

Entrepreneurial Innovation and Risk Taking On Firm Performance: Empirical Evidence from Entrepreneurial Enterprises in Ghana

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ABSTRACT: Purpose – The theme of this paper is entrepreneurial innovation and risk taking. Precisely, the paper has twofold objectives: to investigate the effect of innovation on firm performance and: to explore influence of risk taking on entrepreneurial firm performance

Design/methodology/approach – A quantitative survey was conducted with a total of 250 entrepreneurs participating in this survey.

Findings – The results suggest that innovation has a significant positive effect on firm performance. Furthermore, risk-taking also has a statistically significant influence on firm performance.

Research limitations/implications – The study just focused on only the entrepreneurial businesses in the capital city. Future explorative studies in a similar vein may be executed through channels of national and local development agencies to capture other entrepreneurial business.

KEYWORDS: Entrepreneurial Orientation, Entrepreneurship, Innovation, Risk Taking, Firm Performance.

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I. BACKGROUND OF STUDY

In the last decades, entrepreneurial issues have impaired the global interest, due to the phenomenon's focus on new firm creation and its regional and national vital positive outcomes, highlighted by the economic approach (Ács, & Naudé, 2013). In a world and an environment where there are a rapid change and shortened product and business model lifecycles, the future profit streams from existing operations are uncertain and businesses need to constantly seek out new opportunities and strategies. Today's business environment is repeatedly described as complex and uncertain (Dhaliwal, 2016).

According to Arisi-Nwugballa, Elom, and Onyeizugbe, (2016), this can place emerging young firms in vulnerable positions by compromising their ability to compete against established competitors. With such complexity in conducting business transactions, entrepreneurial orientation (EO) can be regarded as a crucial factor to ensure the success of a business which means that firms need to force and look for new opportunities.

Research indicates that high growth, particularly in young firms, is an especially significant contributor to the job, output, and productivity growth and that entrepreneurs act as a trigger head to give a spark to economic activities by his entrepreneurial decisions (Naudé, 2013). The business orientation philosophy of corporations is one of the main determinants for strategic activities and plans undertaken (Kask & Linton, 2013).

Strategic entrepreneurial orientation (EO) is deemed as an antecedent of business performance and growth (Nasri, & Zekovksi, 2014). EO has become a more important tool that equips start-up firms with flexibility, adaptability, and durability required for survival because most important characteristics of today's world are extensive changes, increased complexity, and competition (Chirani, Farahbod & Pourvahedi, 2013). EO has become a central concept in the domain of entrepreneurship that has received a substantial amount of theoretical and empirical attention (Covin, Greene, & Slevin, 2006). Consistent with Covin and Slevin's (1990) belief that EO represents a unidimensional construct, most studies for almost two decades have summed across all dimensions of EO to create a single variable hence viewing EO to be measured as unidimensional that is summing the different aspect into one singular scales for the dimensionality of the EO construct (Rauch, Wiklund & Frese, 2004).

In examining the entrepreneurial process, it is beneficial to identify the unique contribution of each sub-dimension of EO such that firms could seek the best combination to improve firm performance (Kreiser, Marino & Weaver 2002). Recognition of usefulness of each configuration of EO dimensions will be conducted by determining the importance of their usage in firm performance. Particularly over the last the decade, innovativeness and risk taking has turned into an striking area of study for researchers who have endeavored to

define, and investigate its performance impacts, especially due to its practical relevance. This study will be looking at two of the dimension and the effect in firm performance: innovativeness and risk-taking

II. LITERATURE REVIEW

2.1 ENTREPRENEURSHIP

Entrepreneurship has become one of the most popular areas of research in management studies. It has seen much publicity in recent years, for instance publicity in media and the number of events and awards that relate to entrepreneurship. In many parts of the world, it is quite common to read news articles where entrepreneurs are featured as a mysterious breed of people that start businesses turning something insignificant into something valuable or makes the impossible possible (The entrepreneurial dialogue, 2011).

An entrepreneur is a businessperson who not only conceives and organizes ventures but also frequently takes risks in doing so. Wong, Ho and Autio (2005) defines entrepreneurship as an activity that involves the discovery, evaluation, and exploitation of opportunities to introduce new goods and services, ways of organizing, markets, processes, and raw materials through organizing efforts that previously had not existed. This means that entrepreneurship, the entrepreneurial function can be conceptualized as the discovery of opportunities and the subsequent creation of new economic activity, often via the creation of a new organization.

2.2 The concept of entrepreneurial orientation

The construct of entrepreneurial orientation (EO) has been examined in a large stream of research. Tang et. al. (2008) proposed that entrepreneurial orientation (EO) refers to methods, practices and decision-making styles of managers or business owners of the firms which act entrepreneurially. However, according to Wiklund and Shepherd (2005), EO refers to the strategy-making processes that provide organizations with a basis for entrepreneurial decisions and actions.

Lumpkin and Dess (2001) also argue that EO refers to the processes, practices and decision-making activities that lead to new entries. They considered EO as a process construct, which is concerned with the methods, practices, and decision-making styles. This study, therefore, adopts Lumpkin and Dess's (2009) definition of an entrepreneurial orientation as the strategy-making processes that provide organizations with a basis for entrepreneurial decisions and actions used by the managers.

