

EXPLORING HOSTILE BUSINESS ENVIRONMENT AS A MODERATOR IN THE EFFECT OF INNOVATION ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN KENYA

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ABSTRACT

Using entrepreneurship orientation- performance relationship theory, we explore the effect of hostile business environment (HBE) in moderating the relationship between innovation and financial performance of manufacturing firms. Specifically, we explore the moderating effect of HBE on innovation and financial performance of manufacturing firms, and the effect of innovation on the financial performance of manufacturing firms in Kenya. To achieve this, a sample of 200 firms is used to provide data. Ex post facto design, which investigates possible cause and effect relationships between variables, is used. Hierarchical Multiple Regression analysis among the variables is conducted to statistically test the hypotheses. The findings of the HBE on the relationship between innovation and financial performance of manufacturing firms gave a strong positive coefficient as well as those of innovation on financial performance of manufacturing. The paper concludes that HBE moderates the effect of the relationship between innovation and financial performance of manufacturing firms in Kenya. On the basis of these findings the paper recommends that managers and entrepreneurs of manufacturing firms as well as academicians and policy makers should understand the roles of HBE and its effect on moderating the relationship between innovation and financial performance of manufacturing.

Keywords: Hostile Business Environment, innovation, financial performance, manufacturing firms.

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1. INTRODUCTION

Global changes in the business environment in the recent years have led to an increasing number of large enterprises demanding innovation (Christensen 2004). Most scholars have thought this as an attribute to success in financial performance of manufacturing firms. The reasons for this are three fold. First, competitive edge in the market, second, good returns to the shareholders, and three, financial performance of manufacturing firms has received little research interest (Zain & Hassan 2007). There is need to identify factors that affect the financial performance of the firms.

Primarily, firm's performance is related to the intentions of the manager (Stenholm 2011; Cliff 1998). Pro entrepreneurship proponents acknowledge that individual managers have central role in manufacturing firms in that they make the fundamental decision to success or no success in the financial performance of the manufacturing firms (Morris, Kuratko & Covin 2011; Aktan & Bulut 2008). However, intentions are only one of the prerequisites for successful financial performance in manufacturing firms. Successful financial performance of manufacturing firms requires creativity and innovation in the firm. Considerable anecdotal evidence suggests that innovation leads to success in financial performance of manufacturing firms. According to Zain and Hassan (2007); Drucker (1985); and Stevensen and Gumbert (1985), large firms such as International Business Machine (IBM), Hewlett Packard and 3M have been able to sustain high levels of financial performance by adopting innovation. Additionally, in order for the manufacturing firms to achieve sustained innovation and long-term excellence in the regional and global market they should maintain a culture that supports and encourages performance improvement. This sort of culture can be described as a culture that encourages its employees to be creative and innovative that will enable them to realize and take advantage of opportunities when they arise. Innovation is conceptualised within the combinations of new ideas, new products and new processes/ techniques of production in the firm (Morris, Kuratko & Covin 2011; Cakar & Erturk 2010; Schumpeter 1934)

A few researches of entrepreneurship orientation (EO) in enterprises have been conducted in Africa, for example, Nyanjom (2007) researched on how enterprises in Botswana can develop and enhance entrepreneurial innovation and encourage entrepreneurial activity within enterprises. This study failed to address the innovation characteristics that affect the financial performance of manufacturing firms moderated by hostile business environment (HBE). In Kenya, studies conducted have centred on other issues of entrepreneurship and how they affect performance of the firms, rather than looking at individual issues, this research explores innovation and its effect on financial performance of manufacturing firms moderated

by HBE. For example, Mayaka (2006) in his study of leading Kenya companies, he concentrated on the factors that lead to the companies' success in order to develop a case study. Hence, the study failed to identify the moderating effect of HBE on the innovation and performance of the large enterprises in Kenya.

Applying the theory of entrepreneurship orientation- performance relationship and financial performance regression, our research will argue that the moderator, HBE, has a positive effect of the relationship between innovation and financial performance of manufacturing firms in Kenya. Entrepreneurship orientation- performance relationship theory posits that the five dimensions (innovation, risk taking, proactive, competitive aggressive and autonomy) affect financial performance of the firms moderated by business environmental factors and organizational factors (Lumpkin & Dess 1996). This research will explore the moderating effect of HBE on the relationship between innovation and financial performance of manufacturing firms in Kenya. Specifically, we argue; 1) HBE affects the relationship between innovation and financial performance of manufacturing firms; and 2) Innovation affects financial performance of manufacturing firms.

