Journal of Entrepreneurship & Project Management

Effect of Herding Factor on Investment Decisions among Small and Micro Enterprises in Nairobi County, Kenya

Leah Jemutai Barno, Dr. Josephat Cheboi & Dr. Catherine Muganda

ISSN: 2616-8464

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 4||Issue 4||Page 66-78 |November||2020|
Email: info@stratfordjournals.org ISSN: 2616-8464

Effect of Herding Factor on Investment Decisions among Small and Micro Enterprises in Nairobi County, Kenya

[1]Leah Jemutai Barno, [2]Dr. Josephat Cheboi & [3]Dr. Catherine Muganda

[1] Phd Student, Moi University

[2] Senior Lecturer, Moi University

[3] Senior Lecturer, Moi University

Email of the Corresponding Author: barno.jemutai@gmail.com

***How to cite this article*: Barno, L. J., Cheboi, J. & Muganda, C. (2020). Effect of Herding Factor on Investment Decisions among Small and Micro Enterprises in Nairobi County, Kenya. *Journal of Entrepreneurship & Project management* 4(4), 66-78**

Abstract

This study sought to determine the effect of herd factors on investment decisions among small and micro enterprises in Nairobi County. The study was premised on the behavioural portfolio. Positivism paradigm was deployed. The study adopts explanatory research design. The target population were 102,821 firm owners. A sample of 383 respondents was selected using stratified random sampling technique. The collected data were analysed using descriptive and inferential statistics. Linear regression models were used to establish the relationship between herd factors and investment decisions. The findings revealed that herding factors was found to have positive influence on investment decision ($P = 0.450 < 0.05$). The study recommends that firms should improve on herd factors which improved investment. This would enhance better decision investment decision improving financial performance of the SMEs.

Keyword: *Herd factors, Investment decision, SMEs*

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 4||Issue 4||Page 66-78 |November||2020|
Email: info@stratfordjournals.org ISSN: 2616-8464

1.1 Introduction

Investment decision refers to the determination made by management on how, when, where and how much capital is to be spent on available opportunities including determining the costs and returns for each option (Asetto, 2014). Investment decisions are mostly long term, involving, and comparatively have huge cash outflows making it very important for an investor to make the right decision (Terry, 2013). Every decision made by human being has a behaviour attached to it. These behaviour factors have an effect on how human beings make a decision among given choices. Behavioral factors include herding, anchoring, prospect and overconfidence among other. Research done globally, continental and local shows mixed reaction in different business environment.

Globally, investment decisions are crucial and behavioral factors are influenced by psychological, cognitive and heuristic factors. A study in Colombo Stock Exchange stated that behavioral factors include herding (Kengatharan & Kengatharan, 2014). Herding effects is described as imitative behaviour where investors would follow other opinion or trend and often leading to inefficient outcome (Shekhar & Prasad, 2015). It is common where there limited information or knowledge to make individual decision. It affects investment decision leading to poor decision. Most investors follow the market trend, patterns creating unconscious herding behaviours as alluded by Robert cited in (Shekhar & Prasad, 2015). Cristian opined that herding behaviour can be rational (profit seeking) leading to financial benefit but some time irrational leading to financial instability. Herd behavior is a form of heuristics where individuals are led to conform to the majority of individuals present in the decision-making environment, by following their decisions. However, herd behavior, as with other heuristics may lead people astray when they follow e.g. a general market trend. A fundamental observation about the human society is that people who communicate regularly with one another think similarly (Johnson et al. 2002). Across situations and cultures, psychologists have found that humans employ such social comparisons to inform their beliefs and decisions even when it contradicts facts or their belter judgment (Gounaris & Prout, 2009). People are influenced by their social environment and they often feel pressured to conform. Gounaris & Prout (2009) argue that humans are deeply social beings, dependent on each other for survival. When they make decisions especially when they feel unsure or threatened, they watch what others do and then copy them.

