

**ENTREPRENEURIAL ORIENTATION AND BUSINESS  
PERFORMANCE OF SMALL AND MEDIUM SCALE ENTERPRISES  
OF WESTERN PROVINCE IN SRI LANKA**

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**Abstract**

*The economic growth of developing countries can be sustained by the expansion of private sector, as they are the engine of growth. Many scholars have argued that Entrepreneurial Orientation is one of the salient factors which contribute to the performance of SMEs. However, the recent literature provides contradictory findings about the relationship between Entrepreneurial Orientation and performance. Accordingly this study aimed at investigating the level of Entrepreneurial Orientation (EO) of owner(s)/manager(s) of SMEs and the relationship between EO and business performance of manufacturing SMEs in Western province. This study adopted deductive approach and used both descriptive and inferential statistical tools in analyzing the collected data. Findings revealed that the Entrepreneurial Orientation (EO) among owner/managers of manufacturing SMEs in Western province is at high level. Among the dimensions of EO, innovativeness shows high influence on business performance.*

**Key words:** Entrepreneurial Orientation, business performance, SMEs, innovativeness, economic growth

## **Introduction**

Today SME sector spread worldwide plays a significant role in the economy (Philip, 2010 and Islam et al., 2011). At present the vibrant SME sector is identified as engine of growth playing a significant role in economic growth, innovation, employment generation and poverty reduction (Stokes, 2003 and Prasad, 2004). According to the banking survey done by International Finance Corporation (IFC) in 2006/2007 of the SME Market, in Sri Lanka, SMEs constitute 80-90 percent of total establishments and 20 percent of industrial value added and around 70 percent of employment opportunities have been generated. Further the contribution of SME sector has been increased from 40 percent in 2010 to 52 percent in 2011 (Ministry of Finance and Planning, Annual Report, 2011). Several factors influenced in the development of SMEs in Sri Lanka; shortage of capital, less infrastructure, labour intensive nature of the sector, potential to mobilize and divert financial resources in the economy, promote balanced regional development, nurtures entrepreneurial talents and play a complementary role to large industries through sub-contracting and facilitating the linkage between the formal and informal sector (Gamage, 2003). Thus as shown as above, are very important. Some of the entrepreneurial talents are described by Entrepreneurial orientation. EO has recently been recognized as one of the most important factors for a firm's growth and profitability. Research has shown that high growth correlates with a firm's entrepreneurial orientation. Hence, growth can be associated with innovativeness, pro-activeness and risk-taking behavior of the firm, which refers to an entrepreneurial orientation (EO) dimension (Zainol and Ayadurai, 2011).

Entrepreneurial orientation (EO) has been a topic of much debate in management and entrepreneurship literature for years (Zainol and Ayadurai, 2011). The relationship between EO and firm performance has been extensively discussed conceptually and empirically in previous studies and majority were supported a positive relationship (Lumpkin and Dess, 1996; Quince and Whittaker, 2003; Lim, 2008; Fairoz et al., 2010). It implies that the relationship among various dimensions of EO and performance yield mixed results raising a question that does the EO positively or negatively related with firm performance. Further there is a dearth of literature between EO and business performance in developing countries in Asia (Kiriri, 2005; Zainol and Ayadurai 2011). It is also evident that 85 percent of SMEs face significant survival challenges and more than 75 percent fail within five years of startup (Asian SME Summit, 2009). It implies that SMEs to be proactive and innovative to face these challenges successfully and thereby to ensure the long term survival. This study attempted to

examine how EO can contribute to the performance of SMEs. By analyzing the relationship between EO, this study provides useful insights to owner/managers of manufacturing SMEs in Western province to be entrepreneurially oriented in their businesses.

### **Research Objectives**

The objectives of the study are mentioned as follows.