The construct of EO originates from Miller's (1983) work, in which entrepreneurial firms are defined as those that are geared towards innovation in the product-market field by carrying out risky initiatives, and which are the first to develop innovations in a proactive way in an attempt to defeat their competitors (Miller, 1983). EO can be viewed as a characteristic of organizations, which can be measured by looking at top management's entrepreneurial style, as evidenced by the firms' strategic decisions and operating management philosophy (Pratono, & Mahmood, 2015).

The specific dimensions of EO were introduced for the first time by Miller (1983). He identified the salient dimensions of EO as innovative, risk-taking, and proactive. More than a decade after Miller's work (1983), Lumpkin and Dess in 1996 proposed five dimensions of EO, namely: autonomy, innovativeness, risk-taking, proactiveness and competitive aggressiveness (Lumpkin & Dess, 2001). In other words, they added two additional dimensions, that is autonomy and competitive aggressiveness to complement the three dimensions proposed by Miller (1983). Lumpkin and Dess (2001) argued that, to be successful, a firm requires autonomy from strong leaders or creative individuals, without any restrictions from the firm's bureaucracy.

The other dimension, competitive aggressiveness, describes Lumpkin and Dess idea of beating competitors to the punch. It represents how firms respond to threats and not only seize opportunities as indicated by Miller's proactive dimension. Clearly, EO refers to the specific organizational level behavior to perform risk-taking, autonomous activities, engaged in innovation and react proactively and aggressively to outperform the competitors in the marketplace (Lumpkin & Dess 2001)

According to Lumpkin and Dess (2001) innovativeness reflects the tendency to engage in and support new ideas, novelty, experimentation and creative processes resulting in newness. Proactiveness reflects firm's actions in exploiting and anticipating emerging opportunities by develop and introduce as well as making improvement towards a product (Lumpkin & Dess, 2001). Risk-taking represents the willingness to commit resources to undergo activities and projects which resulted in uncertainty of the outcomes (Lumpkin & Dess, 2001). Meaning the the extent to which a firm is willing to make large and risky commitments.

Competitive aggressiveness is the intensity of firms to improve their position to outdo and overtake their competitors in the market (Lumpkin & Dess, 2001). It is characterized by a strong offensive posture directed at overcoming competitors and may be quite reactive as when a firm aggressively enters a market that a rival has identified. Autonomy refers to an independent action of individual or teams in ensuring ideas and concepts are being carried out till completion (Lumpkin & Dess, 2001). Autonomy gives employees the chance to perform effectively by being independent, self-directed, and creative.

In terms of conceptualizing EO, scholars have mainly two opinions. Some regard entrepreneurial postures as unidimensional (Covin, Slevin & Covin 1990), which composited by innovativeness, risk-taking, and proactiveness. In contrast to Covin, Slevin and Covin (1990), Lumpkin and Dess (2001) suggest that entrepreneurial orientations are multi-dimensional constructs that characterized by five independent dimensions: autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness.

In this research, the researcher would investigate only two dimensions of EO (Innovation and Risk Taking) and their effect on the performance of a firm. In summary, entrepreneurial orientation is reflected in the implementation process of business initiatives and corporate culture and it is a key factor in obtaining a greater performance through differentiation, the development of better solutions ahead of competitors, enhancing adaptation to environmental changes and market trends and weakening the ability of rivals to compete and respond to actions in the future (Hughes and Morgan, 2007).

2.2.1 Innovation

Innovation is broadly seen as an essential component of competitiveness, embedded in the organizational structures, processes, products, and services within a firm. One of the fundamental instruments of growth is to strategically enter new markets innovatively, increase the existing market share and provide the company with a competitive edge.

We are living in a complex and dynamic world in which innovation and entrepreneurship are occupying a decisive role in economic development. From the beginning of the recent decade, due to the speed of the globalization, the intensity of the competition increased and as result, firms have started to focus on searching strategies which will provide them a sustainable competitive advantage. These strategies generally make firms distinguish their products or services and processes in other words, force them to innovate (Otero-Neira, Lindman & Fernandez, 2009). This means that an organization or firm should be able to adopt a new idea or behavior in its daily operations hence Innovation.

The National Innovation Initiative (NII) describes innovation as the intersection of invention and insight, leading to the creation of social and economic value. Innovation as a value means creating and adding importance to customer's satisfaction. It is the basis of all competition advantages, the means of anticipating and meeting customer's needs with full utilization of technology (Kannebley, Sekkel, & Araujo, 2010). This then would require a fresh way of looking at things, and understanding of people.

Developing innovative products and services involves extensive knowledge creation and integration activities (Arshad, Rasli, Arshad & Zain, 2013). When firms give a strong emphasis on research and development, individuals will have a greater desire to devote their knowledge and skills to explore and search for new knowledge. This would help firms innovate or modify new products in an efficient and low-cost way (Kannebley, Sekkel, & Araujo, 2010). In this way, the firm can provide customers with higher-quality products with a higher specification. Innovativeness requires that firms depart from existing technologies and practices and venture beyond the current state of the art. Inventions and new ideas need to be nurtured even when their benefits are unclear.

