

The Impact of Entrepreneurial Orientation on the growth of SMEs in Sri Lanka

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Abstract—Using growth of Small and Medium-size Enterprises (SME's) we investigated the relationship between the Entrepreneurial Orientation (EO) and growth of SME's in Sri Lanka. As EO has three dimensions, the study also aims to investigate to what extent these dimensions affect the growth. It was mainly hypothesized that higher entrepreneurial orientation leads to high venture growth. Venture growth was measured by sales growth and employment growth of firms. Results confirmed that EO has an impact to the venture growth of SMEs. Further, it was found that innovativeness and risk taking propensity have a positive impact on venture growth. However, results indicate that proactiveness has no significant impact on the venture growth. The results of the study have important implications to the existing entrepreneurs, potential entrepreneurs, investors, researchers, consultants and policy makers.

Keywords— Entrepreneurial Orientation, Innovativeness, Proactiveness, Risk Taking Propensity, Small and Medium-size Enterprises.

I. INTRODUCTION

It is widely acknowledged that entrepreneurship is important for economic growth, productivity, innovation and employment creation and many countries have made entrepreneurship an explicit policy priority [1]. As globalization reshapes the international economic landscape and technological change poses new challenges and resulted in creating new opportunities in the world of business. As a result, many experienced business people, political leaders, economists, and educators believe that fostering a robust entrepreneurial culture will maximize individual and collective economic and social success on a local, national, and global scale.

Millions of new ventures are created each year around the world [1]. Therefore each firm or organization seeks for some kind of a growth for their survival in the business. The general preconditions for growth have been suggested to be entrepreneur's growth orientation, adequate firm resources for growth, and the existence of the market opportunity for growth [2]. However, research indicates that some ventures report higher growth whereas others do not [2]. A host of research have been done in this regards and several factors have been explored including characteristics of entrepreneur, characteristics of firms, strategy, environmental conditions etc [3].

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Accordingly, entrepreneurial orientation (EO) has been regarded as a prominent factor for the growth and survival of a firm [4]. EO is defined as the willingness to innovate to rejuvenate market offerings, take risks to try out new and uncertain products, services, and markets, and be more proactive than competitors toward new marketplace opportunities [5]. According to Miller's conceptualization, three dimensions of EO have been identified and used consistently in the literature: innovativeness, risk taking, and proactiveness. Meantime researchers' acknowledged that an entrepreneur who has an entrepreneurial orientation, the business stimulates with its business activities [7].

Sri Lanka's economy is predominantly a Small and Medium Enterprise economy where over 50 % of GDP is produced by the SME sector. According to an industrial census conducted in 2003/2004 there were 121,426 industries having less than 10 employees with total employments at 285,623 and 9961 industries with more than 10 employees having 747,823 employments in total. Among them, the number of industries with less than five employees accounted for 84.3% of the total, contributing 7.5% to the total production value, 7.0% to Gross Value Added (GVA), and 28.4% to the total employment of the manufacturing sector.

II. LITERATURE REVIEW

A. Entrepreneurial Orientation

Entrepreneurial Orientation (EO) has been acknowledged as a determinant for firm growth and profitability. So, in other word EO is key ingredient of a success venture. Using this definition and prior literature, entrepreneurship researchers have used the term entrepreneurial orientation to describe a 'fairly consistent set of related activities or processes' [5]; [6]; [7];[8]. Based on [9] conceptualization, three dimensions of EO have been identified and used consistently in the literature as Innovativeness, risk taking propensity, and proactiveness. These dimensions represent distinct constructs that may vary independently of each other in a given context [10]. The importance of entrepreneurial orientation to the survival and performance of firms has been acknowledged in the entrepreneurship literature [6]; [9]; [11]; [12]; [13]; [14]. The empirical evidences from [11] and [12] showed that the positive influence of entrepreneurial orientation on performance increases over the span of time.

B. Innovativeness

Innovativeness is the predisposition to engage in creativity and experimentation through the introduction of new products/services as well as technological leadership via R&D in new processes. Entrepreneurial innovation can be defined as the “willingness to support creatively and experimentation in introducing new products/services, and novelty, technological leadership and R&D in developing new processes” [15]. Innovation covers not only development or enhancement of products and services but also new management techniques and technologies directed towards the organization functions like production, marketing, sales and distribution [16]. [17] Indicates that as a dimension of firm level entrepreneurial orientation, innovation refers to the creative or unique solutions for the threats that the firm encounter.