- To investigate the level of Entrepreneurial Orientation (EO) of owner(s)/manager(s) of SMEs
- To identify the relationship between EO and strategic planning and business performance of SMEs

### **Review of Literature**

EO refers to a firm's strategic orientation, acquiring specific entrepreneurial aspects of decision-making styles, practices and methods (Lumpkin and Dess, 1996). They defined EO dimensions as follows.

- *Autonomy*: the independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion
- *Innovativeness*: a firm's tendency to engage in, and support new ideas, novelty, experimentation, and creative process which may result in new products, services, or technological processes.
- *Risk Taking*: Incurring heavy debt or making large resource commitments by seizing opportunities in the market place in the interest of high returns.
- *Pro-activeness*: Taking initiatives by anticipating and pursuing new opportunities and by participating in emerging markets.
- *Competitive Aggressiveness*: A firm's propensity to directly and intensely challenge its competitors to achieve entry or improve position to outperform industry rivals in the marketplace.

Fairoz et al., (2010) also focused on entrepreneurial orientation in terms of innovativeness, pro-activeness and risk-taking. In their study entrepreneurial orientation was consisted of same dimensions followed by Koufopoulos in 2010. The above Table 2.6 presents the indicators of EO used by Fairoz et al., (2010). This study found that 52 percent SMEs reported moderate level of EO. Considering the above factors it is clear that both organizational as well as non-organizational factors affect the level of strategic planning in

different ways. Accordingly, owner/manager characteristics, firm characteristics and Entrepreneurial Orientation together determine the level of strategic planning in SMEs.

### **Entrepreneurial Orientation (EO) and Performance**

The relationship between EO and firm performance has been extensively discussed conceptually and empirically in previous studies and majority were supported a positive relationship (Lumpkin and Dess, 1996; Quince and Whittaker, 2003; Lim, 2008; Fairouz et al., 2010).

Most of the subsequent studies were adopted all the dimensions or several of them as per the requirement. Quince and Whittaker (2003) investigated the relationship between EO (innovativeness, pro-activeness and risk-taking) and performance of 142 high-tech firms and found that both pro-activeness and innovativeness were weakly positively related to employment growth and innovativeness was positively related to turnover growth. Lim (2008) investigate the relationship between EO and the performance of 137 service businesses. The model consisted of autonomy, innovativeness, risk-taking and competitive aggressiveness and Competitive aggressiveness was identified as the only dimension of EO which has a significant impact on the performance. This means that the higher the EO in terms of competitive aggressiveness, the higher the performance of the organization.

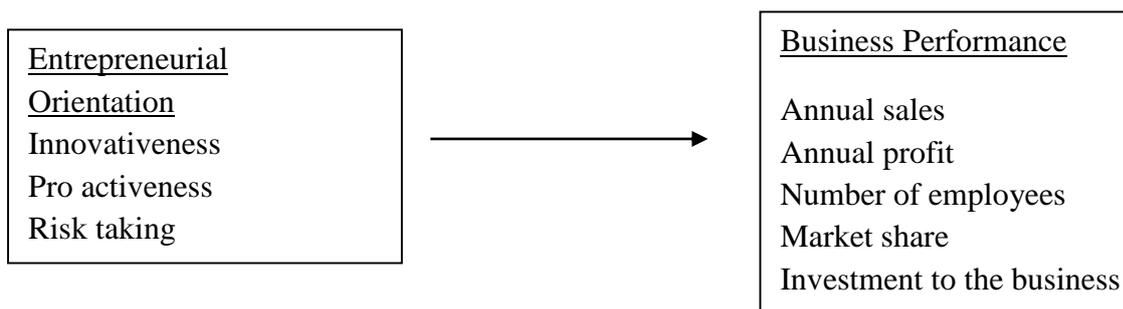
Covin and Slevin (1989) as cited by Lim (2008) suggested that EO is related to performance among small firms in hostile environments. Lim (2008) incorporated four dimensions; autonomy, innovativeness, risk-taking and competitive aggressiveness and confirmed the positive relationship between EO and performance. Consistently Hui Li et al., (2008) reconfirmed Lim's findings employing all five dimensions of EO. Fairouz et al., (2010) also focused on entrepreneurial orientation and business performance of twenty five manufacturing SMEs in Hambantota district in Sri Lanka in terms of innovation, pro-activeness and risk-taking. However the findings are contradictory with other studies and showed no significant relationship among innovativeness, pro-activeness, risk-taking and overall EO with sales growth, profit, employment growth and owner/manager satisfaction. In an attempt to investigate the correlation of EO and firm performance of services and manufacturing SMEs in Kuala Lumpur, results suggested that there is a significant positive relationship between EO and firm performance. Further, it showed that innovativeness, pro-activeness and risk-taking play a significant role in firm performance (Zainol and Ayadurai, 2011). Islam et al., (2011) recently examined the effect of entrepreneurial characteristics and firm characteristics on SME performance in Bangladesh found that entrepreneurial characteristics are

