Effect of Entrepreneurs’ Risk Preference on Organization Efficacy of Small and Medium Enterprises in Kenya

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Abstract
Small and medium enterprises (SMEs) are generally thought to play a crucial role in driving economic growth in both developing and developed countries however, entrepreneurial behavior such as entrepreneur’s judgment and capabilities to perform a given actions such as risk assessment is an important means of growth to small and medium enterprises but no study has attempted to cover it. Thus, this study focused on determining the effect of entrepreneurs’ risk preference on organization efficacy of small and medium enterprises in Kenya. The study utilized the explanatory research design and a survey of small and medium enterprises in western Kenya namely, Kisumu, Nakuru and Eldoret town in Kenya. A sample size of 267 respondents is derived from a target Population of 900 enterprises. Structured questionnaire and systematic random sampling technique were used. Descriptive statistics, Pearson correlation analysis, factor analysis and multiple regressions were used to analyze data. The study findings showed that entrepreneurs’ risk preference positively and significantly affect organization efficacy. Similarly, entrepreneurs’ risk preference is an important factor of organization efficacy. It was concluded that entrepreneurs’ risk preference is important in determining efficacy in management of small firms. Recommendations are made based on managerial implications useful for business practitioners and trainers.

Keywords Organization Efficacy, Small & Medium Enterprises, entrepreneurial characteristics, business performance,
Introduction
Today’s business world is characterized by increasing competitiveness. Consequently, small businesses have become increasingly sophisticated for investors and entrepreneurs, who want success in their organizations. Some scholars (Aldrich, 1979; Astley & Van de Ven 1983 & Lieberson & O’connor, 1977) argued that top managers have little influence on organization performance since environments set many constraints and limits within which organizations or top executives operate, their discretion is very limited therefore, environments mainly determine organizational outcomes. However, recent emerging theories such as Resource based theory supports (Collis & Montgomery 1995) have argued that organizations and top managers can play significant roles in determining their efficacy.

Small and Medium Enterprises act as a catalyst for entrepreneurial seedbed for industrial transformation (McPherson, 1996). Kenya Vision 2030 recognizes the sector and call Small and Medium Enterprises for improved productivity and innovation by enhancing the investment climate, including access to finance. Policy efforts targeted at the Small and Medium Enterprises sector are anchored on the premises that Small and Medium Enterprises are the engine of growth, but market imperfections and institutional weaknesses impede their growth (Beck & Demirguc-Kunt, 2006; Nuwagaba & Nzewi 2013; Nyamwanza, 2014).

Under the devolved governance structure, Small and medium enterprises in Kenya play a significant role in employment and revenue generation for the county governments (KIPPRA ,2013). Mitigating growth constraints resulting mainly from adverse investment climate, poor infrastructure, credit constraints, insecurity, regulatory burden and managerial disposition has been a great a challenge to institutions (KIPPRA, 2013).

It is argued that entrepreneurs are able to exercise control over his or her own thoughts, feeling and actions, that heavily influence individual view of self (Bandura, 1997). An entrepreneurs’ assessment of risk preferences risk propensity, which is defined as an individual’s general tendency toward either taking or avoiding risk within a particular kind of decision context (Mullins & Forlani, 2005) may influence the efficacy of an organizations but it has been covered.

It’s argued that organizations with high efficacy demonstrate high degree of morale, willing to take on a challenge, believe they are stronger than competition, with a track record of accomplishments, a substantial vision for the future, and significant evidence of innovation (Buckingham & Coffmann, 1999). No one understand whether the small and medium enterprise demonstrate these values, furthermore, no study has covered whether small and medium enterprises have the capability to marshal resources and organize activities to accomplish ends. In addition, it is also unclear whether these institutions are able to persist and overcome constraints and progress or they simply give up.

Nevertheless, organization efficacy has been the subject of many studies (McDowell, 2013; Tasa et al., 2007; Gist, 1987; Bohn, 2002; Strauser et al., 2002; Jung & Sosik, 2003; Gully et al., 2002; Tasa & Whyte, 2005; Bandura, 1977, 1986, 1998, 1999, 2006), arguing that efficacy is a strategy consideration in achievements of organization’s outcome. Despite this trend, it is unclear in the Kenyan context what influences organization efficacy especially in small and medium enterprises. Therefore, Organization efficacy within small and medium businesses can be achieved when entrepreneurs work in various ways to produce the desired outcomes and prevent undesired outcome. This study sought to investigate whether, entrepreneurs’ risk preference can affect organization efficacy in order to extend the existing literature, aid management of small firms and policy makers.
Literature review

Concepts of Organization Efficacy
Organizational efficacy is defined as a generative capacity within an organization to cope effectively with the demands, challenges, stressors, and opportunities it encounters within the business environment (Bohn, 2010). A different definition version by (Gist, 1987; Bohn, 2002) stated Organizational efficacy as cognitive confidence of an organization to perform its responsibilities well. This cognitive confidence consists of the collective internal judgments of those individuals within the organization that the organization has the capabilities, judgment, and confidence necessary to perform successfully. This should not be confused with construct of Self-efficacy which state Self-efficacy as a super ordinate judgment of performance capability that is induced by the assimilation and integration of multiple performance determinants, (Gist, 1987).

