

Venture Capital and Its Influence on Profitability of Stockbrokerage Firms in Kenya

Halima A. Lendapana¹, Solomon Ngahu²

¹(School of Business, Jomo Kenyatta University of Agriculture and Technology, Kenya)

²(School of Business, Jomo Kenyatta University of Agriculture and Technology, Kenya)

Abstract: Stockbrokerage firms in Kenya have been facing problems touching on the sufficiency of their capital which in turn affects their liquidity. This has prevented them from maximizing their profitability since they are unable to effectively execute all the transaction orders that they receive. In view of the foregoing, this study evaluated the influence of venture capital on profitability of stockbrokerage firms. The study was guided by Walker's theory of profit. A descriptive research design was employed. Deductive approach as well as quantitative method were also adopted. The 9 licensed stockbrokers in Kenya were targeted. A census design was employed due to the small size of the study population. Data were collected using a structured questionnaire and a secondary data collection sheet. The questionnaire was pilot tested to determine its reliability and validity. Data analysis was facilitated by the Statistical Package for Social Sciences. Data analysis was in form of both descriptive statistics and inferential statistics. Results of the data analyses were in tabular format. It was revealed that venture capital had statistically significant effect on profitability of the licensed stockbrokerage firms in Kenya. It was concluded that venture capital was key to the profitability of licensed stockbrokerage firms in Kenya. The study recommends that these firms should consider increasing their investments in venture capital.

Key Word: Investment practices, profitability, stockbrokerage firms, venture capital

Date of Submission: 12-08-2022

Date of Acceptance: 27-08-2022

I. Introduction

Background of the Study

Investment is described as the process or action of investing. It can also be defined as a thing that is worth buying due to the fact that it is likely to realize profits in the future.¹ On the other hand, to invest is simply to put funds into financial schemes, properties, or shares with the anticipation that the funds will be profitable. Arguably, the term 'investment' attracts multidimensional definition which necessitates the consideration of the context in which it is being applied.² In finance, investment refers to the employment of funds with the sole purpose of earning additional income or appreciation of capital.³ Venture capital (VC) is one of the common investment strategies regarding private equity, the latter being part of investment practices.⁴

Venture capital (VC) was conceived with the intent of empowering firms in terms of financial, technical and management support.⁵ It is arguably a crucial source of entrepreneurial finance. On the same note, it is indicated that besides the funds injected to facilitate their growth, firms benefit from VCs in terms of other important aspects such as business acumen, networks, and other valuable resources.⁶ Venture capital is considered as one of the most crucial sources of funding particularly for new ventures.⁷ The venture capital firm takes over a part of the financial risks of the entity being funded in the event that the business to the former fails. The founders of the funded firm, however, lose part of their equity and subsequently lose some of the possible returns in case their venture exits. On the other hand, representatives of the venture capital firm get considerable control rights, for instance, as members of the board. Inferentially, getting venture capital does not necessarily pay off for an enterprise.⁸

Analogically, profitability refers to the ability of a particular investment to realize or earn a return from its (investment) use. Unlike profit, profitability is considered to be one of the most effective measures of both operational and financial efficiencies of organizations. It is also effective in measuring the productivity of the capital employed.⁹

According to a report of the National Financial Capability Survey on investors in the United States, in making investment sources, stockbrokers constituted 30% of pertinent information sources as at 2015, a proportion that dropped to 26% as at 2018. However, it is important to note that 62% and 60% of investors sourced information on decision making from brokerage firms and related firms in years 2015 and 2018 respectively.¹⁰ Venture capital investment is one of the investment practices. Member states of the European Union (EU) generally have a limited level of venture capital investments in entrepreneurship. This is occasioned

by the low levels of both insurance and pension funds available for the aforesaid investments. It is noted that while the EU-member countries depended on state pensions, the United States established a market for private pensions that resulted in the emergence of large pension funds. These consequently acted as investors in bond and stock markets as well as in venture capital.¹¹

Similar to the situation in South African brokerage firms, it is indicated that capital structure is hardly consequential to profitability of related firms in Tanzania.¹² Stockbrokers in Uganda take the largest share of commission stemming from stock trading compared to other countries in East Africa and indeed the entire Africa. They take 3.28% of the value of transactions.¹³ Therefore, it is apparent that the Ugandan stockbrokers are likely to be among the most profitable on the continent when other factors (particularly expenses and taxation) are held constant. In both Rwanda and Tanzania, brokerage commission on equity trading is regulated and stands at 1.5% of the value of transactions.¹³

The brokerage services are facilitated by the Capital Markets Authority (CMA). As such, the CMA is the one that licenses and regulates the operations of stockbrokers in Kenya.¹⁴ Besides the aforesaid role, there is conspicuously scarce empirical evidence relative to investment in and profitability of brokerage firms particularly in Kenya. It is indicated that, similarly to banks, mutual funds, pension funds, and insurance companies, brokerage firms are financial intermediaries with which investors interact.¹⁵ It is acknowledged that financial management of investors involves financial intermediaries, under which brokerage firms fall.¹⁶ Brokerage firms or stockbrokers play the core role of enabling the transaction (buying and selling) of securities on behalf of financial institutions, investor clients and/or firms in exchange for a brokerage commission.¹⁴ As at 2021, there were 9 registered stockbrokers in Kenya (NSE, 2021). They include EFG Hermes Kenya Ltd, AIB-AXYS Africa, Kestrel Capital (EA) Ltd, Kingdom Securities Ltd, and Suntra Investments Ltd. Others are Old Mutual Securities Ltd, ABC Capital Ltd, Securities Africa Kenya Ltd, and Francis Drummond & Company Limited.

