

LINKAGE BETWEEN ENTREPRENEURIAL ORIENTATION AND EXPORT PERFORMANCE OF SOUTH ASIAN COUNTRIES

Nilofer Hussaini, Christ (Deemed To Be) University
Buddha Anuradha, Christ (Deemed To Be) University

ABSTRACT

Purpose: South Asian economies has witnessed export dependence over the past several years and the dependence has increased manifold. Export performance is the most preferred modes of internationalisation in developing economies as it is directly linked to getting access to international markets with limited resources and capabilities thereby contributing to the economic productivity of the country. This paper examines co-integration between the export performance and entrepreneurial orientation in South Asian nations explaining it as the main enabler of export. Entrepreneurial Orientation has been considered an important criterion for promoting export as EO requires innovation, proactiveness and risk taking which provides competitive advantage to enterprises.

Design/Methodology/Approach: The research employed an econometric panel co-integration investigation to analyse the long run relationship of economic orientation and export performance among these nations.

Findings: The research confirmed positive long run causality between the innovativeness, proactiveness and risk taking as three dimensions of entrepreneurial orientation and export concentration ratio as an indicator for export performance among South Asian nations. So, if these developing nations continue to diversify their product & market mix in exporting products and services the concentration ratio would improve that would result in growing further economic productivity.

Practical implications: This research will serve as an aid to policy makers and entrepreneurs of South Asian nations to focus on the diverse mix of variety of products, services and markets to help South Asian nations prosper.

Originality/Value: The policy makers and entrepreneurs of South Asian nations have accorded high priority to export performance. This research is one of the few studies that highlights access to EO as the basis for better export performance of South Asian nations.

Keywords: Entrepreneurial Orientation, Export, Co-Integration, Innovativeness, Risk Taking.

INTRODUCTION

Export as a mode of international business is one of the most important ways of international business. Export not only provides a means of entering international market which reduces the risk of the business when compared to other modes like joint ventures or subsidiaries but also enterprises that have limited resources such as economic or human and capabilities (in the form of skills and technology) adopt export as an important activity to penetrate international market (Johanson & Vahlne, 1977). Export performance is considered important in the economic

growth of any nation mainly among low income countries (Heiko, 2008). Dependency on export has risen sharply in low-income countries in recent past. Share of exports as the percentage of GDP of South Asian countries indicates that export dependency has been growing relatively large in last few decades (Table 1).

Table 1		
SHOWING EXPORT AS A PERCENTAGE OF GDP		
Country	Year	Export (% of GDP)
India	1990	7.053
	1991	8.494
	2012	24.534
	2013	25.431
Sri Lanka	1990	30.181
	1991	28.741
	2012	19.816
	2013	20.32
Bhutan	1990	26.83
	1991	32.1581
	2012	39.647
	2013	41.43
Afghanistan	2012	11.699
	2013	6.727
Pakistan	1990	14.789
	1991	16.932
	2012	12.397
	2013	13.277
Nepal	1990	10.527
	1991	11.491
	2012	10.074
	2013	10.689

The underlying question is what drives the export performance in these nations? (Carlos M.P.Sousa, 2008) Concluded that considerable studies have been carried on the determinants of export performance but the theoretical framework is fragmented. This study is an attempt to provide empirical analysis to establish the relationship between entrepreneurial orientation and export performance of the nation and test the hypothesis that does entrepreneurial orientation have a long-term relationship with export performance in South Asian Nation.

ENTREPRENEURIAL ORIENTATION

Entrepreneurial orientation was first conceived by Miller (Miller, 1987) and later on it was refined by (Covine & Selvin, 1991). It is the firm's behavioural tendency and management philosophy that has evolved from single dimension to multidimensional concept. Innovativeness, proactiveness, and risk-taking (Wiklund, 1999) are the three components identified in entrepreneurial orientation. Several educations contend that each of the dimensions of entrepreneurial orientation impacts positively the performance of companies, to the extent that it enhances the commitment to innovation, leading to the creation of new products

and services, the search of new opportunities and markets, among others (Lumpkin & Dess, 1996); (Alvarez & Barney, 2001).

Innovativeness is the practice of enterprise to adopt and support creative activities which leads to new products, new technologies, new services, new inventions, new tests, and so on. It can be facilitated by increasing research and development expenses within enterprises to improve technology related activities such as new technology acquisition, new product development, and so on (Table 2).

Table 2 SHOWING CORRELATION BETWEEN INNOVATIVENESS AND EXPORT PERFORMANCE OF FEW SOUTH ASIAN COUNTRIES FOR A PERIOD FROM 2007 TO 2013		
India	Pakistan	Sri Lanka
+0.24	+0.64	+0.46

Proactiveness is the practice of enterprises to adopt novel marketing strategy to introduce new products, new services, new processes, and new technologies in order to have the competitive advantage. It plays an important role in identifying new market opportunities easily and then helps to better innovative performance of enterprises (Table 3).