This paper consists of six sections; after this introduction we examine the theory and hypotheses in which primary tenets of entrepreneurship orientation- performance relationship theory, financial performance and innovation have been discussed. Hypotheses of the study have been developed within the discussion of the literature. The data collection procedure, sample and methodology of the research have been presented within the third section. Analysis and results have been given in the fourth section. Fifthly, discussions and implications are given. Finally, conclusion and recommendations are presented.

2. THEORY AND HYPOTHESES

2.1 Entrepreneurship Orientation- Performance Relationship Theory

There are many theoretical and empirical studies, which examine entrepreneurship orientation (EO) dimensions- performance relationships among firms. In context of this study, we adopted the theory of entrepreneurship orientation- performance relationship by Lumpkin and Dess (1996). According to these authors, EO is defined in term of five EO dimensions (innovation, risk taking, proactive, competitive aggressive and autonomy) moderated by environmental factors (dynamism, munificence, complexity and industry characteristics) and organizational factors (size, structure, strategy, strategy making processes, firm resources and culture) affect performance of the firms (sales growth, profitability, overall performance and stakeholder satisfaction). This theory emphasizes that EO is the processes, practices and

decision-making activities that lead to a new entry. The new entry is accomplished by entering new markets with new or existing commodities. Hence newness or novelty is considered as way of succeeding in any organization (Ngoze, Bwisa & Sakwa, 2013).

In this study, howbeit, we use the innovation that involves product, process and organizational innovation, and financial performance that contains profit and sales constructs. Meanwhile, we believe that the innovativeness affects the financial performance of the manufacturing firms moderated by hostile business environment (Lumpkin & Dess 1996).

2.2 Hostile Business Environment (HBE) as a Moderator

Exploring the effect of HBE as a moderator of the relationship between innovation and firm financial performance was the main objective of this research. A HBE is the environment that creates threats to a firm's mission through increasing rivalry in the industry or depressing demand for a firm's commodities, thereby threatening the very survival of the firm. According to Antoncic and Hisrich (2001) such as environment stimulate innovation. Faced with unfavourable environmental conditions, a firm may opt to differentiate its commodities through intensive marketing and advertising activities in order to sustain customer loyalty or increase penetration of existing segments. Zahra and Garvis (2000) opine that if hostility continues to intensify in the firms, they will consider novel business ideas to replace or supplement their additional business core through internal developments internal joint venturing or diversification, hence better financial performance.

A few studies conducted discovers that hostile environment of the business have a significant effect on the performance of the firms. For instance, in their empirical study of EO dimensions in construction firms in Malaysia, Zain and Hassan (2007: 16) reported a significantly strong coefficient value of $r = 0.803$ ($p < .001$). Despite this study reporting robust results, it involved a non- manufacturing sector in Asia. In addition this study paired innovation with other dimensions of CE, neglecting its effect on financial performance of manufacturing firms moderated by HBE. On the basis of this assertion, we contend that HBE moderates the relationship between the innovation of the manufacturing firm and its financial performance. Consistent with this logic, it is hypothesised that:

H01: HBE moderates the relationship between innovation and financial performance of the manufacturing firms

2.3 Relationship Between Innovation and Financial Performance of Manufacturing Firm

2.3.1 Innovation as a Predictor

Innovation is generally defined as conceptualization of new commodities (or a greatly improved commodities), but also as the successful bringing of new commodities to the market (Cakar & Erturk 2010; Schumpeter 1934). Innovation also connotes process of production, which is the implementation of a new or significantly improved production or delivery method; and organizational changes, which is the creation, or alteration of the structures practices and models, management of staff and improving product design (Trott 2012). Accordingly, the firm's innovation capability is the ability to mobilize the knowledge, possessed by its employees (Kogut and Zander 1996), and combine it to create new knowledge, resulting in product and/ or process innovation. It is recognized as well that competitive advantage can be acquired with a high quality workforce that enables firms to compete on the basis of quality and innovation.

