimate the growth rates at the different quantiles i.e., (25^{th}, 50^{th} & 75^{th}). The results demonstrate a unit variation of the mean of the response variables due to a unit change in the explanatory variables. Where the coefficient of variations is negative, then suggests that the explanatory variables increase while the mean of the response variable decreases.

Table 7. Regression Model Results of Dependent Variable; (SMEs financial performance & growth)

Model Quality[b,c]

	q=0,25	q=0,5	q=0,75
Pseudo R Squared	.488	.000	.000
Mean Absolute Error (MAE)	.2623	.2459	.2459

a. Dependent Variable: 24. SMEs financial performance & growth
b. Model: (Intercept), 13. VCs' local presence and investment in small tickets, 15. Venture Capital, 16. Governments and regional programs, 22. VCs' value-adding activities, Co-Location
c. Method: Simplex algorithm

Parameter Estimates by Different Quantiles[a,b]

Parameter	q=0,25	q=0,5	q=0,75
(Intercept)	.000	1.000	2.000
13.VCs' local presence and investment in small tickets	.000	.000	.000
15. Venture Capital	.000	.000	.000
16. Governments and regional programs	.000	3.698	.000
22. VCs' value-adding activities	1.000	5.551	.000
[Co Location=1]	.000	1.000	.000
[Co Location=2]	.000	1.000	.000
[Co Location=3]	0[c]	0[c]	0[c]

a. Dependent Variable: 24. SMEs financial performance & growth
b. Model: (Intercept), 13. VCs' local presence and investment in small tickets, 15. Venture Capital, 16. Governments and regional programs, 22. VCs' value-adding activities, Co-Location
c. Set to zero because this parameter is redundant.
Source: Primary data, (2022)

Table 7. presents a QR model Quality summary at different quantile levels as Q1(0.25), p-values =0.488, Q2(0.50) and Q3 (0.75), p-values = 0.000 respectively the relationship between venture capital and high-growth firms is statistically significant at the 50th percentile because the p-values <0,05. On the other hand, VC policies aimed at creating new VC markets were found not statistically significant as the p-values were equal to 1.000 which was > 0.05. significance scale.

Therefore, it is recommendable to remove VC policies from the model as holding variables that are not statistically significant can undermine the model's accuracy. These results agree with H2 confirming the positive effect of the VCs' local presence in small tickets investments, VC, governments and regional programs, VCs' value-adding activities, and company location, all combined. Our results are like the study of Audretsch, (2021) about VC investment in the Silicon Valley model of entrepreneurship. The study postulates a strong and sustained economic performance of firms and industries, and finally to even other countries. Moreover, our choice of engaging a QR approach is supported by recent studies that have suggested the application of this model in evaluating firms 'growth since, it has proven to be nonlinear in terms of its causes (Landajo et al., 2008). A firm's growth and financial performance tend to decline with capital structure, management experience, and government

inadequate support, which ultimately negatively impacts financial performance (Serrasqueiro et al., 2009; Bottazzi et al., 2008). Bearing in mind that VC-funded firms are mostly recognized as high-growth opportunities, it is likely that nonlinearity in the firm's growth rates will be observed at the different quantiles.

The study exposed that the earlier SMEs get access to equity financing, the more the productivity and growth of these firms. We can hence conclude that access to VC investment is a precursor to sustainable growth for early-stage firms. These results largely support the estimates of this study grounded on the pecking order theory and growth theory. It has been recurrently documented in several pieces of literature that the internal resources of the firms are often inadequate to promote growth. Hence, SMEs seeking to grow have no choice but rather to seek VC investment for their expansions. Nevertheless, several SMEs' growth is stalled because of the struggle of accessing VCs' superior skills and equity finance instruments that would transform them into more fruitful ventures, in conjunction with the modern understanding of technology and supervisory practices. Our results are reinforced by several previous scholars, Du and Cai, (2020) for instance, conveyed in a study performed in China that VC investment can enhance business activities for economic development. Besides, it can create new market opportunities in terms of noteworthy enhancement in technological innovations, and profitability progress of SMEs.

Furthermore, we also performed additional tests to examine how the VC's local presence in the market influences SMEs' expansion and growth rates. Our results of ($\beta = 0.03$, $p < 0.05$) confirmed a significant statistical impact that potential VCs' local presence in Southern and East Africa has improved start-up performance and entrepreneurial activities. These results address our hypothesis H2 and are consistent with previous literature (Coad & Rao (2008) uncovered that on average, a firm, experiences moderate growth distributions that are heavy tailed. Under such circumstances, the OLS approach would be inappropriate because it focuses on the conditional mean that would be abstruse.

In contrast, the results show that the VC's presence in the local market does not have any significant effect on entrepreneurial activities (p-value = 1.00, $p > 0.05$). Yet, developing and executing operative policy guidelines that can poise financial stability, besides protecting the investors' interest, and creating new equity financing channels for SMEs, poses a big challenge for policymakers. Existing government policies used to regulate the VC industry are seemingly overly difficult to some investors owing to the ambiguity ascending from probable governing revisions. In Uganda, the government through Uganda Investment

Authority has made strides to close the information gap between entrepreneurs and potential investors by enabling their unswerving collaboration during the annual Kampala Private Equity and Venture Capital Conference. This program appears to have witnessed positive results as far as the VC market is concerned.