C. Risk Taking Propensity

In fact, boldness for seeking or pursuing the opportunities and for the very new product or service attempts is considered as reflections of EO [6]. Entrepreneurs and entrepreneurial firms are seen to manage the risks better by focusing on lower-risk market endeavors with developing various new product and service alternatives targeted to the different market segments or niches. The willingness to engage in relatively high levels of risk-taking behaviors helps a firm seize profitable opportunities in the face of uncertainty and the achievement of long-term profitability [18]. Based on [9] approach to EO, which measures risk taking at the firm level by asking managers about the firm's proclivity to engage in risky projects and managers' preferences for bold versus cautious acts to achieve firm objectives. [19] Used a similar approach, asking managers the extent to which they followed tried-and-true paths or tended to support only projects in which the expected returns were certain.

D. Proactiveness

Proactiveness is an opportunity-seeking, forward-looking perspective characterized by the introduction of new products and services ahead of the competition and acting in anticipation of future demand [16]. The term proactiveness is defined by [6] “as acting in anticipation of future problems, needs or changes”. The firm moving first can gain extraordinary benefits and become a pioneer in forming brand image by profiting these opportunities. In today's increasing global competitive environment, proactiveness is seen as important vehicles for survival of firms and for higher performance [17]. Therefore, being a first mover, pursuing new opportunities and participating in developing markets are very closely related with firm level entrepreneurship activities.

E. Small and Medium Enterprises

SME's are companies where personnel numbers fall below certain numbers, amount of capital invested or annual turnover within the certain standard amount [20]. While the importance of the SME sector and the informal sector is acknowledged internationally, defining an SME is a challenging task, as every country has its own definition.

Firms differ in their levels of capitalization, sales and employment. Hence, definitions which employ measures of size (e.g. number of employees, turnover, profitability and net worth) when applied to one sector might lead to all firms being classified as small, while the same size definition when applied to a different sector might lead to a different result [21]. Therefore SME doesn't have any uniform definition [22]. Sri Lanka Industrial Development Board elaborates as a small industry as an establishment whose capital investment in plant and machinery does not exceed Rs.4million (US\$ 42,000) and the total number of regular employees does not exceed 50 persons.

III. CONCEPTUAL FRAMEWORK AND HYPOTHESES

A. Conceptual Framework

Referring to the prior literatures framework can be illustrated as below in Fig. 1.

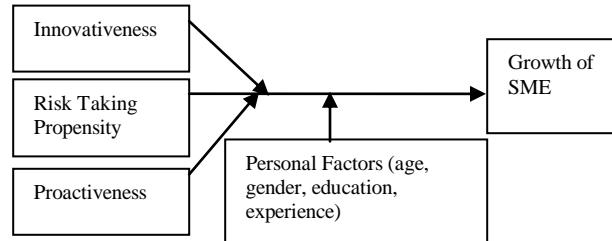


Fig.1.Conceptual Framework

Personal factors used to check the moderator influence on the relationship of EO and growth of SME. Prior researchers discussed about moderators between the relationship of EO and business growth [6]; [11]; [13]. For this study entrepreneur's age, experience, gender and education considered as moderator variables.

B. Hypotheses

Innovativeness is an organization's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services or technological processes, as well as the pursuit of creative, unusual, or new solutions to problems and needs [6];[15]. The first hypothesis can be formulated as,

H1: The Higher the innovativeness higher the growth of SME

Risk Taking Propensity implies as the higher return, if in a case of failure risky ventures if makes high cost as well [23].. Literature emphasized risk taking propensity is one of key attribute entrepreneur should have [6]. The willingness to engage in relatively high levels of risk-taking behaviors helps a firm seize profitable opportunities in the face of uncertainty and the achievement of long-term profitability [18]. Second hypothesis can be formulated as,

H2: Higher the risk taking propensity higher the growth of SME

In the literature the term Proactiveness is an opportunity-seeking, forward-looking perspective characterized by the introduction of new products and services ahead of the

competition and acting in anticipation of future demand [16]. The term proactiveness is defined by [6] "as acting in anticipation of future problems, needs or changes." In literature, Pro-activeness is concerned with 'first mover' and other actions aimed at seeking to secure and protect market share and with a forward-looking perspective reflected in actions taken in anticipation of future demand [3];[9];[15]. Third hypothesis can be formulated as,

H3: The higher the proactiveness the higher the growth of SME

Considering to moderating effect, personal factors have been considered as moderators. By literature's perspective number of variables that potentially moderate the EO-performance relationship [6]; [11]; [13]. Therefore, we can assume personal factor may strengthen or weaken relationship between EO SME growths.