2.2.2 Risk Taking

Measuring the extent to which individuals differ in their willingness to take risk is contentious. Early work in small business research tended to be focused on various psychological characteristics such as locus of control and tolerance of ambiguity (Gasse, 1982; Rotter, 1966). Risk-taking is defined as the willingness of a firm to take advantage of opportunities although the likelihood of success is unknown, acting bravely without understanding the consequences (Lumpkin & Dess, 1996).

That is, the degree which managers are willing to make large resource commitments to those projects with a reasonable chance of costly failures. The first of these definition conveys a sense of uncertainty and may apply generally to some types of risk often discussed in the entrepreneurship literature, such as personal risk, social risk, or psychological risk.

So team members in high risk-taking firms are motivated to take great ownership of the project and engage in risky product innovation activities that with chances to get high returns (Swierczek & Ha, 2003). This could be in the reflection of activities of entrepreneurial firms such as incurring heavy debt or making large resource commitments, committing significant resources to ventures in uncertain environments in the interest of obtaining high returns by seizing opportunities in the marketplace. Risk-taking behavior is a crucial factor that differentiates entrepreneurs from others because it can create losses and inconsistencies in the performance but it is the behavioral dimension of an EO along which opportunity is pursued (Scheper, Voordeckers, Steijvers & Laveren, 2014).

2.3 Entrepreneurial Firm Performance

In today's dynamic business environment, an organization must stay competitive by closely scrutinizing and understanding business performance. Through the middle of 90's, firms have understood the significance of monitoring the production process by exploiting financial and non-financial performance perspectives. Measurement has been recognized as a crucial element to improve business performance (Musa, Ghani & Ahmad, 2014).

There is a various and different explanation of performance in management literature, but the general definition of performance is the accumulated results of all work activities in the organization (Robbins & Coulter, 2009). Firms are very complex systems that classical financial performance systems such as return on investment, sales growth, profitability, are not adequate to measure performance.

2.4 RBT: Resource-based view of the firm (RBV)

The resource-based view of the firm (RBV) is one of the most widely accepted theoretical perspectives in the strategic management field (Powell, 2001). RBV theory focuses on the collection of firm resources and capabilities (Brush & Chaganti 1998).

The RBV suggests that the resources possessed by a firm are the primary determinants of its performance, and these may contribute to a sustainable competitive advantage of the firm. According to (Powell, 2001), if all the firms were equal in terms of resources there would be no profitability differences among them because any strategy could be implemented by any firm in the same industry. The underlying logic holds that the sustainability of effects of a competitive position rests primarily on the cost of resources and capabilities utilized for implementing the strategy pursued.

The resource-based view (RBV) advocates that competitive advantage and performance results are a consequence of firm-specific resources and capabilities that are costly to copy by other competitors. Capabilities, in contrast, refer to a firm's capacity to deploy resources, usually in combination, using organizational processes, to produce the desired effect. Hence, the presence of capability enables resources to begin to be utilized, and the potential for the creation of output arises. While resources are the source of a firm's capabilities, capabilities are the main source of its competitive advantage (Das & Teng, 2000).

This implies that firms with valuable, rare, and inimitable resources including non-substitutability have the potential of achieving superior performance. The resource-based perspective has an intra-organizational focus and argues that performance is a result of firm-specific resources and capabilities. A resource-based logic proposes that if a firm possesses valuable resources that few other firms have, and if these other firms find it too costly or difficult to imitate these resources, then the firm controlling these resources likely can generate super competitive advantage.

In sum, from a resource-based perspective sustainable competitive advantage is the outcome of resource selection, accumulation, and deployment (through organizational capabilities), and is based upon the premise of firms' resource heterogeneity.

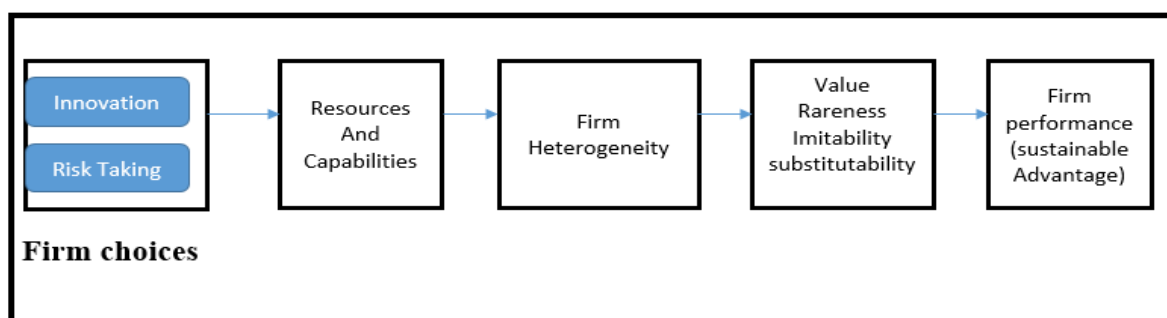


Figure 1: illustrating Resource based theory

The resource-based research on EO is based on the fundamental premise that organizational resources and capabilities are those that underlie and determine a firm's capacity for performance. Within this perspective, organizational resources (tangible and intangible) are taken to provide the input that in turn is combined and transformed by capabilities to produce innovative forms of competitive advantage.