significantly related to business success. Entrepreneurial orientation was one of the entrepreneurial characteristics considered in this study. An important study undertaken by Samarakoon and Jasek (2011), based on the SMEs in Western province of Sri Lanka was aimed to find out the relationship of overall EO and each dimension of EO with the performance of SMEs. This study mainly focused on three dimensions of EO; Innovativeness, pro-activeness and risk-taking. The results found that there is a significant relationship between EO and overall performance. Among the three dimensions, innovativeness has a significant relationship with the overall performance. The performance was measured in terms of Return on Investment (ROI), sales performance and market performance. The analyzed the relationship between overall EO and the each measure of performance. Relationship between overall EO and each measure of performance was investigated. It was found that only significant relationship was found with respect to overall EO and ROI. However the strength of the relationship is not strong.

It is apparent that the relationship among various dimensions of EO and performance yield mixed results raising a question that does the EO positively or negatively related with firm performance. Based on the previous research findings the following hypothesis can be proposed in this study for the empirical testing.

H1: There is a positive relationship between the Entrepreneurial Orientation and the business performance

## Methods



**Figure: Variables**

The above mentioned framework suggests EO as the independent variable and Business performance as the dependent variable. Further the study identifies only three dimensions of EO and five measures for the business performance.

### Operationalization of Independent Variables

Lumpkin and Dess (1996) defined Entrepreneurial Orientation as the firm's strategic orientation, acquiring specific entrepreneurial aspects of decision-making styles, practices and methods. Since the majority of studies have used Innovativeness, Pro-activeness and Risk-taking, this study also focused on these three dimensions. The relevant indicators were adopted from Fairoz et al., (2010) and measured through 5 point scale statements ranging from "strongly agree" to "strongly disagree".

Then the level of EO of owner/managers is categorized as low, medium and high. Accordingly, if the summated value ranges from 9 to 20, from 21 to 32 and from 33 to 45, are categorized as low level of EO, medium level of EO and high level of EO respectively.

**Table 1: Indicators of Entrepreneurial Orientation**

Variable	Indicators
Innovativeness	Emphasis on Research and Development Introduction of new products Changes to the current products
Pro-activeness	Imitativeness towards competitors Imitativeness towards introducing new products Overall position
Risk-taking	Willingness to take risk Dealing with uncertainty Exploring potential opportunities

*Source: Fairoz et al., (2010)*

### Operationalization of Dependent Variables

Business performance of the firm and it was measured through a combination of financial and non-financial measures including the annual sales growth, annual profits growth, annual employee growth, market share and investment to the business. These performance variables were adopted from Pushpakumari & Watanabe (2009). It was found that most of SMEs in Sri Lanka does not maintain financial reports properly and reluctance to disclose the data even if available (Wijewardena et al., (2004). Therefore the owner/managers were asked to indicate the trend of each of these indicators during last three years as "Highly increased", "Increased", "Moderate", "Decreased" and "Highly decreased" using 5-point scale.