Innovation capability is one of the most important dynamics that enables firms to realise high levels of competitiveness both in the national and international market. Thus, how to promote and sustain an improved innovation capability should be the key focus area of the top managers of firms (Cakar & Erturk 2010). Drucker (1985) argues that innovation is the heart of entrepreneurship. An organizational wide entrepreneurial spirit to cope with and benefit from rapidly changing market place conditions would be possible only if sustainable innovative undertakings are established. When these organizational initiatives are supported and coordinated within the firm, the outcomes are gained as sustainable competitive advantage through innovation in the form of new products, services or combination of these (Hornsby et al. 2002; Brentani 2001; Quinn 1985; Schumpeter 1934).

Traditional explanation for the positive relationship between firm level innovativeness and firm performance rests on Schumpeter's work (1934). He argued that innovative new products when first introduced to the market face limited direct competition and as a result, allow firms to enjoy relatively high profits. Overtime, these high profits are likely to erode due to limitation and competition but firms that continue introducing innovative new products may be able to achieve high profitability for sustained period (Atalay, Anafarta & Sarvan 2013). Like many scholars, Varis and Littunen (2010) argue that the ultimate reason for firms to engage in innovativeness activities is to improve firm performance and success. For a manufacturing firm to be competitive it needs to engage in various types of innovation. These are product, process and organizational innovation and financial performance (Trott, 2012).

Product innovation is the introduction of the product that is new or significantly improved with respect to its characteristics or intended uses (Atalay, Anafarta & Sarvan, 2013). This involves significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics (for example, replacing inputs with materials with improved characteristics, environmentally friendly plastics and others). Roberts (1999) examined the effects of product innovativeness on sustainable profitability of firms with longitudinal research in the United States pharmaceutical industry. He discovered support for the expected relationship between high product innovation propensity and sustained superior profitability.

Process innovation refers to implementation of a new or significantly improved production or delivery method (Trott, 2012). This includes significant changes in techniques, equipment and/ or software (for example, installation of new or improved manufacturing technology such as automation equipment or real- time sensors that can adjust processes, computer aided product development). In their studies of Turkish manufacturing firms in different industries, Gunday et al. (2011) discovered a positive effect between process innovativeness and financial performance of the firms. Consequently, new production process enable the firm take little time to produce large quantity of products which can be sold which in turn lead to high profits.

Organizational innovation is the implementation of a new organizational method in the firm's business practices, firm organization or external relations (Trott, 2012). Organizational innovations can be intended to increase a firm's performance by reducing administrative costs or transaction costs, improving workplace satisfaction costs, improving workplace satisfaction (and thus labour productivity) gaining access to non trade able assets (such as non codified external knowledge) or reducing costs of supplies (for example, first- time introduction of management systems for general production or supply operations, such as supply chain management, business re engineering, lean production and quality management system). Many studies have discovered a positive association between organizational innovativeness and financial performance (see Atalay, Anafarta & Sarvan, 2013).

2.3.2 Financial Performance as a Criterion

A firm's financial performance and operations are integrally related. Studies have shown that, the concept of firm's performance is multidimensional in nature (Aktan & Bulut 2008; Wiklund & Shepherd 2005). Within firm performance, the focus has always been on the financial side; hence it is traditionally defined in financial terms. In addition, shareholders, investors and other stakeholders are interested to get information about the firm's performance

conditions frequently. Financial performance information (return on equity, return on investment, sales growth and profitability) is the most extremely explicit and valid information among the other performance dimensions (Zhao et al., 2011). On the other hand financial information should also be available particularly for regulatory and supervisory bodies for auditing the certain fiscal issues and taxations. The extent to which this financial information should be disclosed depend upon firms' features, that is, being private or public character of the firm, its size, or the firm's being quoted or unquoted.

Financial performance is the firm's ability to generate new resources from day to day operations over a specific period of time (Peterson & Peterson, 1996). Broadbert and Cullen (2005); Kaplan and Norton (2000) opine that the financial performance measures can be divided into two major forms. The traditional measures which are based on accounting/ financial data (the effect of actions on one year's profit return on equity and return on investment), which reflects a firm's past financial performance, and on the market based measures derived from stock market values (Economic Value Added and Market Value Added approaches), which are based on valuation principles. To test the financial performance effects of innovativeness, the performance measurement scale of this research was adapted from the frequently used traditional financial criteria.