Therefore, according to RBV, not only must firms be able to create knowledge within their boundaries, but they must also expose themselves to a bombardment of new ideas from their external environment in order to prevent rigidity, to encourage innovative behavior, risk taking, and to check their developments against those of competitors.

2.5 Empirical Evidence of Innovation, Risk taking and Firm Performance

Kitigin (2017) observed the relationship between entrepreneurial intensity and performance of small and medium enterprises in Eldoret town, Kenya. Informed by the study, the researcher explored the influence of risk-taking on the performance of SMEs in Eldoret town using ex- post facto research design. It targeted all the SMEs in Eldoret town. Systematic sampling technique was adopted to select a sample of 100 SME owners. The study established that there is a strong positive correlation between risk-taking and business performance of SMEs in Eldoret town. Therefore, committing business resources to venture in uncertain and unfamiliar environments could result in increased returns and market share for the business.

Relatedly, Boermans and Willebrands (2017) empirically examined 611 entrepreneurs from Tanzania on risk perception and performance. The entrepreneurs were grouped into four different groups based on their risk profile. The results show that the worst performing entrepreneurs are those with low-risk perception and high-risk propensity. Furthermore,

Suwachananont and Apibunyopas (2016) examined the characteristics of an entrepreneur and appraise firm performance. The researchers aimed to explore the relationship between entrepreneurship and firm performance. The quantitative technique was applied in sampling 385 people who were the owner of restaurants in Bangkok Metropolitan area, Thailand. The outcome suggested that, risk-taking and innovative had a relationship with business growth, service innovation, and turnover. Innovative characteristic had the most positive relationship with performance.

Again in 2015, Zehir, Can and Karaboga investigated the relationship between entrepreneurial orientation (EO) on firm performance by considering the effects of third variables which can be internal and external factors. The survey of this study was conducted on 991 middle and senior managers of 331 middle and large-scale firms operating in the manufacturing industry in Turkey, in 2014. The results of analyses showed that both differentiation strategy and innovation performance mediate the relationship between EO and firm performance. It was also seen that innovation have significant positive effects on the EO-performance relationship. In particular, the results suggest that different performance levels are linked to the type of innovation developed. It was recommended that firms should coordinate future innovation plans by considering the synergistic process among the product, market and process innovations to arrive at a combination that will yield optimal levels of performance.

Peng (2015) using firm data from 2002-2012 examined the relationship between capital structure and risk-taking, and between risk-taking and firm performance of small and medium-sized enterprises and large private firms. It was revealed that Foreign-owned affiliated private firms are much more risk-taking than domestically-owned private firms. Risk-taking had statistically and economically significant effects on corporate growth and corporate earning.

Wambugu, Gichira, Wanjau, and Mung'atu (2015) explored the influence of entrepreneurial risk-taking and firm performance on small and medium enterprises in Kenya using 20 agro-processing SMEs. The study findings revealed that risk-taking has a positive impact on the firm performance of agro-processing SMEs in Kenya.

Lastly, Ambad and Wahab (2013), investigate the effect of entrepreneurial orientation dimensions on firm performance of large companies in Malaysia. Partial Least Square (PLS) was used to analyze the data. While objective data were used to measure the firm performance, subjective data was used to measure the independent and moderating variables. The findings showed that innovativeness and risk-taking affect firm performance positively

Contrarily, Hughes and Morgan (2007) studied the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. They examined the independent impact of risk-taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy on performance of young high-technology firms at an embryonic stage of development. The results showed that risk-taking has a negative effect. The conceptual frame work and model and Hypothesis Relationship

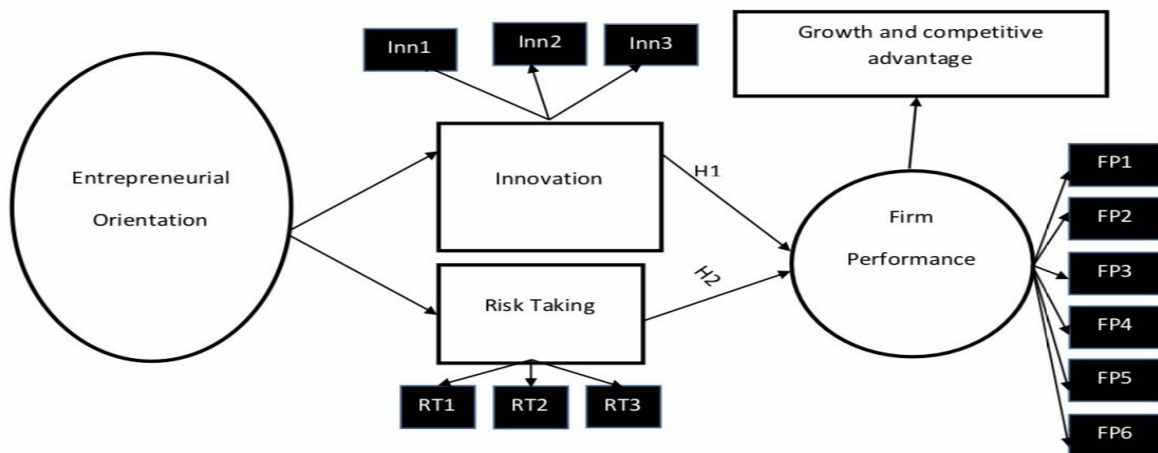


fig 2: Theoretical framework

Hypotheses

H1: Innovation will have a significant positive influence on firm performance among entrepreneurial firms in Ghana

H2: Risk taking will have a significant positive effect on performance among entrepreneurial firms in Ghana.