H4: Personal factors moderate the relationship between EO and growth of SME

IV. RESEARCH METHOD

Two factors were instrumental in designing the study. Growth of SME's in Sri Lanka is one factor and ability of using EO by Sri Lankan entrepreneurs is the second one. Therefore we need a sample of SME's in Sri Lanka and entrepreneurs who undertakes small and medium size business. Growth of SME quantifies using performance evaluation criteria where which is proven by prior researchers. It is a hybrid of number of generated jobs relative to last year and sales performance relative to the last year. Previous literatures emphasized the most frequently used measure for growth has been changed in the firm's turnover and changes of number of employees [24]; [25]. EO's three dimensions were gathered using a questionnaire and finally identify the congruence of impact of EO on the growth of SME. Questionnaire was implemented and it consists of thirty three questions. The questionnaire prepares to quantify the qualitative aspects of an entrepreneur's using five point likert scales. In the case of identifying the sample we followed the generally accepted selection criteria for SME's in Sri Lanka. Firms considered being as unit of analysis and sampling technique was convenience sampling. Therefore we could remove heterogeneity of the sample. With that sampling method we disseminated two hundred questionnaires around twenty districts out of twenty five districts in Sri Lanka. Out of those two hundred questionnaires we obtained ninety eight responds.

V. ANALYSIS AND RESULTS

Skewness and Kurtosis statistics of the control, dependent, independent and moderator variables fall within the boundaries for normality [26] allowing parametric test of significance. SPSS output describe that all correlations with absolute value above .20 are significant at $P < 0.01$. Two dependent variable indicators and three independent variables are formalized in a matrix as below table I.

TABLE I
CORRELATION METRIX

Variable Indicator	Mean	SD	1	2	3	4	5	6	7	8	9
Employment Growth	4.1939	4.95268	1.00								
Sales Growth	1.4240	1.60730	.0554**	1.00							
Innovativeness	19.8265	3.82888	.458**	.359**	1.00						
Risk Taking Propensity	20.3878	3.70464	.390**	.516**	.591**	1.00					
Proactiveness	21.5102	3.67843	.401**	.372**	.658**	.622**	1.00				
Entrepreneur's Age	2.9082	1.21066	.163	.255**	.232*	.093	.177*	1.00			
Entrepreneur's Gender	1.1837	.38921	-.270**	-.281**	-.338**	-.407**	-.426**	-.314**	1.00		
Entrepreneur's Education	2.6224	.86769	-.045	-.159	-.101	.056	-.078	-.544**	-.085	1.00	
Entrepreneur's Experience	4.3980	1.60373	.259**	.405**	.317**	.307**	.393**	.646**	-.317**	-.313**	1.00

* Correlation is significant at the 0.05 level (1-tailed), ** Correlation is significant at the 0.01 level (1-tailed), n=98

Using mean values of the innovativeness, risk taking propensity and proactiveness we can interpret what extend EO used by Sri Lankan entrepreneurs. Referring to table I they are 19.8265, 20.3878 and 21.5102 respectively which implies that degree of EO is low in Sri Lankan SME entrepreneurs.

Growth of the business measured using two quantifiers so two models developed. Therefore in the case of collinearity diagnostics there are two indicators for dependent variable. Both the analysis interprets same answer which VIF is below 3.0 where multicollinearity was not an issue [27]. Using ANOVA analysis, we obtained the results where both models significant at .001 confident levels. Making both analyses of two models table II formulated as below.

TABLE II
HIERARCHICAL REGRESSION ANALYSIS FOR THE STUDY

Variables	Generated Jobs (Model I)		Sales Performance (Model II)	
	Base Model	Full Model	Base Model	Full Model
Independent				
Innovativeness	.377*	.395*	.176**	.185**
Risk Taking Propensity	.368*	.388*	.183**	.193**
Proactiveness	.163	.135	.019	.010
Moderator				
Age		-2.57E-006		-7.81E-005
Gender		-.019		-.001
Education		.001		-.003
Experience		.001		.002
Model Summary				
F Statistic	5.329	3.146	9.571	5.790
R ²	.260**	.266*	.387**	.400**
Adjusted R ²	.211**	.181*	.346**	.331**
ΔR ²	.209**	.006*	.204**	.013**
N	98	98	98	98