Successful entrepreneurial accomplishments will inevitably affect the firm's financial performance in the long run, barely in the short run; there might be no association among innovativeness and firm's financial performance criteria due to project investments and firm's internal resource usages or possible losses (Aktan & Bulut, 2008; Hayton, 2005). Thus, the first signals of successful entrepreneurial accomplishments may be obtained from marketplaces, sales growth and market share. Then, in the long run, these improvements in the competitive position in the marketplace may create higher financial returns as the outcomes of innovativeness. Therefore, more than one criterion, that is, sales and profit were used to reveal the measures of financial performance of manufacturing firms.

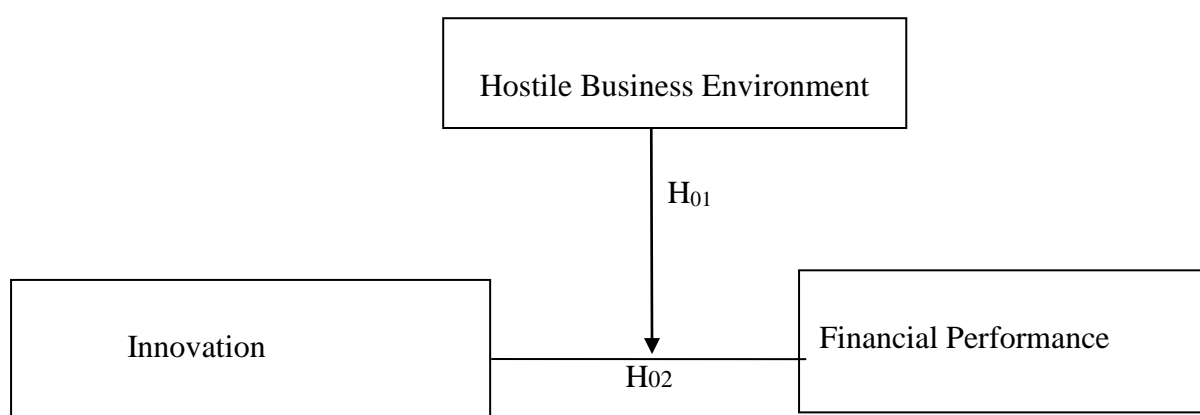
Some pro- entrepreneurship scholars have identified a link between innovativeness and firm's financial performance. For instance, (Morris, Kuratko & Covin, 2011; Hisrich & Kearney, 2013; Antoncic & Hisrich, 2001; Stopford & Baden-Fuller, 1994) discovered that when firms use innovative products to target new market segments, it resulted in increased profitability for these firms. Firms such as Apple International Company, Microsoft, Coca Cola, and Sonny have been able to sustain high levels of performance by behaving entrepreneurially (Morris, Kuratko & Covin, 2011; Trott, 2012; Hisrich, Peters & Shepherd, 2009; Zain & Hassan, 2007; Drucker, 1985). In addition, Lumpkin and Dess (1996) assert that entrepreneurial

activities increase a firm's performance by increasing its commitment to innovation. This argumentation leads us to posit the following hypothesis:

H02: Innovation affects financial performance of the manufacturing firms

Figure 1 displays the hypothesised conceptual framework of moderating effect of HBE on the relationship between innovation and financial performance of manufacturing firms.

Figure 1: Hypothesized Conceptual Framework



3. DATA AND METHODS

3.1 Data Collecting Procedure and Sample

The data used in this study was gathered from 200 manufacturing firms based in Nairobi County identified by sampling technique of simple random sampling where each respondent has equal chance of being selected. The choice of manufacturing sector is based on two premises; first, it is the leading economic sector in Nairobi, Kenya (Kenya, 2014) and its entrepreneurial behaviour is of great concern. The study adopted ex post facto design which investigates possible cause and effect relationships by observing an existing condition or state of affairs and looking back in time for valid causal factors (Kerlinger & Lee 2000). Primary data, including innovation, HBE and financial performance, was gathered using a questionnaire. A total of 200 questionnaires were administered to 200 top managers of manufacturing firms who were considered to be the best able to understand the moderating effect of HBE on the relationship between innovation and financial performance of manufacturing firms under consideration in the study for 20 days. 186 respondents replied, which is 93 percent of response rate. Such a

response is considered statistically sufficient to give a reliable estimation of the population parameters (Zain & Hassan 2007)

The biographic data have shown that 32% came from food and beverages, nearly 80% of the firms have been in business for more than 10 years, 38.7% of firms market their products regionally, 71% of the top managers were males, 46.8% of managers were between 41 to 50 years old and 76.9% of the managers had attained degree level of education.