2.6 Entrepreneurship activities in Ghana

The vast majority of young people in Ghana operate their own businesses. In 2013, the Global Entrepreneurship Monitor (GEM) carried out a country-wide survey of over 1200 young Ghanaians. The survey revealed a high level of youth entrepreneurship (66.39%), with a slight dominance of young women in the majority retail sector and a dominance of young men in construction. Entrepreneurship is a higher perceived career choice among youth, with slightly more young women than young men seeing it as a desirable career choice (GEM, 2016).

Despite the difficulty of becoming an entrepreneur and the generally low levels of educational attainment, over 80% of young Ghanaians see themselves as having the necessary skills and experience to start a business; they also see an abundance of opportunities for a new venture. While most new businesses are in the hospitality and retail sector (58%), Ghana stands out in the sub-Saharan African region with over 22% operating in the agricultural sector and over 15% in the government services sector. Manufacturing has the next highest share, at 6.6% (GEM, 2016).

Business operation in Ghana is relatively stable in the medium to long-term. The GEM 2015 report indicates that about 81% and 89% of respondents in 2013 and 2014, respectively, had not discontinued their businesses in the previous 12 months, neither had 82% and 89% of respondents in 2011 and 2012, respectively, discontinued their businesses in the previous 36 months. The 2014 GEM Ghana report ranked Ghana as the third most entrepreneurial country in sub-Saharan Africa. Its position improved further in 2015 to second place, after Zambia. However, the rate of business discontinuity (sale or closure of an enterprise), while on the decline, is still high (GEM, 2015).

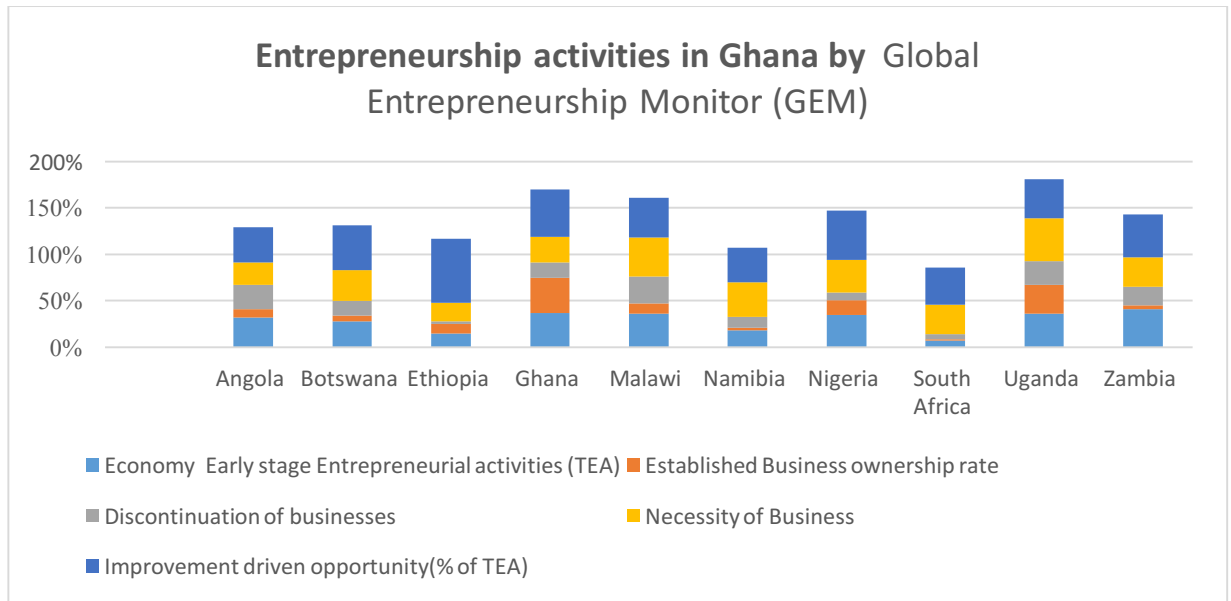


Fig.3: Sub-Saharan African Regional Report 2015. Activity levels in the entrepreneurial pipeline and entrepreneurial motivations in 10 sub Saharan African countries, with comparisons to other regional averages, GEM 2015.

III. METHODOLOGY

3.1: Research design and Sample

In this survey, the researcher intended to identify the effect of innovation and risk taking on firm performance among Ghanaian SMEs. To test the hypotheses, a survey was conducted using a questionnaire. The survey of this study was conducted on entrepreneurs owned and managed Micro and small enterprises in Ghana.

In order to explore the impact of Innovations and Risk taking on the performance of Micro and Small firms; samples of 270 questionnaires were distributed but 250 questionnaires were returned. The survey included questions designed to assess a firm's entrepreneurial orientation (innovation and risk-taking) and their impact of the firm performance.