### **Population, Sample and Sampling Method**

Population of the study consists of manufacturing SMEs in Western province of Sri Lanka. Due to, absence of nationally accepted definition for the SMEs and the unavailability of adequate information, it is difficult to identify an exact total population of the SMEs in Sri Lanka. However, several institutions (DCS, IDB, EDB, Chamber of Commerce etc.) provide various definitions. For the purpose of this study SMEs are defined as any establishments having more than five employees and less than 300 employees. This definition was also adopted by Wijewardane et al., (2004) in their study. Further, the definition of World Bank also identifies the maximum no. of employees as 300 for SMEs. Accordingly, operational population consists of 7216 SMEs based on the data base maintained by Department of Census and Statistics of Sri Lanka. SMEs in Each district Colombo, Gampaha and Kaluthara were identified separately and selected the number of SMEs from each district proportionately. Due to the practical limitations the sample is limited to 275 manufacturing SMEs in Western province randomly selected from the list of registered manufacturing SMEs in Department of Census and Statistics of Sri Lanka by the end of 2011. 275 manufacturing SMEs consisted of 124 SMEs from Colombo, 115 from Gampaha and 36 from Kaluthara.. Accordingly, were selected as the sample for the data collection covering 13 sub sectors of the manufacturing sector. Data will be collected through personally administered questionnaire distributed among 275 owner/managers who are the respondents in the sample. Cronbach's alpha values were calculated for EO and business performance. Each dimension of the EO and business performance indicated a value greater than 0.7. Accordingly this indicates the internal consistency of the questionnaire.

However, 26 of SMEs were excluded since they were not in the operation, 38 of SMEs were not contacted and did not give appointments for interviews and 11 questionnaires were incomplete. Accordingly, only 200 questionnaires were utilized for data analysis which consists of 90 SMEs from Colombo, 84 SMEs from Gampaha and 26 SMEs from Kaluthara.

**Table 2: Cronbach's Alpha Statistics of Scales: Pilot Study and Main Study**

Scale	No. of items		Cronbach's alpha		Cronbach's alpha based on standardized items	
	Pilot test	Real test	Pilot test	Real test	Pilot test	Real test
<b>Entrepreneurial Orientation</b>						
Innovativeness	3	3	0.766	0.756	0.778	0.760
Pro-activeness	3	3	0.701	0.712	0.732	0.722
Risk-taking	3	3	0.711	0.701	0.800	0.788
<b>Business performance</b>	5	5	0.838	0.801	0.853	0.831

Source: Author compiled data (2012)

### Data Analysis

Data were analyzed through descriptive statistical measurements (such as mean, median, percentages, charts, bivariate correlation) and inferential statistical measurements were used to analyze the data and to test the hypothesized relationships. In general, bivariate and multivariate statistical methods have to be adhered to the statistical assumptions: Normality, Linearity, Multicollinearity and Homoscedasticity. Therefore the researcher conducted the Exploratory Data Analysis (EDA) to test the data for the required statistical assumptions using recommended techniques. The statistical results indicate that there is no violation of above assumptions.

**Table 3: Multicollinearity Test of Independent Variables of Conceptual Framework**

Variables	Collinearity statistics	
	Tolerance	VIF
Dimensions of Entrepreneurial Orientation		
Innovativeness	0.650	1.539
Pro-activeness	0.616	1.623
Risk-taking	0.779	1.284

Source: Author compiled data (2012)

The researcher has tested for independence and near multicollinearity to assert the independency of each predictor variables in the model and it was done through tolerance and Variance Inflation Factor (VIF) values. A value near one indicates independence and closer to zero indicates a problem of multicollinearity. VIF values should be less than 10 as a rule of thumb to affirm the non-violation of the assumption (Hair et al., 2009). Therefore there is no

serious multicollinearity between independent variables. When testing for Homoscedasticity, the value of Durbin-Watson test should be closer to 2 in order to imply the non-violation of this assumption (Hair et al., 2009). The value of the Durbin-Watson test is 1.706 for the multiple regression model, which indicates a non violation of this assumption.