There exists significant literature supporting the notion that efficacy is positively related to performance at the individual and group levels (Bandura,1998; Gist, 1987; Gist et al., 1991; Zellars et al., 2001; Jung & Sosik, 2003; Tasa & Whyte, 2005 ); however, organization efficacy within small and medium enterprises in developing nations like Kenya is very limited and need to be studied. Self-efficacy affects an individual’s ability to overcome obstacles (Bandura, 1986) and perform well (Gist et al., 1991), this same concepts can be extended to the organization level, organizational efficacy, for small and medium businesses as well.

In highly efficacious organizations, people should work differently, and act differently and the outcomes should be different from organizations where organizational efficacy is low and similar to what we would expect from people or groups with low or high levels of self-efficacy (Bohn 2010). Zaccaro et al. (1995) define collective efficacy as a sense of collective competence shared among individuals when allocating, coordinating, and integrating their resources in a successful concerted response to specific situational demands this definition supports the statement where people should be able to sense a collective resource to help them accomplish their collective goals in business organizations. People in an organization with high efficacy would seem to demonstrate a high degree of morale, a desire to be at work, and a desire to do the work; they would be enthusiastic workers who want to be part of an organization workers willing to take on a challenge, workers who believe they are stronger than their competition, with a track record of accomplishments, a substantial vision for the future, and significant evidence of innovation (Buckingham & Coffmann, 1999).

Concepts of entrepreneurship and risk preference
Risk and risk management is a major concern for all companies, especially small and medium sized enterprises which are particularly sensitive to business risk and competition (Alquier et al., 2006). The owner’s risk perception and his attitude towards risk management influences the adequacy of the enterprise’s management actions deployed (Ntlhane, 1994). Different investors perceive risk in a certain situation differently and their psychological reaction is called attitude (Mubashir, 2012).

Risk preferences consist of a general tendency, or the general desire, to pursue or avoid risks (Sitkin & Pablo, 1992; Macko & Tyszka, 2009). It is viewed as a determinant of risk propensity, which is defined as an individual’s general tendency toward either taking or avoiding risk within a particular kind of decision context (Mullins & Forlani, 2005; Sitkin & Pablo, 1992).

It is possible that risk preference is partly a stable feature of individual personality, but a number of variable factors such as mood (Hastorf & Ilsen, 1982), feelings (Johnson & Tversky 1983), and the way in which problems are framed (Tversky & Kahneman,1981) also appear to affect perception of and
attitudes toward risk. Previous studies have measured risk preference and found that risk taking, risk preference and risky decision making will decrease with age and on average, individual will demonstrate more risk taking, greater risk preference and more risk decision making when in the company of their peers than when alone (Margo et al., 2005). A study on the Impact of variable risk preferences on the effectiveness of control by pay (John et al., 2004) and results provide evidence that positive outcomes will result when employees who are more risk preference are controlled by pay with which it is consistent with Cable and Judge (1994), that employers should consider the use of risk preference as a selection criterion in the pay system.

A study by Dohmen et al., (2005) shows that willingness to take risks exhibits substantial heterogeneity across individuals, however, his study does not indicate where the individuals falls on the three categories of risk preference. One of the factors that determine the successes of an organization is attitude towards risk which is usually patterned among individual; some people are likely to be consistently risk takers, risk averse while a third group have domain-specific patterns of risk behavior, and personality profiles can be used to predict risk taking (Nicholson et al., 2001). It is argued that if business owners incorporate risk preference on their strategies they will produce the desired effect and improve the efficiency of the business (Ayinde et al., 2008). Thus, it is important to address the same by focusing on small and medium enterprise in Kenyan contexts. According to Barbosa et al., (2007) individuals with a high risk preference have higher levels of entrepreneurial and self-efficacy, whereas individuals with a low risk preference had higher levels of relationship efficacy, and tolerance efficacy.