Investment decision is crucial and wrong decision may lead to a loss in an organization. Most Small and Micro Enterprises (SMEs) have high rate of failure based on investment decisions they make where three out of five businesses fail within the first few months of operation (Kenya National Bureau of Statistics, 2007). SMEs face various challenges when it comes to rational decision making such as limited managerial skills, experiences, challenges in academic ability and sometime personal behavior influence judgement. However numerous paradigm investment decisions can be positively or negatively linked to financial performance or business success depending on whether these decisions are made

with or without biasness. Hence there is need to investigate on herding factors that affect the success of Small and Micro Enterprises.

2.1 Theoretical Framework

The study was anchored on Behavioural Portfolio Theory. Shefrin and Statman proposed the behavioural portfolio theory in 2000 (Shefrin and Statman 2000; Statman 1999b, 2004). It argues that the ultimate motivation for any investor is to maximize the value of investment. In any investment the investor aims to create investment portfolios to meet diverse range of organizational goals. It is based on pyramid distinct layers. They argue that behavioural portfolios are formed as layered pyramids in which each layer is aligned with an objective. The base layer of low risk assets may be intended as "protection from poverty" whereas a higher layer of risky assets represents "hopes for riches." Behavioural investors do not consider the covariance between the layers in the way that modern portfolio theory would suggest they should. The layered approach can explain observed features, such as undiversified stock portfolios (hopes for riches), and the reluctance to invest in foreign stocks despite the seemingly obvious diversification benefits. Behavioural portfolio theory explains the concepts on how behaviours affect the investment portfolio which uses different principles form capital asset pricing model, modern portfolio theory and arbitrage pricing theory. It tries to concentrate on the behavioural based on risk where base layer are portfolios that assist to avert financial crisis which is less risky and most people of who are risk averse would focus on. The top portfolios are fewer than their counterpart has high risk and fewer portfolios that try to increase wealth or maximize returns (Bank, 2011).

2.2 Review of literature

There are several literature behavioral factor, financial literacy and investment decision. Scholarly review of different empirical literature is discussed on overconfidence, anchoring factor, prospect factor, herding factors and financial literacy. Kumar and Sharma (2018) studied on a test of herding decision. The research was done on Indian Stock Exchange empirical data. Kumar and Sharma (2018) argued that herding is common to risky market condition. Pre- and Post-crisis evidence was used in this research. According to results there was a weak evidence of herding reported from the daily and monthly investment pattern during the movement in market. In extreme condition there was no strong evidence of herding which reinforce the issue of asymmetric nature of herding. Rationality in investment decision weakens herding behaviour in financial decisions.

Shekhar & Prasad (2015) researched the on impact of herd behaviour on investment decision of investors and stock market price volatility based on empirical study. The study was inspecting the herding behaviour among Indian retail as well as profession investors. In India 2008 mild financial crisis investor behaviour affected the market

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 4||Issue 4||Page 66-78 |November||2020|
Email: info@stratfordjournals.org ISSN: 2616-8464

supporting entities, regulation bodies and investing organization; Psychological and imperfection of human mind shows that errors done by professional and individual investors. Ghalandari & Ghahremanpour (2013) investigated on the effect of market variable and herding effect on investment decision as factor influencing investment performance in Iran. A sample of 300 consisting investors from Tehran Stock Exchange (TSE) was studied where 275 questionnaires were analysed. A structured equation model was utilized where market variable was found to be positively affecting investment decision. Herding influence investment decisions positively. Investment decision made also affected positively on performance of investment in Tehran Stock Exchange. The findings shade light on the effect of behavioural approach on portfolio theory.

