The Role of Risk-taking on Performance of Firms on Nigerian Stock Exchange

1Mr Olawoye Olaniran, 2Professor G .S. Namusonge, 3Dr Willy Muturi

1 PhD Entrepreneurship Student at Jomo Kenyatta University of Agriculture and Technology ( JKUAT), Kenya
2 Dean, School of Entrepreneurship, Procurement and Management, JKUAT, Kenya
3Chairman, Dept of Economics, Accounting and Finance, JKUAT, Kenya

ABSTRACT

This paper examines the role of risk-taking on performance of firms on the Nigerian Stock Exchange. The paper is designed to look at the role of risk-taking on performance of firms on the Nigerian Stock Exchange. The paper took critical interest in the contents of a number of studies which concluded that among Nigerian managers, lack of innovation and pro-activeness, aggressiveness, aversion to risk-taking, which are critical factors for growth of SMEs, were found to be high in 2007. The target population is 176 firms listed in the Nigerian Stock Exchange with financial returns as at August, 2014. Out of the population, a sample of 60 firms was taken. Methods of statistical analyses include mean, standard deviation, and Pooled, Random and Fixed regression models based on the preferences suggested by the Hausman specification test results. The results of panel analysis of the relationship between Entrepreneurial Orientation dimension – risk-taking, and performance of firms listed on Nigerian Stock Exchange, with returns on assets and returns on equity as proxy showed a negative relationship between risk-taking and returns on assets and risk-taking and returns on equity. This result confirms a study conducted in 2007 in Nigeria on 88 SMEs earlier mentioned. And, it also negates the outcome of a study carried out among Kenya’s manufacturing firms operating under the EAC in 2012, which showed that there existed a positive relationship between entrepreneurial orientation adoption and firm performance. Risk-taking was found to have negative relationships with both returns on assets and returns on equity. The implication of this study result is that, in Nigeria, entrepreneurial orientation dimensions such as risk-taking has been widely adopted and practised, but it was yet to relate to ROA and ROE positively.

Keywords: Risk-taking, , Listed Firms, Firm Performance, Nigerian Stock Exchange.

INTRODUCTION

In a dynamic, fast-changing, and intense worldwide competitive environment of today, the importance of entrepreneurial orientation (EO) is manifest in its rapid diffusion throughout the strategy literature (Corbo, 2012; Carton, 2004; and Rauch el la, 2009, Soininem, et al, 2013). Different strategic orientation of businesses such as market, customer, learning, technology and EOs have gained considerable attention from both management and management scholars (Hakala, 2011).

Entrepreneurial orientation represents strategy making processes that provide organizations with a basis for entrepreneurial decisions and actions (Rauch and Wiklund, 2009). It encompasses specific organizational-level behavior to perform risk-taking, self-directed activities, engage in innovation and react proactively and aggressively to outperform the competitors in the marketplace and hence enhances firm performance (Lumpkin and Dess, 1996; Hakala, 2011). The academic interest in entrepreneurship has virtually exploded in recent years, especially in developing economies of the world including Nigeria. For example, (Rauch, 2014; Covin Green, 2006) averred that the number of studies on EO and performance increased more than five-fold in the past decade compared to the previous one. At the same time, the field is struggling with establishing a common body of knowledge. Does the concept represent a promising area for building such a body of knowledge? Controversies and conflicting results on how it relates to performance and the dimensionality of the construct hampers further development. Moreover, moderators have not yet been sufficiently emphasized in literature. This situation-controversy,
different results, lack of research on moderators, conceptual imprecision, and a substantial number of empirical studies suggest that meta-analysis is a promising way forward and a natural next step (Soininen, 2013).

