

Entrepreneurial Orientation of Information and Communication Technology Services Exports in Sri Lanka

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Abstract: Although International entrepreneurial orientation (IEO) is one of the central themes in international entrepreneurship, so far, only a very few empirical studies have been conducted on this line of research in a non-western developing country context. Thus, the aim of this study is to examine the influence of international entrepreneurial orientation on international performance of Information and communication Technology (ICT) exporting entrepreneurs in Sri Lanka. This study addresses the empirical gap of the need for conducting more and more research on IEO-Performance relationship in developing country contexts. The research hypotheses were formulated on the base of the extant literature on entrepreneurial orientation and born globals and tested with a sample of 100 ICT exporting firms. The findings reveal that three dimensions of entrepreneurial orientation: innovativeness, proactiveness and risk-taking are positively related to international performance of born globals, even for a developing country context. Further, the study found that ICT export entrepreneurs in Sri Lanka exhibit a higher degree of internationalization.

Key words: entrepreneurial orientation; born global; degree of internationalization; international performance

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1. Introduction

Due to several favorable changes and developments in international trade & business a growing number of small firms seem to be operated internationally. As a result of this, recently, the emergence of early and rapidly internationalization firms — born globals (BG) (Rennie, 1993; Knight & Cavusgil, 1996) — has become extremely significant in international businesses and international entrepreneurship research studies (Chun, Tian, & Jing, 2014; Jantunen, Nummela, Puumalainen, & Saarenketo, 2008; Oviatt & McDougall, 1994; Melen & Nordman, 2009). These firms operate internationally from its inception or soon after the inception, gain their competitive advantage from the use of their resources and the sale of their output in distant and multiple countries (Oviatt & McDougall, 1994). Therefore, they are challenging the traditionally internationalizing firms, following the slow and incremental internationalization process, and hence born global firms prefer to use hybrid structures and base their operations on networks instead of hierarchical structures (Jantunen, Nummela, Puumalainen, &

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Saarenketo, 2008). As Kuivalainen et al. (2007) argues with the support of an increasing amount of evidence that entrepreneurial firms are focusing on rapid internationalization, regardless of the facts of being small, resource constraints and their level of development. In that context, born globals are generally entrepreneurial in nature and characterized with several other unique characteristics in common, such as, produce unique products and services, adopt a proactive international strategy and are specialized and niche-oriented. Accordingly, “entrepreneurialness” of these firms is robust and hence, born globals and entrepreneurship are inseparable phenomenon in international entrepreneurial studies. Further,

It is clear that operating on highly competitive international markets demands specialized resources, skills and capabilities. But these internationalization facilitating resources, skills and capabilities tend to be scarce or even non-existent in many small firms, in addition to their greater financial constraints (Kuivalainen, Puumalainen, Sintonen, & Kylaheiko, 2010). Despite being new and small with the lack of financial, human, and other resources that characterize new business, these firms achieve considerable international success (Knight & Cavusgil, 2004). Especially, in a dynamic and most competitive international environment, the knowledge-based resources and strong entrepreneurial orientation are seem to contribute most to the performance (Autio, Sapienza, & Almeida, 2000; Kuivalainen, Puumalainen, Sintonen, & Kylaheiko, 2010). In this context, the role of “entrepreneurialness” in international performance of born globals is at its utmost important for both the business world and the international entrepreneurship research world. Thus, “what international entrepreneurial aspects determine the international performance of born globals?” is one of the main and recent concerns in the field of international entrepreneurship, but with least understood.

There has been a great deal of empirical evidences on born global’s entrepreneurial orientation and performance; these studies have been primarily conducted in the West. Thus, research studies on the phenomenon is extremely absent in the contexts of South Asia and Middle East (Peiris, Akoorie, & Sinha, 2012). They further emphasize the need of conducting more and more research in these contexts as it would increasingly enrich the extant literature with the empirical evidences on the international behavior of born global firms from the emerging and developing country contexts, especially in the context of Sri Lanka. This attempt helps to bridge the existing knowledge gap in the Sri Lankan country context with regards to the entrepreneurial orientation and performance of Sri Lankan born globals, engage in Information and Communication Technology (ICT) industry.