Statement of the Problem

Brokerage firms have been facing significant financial challenges which limit them from executing all the transaction orders that they receive.¹⁷ A hindrance to fully maximize on the business opportunities they receive (exemplified by their inability to execute all transactions) is bound to negate their profitability. This is founded on the fact that the number of transactions is directly proportional to profitability. In Kenya, a number of stock brokers have encountered financial challenges which have, indeed, resulted in their collapse. Given that there is scarce empirical literature on stock brokers especially on their financial performance,¹⁸ it is imperative to investigate how their profitability (an indicator of financial performance) is influenced by investment practices since the firms have been experiencing capital constraints.^{17,19}

Some of the notable stockbrokers which have collapsed since 2007, at no apparent order, include NgenyeKariuki and Company, Francis Thuo and Partners, Nyaga Stockbrokers, and Discount Securities. Besides the mainstream stockbrokers facing profitability challenges which have compromised their remaining afloat, other financial institutions such as banks have been struggling to sustain their (brokerage) loss-making business units. With the affirmation that there is scarcity of empirical literature on brokerage firms and acknowledged capital constraints and profitability challenges encountered by these firms, it was imperative to examine the influence venture capital (as an investment practice) has on the aforesaid profitability. It is on these grounds that this study was conducted.

Objective of the study

To examine the influence of venture capital on profitability of brokerage firms in Kenya

Research Hypothesis

H₀₁: There is no significant influence of venture capital on profitability of brokerage firms in Kenya.

Walker's Theory of Profit

The theory is also referred to as rent theory of profit. Although it is advanced from the works of Senior and Mill, its development is attributed to American Economist F.A. Walker. The theory states that profits are the rent of ability. Profit is the rent of extraordinary abilities that are likely to be possessed by an entrepreneur over others. Similar to the rent being the reward for the utilization of land, profits are a reward of the entrepreneurial ability and/or skills. According to the theory, a superior or more capacitated entrepreneur is bound to realize more profit margins. The proponent of the theory assumed that there exists a state of perfect completion where all enterprises are presumed to be in possession of equal managerial ability and that each entity receives only wages that do not constitute normal profit.

The theory has faced several criticisms. For instance, it is criticized for failing to clearly distinguish net profit from gross profit. Modern economists also argue that it is erroneous to compare profit with rent. Unlike land where there can be absolutely no rent, every entrepreneur including the marginal ones earn normal profit. Whereas rent is common in static as well as dynamic societies, profits are only found in dynamic societies. The

theory also fails to illustrate the real nature of profits. Moreover, critics argue that profit is not necessarily a reward of entrepreneurial ability since it can, sometimes, result from monopoly and/or favourable changes in the market or industry. Rent cannot be equated to profit since it is a cost. The critics argue that the ambiguity in reference to the rent and profit concepts should not be overlooked, thus watering down the applicability of the Walker's theory of profit.²⁰

The tenet of the Walker's theory of profit which is applicable to this study is 'profit as a reward for exceptional entrepreneurial ability'. Therefore, the profitability of the stock brokerage firms in Kenya is believed to be strongly dependent of their entrepreneurial abilities of the managers tasked with overseeing the operations of the firms. The success (reflected in their profitability) and or failure (exemplified by losses) can be attributed to how well the firms are managed especially from financial perspective.

Empirical Review

Past empirical studies reviewed in this section touch on venture capital and profitability, particularly, of brokerage firms.

Review of Empirical Studies on Venture Capital

A study carried out in Egypt was interested in establishing the determinants of investment decisions.²¹ The focus was on the emerging venture capital market in the country. Essentially the objective of the study was to examine the determinants of investment decisions. A sample of 200 new Egyptian technological startups was considered by the study. Logistical regression analysis was adopted. According to the study findings, venture capitalists had a preference of investing in startups that had mature products and documented financial performance.

In South Africa, a study was carried out to determine the strength of the relationship between behaviour measures and funding dimensions in the country's venture capital market.²² The scope of the study was on small and medium enterprises operating in the KwaZulu-Natal, Durban region of South Africa. The study used primary data that were collected by use of questionnaires from a sample of 160 respondents. Additionally, secondary data were obtained from the records, archives and websites of the participating firms. Factor analysis was employed by the study. It was found that at their start-up and early growth stages, majority of the SMEs preferred informal venture capital. The study concluded that the venture capital market epitomized behaviour that was associated with high ROI.

A study carried out amongst SMEs in Nairobi County, Kenya put into perspective financing through venture capital.²³ The general objective was to examine how venture capital financing affect the growth of SMEs in Nairobi County. The study employed descriptive research design. A total of 97 SMEs which had received venture capital financing for the period from 2013 to 2017 were included in the study. Stratified random sampling technique was used to draw a sample of 79 venture capital-backed SMEs. According to the study results, 48.4% of variation in the growth of SMEs was attributed to venture capital financing. It was also revealed that the more the cost of venture capital, the higher the growth of the SMEs. The study recommended that both venture capitalists and SMEs should embrace a cost containment-revenue growth tradeoff strategy.

A local study was conducted to explore the influence of venture capital financing on corporate governance specifically with regard to SMEs based in Nairobi County.²⁴ The objective was to examine the influence of venture capitalist on corporate governance. A descriptive survey research design was adopted. A total of 266 respondents comprising equal numbers of board members and managers were randomly selected from a total of 133 SMEs in Nairobi County. Requisite data were collected using questionnaires. The collected data were analyzed using descriptive, correlation and regression analyses. It was revealed that SMEs were prepared to modify their governance structures in order to allow capital ventures to provide funds. It was concluded that investment management, investment decision, and exist of the venture capital had significant influence on corporate governance of SMEs both separately and jointly.