In a study carried out on Malaysia public enterprises by Sumon, et al (2010), the researchers agreed with Wiklund (1999) who stated that Scholars and practitioners often associate the entrepreneurial orientation (EO) of a firm with private owned business entities. Within the context of organizational entrepreneurship, research shows that EO of a firm has a significant relationship with its performance (Wiklund, 1999). EO is the demonstration of a firm’s innovativeness, proactiveness and risk-taking (Covin and Slevin, 1989). On the other hand, the overall performance of public enterprises in Malaysia continues to be a major concern. Perhaps, the underperformance of these enterprises is due to low degree of their entrepreneurial orientation. Innovativeness portrays organizational willingness and a tendency to achieve the desired innovation demonstrated in terms of behaviors, strategies, activities and processes. As a consequence, innovativeness usually result in new products/services or changes in service/product lines, developing new R&D processes, new methods of production, developing new systems/applications or introducing as well as implementing new procedures. Accordingly, the impact of organizational innovativeness on its performance. Accordingly, the impact of organizational innovativeness on its performance depends on the degree of innovation that is being pursued. It has been argued that more substantial and radical types of innovation tend to have a significant impact on organizational overall performance, while incremental innovation seems to have a low and short term impacts because such innovation usually concentrate on minor or process improvement initiatives or activities. Given this, when there is a major disruption occurs, organizations concentrating too much on incremental innovation initiatives may find themselves less competitive and lack of sustainability.

Traditional EO theory incorporates three core dimensions: risk-taking, pro-activeness and innovativeness (Covin & Slevin, 1989, Sumon, et al,2012). The extent to which an organization is entrepreneurial, in the sense of taking risks and creating new products, manufacturing techniques and markets (Schumpeter, 1934), has been found to have significant and beneficial consequences for the performance of a large variety of western firms (Rauch, Wiklund, Frese & Lumpkin, 2009) and business units (Wales, Monsen & McKelvie, 2011).

As is well known, these are often but not always embedded within business groups, and may have a significant degree of family control ( Khanna & Yafeh, 2005, Sumon, et al, 2012). The analysis of the relationship between EO and the performance of firms in this context enables us to provide a point of comparison with “western” EO strategies (e.g. Miller & Le Breton Miller, 2011).

Hence, bricolage – combining existing knowledge to match specific needs and conditions – may supplement innovation as the key driver of business performance in these business contexts. Relying more heavily on pro-activeness, the third element of EO, may more than substitute for the weaker impact of innovativeness in eastern emerging markets. When considering corporate strategies in eastern emerging market firms, one must also take into account the greater variety of ownership arrangements compared with western economies, most significantly the widespread prevalence of business groups as well as conventional independent private firms and state owned ones.

In a study on changing world of Business in South Africa, Petzer (2012) stated that “In the African regulatory environment, financial institutions are much more exposed to scrutiny and regulations than ever before, and this is said to inhibit the development of entrepreneurial orientation and consequently hinders that performance of corporate firms.

In another study in South Africa, ( Kroop, et al 2006) discovered that international entrepreneurial business venture performance is positively related to the innovative component of EO. And, exploring the entrepreneurial underpinning of low export involvement level of manufacturing firms in Nigeria, (Kelvin and Young, 2006) discovered from the study of a 78-firm representative sample that high export entrepreneurial firm are typically more innovative in developing export, less averse to exporting risk and have more proactive motivations for export. Investigations, however, show that majority of studies carried out in Nigeria are on the following areas: exports (Kevin, and Young, 2006), Kevin (2010). Entrepreneurial burnout (Shepherd et al, 2010) and the role of technology in firms’ performance (Prodromos et al, 2011).
However, available evidence shows that Nigerians are not lacking in EO traits. The Igbos in the East, commonly likened to the Kikuyus of Kenya, the Ijebus and the Ijesas of the South Western Nigeria have exhibited certain entrepreneurial traits over the years. For example, the Ijesas are regarded as the ‘Osomaalos’ of Nigeria. The appellation was initially a term of abuse to characterize the aggressive Ijesa textile traders (Aluko, 1993 and Namusonge, 1998). The word ‘Osomaalo’ is tied to the process of debt collection by the traders. It simply means ‘I will not sit down until I have collected my money’, showing an inflexible determination to succeed in the face of all odds. It also be interpreted as ‘I will not allow bad debts to cripple my business’. So, undoubtedly, this posture constitutes a form of aggressiveness and pro-activeness, which are components of Entrepreneurial Orientation.