2. Conceptual Foundation and Hypotheses

2.1 International Entrepreneurial Orientation (IEO) and Performance

Entrepreneurial orientation (EO) or international entrepreneurial orientation (IEO) has become the central theme in the domain of international entrepreneurship which has received a substantial amount of theoretical and empirical attention (Rauch, Wiklund, Limkin, & Frese, 2009). The difference between EO and IEO depends upon the domain of study. Generally, while EO notion use in general entrepreneurship studies, IEO refers to international entrepreneurship domain. The concept of EO was first recognized by Miller (1983) and then Covin & Slevin (1991), at the first time, conceptualized a theoretical model, emphasizing the antecedents, outcomes of and moderating effects on EO-performance relationship. This theoretical conceptualization was empirically supported by various scholars in their studies. For example, Wiklund, (1999); Zahra and Covin (1995) have found that firms having more entrepreneurial orientation perform better than that of firms, focusing low entrepreneurial orientation. According to Miller (1983), Covin & Slevin (1991), EO consists of three dimensions of

innovativeness, proactiveness and risk-taking behaviour. But in few years later Lumpkin & Dess (1996), developed five dimensions of EO construct, adding two new dimensions of competitive aggressiveness and autonomy.

As Covin & Miller (2013) assert, the notion of EO/IEO has been greatly contributing in developing theory and practice in the field of international entrepreneurship (IE) since its beginning. This is clearly elaborates by McDougall & Oviatt (2000) in their definition of IE as "...a combination of innovative, proactive, and risk-seeking behavior that crosses national borders and is intended to create value in organizations" (p. 903). Thus, Freeman & Causgil (2007) defines IEO as "the behavior elements of a global orientation and captures top management's propensity for risk-taking, innovativeness and proactiveness" (p. 3). Further Wiklund & Shepherd (2005) stress that adopting an "entrepreneurial orientation" may benefit business firms to find out new opportunities for their survival and growth in the industry in order to face the uncertain arise out of the existing operations. Thus, IEO is central to IE domain and extant literature has widely utilized three-dimension measurements of EO construct (Covin & Miller, 2013). This study, following three-dimension of EO construct originally proposed by Miller (1983), suggests that IEO consists of innovativeness, proactiveness and risk-taking.

Many research on IEO has been largely studied the relationship of EO and international performance (Covin & Miller, 2013; Miller, 1983) and are limited to the Chinese context (Covin & Miller, 2013). Many of those researches have found strong, positive relationship between IEO and international performance (Rauch, Wiklund, Limpin, & Frese, 2009). However, these findings are not unchallenged. Several, but few, studies have found insignificant relationship between entrepreneurial orientation and firm performance (George, Wood, & Khan, 2001). Further, it revealed that the extant literature is with this long debate on the fact of concerning the dimensionality of EO/IEO (Rauch, Wiklund, Limpin, & Frese, 2009). While majority of scholars argue that the entrepreneurial orientation/international entrepreneurial orientation as a unidimensional concept, the others have conceptualized the elements of IEO as multi-dimensional constructs. For example, Dimitratos & Plakoyiannaki, (2003), Dimitratos, Voudouris, Plakoyiannaki, & Nakos (2012), Gabrielsson, Gabrielsson, & Dimitratos (2014).

2.2 Innovativeness

Innovativeness refers to "a firm's tendency to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services, or technological processes" (Lumpkin & Dess, 1996, p. 142). Rauch et al. (2009) define innovativeness as "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" (p. 736). Thus, the simple meaning of innovativeness refers to willingness of a firm to change the existing technologies or practices which goes beyond the current state of art. Despite with the several other categorizations, the most useful classification of innovativeness is twofold; product-market innovation and technological innovation (Lumpkin & Dess, 1996). Many scholars have highlighted the importance of the role of innovativeness in entrepreneurial process for example (Covin & Slevin, 1991; Lumpkin & Dess, 1996). They further emphasize that innovativeness is an essential element for firm level entrepreneurship which leads for higher entrepreneurial performance. Providing an empirical support, many studies have found that innovativeness has a positive impact on firm performance (Kuivalainen, Sundqvist, & Servais, 2007; Zhang, Tansuhaj, & McCullough, 2009; Zhou, 2007; Hult, Huerley, & Knight, 2004). Finding contradictions to strong, positive influence on firm performance, some studies have found no relationship between innovativeness and firm performance (Zhang, Ma, & Wang, 2012; Fishammar & Andersson, 2009). However, despite with these contradictions, this study has enough evidences to formulate the following hypothesis as:

Hypothesis 1: Entrepreneurial Innovativeness is positively related to international performance of born global firms.