Considering to model I statistical interpretations innovation (.377 & .395), risk taking propensity (.368 & .388) significant at .05 confident level and addiction of predictor variables made a significant contribution over and above the models ($R^2 = .209$ & $R^2 = .006$) at the .001 and .05 significant levels. Therefore we can conclude that hypotheses H1 and H2 get supported by the statistical analysis. For model II analysis we obtained innovation (.176 & .185), risk taking

propensity (.183 & .193) which is significant at .001 level and addiction of predictor variables made a significant contribution over and above the base models ($R^2 = .204$ & $R^2 = .013$) at the .001 significant level. Therefore we can conclude that hypotheses H1 and H2 get supported by the statistical analysis. For both model I and model II our analysis didn't support to H3 therefore we can't conclude anything about proactiveness. None of any moderator variables significant in this study where our forth hypothesis H4 not significant.

VI. FINDING AND CONCLUSION

One objective is to identify the degree of entrepreneurial orientation of SMEs in Sri Lanka. As we found it was a low value. According to the survey we can conclude that degree of EO of SMEs in Sri Lanka is very low. We can infer that entrepreneurs who approaching innovative venture creations can gain more success in his/her business community. This is aligning with the literature review where Innovativeness is an organization's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services or technological processes, as well as the pursuit of creative, unusual, or new solutions to problems and needs [6]; [15]; [28]. As prior researchers proven it was a true factor for Sri Lankan context and as we found it is moderate positive relationship. Therefore our finding support to past researchers findings and we can emphasize that innovativeness has positive impact on the growth of SME.

There is a moderate positive relationship between Risk Taking Propensity and growth of SMEs. As prior researchers comment on their findings, the willingness to engage in relatively high levels of risk-taking behaviors helps firm size profitable opportunities in the face of uncertainty and the achievement of long-term profitability [18]. Hence, risk-taking tendency may be positively related to success [6]; [29]. As prior researchers found our analysis granted same result for the Sri Lankan context. It implies that entrepreneur who willing to take risk, try out risky ventures and positive risk takers can gain more success in their endeavour.

In the case of analyzing Proactiveness, it deviates from prior researchers findings. [16] Academicians in the field of economy and entrepreneurship have frequently emphasized the importance of being first-mover or being pioneer. The firm moving first can gain extraordinary benefits and become a pioneer in forming brand image by profiting these opportunities. But according to our analysis it was not significant and we were not in a position to accept the relationship. Though it is significant it will be a very weak relationship according to the analysis.

In this research we were talking about four moderator variables which moderate the relationship between EO and growth of SME. The literature discusses a number of variables that potentially moderate the EO– performance relationship [6]; [11]; [13]. According to the analysis no moderator variable significant at any confident levels. Although the moderator variables significant, it will be very

weak relationship according to the analysis we have done. According to the analysis we can conclude that entrepreneur's age, gender, education and experience have no moderator effect on the relationship between EO and growth of SME in Sri Lanka.

VII. RECOMMENDATION

Entrepreneurs who start a business or preparing for a diversification for his/her business we can recommend that he/she should follow EO. The degree of EO of SMEs in Sri Lanka low, but there is some portion of entrepreneurs use EO. According to the past researchers findings and this study we can emphasize that the entrepreneurs who adopt more EO will be another reason to climb the ladder of the success. Innovative ideas, innovative product or service and really important to the growth and success of the business. Entrepreneurs should be positive thinkers on risks. As well as risk taking ability of an entrepreneur cause to gain high return in the business. More the risk venture can create high returns at the same market place. Though our study is not support with it is another factor to gain growth in business. Government and business consultants should make their attention in order to stimulate entrepreneurs to use proactive method in their endeavours. Because anticipation is the key for first mover advantage.

There are factors that effect to EO and growth of the business. We investigated entrepreneur's age, gender, education and experience for that. But none of them were able to create any effect to change or modify the relationship between EO and growth of business. So entrepreneur's age, gender, education and experience have no effect of growth of the business. With good practice of EO entrepreneurs can mitigate or eliminate resistances and gain success of the business.