Review of Empirical Studies on Profitability

A study conducted in Greece sought to analyze the profitability and the relations among its determinants in the retail sector.²⁵ The objective was to investigate the existence of differences in the strategies of the retail firms towards realization of the profitability targets. Data were collected from the Greek retail sectors. The study results depicted that, within the retail sub-sectors, there were no statistically significant differences in profitability in terms of ROW and average sales growth rate. Nevertheless, other metrics of profitability (that is, asset turnover ratio, gross profit margin, and general expenses-to-sales ratio) returned significant differences within the aforesaid subsectors and also among firms. In conclusion, the retail firms employed different strategies aimed at realizing similar return on equity. The study results rejected the hypothesis that the rapid developing entities express less profitability as depicted by return on assets.

In Tanzania, a study was carried out on the effect of capital structure on profitability of business where the focus was on processing enterprises listed on the Dar es Salaam Stock Exchange.²⁶ The objective was to examine the effects of capital structure on business profitability of seven listed processing enterprises. Whereas capital structure was measured using the ration of long-term debt to equity, the metrics of business profitability were ROA, ROE, and earnings per share (EPS). The study relied on secondary data that were sourced from the published reports of the aforesaid listed firms for a duration of 10 years, that is, from 2009 to 2018. Ordinary least square (OLS) regression and Karl Pearson coefficient correlation analyses were employed to illustrate the relationship between capital structure and profitability. According to the study findings, there existed a weak and not significant effect of capital structure indicator on all indicators of profitability. This led to the conclusion that capital structure was not a crucial determinant of profitability of listed firms. Advisably, financial managers ought to follow a cautious approach to debt issues regardless of the benefits accruing from tax shield. This would enable them to reduce the occurrence of risk of operating under financial distress.

Another study analyzed the relationship between capital structure and profitability of firms that are listed on the NSE.²⁷ The objective was to examine how capital structure related to profitability of listed firms in Kenya. Longitudinal research design was used where quantitative data were obtained from the annual audited financial reports of these firms as well as handbooks of the NSE. According to the study findings, the profitability of firms (measured by return on capital employed) had a positive and statistically significant relationship with internal equity. It was concluded that the capital structure adopted by a firm greatly affected its profitability and financial performance at large. The study recommends that listed firms should employ more internal equity to enhance their profitability granted that such does not incur costs of acquisition as opposed to external equity and debt finance.

Conceptual Framework

A diagrammatic illustration of study constructs and how they interact is a typical description of a conceptual framework.²⁸ It is also important to note that the framework can also be in narrative form.²⁹ With regard to this study and as outlined in Figure no 1 and the ensuing narrative, the conceptual framework takes a blend of the two descriptions. It is apparent that there are two categories of variables. These are independent and dependent variables. Independent variable is venture capital while profitability of stockbrokerage firms is the dependent variable. Each of these variables is operationalized where measurable parameters are clearly illustrated. It was presumed that venture capital was related to (or influenced) profitability of stockbrokerage firms. This hypothesis guided this study.

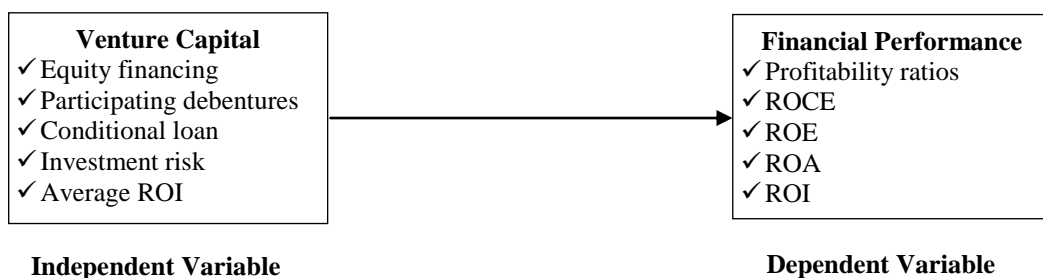


Figure no 1: Conceptual Framework

II. Material And Methods

Research Design

A descriptive research design was employed by the study. This was accompanied by both deductive approach and quantitative method. A research design is described as a framework that guides how a research is conducted.³⁰ The choice of the descriptive design is founded on the fact this study sought to establish accurately the status with regard to investment practices and profitability of stockbrokerage firms in Kenya.

Target Population

The refined section of general population which is essentially described as the group of individuals or participants which possesses specific characteristics or attributes that are of interest relative to a given research.³¹ The licensed stockbrokers in Kenya constituted the target population. There were a total of 9 registered stockbrokers in Kenya by the time this study was conducted.³² Accessible population, which is a subset of target population and one which is arrived at after excluding members of the target population who are unable to participate in the study comprised a total of 9 senior investment (or finance) officers.^{33,34} These represented the 9 licensed stockbrokers in Kenya. These stockbrokers included EFG Hermes Kenya Ltd, AIB-

AXYS Africa, Kestrel Capital (EA) Ltd, Kingdom Securities Ltd, Suntra Investments Ltd, Old Mutual Securities Ltd, ABC Capital Ltd, Securities Africa Kenya Ltd, and Francis Drummond & Company Limited.