2.3 Proactiveness

Proactiveness is a crucial element of entrepreneurial orientation as it reflects a forward-looking perspective which is accompanied by innovative or new venturing activity (Lumpkin & Dess, 1996). Rauch et al. (2009), defines proactiveness as “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” (p. 763). Adding to this definition, Lumpkin & Dess (1996), emphasize the seeking new opportunities is the essential element in proactiveness. Thus, a firm with a greater proactiveness acts as a leader rather than a follower as it always has a focus of seeking new opportunities, though it is not always be the first to do so. Thus, proactiveness exhibits the essential element of an entrepreneur — seizing opportunities. Many studies have found that proactiveness has a strong positive relationship with firm performance (Zhang, Ma, & Wang, 2012; Zhou, 2007; Fishammar & Andersson, 2009; Dimitratos P., Plakoyiannaki, Pitsoulaki, & Tuselmann, 2010). With these empirical supports, this study proposes the following hypothesis as:

Hypothesis 2: Entrepreneurial proactiveness is positively related to international performance of born global firms.

2.4 Risk-taking

Moving to the international market is apparently a risky decision due to various reasons and differences between international markets and domestic markets. Therefore, it is expected that internationalized firms have to take a higher level of risk-taking propensity for their higher performance. And as well, entrepreneurs are, generally, risk-takers. According to Rauch et al. (2009), risk-taking involves ‘taking bold actions by venturing into the unknown, borrowing heavily, and/or committing significant resources to ventures in uncertain environments’ (p. 763). Thus, firms having entrepreneurial orientation often exhibit risk-taking behavior in the actions of taking heavy debt, making large resource commitments, obtaining high rate of returns by seizing opportunities in market places (Lumpkin & Dess, 1996). However, risk is not a clear phenomenon in many of research fields and it brings up several problems such as measuring risk, accounting risk, etc. Thus, it is still unable to find consistent patterns when investigating the phenomenon of risk-taking in relation to entrepreneurship (Lumpkin & Dess, 1996). They further revealed that many entrepreneurial studies on risk-taking investigate individuals rather than firms. Therefore, risk-taking at firm level remains an area for future development. However, many studies have found that risk-taking has a positive influence on firm performance (Zhang, Tansuhaj, & McCullough, 2009; Zhang, Ma, & Wang, 2012; Dimitratos P., Plakoyiannaki, Pitsoulaki, & Tuselmann, 2010). In contrast, Fishammar & Andersson (2009) found that risk-taking has no relationship with international performance. This study proposes the following hypothesis as:

Hypothesis 3: Entrepreneurial proactiveness is positively related to international performance of born global firms.

2.4 Degree of Internationalization (DOI)

Calof & Beamish (Adapting to foreign markets: Explaining internationalization, 1995) define internationalization as “the process of adapting firms’ operations (strategy, structure, resource, etc.) to international environment” (p. 116). Internationalization patterns of born global firms, aiming at rapid internationalization, is one of the main concerns in international entrepreneurship domain and their decision to follow a rapid internationalization is clearly a strategic one (McDougall & Oviatt, 1996). Based on

internationalization strategy, firms engaged in international operations could be categorized into three distinct groups: born globals, born-again globals and traditionally internationalizing firms (Jantunen, Nummela, Puumalainen, & Saarenketo, 2008; Kuivalainen, Saarenketo, & Puumalainen, 2012; Bell, McNaughton, Young, & Crick, 2003). Thus, born global firms follow different internationalization strategies depending on the degree to which BGs engage in international operations, i.e., degree of internationalization (DOI) or degree of born globalness (DBG) (Kuivalainen, Sundqvist, & Servais, 2007). Instead of Jantunen et al.'s (2008) categorization, Kuivalainen et al. (2007) grouped BGs into two separate groups: true born-global and apparently born-global. In line with the majority, this study follows the first group of categorization. The first group — Born globals — follow early and rapid internationalization strategy, i.e., from or near their inceptions, BGs engage in international operations in multiple countries in order to gain a higher international performance. The second group — born-again globals (BAG) — are firms typically well-established in their home markets, having no intention to internationalize, but due to a sudden “critical incident” embraced rapid and committed internationalization (Bell, McNaughton, Young, & Crick, 2003). Finally, the third group — traditionally internationalizing firms — first focus the growth in the domestic market and then adopts a slow and incremental process of internationalization in order to avoid the unnecessary risks and investments (Jantunen, Nummela, Puumalainen, & Saarenketo, 2008). Thus, the study expects born global strategy, born-again global strategy and traditional incremental internationalization strategy to have a more positive effect on ICE-performance relationship of BGs. Degree of internationalization of firms could be defined in terms of scale, scope and time of internationalization and these are the widely used key dimensions of measuring internationalization (Oviatt & McDougall, 1994; Kuivalainen, Sundqvist, & Servais, 2007; Kuivalainen, Saarenketo, & Puumalainen, 2012; Jantunen, Nummela, Puumalainen, & Saarenketo, 2008). Scale is the most widely used dimension of measuring internationalization and refers to the share of turnover from foreign markets out of the total sales volume. Scope of internationalization means number of markets or distant markets in which firms operate internationally. Time of internationalization refers to the speed of internationalization and used various indicators to define it. However, extant literature does not provide commonly agreed explanations in defining these dimensions of degree of internationalization which eventually defines born globals.