CONCLUSION AND IMPLICATIONS

SMEs create most jobs, innovation, and wealth creation, stimulating economic prosperity across nations. Accordingly, it is vital to increase the portfolio of equity financing sources to tolerate small firms to remain in the performance of their role in investment, growth, and employment. Against this backdrop, our empirical results from a quantile regression analysis reveal that unlocking equity capital for SMEs has a positive influence on the productivity and growth rates of firms. In a similar dimension, the study uncovered that the earlier SMEs get access to equity capital instruments (in this case VC commonly accessible from VC firms), the higher the survival and growth. From a different standpoint, we found no significant effect of the VCs' experience on this relationship. Furthermore, empirical evidence underpinning this knowledge is quite scarce in developing countries since most previous studies fail to successfully control for the possible endogeneity nature of VC investments which may lead to biased results.

In addition, we also discovered the negative impact of government policy on nurturing early-stage firms. This was manifested in the government's reluctance to participate in the VC industry through direct VC funding and policy regulations, which are tailored to enhancing foreign VC investors in East and Southern Africa. Yet unfavorable law-making settings can hinder the development of equity capital markets through IPOs (Cumming & MacIntosh, 2003). On a pleasant note, nations that have adopted capital gains tax waivers on issued shares on trade sales and IPOs, have had a significant effect on entrepreneurship and SME expansion (Edwards & Todtenhaupt, 2020). The enactment of such a tax policy to IPOs or upon listing the stock exchange, for instance, Johannesburg Stock Exchange and Nairobi would support create a more impartial business environment for the high-quality of exits, which ultimately is the sole root of the stock (Cumming & MacIntosh, 2003). We, therefore, recommend implementing government-supported programs and policies for boosting SMEs' business confidence, and competitiveness in both local and global markets, and tailored equity financial instruments for business growth. Unfortunately, public hard work has not shaped the anticipated outcomes because of undeveloped equity capital markets in Africa, associated with a few investor-ready companies.

While several success stories are presented from prior surveys illustrating the different approaches governments can support SMEs to maximize growth and productivity, nearly some of these studies neglect the adverse effects of the VCs' involvement in VC-funded enterprises. Moreover, we may not also ignore that despite increasing access to equity financing instruments, not all VC-funded firms have been effective. These results also point to the issue of scarce players in the VC markets that hinder SMEs' development in these regions. We believe that an exploration into this matter can offer new insights into why the Southern and East African regions have drawn little attention from foreign investors matched to China, India, Brazil, and similar emerging countries in Europe. The study further contributes to the body of knowledge since this ground of research is connected to the dearth of literature exclusively in the developing nations in Africa. Future research may try examining the obstacles to IPOs exits, potential hindrances of access to VC funds, and the impact on economic development using survey data from different regions in Africa.

LIMITATIONS AND FUTURE RESEARCH DIRECTION

Research on nurturing high-impact entrepreneurship through equity financing is compelling, nonetheless, it has significant limitations. Even though our use of quantile regression relates to several benefits matched to previous works, a reflection on statistical data analysis attests that most extant empirical studies have used multiple linear regression that merely confines the conditional mean designed to suit studies. A few that have made use of the quantile regression model (Goedhuys & Sleuwaegen, 2010; Ahn et al., 2018; Sundal & Doguhan, 2021) are notable exceptions. Accordingly, complete, and in-depth studies about firms' growth using quantile regression are missing from the literature. While our ability to examine the role of equity capital in a firm's growth and survival remains embryonic, we have faith that this study will ignite future research discussions into these inquiries.

Additionally, our article is confined to the growth of VC-backed companies in South Africa, Kenya, and Uganda. Considering the differences in countries' econometric and public policies that influence entrepreneurship development, the growth rates for small firms may vehemently appear diverse, for instance, in countries where tax policies have been relaxed on capital gains, such as US, Israel, and Germany. There is overwhelming evidence of high-growth technological firms. Although this argument might be intrinsically more theoretical, given the comparatively inadequate work done in this area, we propose that these queries would well help to generate future academic consideration in the years to come.

Notwithstanding the advent of commercial data sets on equity capital instruments, such as the Pitchbook, Crunchbase, Partech, and diverse VC and private equity associations, relative studies are still very sporadic. This is reasonable seeing the SMEs' unique financing framework matched the financing needs of large firms. Previous empirical studies offer conflicting and unclear results in the literature about the impact of equity capital on a firm's productivity and growth. The relative differences emanate from the inconsistencies in the data sets presented by the different commercial data set providers. We believe that future comparative studies may assist to contribute novel knowledge and shed light on contextual differences.

Notwithstanding the considerable growth of VC in the last two decades, a few early-stage firms with growth potential have access to this funding model in developing countries (Brusche, 2016) and found that only one percent (1%) of the small firms get funded owing to the rigorous due diligence. These results were like the finding of Farre-Mensa et al., 2020) who found that only 7% of firms raised institutional VC in the US. As can be seen, these discrepancies are even more extreme in African nations, where the venture industry is still in its infancy. There are serious worries about a limited number of VC investors in these regions. Therefore, future studies that try to investigate the impact of an entire portfolio of equity financing instruments on the growth of innovative firms are desirable considering a handful of VC firms resident in East and Southern regions that cannot address all the unmet needs of the high-growth firms. To this end, while a VC investment has received growing support in numerous entrepreneurship literature as the most suitable financing instrument for fast-growing SMEs, current empirical evidence suggests otherwise (Albaz et al., 2020). Cognizant of the scarcity of VC investment to potential entrepreneurs, exploring a whole portfolio of entrepreneurial finance sources, for instance, crowdfunding angel investment and VC financing, all combined in a single study is desirable to enhance this study.

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