Census Design

There were only 9 registered stockbrokerage firms in Kenya when this study was carried out. Therefore, a census of these firms was conducted given that the staff of interest were those charge of investment and/or finance or related department or section. This translated to only 9 respondents. A census was necessitated in tandem with the assertion that it is a research approach which seeks to facilitate collection of data from every member of the population being studied.³⁵

Research Instruments

Primary data were collected from the respondents (investment officers and/or finance officers) using a structured questionnaire. These questionnaires are crucial in enabling collection of quantitative or numerical data. This was in line with the quantitative approach adopted by this study. In reflection, quantitative approach is associated with collection of numerical data.³⁶ The modeling of the questionnaire was aligned to the study variables (venture capital, growth equity, mezzanine capital, distressed investments, and profitability). On the other hand, a structured sheet was used in collecting secondary data from published financial reports of the licensed stockbrokers in Kenya. The secondary data were majorly on profitability of the aforementioned firms.

Pilot Testing

The questionnaire was subjected to pilot testing in order to ensure that it passed the minimum acceptable threshold for its use in collecting data for the main study. For this to be realized, a pilot study was carried out. A pilot study is described as a mini-version of a full-scale study which is conducted a feasibility study mainly to assess particular research instruments like questionnaires.³⁷ The pilot study was conducted in Kiambu County which has a considerable number of stockbrokerage firms.

Validity Testing

The validity of the research questionnaire was determined. It is stated that a valid questionnaire enables collection of data that precisely measures the concepts (variables) of interest.³⁸ Content validity was assessed. This involved engaging the supervisors assigned by the university who were expected to critically and objectively assess the content of the questionnaire.

Reliability Testing

This is in conformity to the definition of reliable instrument as one that is used to collect consistent data.³⁹ For the purpose of this study, the Cronbach's alpha was used to test the reliability of the questionnaire. To enhance the Cronbach values, the number of data items was increased and/or be positively worded. This is in line with the assertion that the number of items below 10 and negatively-worded questionnaire are associated with low Cronbach values, potentially less than the recommended threshold of 0.7.⁴⁰

Data Analysis

The collected primary and secondary data were scrutinized with the view of establishing any inconsistencies, incomplete research instruments and/or non-responses. Data analysis was facilitated by the Statistical Package for Social Sciences (SPSS) Version 25.0. In particular, data analysis took the form of both descriptive statistics and inferential statistics. Some of the descriptive statistics which were used included frequency, percentage, mean, range, and standard deviation. Inferential statistics included correlation and regression analysis. Pertinent diagnostic tests were conducted in order to assess the applicability of certain inferential analyses. These included tests for linearity, normality, multicollinearity, homoscedasticity/heteroscedasticity, and autocorrelation. Primary data and secondary data analyses were done separately and the results harmonized. Whereas the former addressed both the venture capital and profitability, the latter addressed only the latter variable (profitability). Results of the analyses were presented in tabular as well as graphical formats. The following model guided regression analysis.

$$Y_1 = \beta_0 + \beta_1 X_1 + \epsilon$$

Where:

Y, β_0, β_1 , X_1 , ϵ , represent profitability, constant, regression coefficient, venture capital, and precision level respectively.

III. Results

Descriptive Analysis

This section presents the descriptive statistics in respect of both primary and secondary data. Primary data collected and subsequently analyzed were on all study variables, that is, venture capital, growth equity, mezzanine financing, distressed investments, and profitability. However, secondary data only applied to the latter variable (profitability). The primary data on study variables were aligned to a Likert scales ranging from 1 to 5 and representing strongly disagree, disagree, neutral, agree, and strongly agree respectively.

Venture Capital in Licensed Stockbrokerage Firms

As an investment practice, the application of venture capital in stockbrokerage firms was examined. To this effect, the opinions/views of the senior investment and/or finance officers working with the nine licensed stockbrokers were put into perspective. The descriptive statistics on venture capital are presented in Table no 1.

Table no 1: Descriptive Statistics for Venture Capital

	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev
Our firm has recorded an increase in equity financing	0	0	04 (44.4)	5 (55.6)		4.56	.527
The amount of total venture capital in our firm has consistently increased	0	0	05 (55.6)	4 (44.4)		4.44	.527
There has been an increase in average ROI emanating from venture capital investment	0	03 (33.3)	5 (55.6)	1 (11.1)		3.78	.667
The amount of participating debentures has increased considerably	03 (33.3)	2 (22.2)	3 (33.3)	1 (11.1)		3.22	1.093
The average time required for venture capital to fructify has remained constant	2 (22.2)	6 (66.7)	0	1 (11.1)		2.00	.866
Our firm has been relying on conditional loans to fund its investments	3 (33.3)	5 (55.6)	01 (11.1)	0		1.89	.928
There has been significant investment risk associated with venture capital.	3 (33.3)	5 (55.6)	0	01 (11.1)		1.89	.928

The results shown in Table no 1 indicate that all the participants were in agreement that their firms had recorded an increase in equity financing, and that the amount of total venture capital in their firms had consistently increased. These findings were supported by a generally strong agreement (mean = 4.56), and average agreement (mean = 4.44) respectively. Although a majority of the respondents either agreed (55.6%) or strongly agreed (11.1%) that the brokerage firms had witnessed an increase in average ROI as a result of venture capital investment, a third of the respondents were indifferent (33.3%). In respect of the aforesaid propositions, the views of the respondents were largely similar as reflected by the considerably small standard deviation (std < 1.000).

The respondents expressed largely mixed reactions towards the assertion that the amount of participating debentures had increased considerably (mean = 3.22; std dev = 1.093). Importantly, an equal number of respondents agreed (33.3%) and disagreed (33.3%) with the proposition. It was noted that a majority of the respondents at 88.9% disputed that the average time required for venture capital to fructify had remained constant. Similarly, most of the respondents refuted that the stockbrokerage firms had been relying on conditional loans to fund their investments (88.9%) while an equal number of participants also agreed that there was significant investment risk associated with venture capital. In respect of the latter three assertions, the respondents were generally in agreement and their views were as well similar (std dev < 1.000).