3.2: Measurement of variables

Entrepreneurial orientation is evidenced through visible entrepreneurial tendencies toward innovation and risk-taking; EO was measured using a six items, five-point interval scale type scale ranging from a strong agreement with the question to strong disagreement adopted from (Hughes and Morgan, 2007). Each dimension of entrepreneurial orientation: innovativeness, and risk-taking, was described by three questions.

Firm performance was measured through six indicators which are sales growth, market share, Profit to Sales Ratio, Market Development, and New Product Development using five-point interval scale type scale ranging from 1 indicates that you are highly dissatisfied with the performance of your firm, selecting a 5 indicates that you are highly satisfied with the performance of your firm, and a selection of 3 indicates neutrality.

3.3: Data Analysis Techniques

This section describes the data analysis procedure after answered questionnaires were returned to the researcher. The Statistical Package for Social Science (SPSS Version 24.0) software was used to process and compute the collected data. Both descriptive statistics such as frequency, and inferential statistics such as Cronbach's Alpha, Discriminant Validity, Multicollinearity, Pearson correlation was used for analyzing the data and Regression analysis to test the hypothesis.

3.3.1 Internal Consistency

According to Fornell and Larcker (1981), internal consistency reliability (CR) estimation like the Cronbach's alpha considered acceptable when the composite reliability is 0.70 or greater. The composite reliability centers on individual item's loadings grounded on indicator inter-correlations. In contrast, the Cronbach's alpha assumes that each item contributes similarly to its construct (Barclay et al., 1995).

In this research, the internal consistency of each construct ranges from 0.711 to 0.818 and are above the applauded threshold value of 0.70 as shown in Table 2. Hence, the results forecast that the items used to represent

construct have satisfactory internal consistency reliability.

3.3.2 Indicator Reliability

Chin, (2010) assumes that the indicator reliability can be measured by probing the items loading. Accordingly, it is imperative to have a satisfactory indicator reliability for a measurement model, whereby, each item’s loading is at least 0.70. In other words, the items should be eliminated from measurement models if their loadings are smaller than 0.70. In this study, no item was eliminated because they all met the requirements and were retained for further analysis.

3.3.3 Indicator Reliability and Convergent Validity

In order to asses or test the convergent validity, the average variance extracted (AVE) was used to measure the variance captured by the indicators relative to measurement error, and it should be greater than 0.50 to justify using a construct (Barclay et al., 1995). The result of the analysis shows that all constructs have AVE ranging from 0.736 to 0.777, which validates satisfactory convergent validity.

The indicator reliability can be measured by exploring the items loading. Accordingly, (Chin, 2010) assumes that it is important to have a satisfactory indicator reliability for a measurement model, whereby, each item’s loading is at least 0.70. Similarly, the items should be eliminated from measurement models if their loadings are smaller or lower than 0.70 hence only items that have loading above 0.70 were retained for further analysis. In this study, it can be seen in Table 2 that, all items were above 0.7.

Table 2: Indicator Reliability and Convergent Validity

NO. VARIABLE	N	Items	Consistency reliability estimation CR CRONBACH’S ALPHA	Average variance extracted
Innovation	250	3	.720	.755
Risk taking	250	3	.711	.736
Firm Performance	250	6	.818	.777
Overall Alpha		12	.823	

Table 2 shows that all variables have Cronbach Alpha values of high than 0.7. which makes all variables accepted, hence, internally consistent and reckoned reliable for further analysis.

3.3.4: Discriminant Validity

Discriminant validity is the complement of the convergent validity. It indicates the degree to which one construct differs from the other. It can be assessed using two measures; i) cross-loading, and; ii) Fornell Larcker’s (1981) criterion. Firstly, the loadings of the indicators must be higher on their respective construct compared to other constructs. In this vein, Table 3 shows the indicators’ loading with respect to all constructs correlations.

From Table 3, it can be seen that all measurement items loaded are higher in its construct compared to other constructs, and loading of each block is higher than any other block in the same row and columns. It is obvious that the loading clearly separates each construct as theorized in the conceptual model. Therefore, the cross loading of the items in the measurement model’s discriminant validity is satisfied.

The second measure used for the discriminant validity is the Fornell-Larcker criterion. There are two ways of assessing the Fornell-Larcker criterion (Chin, 2010); i) compare the square root of AVE to construct correlations, and; ii) compare the AVE with the squared correlations among the construct correlations. The aim is to make sure the AVE / square root of AVE to be greater than each of the construct correlations.

This is so to ensure that the measurement model demonstrated adequate discriminant validity (Fornell & Larcker, 1981). From Table 4, all square roots of AVE exceed the off-diagonal elements in their corresponding row and column. Thus, the result confirmed that Fornell and Larker’s criterion is met.