3.2 Measures of Constructs

Constructs were measured with dimensions adapted from the entrepreneurship proponents such as Lumpkin and Dess (2001); Barringer and Bluedorn (1999); Covin and Slevin (1989); Miller (1983); Khandwalla (1987) as well as those generated from the literature of entrepreneurship. All items were measured on a five point Likert- type scale where 1 = strongly disagree and 5 = strongly agree. Mean scales scores were calculated for all measures. We used the Cronbach's alpha to estimate reliability for scales. A total of 15 items were used in which 5 items measured innovativeness, 4 items measured HBE and 6 items measured financial performance of manufacturing firms. The financial performance scales were created from the existing literature and chosen among the most frequently used financial criteria, which are return on sales and profits. Financial performance of firms within the presiding two years was measured using five point scales, which were anchored at much worse than previous year (= 1) and much better than previous year (= 5).

4. ANALYSIS AND RESULTS

4.1 Reliability Tests, Factor Analysis and Correlations

The scales were submitted to factor analysis in which out of 25 items, 15 items (5 for innovation, 4 for HBE, 3 for sales and 3 for profit) loaded to each other, and showed strong validity for such a measurement model, with the Goodness of Fit Index (GFI) = .94, Confirmatory Factor Index (CFI) = .96; Normed Fit Index (NFI) = .95). Factor loadings are depicted in Table 1 below.

Table 1: Factor Loadings for Innovation, Hostile Business Environment and Financial Performance Constructs

Items	Factor Loadings
Innovation	
Developing new types of product	.537
Frequently trial of new techniques of manufacturing products	.514
Firm is creative in the methods of operation to reduce the time of production	.567
Investing in developing appropriate technology to produce high quality goods	.715
Carrying out product improvement always	.641
Hostile Business Environment (HBE)	
Firm adopts competitive pricing to enable its product fetch market	.789
Firm adopts a combination of marketing strategies to sustain customer loyalty	.787
Firm targets a certain niche of market through introducing new product to stay competitive	.628
Firm introduces new methods of packaging of products which attracts many customers	.516
Financial Performance	
Sales	
Innovative techniques of production has led to high quality and quantity of products that increases sales	.634
HBE make the firm to identify strategies to increase sales	.681
Innovative methods of operation that reduces the time of production has led to the decrease in costs thereby realising profits	.729
Profit	
HBE make the firm to identify strategies to improve profits	.709
Decision to allow autonomous unit of production has led to a lot of sales being made	.844
Autonomous units created by firms produces more goods that led to high profits	.750

Significant at *** $p < .001$

The findings of factor analyses also give evidence for convergent validity of constructs regarding to significantly ($p < .01$) loadings of all items to respective latent factors. The principle component analysis (PCA) was utilized to test the discriminant validity. PCA showed that all constructs have been extracted to eight respected factors of factor analysis with the cut point of Eigen value 1. To test unidimensionality of scales, each construct were submitted to PCA individually and resulted with one factor. These findings gave evidence for the validity of the scales. Cronbach's alpha test was conducted for each of the construct to test for the reliability analyses. Table 2 reports the results of reliability test in which all the alpha coefficients are larger than expected value of .700 (Aktan & Bulut 2008). Furthermore, means and standard deviations of each construct were computed and discovered sufficient variance for further analyses. The findings demonstrated that the factor structure was valid and reliable to

test the hypotheses of the research. Before testing hypotheses of the study, correlation analysis was conducted between types of innovativeness and financial performance constructs. The findings of descriptive statistics, correlations and reliability analyses are presented in Table 2 below.