A study done in Western Kenya by Mumbo et al., (2012) that sought to establish the extent to which risk-propensity and entrepreneurial behavior influence health indicators among community health workers and their clients concludes that Risk taking propensity as entrepreneurial characteristic and should be considered as a community health strategy in an effort to achieve the millennium development goals.

Rational investors opt to maximize their returns for a given level of risk they bear, or minimize their risks for a given level of return. The types of investment with the operations they select will depend on their risk tolerance, whether the investors are risk seekers, risk averters or risk indifferent. According to Lutfi, (2013) investors’ risk behavior influences specific business performance or results. This suggests that there are few studies on the effect of entrepreneurs’ risk preference on organization efficacy that needs to be addressed among small and medium enterprises.

Recent studies have showed that women and men differ in risk taking propensity and behavior regardless of the groups they belong, whether in the general population or in a specialized groups such as managers, entrepreneurs (Newby, 2005; Holt & Laury, 2002; Donkers et al. 2001; 2008; Neelakantan, 2010; Brooks et al., 2009) and risk propensity mediates the effect of gender on risk behavior of the entrepreneurs (Pradana & Mudiyanselage, 2013). However, Johnson and Powell (1994) and (Atkinson et al. 2003) suggest that women and men are similar in terms of risk taking propensity and risk behavior by examining the risk taking behavior of a sample consisting of managers, entrepreneurs and professionals. While Fehr-Duda et al., ( 2006: Gysler et al., 2002) noted that gender differences in risk behavior are domain specific and context dependent and risk taking behavior does not merely depend on gender but controlling for overconfidence and financial market knowledge respectively. With risk tolerance being an increasing function of individuals’ resources according to Guiso & Paiella,(2008), thus it seems to appear that entrepreneur’ risk preference is one of the construct that can influence organization efficacy.
Methodology
The study adopted explanatory research design to determine the effect of entrepreneurs’ risk Preference on organization efficacy of small and medium enterprises in Kenya. A sample size of 267 respondents were drawn from a target population of about 900 Small professional services firms in Kisumu, Nakuru and Eldoret town in Kenya, using systematic random sampling method. The three towns are among, the most growing towns in Kenya. The Respondents of the study are owners/managers of the business enterprise because they deemed to be the ones who set decisions of the organization as stated by Lumpkin & Dess, (1996 & Miller, 1983). Small professional service operators’ which include firms such as; small insurance firm, Medical diagnostic Labs, security services, audits firm, counseling and training firms were ideal for the study because respondents were believed to possess necessary skills and knowledge for answering questions of the study without undue influence by the researcher.

Reliability assessment of internal consistency of the items was performed using Cronbach alpha coefficient (Sekaran, 2003; Ventura et al,.2013; Waithaka et al.,2014; Cooper & schindler, 2001). Validity is concerned with whether the findings are really about what they appear to be about (Cooper &Schindler 2008). This was achieved by providing adequate coverage of the investigative questions and this was done by reviewing literature related to this study. Criterion-related validity was achieved through correlation analysis. Convergent Content validity was achieved through factor loading (Waithaka et al.,2014; Cooper & Schindler 2008)

Data Analysis
Data analysis for this study was performed in five phases. The first phase descriptive statistics to provide frequencies distribution and percentages for population description, the second phase was descriptive statistics to provide mean distribution and standard deviations of the variables. The third phase was correlation analysis; Pearson correlation was performed to determine the relationship between the variables as advanced by Saunders et al., (2009; Rotich et al., 2014; Levesque et al., 2014), the Fourth phase was factor analysis procedure using principle component, Varimax rotation (orthogonal method) with Kaiser Normalization was used to determine which items to be used within the variables.
Prior to factor analysis, Tests of Normality was performed using Shapiro-Wilk, to determine whether all variables were normally distributed. Kaiser –Meyer-Olkin (KMO) and Bartlett’s test of sphericity which test sampling adequacy and the null hypothesis that the original correlation matrix is an identity matrix (Field 2000, 2001 and 2005) were performed. Finally, simple regression analysis was performed. Prior to regression model, preliminary review of normality, validity and reliability of constructs were done

Results and discussion
Respondents’ profile
The data was analyzed to provide frequencies, percentages, means and standard deviation to describe the population. Respondents surveyed, were 190 small business owners, men (N135, 71%), women (N 55, 29 %), aged 16-35 years (N 135, 71.1 %) operating mostly young businesses below 10 years (N 163, 86 %).
Measures and findings

Organization efficacy
The study measured organization efficacy using 17 items adapted from Bohn, (2010). Items were modified to suit the context of the study. Organization efficacy constituted the sense of collective capability or collaboration, organization sense of Mission, Future, or Purpose and organization sense of resilience were the constructs of Organization efficacy. The items were rated on a point Likert scale as scale varying from 1- “strongly disagree” to 6- “Strongly agree”