Thus, the study attempts to contribute to the extant literature by making contributions to the born global definition within a developing country context.

3. Research Method

3.1 Data Collection and Sample

This study employs a quantitative research design following a survey method combined with a statistical treatment. Concerning time frame of the study, it is limited to cross-sectional study and the unit of analysis is the firm as the focus of the study is on firm level entrepreneurial orientation of born global firms towards their international performance.

The population of the study included ICT export entrepreneurs in Sri Lanka. Due to rapid development of ICT sector and unavailability of the official figures for the ICT industry, there was no single up-to-date sampling frame available for the study purpose. Therefore, the ICT exporters, registered at the Export Development Board (EDB) in Sri Lanka, has chosen as the target population of the study and the sample includes 100 exporters. At the time of the survey conducted, 600 exporters registered with EDB, but 20% of them have withdrawn from the

industry and out of the remaining 230 are not engaging in export activities. Thus, the successive sample includes 250 exporters and only 100 agreed (40% of response rate) to participate the survey. The response rate is fairly adequate as the respondents were mainly owner managers of those firms with very tight time schedules. They were first contacted by telephone to receive their consent of participating the survey and the questionnaire were mailed to those who agreed. A face-to-face interview was conducted for those who agreed for it and for other it was telephone interview. This method was appropriate as the questionnaire was mailed earlier and quite simple and short.

3.2 Measurements

3.2.1 Entrepreneurial Orientation

The construct — entrepreneurial orientation was the independent variable of the study and it consists of three dimensions of innovativeness, proactiveness and risk-taking. The study used the most widely used entrepreneurial orientation scale, The Miller/Covin and Slevin EO Scale, developed by Covin and Slevin and re-produced in Covin & Miller (2013) and this was tested for reliability and validity. The questionnaire of the current study includes three items each to measure innovativeness, proactiveness and risk-taking. All nine items were measured using seven point likert scale as originally proposed in The Miller/Covin and Slevin EO Scale. For each item, the respondent had to provide his/her level of agreement which ranging from 1 = Not at all agree to 7 = Extremely agree. In testing hypotheses, summated scale were performed for each dimension of entrepreneurial orientation. Since the Miller/Covin and Slevin EO Scale was proposed and empirical tested in the West, reliability and validity issues may occur when it is going to be applied into a non-Western developing country context. Thus, the reliability of the scale was assessed and factor analysis was applied to confirm the scales (see Table 1) and to assure the construct validity of the measures. All measures were also examined and verified for face validity by five leading owner managers in the ICT industry who are well experienced in exporting and international business.

3.2.2 International Performance

Performance is a multidimensional concept. Thus, studies, investigating the relationship between entrepreneurial orientation and performance, have recognized several different aspects of performance. The existing literature reports a greater diversity of performance measures (Rauch, Wiklund, Lumpkin, & Frese, 2009) and hence, no common valid operationalization of the concept is available (Jantunen, Nummela, Puumalainen, & Saarenketo, 2008). However, the EO-Performance relationship may depend mainly upon the measurement indicators selected to assess performance (Lumpkin & Dess, 1996). According to the existing literature, performance could be measured in terms objective measures and subjective measures of performance (Cavusgil & Zou, 1994; Jantunen, Nummela, Puumalainen, & Saarenketo, 2008). According to Rauch et al. (2009), objective measures of performance are more appropriate than subjective measures of performance in investigating EO-Performance relationship. But, collecting financial data from entrepreneurs is extremely difficult as owner managers are generally unwilling to share their sensitive financial information to a third party (Dess & Robinson, 1984). On the other hand, general tendency among owner managers is to provide biased information of their firms' performance (Sapienza, Smith, & Gannon, 1988). Thus, the recent trend in entrepreneurship studies is to use non-financial subjective measures to measure performance (Jantunen, Nummela, Puumalainen, & Saarenketo, 2008). With these justifications and in line with the majority, this study too employs subjective measures of performance.