According to Campos et al, (2013), firms with higher Entrepreneurial Orientation (EO) perform better, however, an important message from past research efforts is that this relationship is more complex. The notion that the relationship between an EO and performance is different for many types of businesses, especially small business, is not new. There are two explanations for these inconclusive results: the performance implication of EO is context-specific and the relationship between EO and performance is moderated by internal factors.

In a study of 164 small businesses in Mexico, Campos, et al (2013) discovered that performance was positively influenced by its EO, but the findings also indicate that time orientation moderates the relationship. The EO-performance link is stronger for long-term orientation than for short-term orientation. Campos et al, 2013 concluded their study by stating that it is necessary to continue the study of EO and its peculiarities in the small businesses context because these businesses acquire certain peculiarities that distinguish them from the large company. The internal contingent factors may be helpful to better understand the relationship between EO and firm performance. This work was supported by the concept of dominant logic, which in the context of a small business is essential. In the same vein, through the concept of dominant logic, future research can contribute to a greater understanding in regard to decision making within a company. This in turn could generate benefits for both theory and practice. Quoting Miller (1983), Campos et al, 2013 agreed that there are three dimensions of EO that have been used consistently in the literature: innovativeness, risk taking and pro-activeness. Lumpkin and Dess, (1978) added aggressiveness and pro-active posture as components of EO.

The Nigerian Capital market represents the arm of the Nigerian financial system that is responsible for the listing, supervision and management of business in Nigeria. It came into existence in 1960 under the nomenclature of Lagos Stock Exchange (LSE) and later came to be known as the Nigerian Stock Exchange (NSE) in December 1977. NSE began operations in 1961 other branches that were later opened include: Kaduna (1978), Port Harcourt (1980), Kano (1989), Onitsha (February 1990), Ibadan (August 1990), Abuja (October 1999), Yola (April 2002), Benin (January 2005), Uyo (2007), Ilorin (2008), and Abeokuta (2008). The NSE continues to evolve to meet the needs of its valued customers, and to achieve the highest level of competitiveness. With about 200 companies and 258 Securities listed, The Exchange operates fair, orderly and transparent markets that bring together the best of African enterprises and the local and global investor communities. The Nigerian Stock Exchange is currently championing the acceleration of Africa's economic development and poised to become ‘the Gateway to African Markets’.

THEORIES ON ENTREPRENEURSHIP

Schumpeter’s Theory

The theory of entrepreneurship innovation was propounded by Joseph Schumpeter (1949). According to him, entrepreneurs help the process of development in an economy, entrepreneurs are the people who are innovative, creative, and with foresight in a given community. Schumpeter went further and added that innovation occurs when the entrepreneur introduce a new product or a new production system, open a new market, discover a new source of raw materials or introduce a new organization in to the industry. He further stated that entrepreneurship is about combining resources in a new way such as introducing new products, new method of production, identify new source or source(s) of raw materials/inputs and setting a new standard either in the market or the industry that alters the equilibrium in the economic system. However, Schumpeter’s entrepreneurs are, essentially, large scale businessmen/ women which are common in the advanced economies. The class of
entrepreneurs common in developing countries are entrepreneurs who needs to imitate, rather than innovate to survive.

**McClelland’s Theory**
The theory of high achievement motivation was propounded by McClelland. Here, he identified two characteristics of entrepreneurship, namely; (1) Doing things in a new and better way and (2) Making decisions under uncertainty. He stated further that people with high achievement motivation were likely to become entrepreneurs. That these people are not influenced by money or external incentive, but consider profit making in any venture as a measure of success or competency. Achievement motivation can be measured by the achievement motivation inventory which is a drive that is developed from emotional state. One may feel to achieve by get striving for success and avoiding failure. Another theory developed by McClelland was the theory of Acquired Needs motivation. He categorized a person’s needs into three; (1) Need for Achievement- success with individuals own effort (2) Need for Power- need to dominate and influence others, and, (3) Need for Affiliation -to maintain friendly relations with others. McClelland concluded by stating that the need for achievement is essential for successful new entrepreneurship.