### **The Profile Characteristics of SME Owner/Managers**

The personal profile of the owner/manager of SMEs contains age, gender, marital status, level of education, previous training and prior business experience before entering in to the current business. Majority of 34 percent of owner/managers is in the age category of 51-60 years. Further, 72 percent of them are males and 74% of them are married. As shown by the sample, as per the highest educational qualification, 25 percent of them have passed GCE Advanced level examination. Considerably another 25 percent of them are graduates and 23 percent of them are holding either certificate or diploma, whereas 3 percent have obtained post graduate qualification.

**Table 4: The Personal Profile of the Owner/Managers**

Characteristic		No. of SMEs	Percentage
Age of the owner/manager	20-30 years	5	3
	31-40 years	45	23
	41-50 years	65	33
	51-60 years	68	34
	61-70 years	17	7
	More than 70	0	0
		200	100
Gender of the owner/manager	Male	143	72
	Female	57	28
		200	100
Marital status of the owner/manager	Single	47	23
	Married	153	74
		200	100
Highest qualification of the owner/manager	Below GCE Ordinary Level	1	1
	GCE Ordinary Level	16	8
	GCE Advanced Level	54	27
	Certificate/Diploma	47	23
	Professional qualifications	27	13
	Graduate	50	25
	Post graduate	5	3
		200	100

Previous training before entering into the current business	Yes	122	61
	No	78	39
		200	100
Prior experience before entering into the current business	No	104	52
	Yes	96	48
		200	100

Source: Survey data (2012)

### Entrepreneurial Orientation and Business Performance

The relationship between EO and business performance was examined in terms of overall performance and each measure separately. Business performance was measured under five measures namely; annual sales, annual profits, employee growth, market share growth and investment to the business over last three years from 2009 to 2011.

**Table 5: Relationship between the Entrepreneurial Orientation and Business Performance**

		Entrepreneurial Orientation	Overall Performance
Entrepreneurial Orientation	Pearson Correlation	1	.404**
	Sig. (2-tailed)		.000
	N	200	200

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: Survey data (2012)

Since the p-value is less than 0.05, the alternative hypothesis is accepted. Accordingly, it can be concluded there is a positive correlation between the EO and business performance. More precisely higher the levels of EO better the business performance of SMEs. Pearson correlation coefficient is 0.404 at 0.01 significance level, which indicates a weak relationship between these two variables. That means EO contributes the business performance slowly.

In addition to the overall relationship between EO and business performance, the relationship between each dimension of EO and business performance was investigated by the Table 6. The results show that a positive relationship between innovativeness, pro-activeness and risk-taking and business performance. However, the relationship is moderated with innovativeness, weak with pro-activeness and risk-taking.

**Table 6: Relationship between Dimensions of Entrepreneurial Orientation and Business Performance**

		Innovativeness	Pro activeness	Risk taking
Overall Performance	Pearson Correlation	.555**	.404**	.209**
	Sig. (2-tailed)	.000	.000	.003
	N	200	200	200

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: Survey data (2012)

Further, the relationship between overall EO and each measure of business performance was examined by the following Table 7.

**Table 7: Relationship between Overall Entrepreneurial Orientation and each Measure of Business Performance**

		Annual sales during last three years	Annual profits during last three years	Employee growth during last three years	Market share growth during last three years	Investment to the business
Overall Entrepreneurial Orientation	Pearson Correlation	.175*	.394**	.481**	.190**	.151*
	Sig. (2-tailed)	.013	.000	.000	.007	.032
	N	200	200	200	200	200

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: Survey data (2012)

According to the above table, there is a positive relationship between overall EO and the each measure of business performance (less than 0.05). Although the relationship is positive, it cannot be found any strong relationship. However, the relationship between EO and employee growth shows .481, which is closer to moderate (0.5) with respect to other measures.