The common dimensions of subjective measures of international performance consist of sales volume, market share, profitability, market entry, image development, knowledge development and overall performance,

for example, Jantunen, Nummela, Puumalainen, & Saarenketo (2008), Knight & Cavusgil (2004), Kuivalainen, Puumalainen, Sintonen, & Kylaheiko (2010), Kuivalainen, Sundqvist, & Servais (2007), Cavusgil & Zou (1994). Following the scale for performance in international markets, developed by Cavusgil & Zou (1994), this study measured the international performance in terms of sales volume, market share, profitability and overall satisfaction which was measured with seven-point likert scale. Thus, the respondents were asked to express their level of satisfaction, varying from 1 = Strongly disagree to 7 = Strongly agree, on the said four dimensions of performance. Finally, a summated scale was produced to measure the international performance of the firms.

4. Data Analysis and Findings

4.1 Factor Analysis

The principal component analysis was performed to test the construct validity of the scale and the coefficient of Cronbach alpha was used to assess the internal consistency reliability of the items of the research instrument. Table 1 presents the results of the item factor loading of the principal component factor analysis and the coefficient of Cronbach alpha of the main constructs.

The results records a significantly higher Cronbach's alpha value for all four factors and it is higher than 0.7 which is the acceptable level. Thus, the items of the questionnaire record a strong internal consistency of reliability. And as well, no item deleted is required as the Cronbach's alpha value is greater than the "Cronbach's alpha value, if item deleted". Construct validity of each factor have recorded a relatively high positive correlation within the items in the scale.

Table 1 Factor Analysis

Item	Factor Loading
Factor 1: Innovativeness (Cronbach's alpha = 0.899)	
Emphasis on R&D, Tech and innovation	0.860
Marketing new lines of products/services	0.892
Changes in products/services	0.848
Factor 2: Proactiveness (Cronbach's alpha = 0.912)	
Initiate actions first	0.886
First to introduce new things	0.900
Adopts a very competitive posture	0.885
Factor 3: Risk-taking (Cronbach's alpha = 0.865)	
Proclivity for high risk projects	0.787
Bold and wide ranging acts	0.840
Adopts a bold and aggressive posture	0.875
Factor 4: International Performance (Cronbach's alpha = 0.915)	
Market share	0.892
Sales growth	0.836
Pre-tax profitability	0.810
Overall performance	0.827

Extraction Method: Principal Component Analysis.

4.2 Descriptives

The summary of the descriptive statistics are presented in Table 2. As it shows, the degree of internationalization among ICT export entrepreneurs in Sri Lanka is quite high. On average, those firms move to the international market within their first year of operations and nearly 56% of their total revenue comes from

exporting. As well, ICT export entrepreneurs in Sri Lanka operate in maximum of 12 markets and on average, they operate in 3-4 markets.

Referring to the main constructs of this study, while innovativeness, proactiveness and international performance record nearly a mean statistic of 5.4, risk-taking records it as 5.5. Thus, Sri Lankan ICT exporters are more positive towards innovativeness, proactiveness and risk-taking. And as well, they are fairly satisfied with their international performance.

Table 2 The Descriptive Statistics of the Sample

	N	Minimum	Maximum	Mean	SD	Skewness		Kurtosis	
						Statistic	SE	Statistic	SE
(Time) Time of internationalization	100	0	10	0.93	1.742	2.403	0.244	7.307	0.483
(Scale) % of export revenue	100	10	100	55.90	26.442	0.039	0.241	-1.146	0.478
(Scope) No of export markets	100	1	12	3.47	2.472	1.760	0.241	3.906	0.478
Innovativeness	100	2.67	7.00	5.4067	1.02119	-0.677	0.241	0.032	0.478
Proactiveness	100	2.67	7.00	5.4300	0.97935	-0.799	0.241	0.690	0.478
Risk-taking	100	2.67	7.00	5.5233	0.92509	-0.697	0.241	1.101	0.478
International Performance	100	2.50	7.00	5.3850	0.96165	-0.774	0.241	0.335	0.478
Valid N (listwise)	100								

4.3 Hypotheses Testing

The hypotheses (H1 – H3) were tested using a linear regression model. Before run the regression, first it was confirmed whether the basic assumptions of regression were satisfied. Q-Q plots and the skewness and kurtosis statistics confirmed the normality assumption with all the variables. Skewness and kurtosis statistics are below the standard value of 1 for innovativeness, proactiveness and international performance whereas for risk-taking, skewness satisfies the rule, but kurtosis is little bit higher to the standard value 1. But this is not a problem, as all index values for both skewness and kurtosis for all the variables are below the standard value of 3.3. Further, examination of the linearity plots, tolerances and residuals revealed no violations of the basic regression assumptions. The regression results are presented in Table 3.