McClelland also carried out an experiment which is popularly known as Kakinada findings. The study was conducted in an industrial town in Andhira Pradesh between January and March 1964. In that study, young adults were selected and put through three months training program at Small Industry Extension Training Institute (SIETI). The program was designed to induce achievement motivation in them. The program subjected the trainee to control their thinking and talk to themselves positively, imagined themselves in need for challenge to succeed, set planned and achievable goals, strive to get concrete and frequent feedback and imitate their role model. the experiment revealed the following results (1) Traditional belief do not inhibit an entrepreneur or destroy entrepreneurial orientation (2) Sustainable training can supply the required motivation to an entrepreneur (3) Achievement motivation has a positive impact on performance of participant. The general conclusion was that it was the Kakinada studies that made people realize the importance of EDP-Entrepreneurial Development Program.

**Risk-Taking-Performance Model**

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<th>INDEPENDENT VARIABLES</th>
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<tbody>
<tr>
<td><strong>RISK-TAKING:</strong></td>
<td><strong>FIRM PERFORMANCE:</strong></td>
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<tr>
<td>Monetary Risk</td>
<td>Returns on Assets (ROA)</td>
</tr>
<tr>
<td>Social Risk</td>
<td>Returns on Equity (ROE)</td>
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<td>Psychological Risk</td>
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**Risk-Taking**
The concept of risk-taking has been long associated with entrepreneurship. Early definition of entrepreneurship centered on the willingness of entrepreneurs to engage in calculated business risks. Lumpkin and Dess (1996), Oscar, et al, 2013 identified venturing into the unknown as a
generally accepted definition for risk taking, though may be difficult to quantify. This is because, in addition to monetary risk, it typically entails psychological and social risks (Gasse, 1982; Lumpkin and Dess, 1996, Oscar, et al, 2013). Recent research indicates that entrepreneurs secure higher on risk-taking than do non-entrepreneurs, and are generally believed to take more risks than non-entrepreneurs because the entrepreneur faces a less structured and a more uncertain set of possibilities (Bearse, 1982, Oscar, 2013).

Risk taking is also perceived as tendency towards risky projects (Miller 1983, Covin and Stevin, 1988, Mario, 2013). It was expected that firms that have better performance would also have a higher level of risk propensity (Leko-Simic and Horvat, 2006, 2013). These authors further emphasized that risk-taking propensity can be defined as a tendency to take or avoid risks and it is viewed as an individual characteristic. The positive relationship between risk-taking propensity and risk decision making by individuals is expected to translate to organizations through top management teams. Although there are many ways of conceptualizing risk, Forlani and Mullins (2000) cited in Kropp et al, 2005, Oscar, et al, 2013 described entrepreneurs perception of risk as the uncertainty and potential losses associated with outcomes which may follow from a given set of actions or behavior. Risk taking depends on risk propensity and risk perception. That is, the higher the risk propensity, the lower the anxiety over risk or risk taking.

Landes (2012) identified three types of risks, namely social or market risk (i.e the risk which occurs when a market crash or decline crushes the performance of investment even when the quality of the investment remains the same). Monetary risk- usually the resultant effect of inflation as a phenomenon: Inflation reduces the value of money, that is, the purchasing power of money, making firms to expend more money in production, distribution of their products or services, and consequently impact the level of profits negatively, while psychological risk, is a risk associated with debtors’ inability to fulfill or honor their repayment obligations, thereby impair the liquidity position of the firm and consequently its performance. Risk-taking also connotes a tendency to take bold steps such as venturing into unknown and new market as stated by Lumpkin & Dess, 2001, Wiklund & Shepherd, 2005. It can also be associated with willingness to commit large amount of resources to a project which the probable cost and chances of failure are high (Keh, et al, 2007, Baker and Sinkula, 2009).