**Table 8: Relationship between Entrepreneurial Orientation Dimensions and Business Performance Indicators**

		Annual sales during last three years	Annual profits during last three years	Employee growth during last three years	Market share growth during last three years	Investment to the business
Innovativeness	Pearson Correlation	.393**	.373**	.343**	.300**	.462**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	200	200	200	200	200

Pro-activeness	Pearson Correlation	.240**	.282**	.391**	.226**	.240**
	Sig. (2-tailed)	.001	.000	.000	.001	.001
	N	200	200	200	200	200
Risk taking	Pearson Correlation	.100	.182*	.196**	-.010	.213**
	Sig. (2-tailed)	.161	.010	.005	.890	.002
	N	200	200	200	200	200

\*\**. Correlation is significant at the 0.01 level (2-tailed).*

\**. Correlation is significant at the 0.05 level (2-tailed).*

*Source: Survey data (2012)*

The above table presents the correlations between different dimensions of EO and different measures of business performance. Results show that innovations and pro-activeness are significantly related with all performance variables at 0.01 ( $P=.000 < 0.05$ ). However, risk taking is significantly related only with profits growth, employee growth and investment to the business. Notably risk taking is negatively related with market share growth. However, it is not significant.

Subsequently multiple regression analysis was carried out to identify which dimension of EO would affect significantly on the business performance significantly. Multiple regression results show that the coefficient of determination ( $R^2$ ) is 0.310 (Adjusted R Square=0.310). It denotes that only 31 percent of variation on business performance is explained by this model with the standardized beta values of 0.491, 0.141 and 0.043.

The significance value shown by the ANOVA table is less than 0.05 ( $P\text{-value} > 0.000$ ), which indicated that overall model applied is significantly good enough in predicting the outcome variable of business performance.

With reference to the below Table 9, independent variables are innovativeness, pro-activeness and risk-taking. The results show that the p-values of pro-activeness (.061) and risk-taking (.518) are greater than 0.05 except innovativeness (.000). Therefore it can be concluded that only innovativeness has a significant impact on business performance.

**Table 9: Multiple Regression Analysis – Dimensions of Entrepreneurial Orientation and Business Performance**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	8.413	1.198		7.023	.000
Innovativeness	.620	.092	.491	6.725	.000
Pro-activeness	.212	.113	.141	1.884	.061
Risk taking	-.070	.108	-.043	.647	.518

Source: Survey data (2012)

The multiple regression equation can be derived as follows.

$$\text{Business performance} = 8.413 + 0.491 (\text{Innovativeness}) + 0.141 (\text{Pro-activeness}) - 0.043 (\text{Risk taking})$$

The researcher is interested to investigate the nature of the Entrepreneurial Orientation among the manufacturing SMEs in Western province. Survey data reveals that 104 SMEs have high EO, 83 of them have medium EO and 13 have low EO. The above hypothesis was tested using one way Analysis of Variance (ANOVA). Accordingly, majority of owner(s)/manager(s) of manufacturing SMEs in Western province demonstrate high EO.

**Table 10: ANOVA – Entrepreneurial Orientation and Business Performance**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	140.120	2	70.060	10.718	.000
Within Groups	1287.755	197	6.537		
Total	1427.875	199			

Source: Survey data (2012)

According to the above Table 10, the significance value of the ANOVA is 0.000 (P-value>0.05). It reveals that there are statistically significant differences between levels of EO in terms of business performance. That is the business performance of SMEs would differ with the different levels of EO of owner(s)/manager(s). The Turkey HSD test was used to identify the performance differences among three groups of EO. Accordingly, the significant performance differences can be found between medium and high groups (p-value=.000) and low and high groups (p-value=.001) in terms of EO.