Table 3: Discriminant Validity: Cross Loadings

Construct	1	2	3
1. Innovation			
Inn 1	0.901	0.310	0.020
Inn2	0.823	0.214	0.031
Inno 3	0.841	0.181	0.022
2. Risk Taking			
Ris 1	0.021	0.863	0.140
Ris 2	0.004	0.812	0.021
Ris 3	0.050	0.870	0.310
3. Firm Performance(FP)			
FP1	0.010	0.034	0.899
FP2	0.050	-0.013	0.894
FP3	0.033	0.140	0.874
FP4	0.431	-0.431	0.865
FP5	0.202	0.311	0.953
FP6	0.070	0.240	0.911

Bold values are loadings for items which are above the recommended value of 0.5

Table 4: Discriminant Validity: Fornell-Larcker criterion

Construct	1	2	3
1. Firm performance	0.881		
2. Innovation	0.003	0.877	
3. Risk taking	0.158	0.060	0.858

Diagonals (in bold) represent the square root of AVE while the other entries represent the correlation

3.3.5 Multicollinearity

In regression statistics, there is a lot of assumption that requires testing. When it comes to those assumptions that required testing, the first one of these was namely multicollinearity, which can be evaluated based on VIF.

Multicollinearity generally occurs when there are high correlations between two or more predictor variables. In other words, one predictor variable can be used to predict the other. This creates redundant information, skewing the results in a regression model. The statistical software calculates a VIF for each independent variable.

VIFs start at 1 and have no upper limit. A value of 1 indicates that there is no correlation between this independent variable and any others. VIFs between 1 and 5 suggest that there is a moderate correlation, but it is not severe enough to warrant corrective measures. VIFs greater than 5 represent critical levels of multicollinearity where the coefficients are poorly estimated, and the p-values are questionable. In other words, values that get close to 10 become worrying (Field, 2009). The VIFs of the different models can be seen in Table 5, and these factors clearly show that multicollinearity is not an issue since the values stay below three (3) in case of all the models.

Model	Collinearity statistics	
	Firm Performance	VIF
Base (control variables only)		
Age	.872	1.043
Edu. Background	.647	1.983
Experience	.853	1.061
Company size	.618	1.797
Company age	.557	2.142
Innovation		
Age	.863	1.034
Edu. Background	.546	2.465
Experience	.525	2.143
Company size	.615	1.713
Company age	.612	1.980
Innovativeness	.818	1.426

Risk taking		
Age	.858	1.089
Edu. Background	.643	1.735
Experience	.605	1.631
Company size	.552	2.214
Company age	.435	2.846
Risk taking	.843	1.171

Table 6: Descriptive Analysis results

Characteristics	Classification	Frequency	Percentage
Gender	males	137	54.8
	female	113	45.2
Age	25-35	119	47.6
	36-45	93	37.2
	46-Above	38	15.2
Marital Status	Single	76	30.4
	Married	128	51.2
	Divorce	46	18.4
Educational Background	Below-Secondary sch.	66	26.4
	secondary education	120	48.0
	Degree	64	25.6
Experience	1-5 Years	92	36.8
	6-10 Years	97	38.8
	11-Above years	61	24.4
Company Size	Micro (1-10 Employees)	133	53.2
	Small (11--49 employees)	86	34.4
	medium(50+Employees)	31	12.4
Company Age	Less than 3 Years	56	22.4
	4-6 Years	84	33.6
	7-10 Years	110	44

As shown in table 6 the age of respondents, 137(54.8%) of the respondents were males while the remaining 113(45.2%) were females. Again, 119(47.6%) of the respondents were between 25-35 years old, 93(37.2%) were between 36-45 years old while 38(15.2%) were above 46 years. In terms of marital status, the majority of the respondent entrepreneurs participated the survey were married 128(51.2%), a fraction of singles were 76(30.4%) and a number of 46(18.2%) respondents were divorced.

In relation to the educational background, near to half of the respondents, 120(48.0%) had secondary education, 66(26.4%) had below secondary certificate and 64(25.6%) had a university degree. This is an indication that the respondents had some level of formal education. Majority of the respondents had some level of expertise in the market as 97(38.8) had experience of 1-5 years, 92(36.8%) had 6-10 years of experience and 61(24.4) had 6-10 years' experience.

In terms of company size, the mass of the respondents owns micro (1-10 Employees), followed by small business (11-49 employees) and medium enterprises (+50 employees) representing 133(53.2%), 86(34.4%) and 31(12.4%) respectively. Conclusively, with company's age, the majority of companies owned by respondents 110(44.0%) that took part in the survey were (7- 10 years old), below 84(33.6%) of the companies were between 4- 6 years while the remaining 1-3years represented 56(22.4%).

Table 7: Correlation Analysis Results

Variables	r			P		
	1	2	3	1	2	3
1. Innovation	-	*** .458	*** .682	-	.001	.000
2. Risk Taking	*** .458	-	*** .522	.001	-	.000
3. Firm Performance	*** .482	*** .422	-	.000	.001	-

N=250

****.** Correlation is significant at the 0.01 level (2-tailed). * p < .10; ** p < .05; *** p < .01

From table 7, a Pearson correlation was done to assess the relationship between innovation, risk-taking and firm performance, innovation had a significant positive relationship with firm performance (r=0.682 and p<0.01). Next, the correlation between Risk-taking and firm performance as in table 7 shows is 0.422. It states that as one level increase of risk-taking leads to 0.422 higher firm performance. The probability of this correlation coefficient occurring by chance is .000. This coefficient shows that there is a statistically significant positive relationship between risk-taking and firm performance (r = .422, p < .01).