Profitability of Licensed Stockbrokerage Firms (Primary Data Analysis)

In this study, the aspect of profitability of licensed stockbrokerage firms in Kenya was examined. First, the views on profitability of the senior investment/finance officers working with these firms were examined. The said views were summarized and subsequently presented as shown in Table no 2.

Table no 2: Descriptive Statistics for Profitability

	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev
The firm has witnessed increasing gross profit margin since 2016	0	0	0 5 (55.6)	4 (44.4)		4.44	.527
In our firm, the return on equity (ROE) has maintained a steady rise since 2016	0	0	0 6 (66.7)	3 (33.3)		4.33	.500
Shareholders' equity reported by the firm has been on the rise since 2016	0	0	0 6 (66.7)	3 (33.7)		4.33	.500
Since 2016, there has been a significant increase in return on capital employed (ROCE)	0	0	0 6 (66.7)	3 (33.3)		4.33	.500
Since 2016, the firm has recorded a rise in earnings before interest and tax (EBIT)	0 1 (11.1)		0 5 (55.6)	3 (33.3)		4.11	.928

The firm has reported notable increase in operating profit margin since 2016	0 1 (11.1)	0 6 (66.7)	2 (22.2)	4.00	.866
--	------------	------------	----------	------	------

According to the views of the investment and finance officers as indicated in Table no 2, it is apparent that all issues presented to them resulted in largely similar opinions (std dev < 1.00). Additionally, the respondents were in agreement with all the assertions on profitability of the licensed stockbrokers (mean >≈ 4.00). With regard to the assertions that since 2016, the stockbrokerage firms had witnessed increasing gross profit margin, the ROE had maintained a steady rise, shareholders’ equity reported by the firms had been rising, and that there had been a significant increase in ROCE, all the respondents were either in agreement or strong agreement. However, it was minimally disputed (Disagree = 11.1%) that over the same period of time, the stockbrokers had recorded a rise in EBIT as well as increase in operating profit margin. The rest of the respondents were in agreement with the two proposed issues.

Profitability of Licensed Stockbrokerage Firms (Secondary Data Analysis)

Various aspects pertinent to determination of profitability of licensed stockbrokerage firms in Kenya were examined. These aspects include revenue, expenses, operating income/profit, profit before tax, and profit after tax. Out of the nine licensed stockbrokers, data were only accessible from 4 such firms, which include Securities Africa Kenya Ltd, Kingdom Securities Ltd, AIB-AXYS Africa, and ABC Capital Ltd. The pertinent results are presented in Figure no 2, Figure no 3, and Figure no 4.

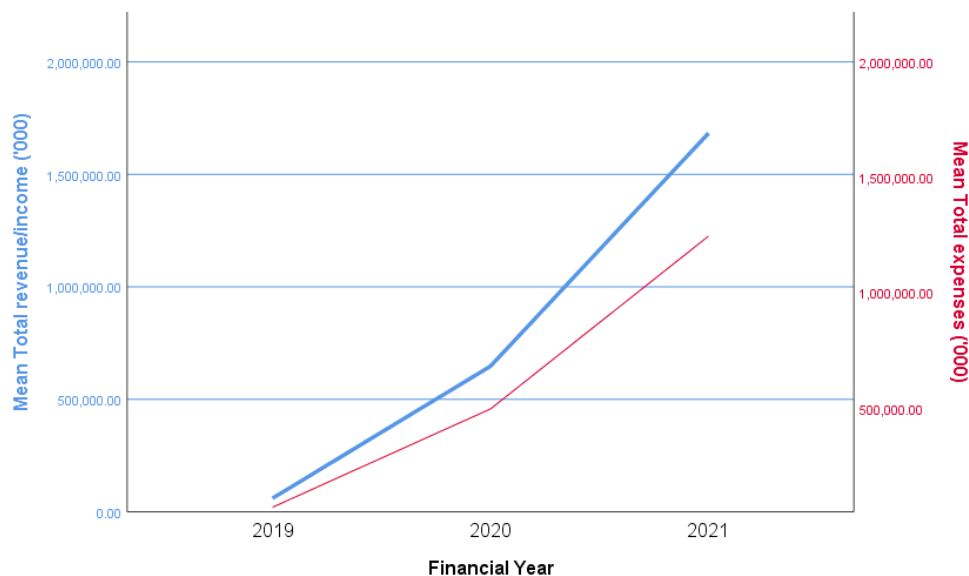


Figure no 2: Total Revenue and Total Expenses of Stockbrokerage Firms

According to the results shown in Figure no 2, the average of both the total revenue collected by the surveyed stockbrokerage firms as well as the total expenses incurred increased over the period of the three financial years, that is, from FY2019 to FY2020. In 2019, 2020, and 2021, the four stockbrokers realized revenue amounting to Ksh 60.11 million, Ksh 647.34 million, and Ksh 1.68 billion respectively. Over the same period of time, total expenditure recorded by these firms was Ksh 69.76 million, Ksh 495.85 million, and Ksh 1.24 billion respectively. Except in FY 2019 when the expenditure outweighed total revenue, in FY 2020 and FY 2021, the stockbrokerage firms recorded more revenue than expenditure.



Figure no 3: Total Revenue and Operating Profit of Stockbrokerage Firms

A comparison of total revenue collected by the licensed stockbrokers and operating profit indicated that both recorded considerable increase across the three financial years beginning 2019 and ending 2021 (Figure no 3). It is important to note that in 2019, the four stockbrokerage firms, on average, recorded negative operating profit (Ksh -8.64 million). The operating profits, however, increased tremendously to Ksh 341.27 million (FY 2020) and Ksh 1.42 billion (FY 2021).