## **Discussion and Conclusion**

The relationship between the level of Entrepreneurial Orientation (EO) of owner-managers of SMEs and business performance is inconclusive in the recent literature. Therefore this relationship was empirically tested in manufacturing SMEs in Sri Lankan context. The findings of the present study revealed that there is a positive but weak relationship between EO and business performance (.404). Further, only moderate relationship could be found in terms of innovativeness (.550) and weak relationships with pro-activeness (.404) and risk taking (.209). Further, it was found that innovativeness is only significant in predicting the business performance of the manufacturing SMEs in Western province. The relationship of EO with each measure of performance also shows a significant positive relationship. However, except with employee growth, the relationship with other four performance measures show a weak relationship. On the other hand innovativeness and pro-activeness have significant positive relationship with all performance measures whereas risk taking shows significant positive relationship only with profits growth, employee growth and investment to the business. The business performance significantly differs among the levels of EO (high, medium and low). The findings of the present study are consistent with the findings of Quince and Whittaker (2003), Lim (2008), Hui Li et al., (2008), Zainol and Ayadurai (2011) and Samarakoon and Jasek (2011). More importantly Samarakoon and Jasek (2011) have tested the relationship between EO and performance with respect to Sri Lankan SMEs. The results of the present study confirm that of Samarakoon and Jasek (2011). One possible reason for this may be the fact that if an individual possess entrepreneurial characteristics that person has a strong desire and courage to drive the business toward the success. However, the findings of Fairoz et al., (2010) are contradictory with other studies and showed no significant relationship among innovativeness, pro-activeness, risk-taking and overall EO with sales growth, profit, employment growth and owner/manager satisfaction.

The analyzed level of Entrepreneurial Orientation (EO) concludes that the majority of owner(s)/manager(s) in manufacturing SMEs in Western province exhibit a high level. Furthermore, the study revealed that there is a positive relationship between the EO and business performance of manufacturing SMEs in Western province. That means higher the EO among owner(s)/manager(s) higher the business performance of manufacturing SMEs in Western province and among the dimensions of EO, innovativeness is relatively important in predicting the business performance. Among the five measures of business performance EO mainly contributes for the employee growth.

The findings of the study reveal that innovation is significant among the three dimensions of EO used in this study. In line with the literature most of the studies have incorporated these three dimensions and proved that innovativeness important. Accordingly it implies that researchers need to investigate new dimensions or various aspects of EO to develop it.

### **Limitations and Recommendations for Further Research**

The limitations of this study can be discussed as contextual and conceptual. The results of this study must be interpreted in the light of obvious limitations. One limitation is that the research is constrained by the vastness of SME sector and the limited time availability. Therefore this study was confined to manufacturing SMEs in Western province only. Sample size was another limitation of the study. Nevertheless, the results were also subject to the limitations commonly associated with the questionnaire method.

Conceptual limitations consist of definitions of performance and Entrepreneurial Orientation. For the purpose of this study EO, it was defined in terms of three dimensions; innovativeness, pro-activeness and risk taking whereas business performance using five measures. Further, there are some factors such as firm size, uncertainty which mediate the EO-performance relationship. Those mediating factors were not considered in this study. In addition to that, there are limitations in relation to the operational definition of SMEs. In this study SME was defined based on only one criteria; no. of employees. Accordingly the following recommendations can be made for future research.

- The present study mainly focused on the relationship between EO and business performance of manufacturing SMEs in Western province of Sri Lanka, which can be recommended to other provinces in Sri Lanka.
- In defining EO autonomy and competitive aggressiveness can be incorporated in addition to above three measures. There may be many measures categorized under financial (Net profit, Return on investments etc.) and non-financial (objectives achievement level, manager/employee/customer satisfaction etc.). Accordingly, another prospect for further research lies in the need to develop more tools to define EO and business performance and validate the relationship which is investigated in this study.
- Obviously the scope of the study was limited to manufacturing SMEs in Western province. However, this study is possible to extend to other industries like retail and trade sectors and examine the differences among them. Similarly the performance differences can be examined among the three districts in the Western province.