Firms that adopt EO are often characterized by high risk taking behavior such as taking on large debts or making large resources commitment to projects with a view to make huge returns based on available opportunities. In seizing opportunities in the marketplace, risk-taking concerns firms’ tendency to take bold actions such as venturing into unknown markets, committing a substantial amount of resources to ventures with uncertain outcomes, as well as the tendency to borrow heavily hoping to reap high returns (Dess et al., 2007, Etebang, 2010). They go on to posit that managers and organizations are confronted with three types of risk, namely: Business risk-taking (i.e. venturing into the unknown without knowing the probability of success). Financial risk-taking (i.e. when a company needs to borrow heavily or commit a large portion of its resources in order to grow). Personal risk-taking (i.e. the risks that an executive assumes in taking a stand in favour of a strategic course of action). Therefore, in pursuit of organizational innovation, strategic renewal and venturing efforts as part of organizations’ growth strategies, organizations may follow the risk-taking path by making decisions and taking action in the context of uncertainty as well as making substantial resource commitments without knowing what the consequences of their decisions and behaviors will be. The standard view is that risk-taking is one of the three key elements of EO, and one that enhances company profitability (Miller, 1983; Miller & Le Bruton-Miller, 2011). It is associated with the willingness of managers to act in a bold and decisive manner in the face of uncertainty. However, we would argue that this plays out somewhat differently in eastern emerging markets. Deficiencies in capital markets and more generally absence of efficient institutions that reduce transactions costs (Khanna & Yafeh, 2007. Wong,2012) mean that, while potential entrepreneurial gains can be high, the downside risks are high as well because the firm is less able to draw on external finance in case of temporary shocks to cash flow resulting from following risky strategies.

Moreover, these downside risks are relatively higher than in western market economies because of the absence of well-functioning insurance markets and associated financial products. This prevents eastern companies from hedging these risks. In addition, India, for example, despite growth in the foreign exchange and interest rate derivatives market, is by global standards it is still in its nascent
stage (Gopinath, 2010). It has been confirmed in prior studies that firms which are strong in innovation are more likely to introduce new and better products ahead of their competitors and enjoy product advantage (Ledwith and O’Dwyer, 2008; Li and Calantone, 1998). However, this advantage does not stem simply from meticulously planned innovation; the boldness of the firm to take the risk by breaking new ground in product development plays a decisive role in securing the advantage. Risk-taking, as a corporate-level phenomenon, is defined as “the degree to which managers are willing to make large and risky resource commitments – i.e. those which have a reasonable chance of costly failures” (Miller and Friesen, 1978, p. 923). Risk-taking is an essential element of EO and scholars generally believe that risk always exists in conjunction with innovation if the innovation is to be effectual (Dess and Lumpkin, 2005; Stam and Elfring, 2008).

While risk is inherent to innovation as market potential of innovative products is highly uncertain; risk-taking brings about innovation because without risk, innovation is unlikely to happen (Sethi and Sethi, 2009). Studies revealed that the failure rate of innovation attempts could be as high as 50 percent (Nakata and Sivakumar, 1996; Wong and Tong, 2012). However, entrepreneurial firms were not intimidated by the high risks involved and may devote up to one-fourth of their profits to the products developed in the most recent five years (Takeuchi and Nonaka, 1986).

Methodology

The target population is 176 firms listed in Nigerian Stock Exchange with financial returns as at August, 2014. Out of the population, a sample of 60 firms were selected. Secondary data collection instruments were applied on the sampled firms. Tools used in the analysis included statistical mean, standard deviation and regression coefficient obtained from pooled, random and fixed model based on the result of Hausman specification test.