Table 2: Correlations, Descriptive Statistics and Alpha Coefficients of Innovativeness, Hostile Business Environment and Financial Performance

Variable	1	2	3
1. Innovation	1.000		
2. Hostile Business Environment	0.058*	1.000	
3. Financial Performance	0.394***	0.234***	1.000
Observation (N)	186		
Mean	4.1849	4.0459	4.1573
Standard Deviation	0.4195	0.5929	0.4573
Alpha coefficient	0.7570	0.7200	0.8660

Note: Statistical significance * $p < .05$, ** $p < 0.01$, *** $p < 0.001$

4.2 Hypotheses Testing

To test the two hypotheses, $H01$: HBE moderates the relationship between innovation and financial performance of the manufacturing firms; and $H02$: Innovation affects financial performance of the manufacturing firms, hierarchical multiple regression (HMR) analysis in form of sequential approach and backward elimination was conducted. HMR has been applied in various researches involving moderating variable (Miller, 2011; Tang et al., 2010). The regression model used for the analysis is as follows:

$$F_{pj} = \beta_0 + \beta_1 In + \beta_2 He + \beta_3 (In * He) + \epsilon_i$$

Where dependent variable F_{pj} is financial performance of manufacturing firms in region j which is Kenya and independent variable In is innovation and moderating variable He is Hostile Business Environment. The intercept " β_0 " was the level firm's financial performance that was attributed to activities other than firm's innovativeness and HBE, β_1 , β_2 , and β_3 were coefficients or slopes of the independent variables. ϵ_i - Regression residual or error term and subscript i indexes a particular observation.

To test the fitness of this model, the first step involved regressing financial performance on innovativeness and lastly entering the HBE into the model. Preliminary analyses were conducted to ensure no violation of assumption of normality, linearity, homoscedasticity and multicollinearity. To achieve this, values of correlation coefficients and variance inflation

factors (VIF) were used. Table 2 shows correlation coefficients of innovativeness was $r = .394$, ($p < .001$) and HBE was $r = .234$ ($p < .001$). These coefficients are low, less than .900, implying that multicollinearity was unlikely to be a problem (Tabachnick & Fidell, 2007). VIF of innovation and HBE were below 10 indicating multicollinearity was also not an issue (Yang & Zimmermann, 2011). Absence of multicollinearity and statistical significance of correlations of financial performance of firms' variable against innovation and HBE enabled HMR to reliably carried out.

Table 3a and Table 3b present the findings of hierarchical multiple regression (HMR) analysis conducted in two steps. In the first step, HMR was conducted between financial performance of the firms and innovation. Table 3a reports the findings of the regression between financial performance and innovativeness, which represented model 1. The results yielded the coefficient of $F(1,179) = 55.143$ ($p < .001$) and the regression coefficient of $R^2 = .649$ ($p < .001$). These results denoted that the model was statistically significant and explained 64.9 percent of variance in financial performance. This indicates that the effect of innovation on financial performance is significant ($p < .001$). Furthermore, innovation construct was statistically significant with the beta value ($\beta = .185$, $p < .001$). This coefficient is positively associated with financial performance. The results suggest that the increase in management efforts results to the following; first, creativity in methods of operation to reduce time of production and investing in developing appropriate technology to produce high quality products; and lastly, more effort is put in developing new types of products and improving the those that already exist to enable higher sales.

The second step involved the entry of moderating variable, HBE, into the relationship between innovation and financial relationship. Table 3b shows the results of regression of financial performance of firms against the relationship between innovativeness and HBE that denoted model 2. The introduction of HBE variable explained additional 4.7 percent variance in the financial performance of the manufacturing firm after controlling for innovativeness variable with R^2 change = .047 and $F(1, 176) = 1.939$ ($p < .166$). After the addition of moderating variable, HBE, to the equation, there is a significant change by 4.7 percent in the explanatory power of regression coefficient and as such, the introduction of interaction term, HBE * Innovation, into the model has produced meaningful results. The introduction of interaction term changed the form of relationship between the predictor variable, innovativeness and dependent variable, financial performance of manufacturing firms. As a result, the innovation variable accounted for 69.6 percent of variances in the financial performance of manufacturing firms after introduction of HBE variable compared to 64.9 percent before the introduction of the

moderating variable, HBE. Consequently, the interaction term is a true moderator of since it changed the form of the relationship and the effect of predictor variable resulting in the improvement in the power of the multiple regression analysis (Kothari, 2012; Zain & Hassan, 2007; Aguinis, 2002). All the variables were statistically significant with innovativeness yielding a highest beta value of .670 ($p < .001$) and the interaction term, HBE * Innovativeness reporting a lowest beta value of .593 ($p < .001$). These findings denote moderately strong association among the variables hypothesised.