Omery, (2014) conducted a study on the effect of behavioral factors on individual investor choices at the Nairobi Securities Exchange. The study adopted descriptive survey design. The sample was 63 individual investors in NSE. Data was collected using questionnaires. The study established that herding, loss aversion, regret aversion, price changes, market information, past trends of stocks, overconfidence and anchoring highly affected investment decisions while Mental Accounting was the least significant factor in investment decision. Based on the above review, there is reasonable argument that herds factor affect performance of organizations/enterprise. However, these studies have given much attention on larger firms especially listed firms. Hence, these results might not be generalized to small and medium enterprise. Therefore; this study hypotheses that;

***H_0**: Herding has no significant effect on investment decision among SMEs in Nairobi County.*

3.0 Material and Method

The study adopted positivist paradigm, this paradigm was selected since the study employed the quantitative data. The study used explanatory research design to assess and establish the effect of behavioral factors on SME investment decisions in Nairobi County. A target population of 102,821 registered SMEs within Nairobi County were considered (Nairobi County, Ministry of Trade, 2016). Managers were selected purposively on the grounds that they are in a superior position to comprehend investment decision issues of SMEs and in a position to give the correct data. Random sampling was used to select the 383 SMEs that participated in the study within each stratum. The study used questionnaires to collect primary data. Closed-ended questions were used in the questionnaire to measure the variable providing all-round information about the variables. The study variables were based on previous studies and detailed review of existing literature. In line with measurement used in previous studies, a five- point Likert were adopted for all item scale ranging from 1=strongly disagree to 5=strongly agree and 1=very low to 5= very high. The researcher opted for this scale to create a 'neutral' middle point which is essential in some scales where respondents may simply not have an opinion (Chung, 2008).

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 4||Issue 4||Page 66-78 |November||2020|
Email: info@stratfordjournals.org ISSN: 2616-8464

Measurement, Reliability and Validity of Variables

Likert scale and an open ended question and finally herding utilized eight question has a 5 point Likert scale and one open ended question.

Table 1: Measurement of Study Variables

VARIABLES		NUMBER OF ITEMS	SOURCES	Cronbach's alpha
Investment Decision **(Dependent variable)**		**10**	Luu, 2014; Nyakundi (2017); Omery, 2014; Awais, Laber, Rasheed & Khursheed 2016; Kengatharaan and Kengatharaan (2014); Garang (2016); Ojwang (2015).	0.827
	Herding Factors	**7**	Lin (2011); Ghalandari & Ghahremanpour (2013).	0.838

Source: Researcher (2019)

Reviewed literature demonstrates constructs testing for reliability accomplished by ascertaining the Cronbach's alpha coefficient. Every one of the constructs was found to have a sufficient alpha value (> 0.6) (Hair *et al*., 1998). The constructs testing for reliability was accomplished by computing the Cronbach's alpha which was 0.834. In this study, construct validity was assured by deriving investments behavior from existing literature.

Analytic model

Further, the study employed inferential statistics in form of multiple regression and Pearson correlations analyses. Linear regressions were appropriate for the study because there is more than one independent variable involved in the analysis and establishing whether relationships between variables are significant by testing hypothesis (Zikmund *et al*, 2010). The generated multiple regression models that is behavioral factors were predicted using the following hypothesis.

$InvDec = \beta o + C + \beta_1 X_1 + \varepsilon$

Where,

Yi = investment decision

X_4 = Herding, FS = Firm Size, FA = Firm Age

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 4||Issue 4||Page 66-78 |November||2020|
Email: info@stratfordjournals.org ISSN: 2616-8464

$\beta 0$ = Constant term, β_1, = Coefficients of the Regression

ε = Error term

4.0 Results and Discussion

This chapter provides a presentation of research findings collected through the methodology discussed in chapter three. It provides findings of the empirical research on the direct relationship between herding factors with investment decisions among small and micro enterprises in Nairobi County. The response rate was 375(97.9%) which was above the threshold of 80%. This was deemed ideal for the study basing on recommendations of a response rate in the range 50% and 70% (Saldivar, 2012).