Table 3 The Effects of the Entrepreneurial Orientation Dimensions on Internal Performance

	B	Beta	t	Sig	Collinearity	
					Tolerance	VIF
Innovativeness	0.242	0.257	2.004	0.048*	0.141	7.109
Proactiveness	0.301	0.307	2.065	0.042*	0.105	9.497
Risk-taking	0.363	0.303	3.345	0.001*	0.208	4.811
R ² = 0.7777						
F = 111.689*						

Note: *p < 0.05.

The findings of the analysis supported for the main hypotheses (H1–H3) of the study. That is all dimensions of the entrepreneurial orientation; innovativeness, proactiveness and risk-taking, have a significant positive influence on international performance at a 95% of confidence level. Thus, the findings are supporting to accept H1, H2 and H3. Further, it was revealed that the overall model is also significant, meaning that innovativeness, proactiveness and risk-taking together have a significant positive impact on international performance. As well, the multiple regression model records a higher explanatory power as the coefficient of determination (R² = 0.777) is above 0.75. Thus, innovativeness, proactiveness and risk-taking together explains more than 77% of variation in

international performance.

The last column in Table 3 shows the statistics to test the multicollinearity. Since, all tolerance value are greater than 0.1 and VIF is less than 10 the regression model does not violate the multicollinearity assumption.

5. Discussion and Conclusion

The findings of this study revealed that ICT export entrepreneurs in Sri Lanka, a developing country context, also exhibit born global characteristics. Their degree of internationalization is significantly higher. There is no common agreement of defining the concept “born global” and the measurement criterion used to assess the degree of internationalization. However, time, scale and scope are the most widely used measurement scales in this regard. However, different scholars have used different measurement scales. According to Knight & Cavusgil (1996), the most recognized definition in existing literature, a firm to be a born global, it should: (1) Commence their international operations within the first three years, (2) Earn at least 25% of their total turnover from exporting and (3) Operate in multiple and distance international markets. According those criterion, the Sri Lankan ICT export entrepreneurs too are born globals as on average, those firms move to the international market within their first year of operations and nearly 56% of their total revenue comes from exporting. As well, ICT export entrepreneurs in Sri Lanka operate in maximum of 12 markets and on average, they operate in 3-4 markets. Under this vein, it can be expected that they are more entrepreneurial orientated as suggested by existing literature.

Providing an empirical support to this, the findings of the study revealed that the entrepreneurial orientation positively and significantly influence the international performance of ICT export entrepreneurs in Sri Lanka. Thus, the innovativeness, proactiveness and risk-taking are significant, positive predictors of international performance of born global firms. Thus, it seems that majority of ICT born globals in Sri Lanka are more innovative, proactive and risk-takers which lead them to their superior international performance. Being unique among other entrepreneurs, ICT born globals focus on international market from their inception. Thus, the study would conclude that high entrepreneurial orientations seem to be prerequisites for becoming a born global. And as well, results indicate that a firm expecting to succeed at the international market need to develop their entrepreneurial characteristics.

To conclude, entrepreneurial orientation and its dimensions of innovativeness, proactiveness and risk-taking are significant predictors of international performance for born global firms, even for developing country contexts like Sri Lanka. But the magnitude of this EO-Performance relationship may vary due to several other factors which are either moderators or mediators to this relationship. Thus, this area of research is likely to continue to be of relevance and interest for the foreseeable future.

References

- Autio E., Sapienza H. J. and Almeida J. G. (2000). “Effects of age at entry, knowledge intensity and imitability on international growth”, *Academy of Management Journal*, Vol. 43, No. 5, pp. 909-924.
- Bell J., McNaughton R., Young S. and Crick D. (2003). “Towards an integrative model of small firm internationalization”, *Journal of International Entrepreneurship*, Vol. 1, pp. 339-362.
- Bloodgood J. M., Sapienza H. and Almeida J. G. (1996). “The internationalization of new high-potential US ventures: Antecedents and outcomes”, *Entrepreneurship Theory & Practice*, pp. 61-76.
- Calof J. L. and Beamish P. W. (1995). “Adapting to foreign markets: Explaining internationalization”, *International Business Review*, Vol. 4, pp. 115-131.