Risk preference behavior
Items variable that were used to measure entrepreneurs’ risk preference were assessed using 5-item scale employed from Bruce, (1995). The Sample items Include “My philosophy is to avoid from taking risks always; it is risky to lend money to someone and I do not engage in works that can cause money loss in the end” among others. Respondents indicated the degree to which they believed each statement was descriptive of the reality in their organization, marking their responses on a 6-point scale ranging from 1 (Strongly disagree) to 6 (strongly agree). Cronbach’s alpha scale was 0.707 the acceptable level of reliability (α ≥0.70) (Sekaran, 2003). (M 4.0895; SD  .77806) which indicate that majority of the entrepreneurs agree with the statements. Suggesting the cognitive ability of entrepreneurs to prefer less risk to higher risk contributes high organization efficacy (M 4.3316, SD  .80411)

Tests of Normality
To determine whether all variables were normally distributed, Tests of Normality were performed using Shapiro-Wilk. All variables were significant with (P-value >0.05,df 190) which indicates that data came from a normal distribution (Cohen et al., 2013; Field, 2000, 2001, 2003, 2005,2010 and 2013) allowing statistical analysis to proceed. Tests of Normality are reported in table 4.1 below

Table 4.1 Tests of Normality

<table>
<thead>
<tr>
<th>Variables</th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic Df Sig.</td>
<td>Statistic Df Sig.</td>
</tr>
<tr>
<td>Organization Efficacy</td>
<td>.078 190 .007</td>
<td>.979 190 .006</td>
</tr>
<tr>
<td>Entrepreneurs’ Risk</td>
<td>.082 190 .004</td>
<td>.992 190 .405</td>
</tr>
<tr>
<td>preference</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data, (2014)
Factor analysis for Entrepreneurs’ Risk preference
Prior to factor analysis the item-variables were tested with Kaiser –Meyer-Olkin (KMO) and Bartlett’s test of sphericity which test sampling adequacy and the null hypothesis that the original correlation matrix is an identity matrix (Cohen et al.,2013; Field 2000, 2001 and 2005). The sample is adequate if the value of KMO is greater than 0.5 (Cohen et al.,2013; Field 2000, 2001,2005 and 2013). KMO results for Entrepreneurs’ Risk preference and entrepreneurs’ risk preference variables were greater than 0.5. Bartlett’s test of sphericity were all significant (p<0.05) indicating that there were no correlations between the variables, satisfying the assumptions of exploratory factor analysis. Entrepreneurs’ Risk preference item-variables were subjected to principal component analysis to identify components underlying the variables. The principal axis method was used to extract the components, and this was followed by a Varimax (orthogonal) rotation.

Factor analysis 11: Factor loading for Entrepreneurs’ risk preference behavior
Only the first two components displayed eigen values of 2.455 and .997, the values above .7 as recommended Jolliffe (1972:1986).This suggesting that only the first two components were meaningful in explaining entrepreneurs’ risk preference. Therefore, only the first two components were retained for Rotation. Combined, components 1 and 2 accounted for 69.043% of the total variance which explain organization efficacy.

Table 4.2 Total Variance Explained on Entrepreneurs’ Risk Preference

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>2.455</td>
<td>49.104</td>
<td>49.104</td>
</tr>
<tr>
<td>2</td>
<td>.997</td>
<td>19.938</td>
<td>69.043</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis

Source: Research Data, (2014)

Table 4.3 Rotated Component Matrix For Entrepreneurs’ Risk Preference

<table>
<thead>
<tr>
<th>Compone nt</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>My philosophy is to avoid from taking risks always.</td>
<td>.738</td>
<td></td>
</tr>
<tr>
<td>It is risky to lend money to someone.</td>
<td></td>
<td>.987</td>
</tr>
<tr>
<td>I do not engage in works that can cause money loss in the end</td>
<td>.837</td>
<td></td>
</tr>
<tr>
<td>I never try risky investment</td>
<td></td>
<td>.791</td>
</tr>
<tr>
<td>I do never lose time on alternatives that have low possibility to realize.</td>
<td>.729</td>
<td></td>
</tr>
</tbody>
</table>
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 3 iterations.