Factor analysis for investment decision

Descriptive statistics were obtained using mean and standard deviation. These were used for interpreting the findings and come up with conclusion about the study. The data was expressed in terms of, mean, standard deviation, for herding factors and investment decision. Herding factors summed up to a mean of 3.87, standard deviation of 0.59,. Factor analysis for herding factor was conducted to ensure that all of the constructs used are valid and reliable before proceeding for further analysis .Thus, from the findings all values for all the factors were more than 0.5 reflecting the accepted value of factor loading. Additionally, the first factor accounted for 29.062% of the total variance and second factor accounted for 52.699%. The Kaiser-Meyer-Olkin Measure value (0.651) was above 0.5 hence acceptable. Also, the Bartlett's Test was significant.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 4||Issue 4||Page 66-78 |November||2020|
Email: info@stratfordjournals.org ISSN: 2616-8464

Table 2: Herding Factors

n=366	Mean	Std. Deviation	Loadings
Price changes of securities are considered before investing	2.84	1.13	0.69
Past investment affect what to invest in future	3.51	0.88	0.76
There is highly likelihood of increasing investment in the same line of	3.74	0.73	0.74
Expansion is based on profit in the present business size.	3.85	0.82	0.70
Whenever the prices of goods/ services that the business is engaged in fluctuates affect buying pattern until the prices stabilize.	3.74	0.82	0.85
Prices of the goods are affected sales low price the enterprise reduce sales and sell at high prices	3.73	0.84	0.61
Herding Factors	3.87	0.59	-0.77
KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.651		
Bartlett's Test of Sphericity,Approx. Chi-Square	399.839		
Df	21		
Sig.	0.00		
Total Variance Explained: Rotation Sums of Squared Loadings			
Initial Eigenvalues	2.03	1.66	
% of Variance	29.06	23.64	
Cumulative %	29.06	52.70	

The findings on investment decision summed up to a mean of 3.82, standard deviation of 0.69, skewness -0.58 and kurtosis 0.26. Table 3 shows that the factor loadings for most of the investment decision items were above 0.5.To sum up, the first factor accounted for 18.34% of the total variance, second factor accounted for 32.44% and the third factor 45.95% of the total variance. The Kaiser-Meyer-Olkin Measure value (0.616) was above 0.5 hence acceptable. Also, the Bartlett's Test was significant.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 4||Issue 4||Page 66-78 |November||2020|
Email: info@stratfordjournals.org ISSN: 2616-8464

Table 3: Investment decision

n=366	Mean	Std. Deviation	Loadings
In general, the SME satisfied with the way of making investment decisions	4.24	0.69	0.548
SME decision-making helps the enterprise to achieve its investment objectives	4.39	0.72	0.779
SME investments decisions can mostly earn higher than average return in the market	4.21	0.76	0.77
SME make all investment decisions on its own	4.19	0.77	0.585
SME has increased the amount to be invested asset category	3.7	0.98	0.724
SME has been able to open many branches in other part of the country	3.88	1.05	0.515
SME has been able to diversify its business in other sectors	3.89	1.06	0.679
The SME able to borrow more loans which have increased its business stock	4.11	0.76	0.637
Investment Decision	3.82	0.69	
KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.616	
Bartlett's Test of Sphericity, Approx. Chi-Square		283.737	
Df		45	
Sig.		0	
Total Variance Explained:Rotation Sums of Squared Loadings			
Total	1.83	1.41	1.35
% of Variance	18.34	14.11	13.5
Cumulative %	18.34	32.44	45.95

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 4||Issue 4||Page 66-78 |November||2020|
Email: info@stratfordjournals.org ISSN: 2616-8464

4.1 Multivariate analysis (testing of hypothesis)

Table 4 further illustrates the model summary of multiple regression model, the results showed that all the predictors explained 68.6 percent variation of investment decision. This showed that considering the study variables of independent variables, there is a probability of predicting investment decision by 68.6% (R squared =0.686).Finally, study findings in the table indicated that the above discussed coefficient of determination was significant as evidence of F ratio of 86.456 with p value 0.000 <0.05 (level of significance). Thus, the model was fit to predict investment decision using overconfidence, anchoring factors, prospect factors and herding factors. Table 4.28 highlights the findings on the correlation between to behavioral factors, and investment decision. The results revealed that herding factors has significant positive relationship with investment decision (r= .631 $\rho \leq .05$).