Analysis and Findings

This subsection deals with the distribution of sampled firms based on the number of times they undertake or adopt components of Risk-taking during the period covered by this paper. The table below reveals that only 2 firms or (3.3%) did not take monetary risk but others-58 firms or 96.67% took risk for a period ranging from 3 to 9 years. Only 2 firms or 3.3% did not take social risk, while 58 firms (96.67%) took the risk for a period ranging from 3 to 9 years. Only 2 firms were also found not to take psychological risk during the period under review while the rest-58 firms or 96.67% took psychological risk for a period ranging from 3 to 9 years.

<table>
<thead>
<tr>
<th>RISK TAKING</th>
<th>PR</th>
<th>RR</th>
<th>FR</th>
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<tbody>
<tr>
<td>Monetary Risk</td>
<td>2(3.3)</td>
<td>2(3.3)</td>
<td>2(3.3)</td>
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<tr>
<td>Social Risk</td>
<td>2(3.3)</td>
<td>2(3.3)</td>
<td>2(3.3)</td>
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<tr>
<td>Psychological Risk</td>
<td>2(3.3)</td>
<td>2(3.3)</td>
<td>2(3.3)</td>
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Role of Risk-Taking on ROA

The table below shows a positive and significant relationship between firm’s aggressiveness and firm performance among Nigeria’s listed firms. Using fixed regression model and with ROA as proxy, an increased effort on risk-taking would lead to 0.5% decrease in ROA or a decrease of 8.1% in ROE. This is certainly a dis-incentive to management in its effort to take risk.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>PR</th>
<th>RR</th>
<th>FR</th>
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<tbody>
<tr>
<td>Risk-taking</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.005</td>
</tr>
<tr>
<td>Constant</td>
<td>0.427</td>
<td>0.434</td>
<td>6.287**</td>
</tr>
<tr>
<td>R2</td>
<td>0.004</td>
<td>0.025</td>
<td>1.824</td>
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Role of Risk-taking on ROE

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<th>VARIABLE</th>
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<tbody>
<tr>
<td>Risk-taking</td>
<td>0.022</td>
<td>0.021</td>
<td>-0.018</td>
</tr>
<tr>
<td>Constant</td>
<td>0.427</td>
<td>0.434</td>
<td>6.287**</td>
</tr>
<tr>
<td>R2</td>
<td>0.004</td>
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DISCUSSION AND IMPLICATIONS

This paper is a quantitative investigation in respect of the relationship between firms risk-taking efforts and performance of firms on Nigerian Stock Exchange (NSE). The objectives of the paper was specifically, to establish the role of risk-taking on performance of firms on Nigerian Stock Exchange; This paper sought to answer the question of what is the relationship between firms risk-taking efforts and performance in the context of listed firms in Nigeria. The components of risk-taking include: Monetary risk, Social risk and Psychological risk. As noted by Osoro (2012) that certain learning related factors did potentially contributed to shaping EO and contribute significantly to increase in firms earnings in Kenya, this study however discovered that in Nigeria, there is a negative relationship between risk-taking and ROA, and between risk-taking and ROE. This finding negates Otieno (2012) findings among manufacturing firms operating under the EAC (East African Community) in Kenya, where there existed a positive relationship between EO adoption and performance of those firms in terms of sales, profits, and employees. The result also confirms Adegbite and Abereijo (2007) study which concluded that EO was at infancy stage among Nigerian firm managers and entrepreneurs.

CONCLUSION

As concluded by Ebingina (2012) entrepreneurship development especially innovation and aggressiveness in Nigeria is at the peak of awareness, creation and participation by the people, the organized private sector and government at all levels. Policies of government should shift to address the problems of infrastructural decay and finance. The problem of power supply is still very much an issue while credit framework via micro-financing banks should be put in place to assist entrepreneurs with soft loans when still in their infancy. Innovation by Nigerian entrepreneurs brings about technical progress through capital-saving, efficient production techniques and higher levels of output or economic growth. These entrepreneurs stimulate growth in various enterprises and industrial organizations. However, Nigerian entrepreneurs still face problems and challenges in their struggle for innovation and technical progress.

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