Source: Research Data, (2014)
In interpreting the rotated factor pattern, an item was said to load on a given component factor with an absolute value greater than 0.4 which explain around 16% of variance (Stevens 1992, Cohen et al.,2013; Field 2000, 2001). Using these criteria, four items which was describing risk preference behavior were found to load on the first component, which was subsequently labeled risk preference component1. The drivers of this component are: “My philosophy is to avoid taking risks always, I do not engage in works that can cause money loss in the end, I never try risky investment and I do never lose time on alternatives that have low possibility to realize” with a loading factor of .738, .837, .791 and respectively. This indicates that the items explain 53% to 70% of variance on organization efficacy. One item also loaded on the second component, which was labeled component risk preference2 “It is risky to lend money to someone” with a loading factor of .987 explaining 97% variance on organization efficacy. The mean scores for the retained components that is, risk preference component1 and risk preference component2 were used as independent variable (X) in regression analysis to test hypotheses of the study.

Prior to testing hypotheses, preliminary review of serial correlation between errors (independent error) and multi-correlation of constructs were done. The absence of multi-collinearity was validated using variance inflation factor (VIF) a recommended a threshold of VIF values less ten is accepted (Cohen et al.,2013; Lakhal et al., 2006; Hair et al.,2006, 2010; Lawless & Heymann, 2010 ). The VIF values were all acceptable at score < 2.0, while serial correlation was tested using Durbin-Watson which indicated a positive correlation of 1.567, an acceptable score of between 1 and 2 recommended by Durbin & Watson (1951). Component1 and component2 in table 4.3 (risk preference) were coded as entrepreneurs’ risk preference variable during computation.

Correlation analysis showed that there is statistically significant but weaker relationship between Entrepreneurs’ Risk preference and organization efficacy \( r = .481, P < .01 \) indicating that there is fairly weak but positive relationship between entrepreneurs’ risk preference between and organization efficacy.
Regression Analysis

Table 4.4 regression model

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.481</td>
<td>.231</td>
<td>.227</td>
<td>.70694</td>
<td>.231</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</table>

Source: Research Data, (2014)

Linear regression was used to determine the relative importance of entrepreneurs’ risk preference in explaining the variations on organization efficacy. The Model yielded an ($R^2 .231$ and statistically significance at $P$-value $.000$, $F 56.533$) as shown in table 4.4 implying that the model explained only 23.1% of the variability on organization efficacy. The unexplained variability could be attributed to random factors and other variables not captured in the model.

Table 4.5 Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient $s$</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>Constant</td>
<td>4.332</td>
<td>.051</td>
<td>84.458</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurs’ Risk preference</td>
<td>.253</td>
<td>.055</td>
<td>.314</td>
<td>4.563</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Research Data, (2014)
Effect of entrepreneurs’ Risk Preference on Organization

The hypothesis of the study stated that Entrepreneurs’ risk preference has no significance effect on organization efficacy. Results from 4.5 model above shows (β=.314, P-.000) implying that Entrepreneurs’ risk preference has a significance effect on organization efficacy with a model predicting a magnitude of 0.314. This is supported by (t =4.563, P-.000). Suggesting that, Entrepreneurs’ Risk preference is significantly and positively associated with organization efficacy. These concur with the study carried by (Insoo & Orazem, 2011) that the least risk averse appears to make better decisions in the uncertain economic environment of the business owner. Therefore entrepreneurs’ risk preference aversion could be a strategy for managing environmental uncertainty in business which may result to high organization efficacy. The study interpretation is supported by experimental studies including (Frederick, 2005; Benjamin et al.,2006; Burks et al.,2009; Dohmen et al.,2010) that the least risk Averse individuals’ exhibit higher cognitive ability. The finding of the study is also supported by Caliendo et al. (2008) that an entrepreneur who is moderate risk taker has chances of success and survival in their businesses. However, the finding of the study contradict works of Brockhaus (1982) that risk-taking may not be linked to either the entrepreneurial decision, or to the success of the enterprise and (Rauch & Frese, 2007) that risk taking has not shown significant role in the success and survival of the small firms

Conclusion
The results of the study show that Entrepreneurs’ risk preference has a significance effect on organization efficacy. It is suggested that entrepreneurs consider risk preference as a strategy for managing environmental uncertainty in business which may result to high organization efficacy. It is also concluded that entrepreneurs have the capabilities, judgment, and confidence necessary to perform successfully in their organization as far as risk and their managerial characteristics are concerned.

**Recommendations**

Measures need be put in place in small and medium enterprises (SMEs) to enable entrepreneurs to utilize capabilities to achieve more economic growth by paying more attention on risk intervention. There is also need to create a culture or environment where risk preference becomes more attractive. Since this study was based on small professional firm in western Kenya, it is suggested that future research should explore the same variables in other types of small and medium enterprise.
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