Hypothesis

Stated that herding factors has no significant effect on investment decision among SMEs in Nairobi County. Findings showed that herding factor had coefficients of estimate which was significant basing on $\beta_4 = 0.450$ (p-value = 0.000 which is less than $\alpha = 0.05$). The null hypothesis was thus rejected and it was concluded that herding factors positively and significantly influence investment decision among SMEs in Nairobi County. This suggested that there was up to 0.450 unit increase in investment decision making for each unit increase in herding behavior. The effect of herding factors was more than 10 times the effect attributed to the error; this was indicated by the t-test value = 10.989. Also, research findings showed that firm size had coefficients of estimate which was significant basing on $\beta_5 = 0.100$ (p-value = 0.003 which is less than $\alpha = 0.05$) implying firm size has a significant effect on investment decision among SMEs in Nairobi County. This results concurs with Ghalandari and Ghahremanpour (2013) who found that herding factors has a positive significant effect on Tehran Stock Exchange. Shekhar and Prasad (2015) found also positive effect of herding on investment decision. In another study Kumar and Sharma (2018) found weak evidence of herding in both daily and monthly investment pattern. Hence there was no strong evidence of herding factors to ascertain asymmetric nature of herding. This indicate a weak insignificant effect of herding in financial decision. This was also evident in current research where prices change of security were fairly considered before investing. Herding factor's findings was also found to be significant by Lin (2011). In addition, Lin (2011) found that females and younger generation display had greater disposition than the male and older.

Further, the results in table 4 showed that there was no significant effect of business age on investment decision among SMEs in Nairobi County ($\beta_6 = 0.037$, p value=0.519 >.05). This shows business age has no effect on investment decision among SMEs. Similarly, business experience had no significant effect on invest decision among SMEs ($\beta_7 = -0.105$, p value=0.061 >.05). Also, the education level of the entrepreneurs had no

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 4||Issue 4||Page 66-78 |November||2020|
Email: info@stratfordjournals.org ISSN: 2616-8464

significant effect on investment decision among the SMEs β_8 = -0.016, p value=0.685 >.05). Finally, there was no significant effect of origin of business on investment decision among SMEs in Nairobi County (β_9 = 0.047, p value=0.125 >.05).

Table 4: Multiple Regression

	Unstandardized Coefficients		**Standardized Coefficients**			**Collinearity Statistics**	
	B	**Std. Error**	**Beta**	**t**	**Sig.**	**Tolerance**	**VIF**
(Constant)	-0.743	0.222		-3.344	0.001		
Herding Factors	0.532	0.048	0.450	10.989	0.000	0.526	1.901
Firm Size	0.198	0.067	0.100	2.960	0.003	0.774	1.292
Business Age	0.035	0.054	0.037	0.646	0.519	0.264	3.795
Experience	-0.100	0.053	-0.105	-1.877	0.061	0.283	3.538
Education	-0.016	0.039	-0.016	-0.406	0.685	0.561	1.784
Origin of Business	0.235	0.153	0.047	1.537	0.125	0.963	1.039
Model Summary							
R	0.828						
R Square	0.686						
Adjusted R Square	0.678						
Std. Error of the Estimate	0.39265						
Durbin-Watson	2.072						
Goodness of fit							
ANOVA							
F	86.456						
Sig.	0.000						
Person correlation	.752**						

a Dependent Variable: Investment Decision

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

5.0 Conclusion and Recommendation

The study concluded that firm size had positive significant effect on the investment decision. Larger firm made better investment decision than small counterpart. Age had no significant effect investment, whereby investment decision does not dependent the experience. Herding had a positive and significant influence on investment decision among SMEs in Nairobi County. The entrepreneurs prefer herding because they are capable of extracting useful and reliable information that is key in making investment decisions. The herding behavior is also exhibited by the enterprises reliance on past investments to make investments in the future. Since herding had a positive impact on the investment decision among SMEs in Nairobi County, the SMEs need to rigorously analyze past events, seeing that they influence the investment decisions. Besides, the entrepreneurs should base their decision to expand on profits made by the enterprise. Furthermore, SMEs need to choose good investment partners or alliance to consider as references for their investment. Finally, entrepreneurs should consider the negative and positive impacts of herding carefully before making investment decisions. The scope of this study was limited to the collection of primary data; there is therefore the need to use secondary data to undertake the same study in order to detect variations and similarities in the findings.