REFERENCES

- [1] Semasinghe, D.M. , The role of idea novelty and relatedness in nascent ventures. *PhD thesis*, (2011), 48-50
- [2] Davidsson, P. , Continued entrepreneurship: ability, need, and opportunity as determinants of small firm growth. *Journal of Business Venturing* 6 (6) , (1991), 405-429.
- [3] Covin, J., & Slevin, D.,Strategic Management of Small Firms in Hostile and Benign Environments. *Strategic Management Journal* , (1989),75-89.
- [4] Wiklund, J., & Shepherd, D., Knowledge-based Resources, Entrepreneurial Orientation and the Performance of Small and Medium-sized Businesses. *Strategic Management Journal* , (2003), 1307-1314.
- [5] Covin, J., & Slevin, D., A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theoretical Practice* , (1991), 7-25.
- [6] Lumpkin, T., & Dess, G., Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance. *Academy of Management Review* , (1996),135-138
- [7] Stevenson, H. H., & Jarillo, J. C., A Paradigm of Entrepreneurship: Entrepreneurial Management. *strategic Management Journal* , (1990), 17- 27.
- [8] Smart, D., & Conant, J.,Distinctive Marketing Competencies and Organizational Performance. *Journal of Applied Business Research* , (1994), 10-28
- [9] Miller, D. The correlates of entrepreneurship in three types of firms. *Management Science*, (1983), 29(7), 770-791.
- [10] Donatus, O.,Entrepreneurial orientation and psychological traits: the moderating influence of supportive environment. *Journal of Behavioral*

- Studies in Business* , (2008), 1-3
- [11] Zahra, S. A., & Covin, J., Contextual influences on the corporate entrepreneurship performance relationship A longitudinal analysis. *A longitudinal analysis Venturing* , (1995), 43-58
- [12] Wiklund, J. ,The Sustainability of the Entrepreneurial Orientation–Performance Relationship. *Entrepreneurship Theory and Practice* , (1999), 37-48
- [13] Zahra, S. A., & Garvis, D. M., International corporate entrepreneurship moderating effect of international environmental hostility. *Journal of Business Venturing* , (2000), 469-492
- [14] Wiklund, J., & Shepherd, D., Entrepreneurial Orientation and Small Business Performance: A Configurational Approach. *Journal of Business Venturing* , (2005), 71-91
- [15] Lumpkin, G. T., & Dess, G. G., Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry lifecycle. *Journal of Business Venturing*, (2001), 16, 429-451.
- [16] Harun, K., & Veysel, A. ,ENTREPRENEURIAL ORIENTATION AND PERFORMANCE OF TURKISH MANUFACTURING FDI FIRMS. *İktisat İşletme ve Finans* , (2009), 6-8
- [17] Knight, G. A., Cross-cultural reliability and validity of a scale to measure firm entrepreneurial orientation. *Journal of Business Venturing*, (1997), 12, 213-225.
- [18] McGrath, R.G. , Exploratory learning, innovative capacity and managerial oversight. *Acad. Management J.* 44, (2001),118-141
- [19] Venkatraman, N. , Strategic orientation of business enterprises: The construct, dimensionality, and measurement. *Management Science*, (1989a), 35(8), 942-962.
- [20] Aruna, S., Small and Medium Enterprise Development in Sri Lanka. , (2003), 133-135
- [21] Edmore, M., Literature review on small and medium enterprises. *National Credit Regulator* , (2011), 21-22
- [22] Storey, D., *Understanding the small business sector*. London: Routledge, (1994).
- [23] Miller, D., & Friesen, P., Innovation in Conservative and Entrepreneurial Firms:Two Models of Strategic Momentuml. *Strategic Management Journal* , (1982), 1-25
- [24] North, D., & Smallbone, D., Employment generation and small business growth in different geographical environments. *The 16th National Small Firms Policy and Research Conference.*, (pp. 17-19). Nottingham, England, (1993).
- [25] Storey, D., *Understanding the small business sector*. London: Routledge, (1994).
- [26] Shapiro, S., & Wilk, M., An analysis of variance test for normality. *Biometrika*52 , (1965), 591-611
- [27] Hair, J.F. , Anderson, R.E., Tatham, R.L., & Black, W.C., Multivariate Data Analysis, (5th Edition). Upper Saddle River, NJ: Prentice Hall, (1998).
- [28] Certo, T.S., T.W. Moss and J. Short, Entrepreneurial orientation: An Applied Perspective. *Business Horizons*, 52: 2009, 319-324
- [29] Frese, M., Brantjes, A., & Hoorn, R. , Psychological success factors of small scale businesses in Namibia: The roles of strategy process, entrepreneurial orientation and the environmentl. *Journal of Developmental Entrepreneurship*, (2002) , 259-283