Thus the findings provide strong support for *H01*: HBE moderates the relationship between innovation and financial performance of the manufacturing firms, and *H02*: Innovation affects financial performance of the manufacturing firms.

Table 3a: Model 1-Effect of Innovativeness on Financial Performance of Firms

Variable	β	t- Test	p- Value	PCC	VIF
Constant	0.933	7.011	0.000		
Innovation	0.185***	3.827	0.000	0.144	1.378
Observation (N)	186				
R Square	0.649***		0.000		
Adj. R Square	0.637***		0.000		
F- Value (1, 179)	55.143***		0.000		

Note: Statistical significance * $p < .05$, ** $p < 0.01$, *** $p < 0.001$

Table 3b: Model 2-Effect of Innovativeness on HBE and Financial Performance of Firms

Variable	β	t- Test	p- Value	PCC	VIF
Constant	0.946	3.614	0.000		
Innovation	0.670***	3.602	0.000	0.263	1.290
HBE	0.593***	2.754	0.007	0.203	1.825
Interaction Term					
HBE * Innovation	0.129***	2.264	0.025	0.169	1.879
Observation (N)	186				
R Square	0.696***		0.000		
Adj. R Square	0.679***		0.000		
F- Value (3, 175)	40.060***		0.000		

Note: Statistical significance * $p < .05$, ** $p < 0.01$, *** $p < 0.001$

5. DISCUSSION AND IMPLICATION

One of the core issues in the manufacturing firms is to establish why firms operating in the same industry experience diverse levels of financial performance (Tang et al., 2010). When applied to the entrepreneurial setting, the issue can be re framed to examine why entrepreneurial firms are able to enjoy heightened levels of firm financial performance. One of the cardinal features of entrepreneurial firms is their willingness to innovate in a hostile environment and exploit environmental opportunities in order to outcompete rival firms (Lumpkin & Dess, 2001). By moderating the relationship between innovation and financial performance of manufacturing firms with HBE we were able to offer important insights into this puzzle.

The research generates a few theoretical implications. Firstly, these results support the theoretical and empirical research findings on the effect of HBE on the relationship between innovativeness and financial performance of manufacturing firms by Stenholm (2011); Zain and Hassan (2007); Antoncic and Hisrich (2001). The point of distinction is that the innovativeness constructs and HBE in this study denotes lower explanatory power (69.6 percent) compared to theirs, which indicated regression coefficients to be above 80 percent. Secondly, the results of this study extended the literature further by showing that the manufacturing firms in Kenya could benefit from performance when being innovative in the hostile environment. Finally, this study broadens the factors that affect financial performance of the manufacturing firms in an attempt to contribute and to organise the large body of academic literature on innovativeness and HBE. The principal challenge to proponents of entrepreneurship research is to identify the innovative processes that lead to various forms of innovation in HBE, and then theoretically predict and empirically verify the forms of this phenomenon that produce the best results for firms in various business and industry contexts.

A number of practical or managerial implications could also be derived from this study. Firstly, it appeared that innovation is a vital element for manufacturing firm's financial performance in HBE. Therefore, managers of enterprises should seriously consider innovation as an effective tool for enhancing financial performance manufacturing firms in HBE. Lastly, the growing significance of financial performance of firms in current world, demands the managers to identify innovation types of their workers so that they can differentiate those who are innovatively inclined from those who are not in HBE.

6. CONCLUSION AND RECOMMENDATIONS

This study utilized entrepreneurship- performance relationship theory to establish the effect of moderating effect of HBE on the relationship between innovativeness on financial performance of manufacturing firms. Data collected from 186 firms discovered that that the moderating variable, HBE, had a strong and positive effect on the relationship between innovation and financial performance of manufacturing firms as well as those of innovation on financial performance of manufacturing in Kenya. Therefore it is concluded that HBE moderates the effect of the relationship between innovation and financial performance of manufacturing firms in Kenya. On the basis of these findings the paper recommends that managers and entrepreneurs of manufacturing firms as well as academicians and policy makers should understand the roles of HBE and its effect on moderating the relationship between innovation and financial performance of manufacturing.

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