Funding: The authors did received funding from Bomet University College.

Conflict of interest: We, the authors of this paper, have all contributed to the conception and design of the work submitted. We have revised and critically approved of the version to be published and agree to be accountable for all aspects of the work. We have no conflict of interest.

REFERENCES

Asetto, F. (2014). *Effects of Table Banking on Investment Decision of Small and Micro Enterprises in Nairobi County.* Unpublished MBA project. Nairobi: University of Nairobi.

Awais, M., Laber, M. F., Rasheed, N., & Khursheed, A. (2016). Impact of Financial Literacy and Investment Experience on Risk Tolerance and Investment Decisions : Empirical Evidence from, 6(1), 73–79.

Bank, E. (2011). "Behavioral Portfolio Theory 1, Safety First". Retrieved at 7th September 2011 from *http://www.hedgefundwriter.com*

Garang, M. (2016). The Effect of Financial Literacy on Investment Decisions in the Juba City South Sudan.

Ghalandari, K., & Ghahremanpour, J. (2013). The Effect of Market Variables and Herding Effect on Investment Decision as Factor Influencing Investment Performance in Iran. *Journal of Basic Application Research*, 3(3), 313–318.

Gilchrist, S., Himmelberg, C., Huberman, G. (2005). Do stock price bubbles influence corporate investment? *Journal of Monetary Economics*, 52 (4), pp. 805-827

Hair, F., Black, B., Babin, B., Andersion, R. E., &Tatham, R. L. (1998). *Multivariate data analysis*. Prentice-Hall, International, Inc

Hallahan, A. & Faff, R., & Mckenzie, D. (2004). An empirical investigation of personal financial research tolerance. *Financial Services Review*, Vol 13(2004), pp.57-78

Kengatharan (2014). 'The Influence of Behavioural Factors in Making Investment Decisions and Performance: Study on Investors of Colombo Stock Exchange Sri Lanka'. Asian Journal of Finance & Accounting, 6(1) 1-23

Kengatharan, L., Kengatharan, N., (2014). The Influence of Behavioral Factors in Making Investment Decisions and Performance: Study on Investors of Colombo Stock Exchange, Sri Lanka. *Asian Journal of Finance & Accounting* 6(1), 1-23

Kumar, S., & Sharma, R. (2018). A Test of Herding in Investment Decision: Evidence from Indian Stock Exchange. *Pacific Business Review International*, 10(11), 27–34.

Luu, T., (2014). Behavior Pattern of Individual Investors in Stock Market. *International Journal of Business and Management*, 9(1), 1-16

Nyakundi, J., (2017). *Effect of behavioral biases on ranking of financing decisions by financial managers of firms listed in the Nairobi Securities Exchange.* Master's thesis submitted to USIU.

Ojwang, P. (2015). *Behavioral Factors and Investment Decisions.* Unpublished report.

Omery, C. S (2014). *The effect of behavioral factors on individual investor choices at the Nairobi Securities Exchange.* Master's Thesis, University of Nairobi.

Shefrin, H., (2000). Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing. Boston, Harvard Business School Press.

Shekhar, B., & Prasad, R. (2015). Impact of Herd Behavior on Investment Decision of Investors and Stock Market Price Volatility – An Empirical Study. UNNAYAN, 2, 1–7.

Terry, L. (2013). *Management Accounting.* 5th ed. New York: Continuum.

Zikmund, W., Babin, B., Carr, J., & Griffin, M. (2010). *Business research methods* (8th ed.). Mason, HO: Cengage Learning.