## References

Fairoz, F.M., Hirobumi, T. and Tanaka, Y. (2010). Entrepreneurial Orientation and Business Performance of Small and Medium scale Enterprises of Hambantota District Sri Lanka. *Journal of Asian Social Science*.6 (3), 34-46.

Gamage, A.S. (2003). Small and Medium Enterprise Development in Sri Lanka: A Review. [On line] Available from [http://202.11.2.113/SEBM/ronso/no3\\_4/aruna.pdf](http://202.11.2.113/SEBM/ronso/no3_4/aruna.pdf) [Accessed 01.06.2012]

Hui Li, Y., Wen Huang, J. and Tien Tsai. M. (2008). Entrepreneurial orientation and Firm Performance: The role of Knowledge Creation Process. *Industrial Management Journal*.<http://www.sciencedirect.com/science/article/pii/S0019850108000266>.

Islam, A., Khan, M.A., Obaidullah, A. Z. M. & Alam, M. S. (2011). Effect of Entrepreneur and Firm Characteristics on the Business Success of Small and Medium Enterprises (SMEs) in Bangladesh, *International Journal of Business and Management*.6 (3).

Kiriri, P.N. (2005). Small and medium enterprises planning: evidence from Australia. [On line] Available from <http://www.sbaer.uca.edu/research/icsb/2005/paper112.pdf> [Accessed 08.06.2012]

Koufopoulos, D.N., Gkliatis, I.P., Argyropoulou, M. and Zoumbos, V. (2010). Strategic Planning Approaches in Greek SMEs. Working paper. [On line] Available at SSRN: <http://ssrn.com/abstract=1619872> or <http://dx.doi.org/10.2139/ssrn.1619872>. [Accessed 10.10.2012]

Lim, S. (2008). Entrepreneurial Orientation and the Performance of Service Business. [On line] Available from <http://www.decisionscience.org/Proceedings/DSI2008/docs/392-9586.pdf> [Accessed 10.08.2012]

Lumpkin, G.T and Dess, G.G. (1996). Clarifying the entrepreneurial construct and linking it to performance. *Academy of Management Review*. 21 (1), 135-172.

Ministry of Finance and Planning. 2005-2011. Annual Reports

Philip, M. (2010). Factors affecting business success of small & medium enterprises (SMEs), International Research & Educational Consortium <http://www.skirec.com>, APJRBM Volume 1, Issue 2

Prasad, V. N. (2004). Strengthening policies through international cooperation. Sweden: IKED/INSME International Roundtable.

Quince, T. and Whittaker, H. (2003). Entrepreneurial Orientation and Entrepreneurs' Intentions and objectives. [On line] Available from <http://www.cbr.cam.ac.uk/pdf/wp271.pdf> [Accessed 20.07.2012]

Samarakoon, S.M.A.K. and Jasek, R. (2011). Entrepreneurial Orientation and Business Performance of Small and Medium Size Enterprises in Sri Lanka. 17<sup>th</sup> International Business Information Management Association Conference, November 14-15, Milan, Italy. p.1398-1408, ISBN: 978-0-9821489-6-6.

Stokes, D. (2003). Small Business Management. 4th ed. London: Thomson Learning.

Wijewardena, H., De Zoysa, A., Fonseka, T. and Perera, B. (2004). The impact of planning and control sophistication on performance of small and medium-sized enterprises: evidence from Sri Lanka. *Journal of Small Business Management*. 42 (2), 209-217.

Zainol, F.A. and Ayadurai, S. (2011). Entrepreneurial Orientation and Firm Performance: The Role of Personality Traits in Malay Family Firms in Malaysia. *International Journal of Business and Social Science*. 2 (1), 59-71.