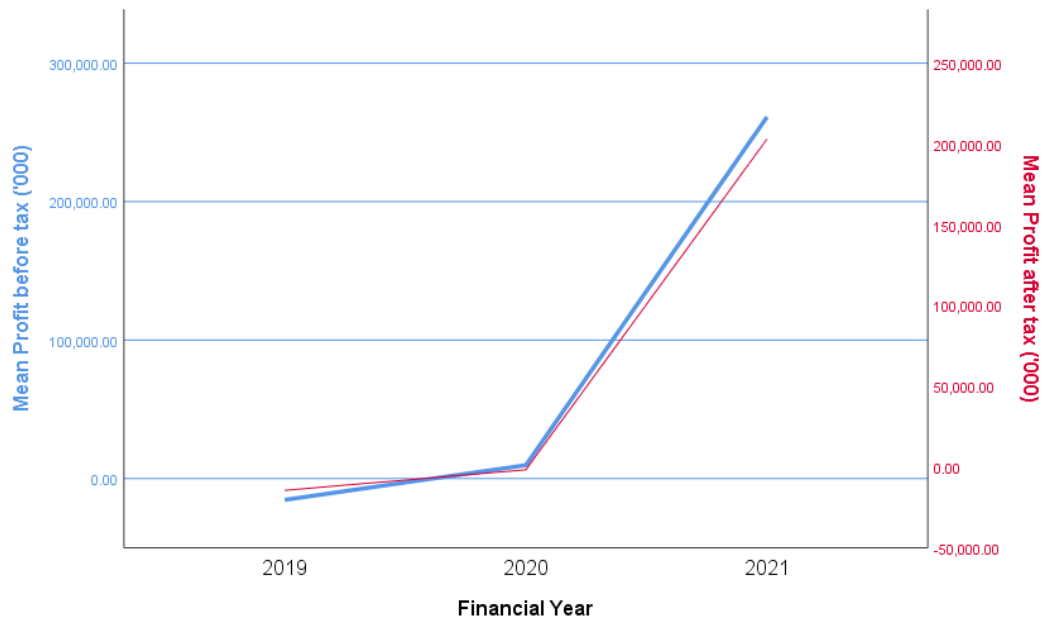


Figure no 4: Profit before Tax and Profit after Tax of Stockbrokerage Firms

Expectedly as shown in Figure no 4, average net profit before tax was more than average net profit after tax for the three years (2019 to 2021) under research. In 2019, loss before tax recorded by the stockbrokers averaged Ksh 15.35 million while loss after tax was slightly lower at Ksh 14.43 million. In 2020, profit before tax was Ksh 9.64 million while after tax, the loss reported averaged Ksh 1.72 million. Financial year 2021 recorded huge increase in both profit before tax (Ksh 261.18 million) and profit after tax (Ksh 203.03 million).

Inferential Analysis

In this section, the results of Spearman rank correlation analysis and regression analysis are presented, interpreted and discussed.

Correlation Analysis

The correlation between each of the investment practices (that is, venture capital, growth equity, mezzanine financing, and distressed financing) and profitability of licensed stockbrokerage firms operating in Kenya was determined. The results of Spearman rank’s correlation analysis are presented in Table no 3.

Table no 3: Spearman Rank’s Correlation Matrix

Spearman's rho	Venture Capital	Correlation Coefficient	1.000	
		Sig. (2-tailed)	.	
	Profitability	Correlation Coefficient	.767 ^a	1.000
		Sig. (2-tailed)	.016	.
		N	9	9

*. Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

According to the results shown in Table no 3, the correlation between venture capital and profitability of stockbrokerage firms was positive, strong, and statistically significant when tested at p-value = 0.05 ($r_s = 0.767$; 0.016). These results mean an increase in venture capital was strongly likely to lead to substantial increase in profitability of the stated firms.

Simple Linear Regression Analysis

The effect of venture capital on profitability of stockbrokerage firms in Kenya was analyzed using simple linear regression analysis. The results concerning this analysis are demonstrated in Table no 4, Table no 5, and Table no 6.

Table no 4: Model Summary of Venture Capital against Profitability

Model	r	r Square	Adjusted r Square	Std. Error of the Estimate
1	.730 ^a	.533	.466	.24844

a. Predictors: (Constant), Venture Capital

The results shown in Table no 4 indicate that the coefficient of determination (r^2) is 0.533. This means that 53.3% of variability in profitability of licensed stockbrokerage firms could be explained by venture capital. These results clearly illustrated the importance of the foregoing investment practice with regard to profitability of the stated firms.

Table no 5: ANOVA of Venture Capital against Profitability

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.492	1	.492	7.979	.026 ^b
	Residual	.432	7	.062		
	Total	.925	8			

a. Dependent Variable: Profitability

b. Predictors: (Constant), Venture Capital

The results of analysis of variance (ANOVA) shown in Table no 5 reveal the F-statistical results. According to the value of F-statistic ($F_{1,7} = 7.979$; $p = 0.026 < 0.05$), it was established that there existed a significantly linear relationship between venture capital and profitability. Interpretively, the collected data fitted the adopted simple linear regression model ($Y = \beta_0 + \beta_1 X_1 + \epsilon$) linking profitability to venture capital. This means that it was practical to use the aforesaid model to establish the influence of venture capital on profitability as shown in Table no 6.