3.6 Testing of Hypothesis

Regression analysis was used to test the effect of innovation on firm performance (H1), the regression analysis results in Table (8) indicates that innovation has a positive and significant influence on the performance of SMEs firm (β= .359, t=4.587, p=.000) in Ghana, therefore, this finding supports H1. Risk-taking (β=.220 t=2.876, p=.004) were found to have statistically significant and positive effect on firm performance. Therefore (H2) supported.

Regression analysis (Coefficients a)

Table 8: Regression analysis on the variables

	Unstandardized Coefficients	standardized Coefficients			
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.928	.203		9.724	.000
Innovation	.268	.059	.359	4.587	.000 ***
Risk Taking	.157	.052	.220	2.876	.004 ***

a. Dependent Variable: Firm performance

* p < .10; ** p < .05; *** p < .01

a. df = 1, 249 b. Note: Innovation: R² =.442, F = 46.789c. Note: Risk Taking : R² =.298, F = 23.583

As it has been established already in Table 7, there is a positive relationship between innovation and firm performance. There was also a positive correlation between risk-taking and firm performance, hence, the researcher went further the examine the influence of innovation on firm performance as well as the impact of risk-taking on firm performance which constitute both the first hypothesis and the second hypothesis respectively.

For hypothesis one, the researcher sought to investigate the influence of innovation on firm performance among entrepreneur businesses in Ghana. The results on the table 8 above, indicated that the F statistic calculated is significant at 0.01, therefore, innovation has a positive significant effect on firm performance among entrepreneurs in Ghana [F(1,249) = 46.789, β=.359, p < 0.01] with an R2 value of .442.

This, therefore, implies that 44.2% of the variation in firm performance among entrepreneurs in Ghana is explained or accounted for by innovation. Besides, firm actively introducing improvements and innovations in its business, changes in its product or service line have been quite dramatic and firm encourages development of employee’s ideas for the purpose of business improvement Then, firms with greater innovation tend to achieve higher growth rate, increase return on sales and market share, gain better bright future of the organization, and promote higher business performance. The findings, therefore, support the first hypothesis.

Furthermore, the second objective of this study was to examine the impact of risk-taking on firm performance among entrepreneurs in Ghana. Table 8 above indicates that with an 'R² of .298' (R²=298), it follows that the strength of the relationship between the predictor variable (Risk-taking) and the outcome variable (firm performance) as explained by the model is 29.8%. The results showed that the F statistic is significant at 0.01, therefore risk-taking has a positive significant impact on firm performance among entrepreneurs in [F = 23.583, β =.220, P < .01]. Based on this finding, the second hypothesis that risk-taking has a positive impact on firm performance among entrepreneurs in Ghana is retained.

3.7: Summary of Findings

1. Innovation had a significant positive relationship with firm performance
2. Risk-taking had a statistically significant positive relationship with firm performance.
3. Innovation has a positive and significant influence on the performance of SMEs firm in Ghana.
4. Risk-taking have statistically significant and positive effect on firm performance.

IV. LIMITATIONS AND RECOMMENDATIONS FOR FUTURE STUDIES

The studies encountered some challenges that are worth mentioning in order to guide the replication of such studies in the future.

Firstly, the study focused on only entrepreneurs or SMEs in one city which is the capital of the country. This makes it very difficult to generalize the findings to all entrepreneurial business in the country with some degree of certainty. Therefore, the researcher recommends that in future studies the researcher should try as much as possible to increase the sample size to other cities so the findings can have higher external validity.

Secondly, the researcher just investigated two dimensions of entrepreneurial orientation. It is recommended that future studies could also look at the impact of the remaining 3 dimensions on firm performance among SMEs in Ghana.

Lastly, the quantitative study did not allow for the researcher to probe further on issues on interest, thus the researcher was unable to get clarification on certain issues. It is the recommendation of the researcher that possibly in future studies, a mixed method approached should be considered as it will allow for the further clarification of issues of interest.

V. CONCLUSION

Entrepreneurial orientation is becoming gradually imperative for firms at all sizes, ages, and industries due to its positive effect and impact on a firm's profitability and growth. This positive outcome is not only sustainable in short time but the relationship is stronger over long periods of time.

The current study set out to investigate the relationship among innovation, risk-taking and firm performance and to determine the extent to which these variables (innovation and risk-taking) influences firm performance among entrepreneurs in Ghana. All the hypothesis that was formulated for the study was supported, an indication that innovation and risk-taking are vital for the success of an entrepreneurial business.

Fruitful introduction of innovation and risk-taking into entrepreneurial business strategically improves the firm's ability to grow up and create power and sustainability in their business environment hence outsmarting its competitors. Entrepreneurs should recognize and introduce and manage innovations and risk taking in order to boost their operational performance since they are integral part of the business strategy.

Ghanaian entrepreneurial progressively understood the importance of innovation and risk-taking for prospect and opportunity holding which eventually leads to a successful path of entrepreneurship.

This study discovered that two dimensions of entrepreneurial orientation (innovation and risk-taking) are positively linked or positively influences firm performance among entrepreneurs in Ghana hence this study supports the findings made by previous scholars that assert the firm's entrepreneurial orientation is an essential and vital factor that contributes to the performance of the firms.

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