- Cavusgil S. T. and Zou S. (1994). "Marketing strategy-performance relationship: An investigation of the empirical link in export market ventures", *Journal of Marketing*, Vol. 58, No. 11, pp. 1-21.
- Chun L. Y., Tian L. and Jing Y. (2014). "The effect of born internationals' international strategies on its subsequent development: Taking the accumulated overseas market resources as the moderating effect", *Anthropologist*, Vol. 17, No. 3, pp. 687-700.
- Covin J. G. and Miller D. (2013). "International entrepreneurial orientation: Conceptual considerations, research themes, measurement issues, and future research directions", *Entrepreneurship Theory & Practice*, pp. 11-37.
- Covin J. G. and Slevin D. P. (1991). "A conceptual model of entrepreneurship as firm behavior", *Entrepreneurship Theory & Practice*, Vol. 16, pp. 7-25.
- Covin J. G., Green K. M. and Slevin D. P. (2006). "Strategic process effects on the entrepreneurial orientation-sales growth rate relationship", *Entrepreneurship Theory & Practice*, Vol. 30, No. 1, pp. 57-81.
- Davidsson P. (2004). *Researching Entrepreneurship*, New York: Springer.
- Dess G. G. and Robinson R. (1984). "Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit", *Strategic Management Journal*, Vol. 5, pp. 265-273.
- Dimitratos P. and Plakoyiannaki E. (2003). "Theoretical foundations of an international entrepreneurial culture", *Journal of International Entrepreneurship*, Vol. 1, pp. 187-215.
- Dimitratos P. and Plakoyiannaki E. (2003). "Theoretical foundations of an International Entrepreneuria", *Journal of International Entrepreneurship*, Vol. 1, pp. 187-215.
- Dimitratos P., Plakoyiannaki E., Pitsoulaki A. and Tuselmann H. J. (2010). "The global smaller firm in international entrepreneurship", *International Business Review*, Vol. 19, No. 6, pp. 589-606.
- Dimitratos P., Voudouris I., Plakoyiannaki E. and Nakos G. (2012). "International entrepreneurial culture — Toward a comprehensive opportunity-based operationalization of international entrepreneurship", *International Business Review*, Vol. 21, pp. 708-721.
- Evers N. (2011). "International new ventures in 'low tech' sectors: a dynamic capabilities perspective", *Journal of Small Business and Enterprise Development*, Vol. 18, No. 3, pp. 502-528.
- Fishammar J. and Andersson S. (2009). "The overestimated role of strategic orientations for international performance in smaller firms", *Journal of International Entrepreneurship*, Vol. 7, No. 1, pp. 55-77.
- Freeman S. and Cavusgil S. T. (2007). "Toward a typology of commitment states among managers of born-global firms: A study of accelerated internationalization", *Journal of International Marketing*, Vol. 15, No. 4, pp. 1-40.
- Gabrielsson M., Gabrielsson P. and Dimitratos P. (2014). "International entrepreneurial culture and growth of international new ventures", *Management International Review*, Vol. 54, pp. 445-471.
- George G., Wood D. R. and Khan R. (2001). "Networking strategy of boards: implications for small and medium-sized enterprises", *Entrepreneurship and Regional Development*, Vol. 13, No. 3, pp. 269-285.
- Hennart J. F. (2014). "The accidental internationalists: A theory of born globals", *Entrepreneurship Theory & Practice*, Vol. 38, No. 1, pp. 117-135.
- Hult G. T., Huerley R. F. and Knight G. A. (2004). "Innovativeness: Its antecedents and impact on business performance", *Industrial Marketing Management*, Vol. 33, No. 5, pp. 429-438.
- Jantunen A., Nummela N., Puumalainen K. and Saarenketo S. (2008). "Strategic orientation of born globals — Do they really matter?", *Journal of World Business*, No. 43, pp. 158-170.
- Jantunen A., Nummela N., Puumalainen K. and Saarenketo S. (2008). "Strategic orientations of born globals — Do they really matter?", *Journal of World Business*, Vol. 43, pp. 158-170.
- Kaur S. and Sandhu M. S. (2014). "Internationalization of born global firms: Evidence from Malaysia", *Journal of the Asia Pacific Economy*, Vol. 19, No. 1, pp. 101-136.
- Knight and Cavusgil (2004). "Innovation, organizational capabilities and the born global firm", *Journal of International Business Studies*, Vol. 35, No. 2, pp. 124-141.
- Knight G. and Cavusgil S. T. (1996). "Born global firms: A challenge to traditional internationalization theory", *Advances in International Marketing*, Vol. 8, No. 2, pp. 12-32.
- Kuivalainen O., Puumalainen K., Sintonen S. and Kylaheiko K. (2010). "Organizational capabilities and internationalization of the small and medium-sized information and communication technology firms", *Journal of International Entrepreneurship*, Vol. 8, No. 2, pp. 135-155.
- Kuivalainen O., Saarenketo S. and Puumalainen K. (2012). "Start-up patterns of internationalization: A framework and its application in the context of knowledge-intensive SMEs", *European Management Journal*, Vol. 30, pp. 372-385.