Table no 6: Regression Coefficients of Venture Capital against Profitability

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	.437	1.356			.322	.757
Venture Capital	.846	.299	.730		2.825	.026

a. Dependent Variable: Profitability

As indicated in Table no 6, the model ($Y = \beta_0 + \beta_1 X_1 + \epsilon$) was substituted as $Y = 0.437 + 0.846X_1$ which meant that a unit change in profitability of stockbrokerage firms required 0.846 unit change in the same direction when other factors were held constant. The results of t-statistic ($t = 2.825$; $p = 0.026 < 0.05$) indicated that the influence of venture capital on profitability of the aforementioned entities was statistically significant. Therefore, the null hypothesis which stated that ‘There is no significant influence of venture capital on profitability of brokerage firms in Kenya’ was rejected. The alternate hypothesis which affirmed that the aforesaid influence was significant, was concluded to be true. The results further demonstrated the important contribution of venture capital towards profitability of licensed stockbrokers in Kenya.

IV. Conclusions and Recommendations

The study concluded that the licensed stockbrokerage firms in Kenya have recorded considerable increase in equity financing since 2016. This implied that the stockbrokers had a preference of equity financing as an investment practice. The study also concluded that the fact that venture capital had minimal investment risks, it was an appealing investment practice to investors. The importance of venture capital with regard to profitability of licensed stockbrokerage firms in Kenya could not be overemphasized.

Given that venture capital was concluded to have significant effect on profitability of stockbrokerage firms in Kenya, it is recommended that these organizations should consider investing in the said capital in a bigger way. It is also important to establish the reasons behind the fluctuation of the time-to-fructify of this capital. This would in turn be informative to policy makers to align their strategies in a way that would be more appealing to current and prospective investors.

References

- [1]. Soanes, C., & Stevenson, A. (2008). *Concise Oxford English Dictionary* (11th ed.). Oxford, England: Oxford University Press.
- [2]. Hwang, S. C., & Cheng, J. F. (2011). Definition of "Investment" - a voice from the eye of the storm. *Asian Journal of International Law*, 1(1), 99-129.
- [3]. Muhammed, M. P., & Shabana, A. M. (2017). *A study on major investment avenues in India*. Munich, Germany: GRIN Verlag.
- [4]. Lerner, J., Ledbetter, J., Speen, A., Leamon, A., & Allen, C. (2016). Private equity in emerging markets: Yesterday, today and tomorrow. *The Journal of Private Equity*, 19(3), 8-20.
- [5]. Harrison, R. T., & Mason, C. M. (2019). Venture capital 20 years on: Reflections on the evolution of a field. *An International Journal of Entrepreneurial Finance*, 21(1), 1-34. doi:10.1080/13691066.2019.1562627
- [6]. Ismail, E. A., & Medhat, M. I. (2019). What determines venture capital investment decisions? Evidence from the emerging VC market in Egypt. *The Journal of Entrepreneurial Finance*, 21(2), 1-25. Retrieved July 3, 2021, from <https://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1355&context=jef>
- [7]. Li, Y., & Zahra, S. (2012). Formal institutions, culture, and venture capital activity: A cross-country analysis. *Journal of Business Venturing*, 27, 95-111.
- [8]. Rosenbusch, N., Brinckmann, J., & Müller, V. (2012). Does acquiring venture capital pay off for the funded firms? A meta-analysis on the relationship between venture capital investment and funded firm financial performance. *Journal of Business Venturing*, 28, 335-353.
- [9]. Tulsian, M. (2014). Profitability analysis (a comparative study of SAIL & TATA Steel). *IOSR Journal of Economics and Finance*, 3(2), 19-22.
- [10]. Lin, J. T., Bumcrot, C., Mottola, G., & Walsh, G. (2019). *Investors in the United States: A report of the National Financial Capability Study*. Washington, DC: FINRA Investor Education Foundation. Retrieved June 27, 2021, from https://www.usfinancialcapability.org/downloads/NFCS_2018_Inv_Survey_Full_Report.pdf
- [11]. Constâncio, V., Dalić, M., Letta, E., Noyer, C., Reding, V., & Steinbrück, P. (2019). *Markets4Europe: Transforming Europe capital markets - a roadmap to a capital markets union for companies and savers*. Brussels, Belgium: Markets4Europe. Retrieved June 28, 2021, from <https://markets4europe.eu/wp-content/uploads/2019/10/M4E-Roadmap-digital.pdf>
- [12]. Mujwahuzi, G. V., & Mbogo, C. J. (2020). Effects of capital structure on business profitability of processing enterprises listed on the Dar es Salaam Stock Exchange. *Journal of Finance and Accounting*, 8(4), 165-171. doi:10.11648/j.jfa.20200804.11
- [13]. Anyanzwa, J. (2020, September 17). Tanzania, Rwanda and Uganda race ahead to forge a single stock market. Nairobi, Kenya. Retrieved June 28, 2021, from <https://www.theeastafrican.co.ke/tea/business/tanzania-rwanda-and-uganda-race-ahead-to-forge-a-single-stock-market-2219156>
- [14]. Rothwell, K. (2016). *Regulations and market practice (Kenya)*. London, UK: Chartered Institute for Securities & Investment.
- [15]. Eberhard, J., Lavin, J. F., Montecinos-Pearce, A., & Arenas, J. (2019). Analyzing stock brokers' trading patterns: A network decomposition and spatial econometrics approach. *Hindawi Complexity*, 1-18. doi:10.1155/2019/7490640
- [16]. Allen, F. (2001). Do financial institutions matter? *Journal of Finance*, 56(4), 1165-1175.
- [17]. Demirbag, M., McGuinness, M., Akin, A., Bayyurt, N., & Basti, E. (2016). The professional service firm (PSF) in a globalised economy: A study of the efficiency of securities firms in an emerging market. *International Business Review*, 25(5), 1089-1102.
- [18]. Sensoy, A., & Tabak, B. M. (2014). Dynamic spanning trees in stock market networks: The case of Asia-Pacific. *Physica A: Statistical Mechanics and its Applications*, 414, 387-402.
- [19]. Lee, D., Kim, J., & Kang, H. (2014). Do larger brokerage firms enjoy larger economies of scale and scope? *Seoul Journal of Economics*, 27, 445-467.
- [20]. Lippman, S. A., & Richard, P. R. (2003). The payments perspective: Micro-foundations of resource analysis. *Strategic Management Journal*, 24, 903-927.
- [21]. Ismail, E. A., & Medhat, M. I. (2019). What determines venture capital investment decisions? Evidence from the emerging VC market in Egypt. *The Journal of Entrepreneurial Finance*, 21(2), 1-25. Retrieved July 3, 2021, from <https://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1355&context=jef>
- [22]. Mbhele, T. P. (2012). The study of venture capital finance and investment behaviour in small and medium-sized enterprises. *South African Journal of Economic and Management Sciences*, 15(1), 94-111.
- [23]. Apuoyo, B. O. (2020). *Venture capital financing and growth of small and medium enterprises in Nairobi City County, Kenya*. Unpublished Doctor of Philosophy in Business Administration (Finance) thesis, Kenyatta University, Ruiru, Kenya. Retrieved July 5, 2021, from <https://ir-library.ku.ac.ke/bitstream/handle/123456789/21444/Venture%20Capital%20Financing%20and%20Growth%20of%20Small....pdf?sequence=1&isAllowed=y>
- [24]. Maali, M. (2020). *Influence of venture capital financing on corporate governance of small and medium enterprises (SMEs) in Nairobi County*. Unpublished Master of Business Administration thesis, Strathmore University, Nairobi. Retrieved July 5, 2021, from <https://superplus.strathmore.edu/bitstream/handle/11071/10424/Influence%20of%20venture%20capital%20financing%20on%20corporate%20governance%20of%20Small%20and%20Medium%20Enterprises%20%28SMEs%29%20in%20Nairobi%20County.pdf?sequence=3&isAllowed=y>

- [25]. Koliass, G., & Arnis, N. (2019). Analysing the profitability and the relations among its. *Journal of Accounting and Taxation determinants of the retail sector: Evidence from Greece*, 2(2), 32-48. doi:10.5897/JAT2018.0331
- [26]. Mujwahuzi, G. V., & Mbogo, C. J. (2020). Effects of capital structure on business profitability of processing enterprises listed on the Dar es Salaam Stock Exchange. *Journal of Finance and Accounting*, 8(4), 165-171. doi:10.11648/j.jfa.20200804.11
- [27]. Kerosi, D. O., Mugo, R. K., & Kalui, F. M. (2016). The relationship between capital structure and profitability of firms listed at the Nairobi Securities Exchange. *African Development Finance Journal*, 2(1), 182-216. Retrieved July 11, 2021, from https://www.researchgate.net/publication/327968074_THE_RELATIONSHIP_BETWEEN_CAPITAL_STRUCTURE_AND_PROFITABILITY_OF_FIRMS_LISTED_AT_THE_NAIROBI_SECURITIES_EXCHANGE
- [28]. Camp, W. G. (2001). Formulating and evaluating theoretical frameworks for career and technical education research. *Journal of Vocational Educational Research*, 26(1), 27-39.
- [29]. Grant, C., & Osanloo, A. (n.d.). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house". *Administrative Issues Journal: Connecting Education, Practice, and Research*, 4(2), 12-26. doi:10.5929/2014.4.2.9
- [30]. Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). Harlow, England: Pearson Education Limited.
- [31]. Creswell, J. W. (2014). Research design: Qualitative, quantitative and mixed methods approaches. Retrieved July 12, 2021, from http://www.drbrambedkarcollege.ac.in/sites/default/files/Research-Design_Qualitative-Quantitative-and-Mixed-Methods-Approaches.pdf
- [32]. Capital Markets Authority. (2021). *List of licensees & approved institutions - October 22, 2021*. Nairobi, Kenya: Capital Markets Authority.
- [33]. Asiamah, N., Mensah, H. K., & Oteng-Abayie, E. F. (2017). General, target, and accessible population: Demystifying the concepts for effective sampling. *The Qualitative Report*, 22(6), 1607-1621.
- [34]. Bartlett, J. E., Kotrlík, J. W., & Higgins, C. C. (2001). Organisational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 1-8.
- [35]. Jupp, V. (2011). *The SAGE dictionary of social research methods*. Thousand Oaks, CA: Sage Publications, Inc. doi:10.4135/9780857020116
- [36]. Morris, C. (2003). *Quantitative approaches in business studies* (6th ed.). Harlow, England: FT Prentice Hall.
- [37]. van Teijlingen, E. R., & Hundley, V. (2001). *The importance of pilot studies*. Guildford, United Kingdom: Department of Sociology, University of Surrey.
- [38]. Ghauri, P., & Grønhaug, K. (2010). *Research methods in business studies: A practical guide* (4th ed.). Harlow, England: Financial Times Prentice Hall.
- [39]. Saunders, M. N. (2012). Web versus mail: The influence of survey distribution mode on employees' response. *Field Methods*, 24(1), 56-73.
- [40]. Bolarinwa, O. A. (2015). Principles and methods of validity and reliability testing of questionnaires used in social and health science researches. *Nigerian Postgraduate Medical Journal*, 22, 195-201. doi:10.4103/1117-1936.173959