- Kuivalainen O., Sundqvist S. and Servais P. (2007). "Firms' degree of born-globalness, international entrepreneurial orientation and export performance", *Journal of World Business*, Vol. 42, pp. 253-267.
- Lumpkin G. T. and Dess G. G. (1996). "Clarifying the entrepreneurial orientation construct and linking it to performance", *Academy of Management Review*, Vol. 21, No. 1, pp. 135-172.
- Ma X., Zhang X. and Wang Y. (2012). "Entrepreneurial orientation, social capital and internationalization of SMEs: Evidence from China", *Thunderbird International Business Review*, Vol. 54, No. 2, pp. 195-210.
- McDougall P. P. and Oviatt B. M. (1996). "New venture internationalization, strategic change and performance: A follow up study", *Journal of Business Venturing*, Vol. 11, No. 1, pp. 23-40.
- McDougall P. P. and Oviatt B. M. (2000). "International entrepreneurship: The intersection of two research paths", *Academy of Management Journal*, Vol. 43, pp. 902-908.
- Melen S. and Nordman E. R. (2009). "The internationalization modes of Born Globals: A longitudinal study", *European Management Journal*, Vol. 27, pp. 243-254.
- Miller D. (1983). "The correlates of entrepreneurship in three types of firms", *Management Science*, Vol. 29, No. 7, pp. 770-791.
- Oviatt B. M. and McDougall P. P. (1994). "Toward a theory of international new ventures", *Journal of International Business Studies*, Vol. 25, No. 1, pp. 45-64.
- Oviatt B. M. and McDougall P. P. (2005). "Defining international entrepreneurship and modeling the speed of internationalization", *Entrepreneurship Theory and Practice*, Vol. 29, No. 5, pp. 537-554.
- Peiris I. K., Akoorie M. E. and Sinha P. (2012). "International entrepreneurship: A critical analysis of studies in the past two decades and future directions for research", *Journal of International Entrepreneurship*, Vol. 10, pp. 279-324.
- Rauch A., Wiklund J., Lumpkin G. T. and Frese M. (2009). "Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future", *Entrepreneurship Theory & Practice*, Vol. 33, No. 3, pp. 761-787.
- Rennie M. (1993). "Global competitiveness: Born global", *McKinsy Quarterly*, Vol. 4, pp. 45-52.
- Sapienza H. J., Smith K. G. and Gannon M. J. (1988). "Using subjective evaluations of organizational performance in small business research", *American Journal of Small Business*, Vol. 12, No. 3, pp. 45-53.
- Shane S. (2003). *A General Theory of Entrepreneurship: The Individual Opportunity Nexus*, Cheltenham, UK: Edward Elgar.
- Short J. C., Ketchen Jr. D. J., Shook C. L. and Ireland R. D. (2010). "The concept of 'Opportunity' in entrepreneurship research: Past accomplishment and future challenges", *Journal of Management*, pp. 40-65.
- Wales W. J., Gupta V. K. and Mousa F. T. (2011). "Empirical research on entrepreneurial orientation: An assessment and suggestions for future research", *International Small Business Journal*, Vol. 31, No. 4, pp. 357-383.
- Wiklund J. and Shepherd D. (2005). "Entrepreneurial orientation and small business performance: A configurational approach", *Journal of Business Venturing*, Vol. 20, pp. 71-91.
- Zhang M., Tansuhaj P. and McCullough J. (2009). "International entrepreneurial capability: The measurement and a comparison between born global firms and traditional importers in China", *Journal of International Entrepreneurship*, Vol. 7, No. 4, pp. 292-322.
- Zhang X., Ma X. and Wang Y. (2012). "Entrepreneurial orientation, social capital and internationalization of SMEs: Evidence from China", *Thunderbird International Business Review*, Vol. 54, No. 2, pp. 195-210.
- Zhou L. (2007). "The effects of international proclivity and foreign market knowledge on early internationalization", *Journal of World Business*, Vol. 42, No. 3, pp. 281-293.