Table 3 SHOWING CORRELATION BETWEEN ENTREPRENEURSHIP & EXPORT PERFORMANCE FOR FEW SOUTH ASIAN COUNTRIES FOR A PERIOD FROM 2007-2013		
India	Pakistan	Sri Lanka
+0.96	+0.42	+0.87

Risk-taking is the tendency of enterprises to initiate bold actions in expectation of high reward. The risk-taking feature promotes firms dynamism in an industry as some enterprises fail while others succeed in the long term.

EXPORT PERFORMANCE

International Trade Centre indicates 22 indicators of export performance (International Trade Center, 2007). One of the indicator is export concentration or export diversification. Export concentration reflects the degree to which a country's exports are concentrated on a small number of products or a small number of trading partners. A country that exports one product to only one trading partner has a perfectly concentrated export portfolio. Conversely, a country whose exports are comprised of a larger number of products and that trades with a larger number of trading partners has a lower export concentration ratio (ECR), i.e., has more diversified exports.

Dependence on a narrow range of exports gives rise to risks associated with the lack of diversification. It therefore, exposes a country to economic shocks. Export diversification leads to mitigating volatility risks, instability in export earnings etc. which has an adverse effect on growth, investment, employment, export capacity, foreign exchange reserves and other macro-economic variables. (Samen, 2010) On the contrary, export diversification is the change in the composition of a country's existing export product mix or export destination (Ali, Alwang, & Siegel, 1991).

LINKAGE OF ENTREPRENEURIAL ORIENTATION AND EXPORT PERFORMANCE

Each component of entrepreneurial orientation has positive influence on export performance (Wilkund & Shephard, 2005). Hence, innovative companies that creates and introduces new products and technologies, generates higher export performance and are seen as engines of economic growth. This idea is in line with Schumpeter's view that innovative enterprises have an outstanding performance and can be seen as drivers of the export performance for countries (Schumpeter, 1934). Moreover, proactive enterprises benefit from first mover advantage (Zahra & Covin, 1995). Proactive enterprises create first-movers advantage and reaches the international market better than its competitors. The link between risk and export performance is less obvious. (Zahra & Gravis, 2000) Argued that enterprises that are successful in the global market requires creativity, proactiveness and risk-taking. In the process of international business, firms need to learn and use different skills from those adopted in domestic markets, and it requires risk-taking. Thus, when firm decides to internationalise, EO becomes a competitive advantage not only in existing markets or in new markets.

MATERIAL & METHODS

Studies conform the positive relationship between entrepreneurial orientation and export performance (Okpara, 2009).

As the aim of the study to examine the long run association of the entrepreneurial orientation on the export performance of South Asian Nations panel co-integration among variables were established. (Engle & Granger, 1987) Showed that co-integration can be empirically useful method to model the long-term relationships.

$$\text{Export Concentration}_{it} = \beta_0 + \beta_1 \text{Innovation} + \beta_2 \text{Proactiveness} + \beta_3 \text{RiskTaking} + \mu_{it}$$

μ =error term for $t=1, \dots, T$; $i=1, \dots, N$.

Where T refers to the number of observations over time & N refers to the number of individual countries within South Asian Region. To suit the study and its relevance, model was modified to accommodate only export concentration ratio as the exogenous variable and Innovation, proactiveness and Risk Taking as the independent variable to measure entrepreneurial orientation of the South Asian nations. Several tests have been proposed for panel-co-integration like (Pedroni, 1995), (Kao, 1999), (Fisher, 1932) after it has been examined for stationarity. Data when stationary means they have constant mean and variance. The panel data was collected for South Asian Nations ($N=5$) for a span of years ($T=10$) from 2007 to 2016. Due to data unavailability out of Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan & Sri Lanka only 5 nations namely Pakistan, India, Sri Lanka, Bangladesh & Nepal were chosen for this study.

RESULTS & DISCUSSION

Panel Unit Root Test

The first step was to examine the unit root properties of the data. The data should be $I(1)$ stationary to proceed for panel co-integration. And for this study, common root method by

Levin, Lin, & Chu (Levin, Lin, & Chu, 2002) & individual root by Im, Pesaran, Shin (Im, Pesaran, & Shin, 2003) was adopted.

The null hypothesis to test the stationarity of the panel data, according to LLC (Levin, Lin, & Chu, 2002) & Im, Pesaran, Shin (Im, Pesaran, & Shin, 2003) was given as:

$$H_0: \beta = 1(\text{not stationary})$$

$$H_1: \beta < 1(\text{stationary})$$

The result of the panel unit root is contained in the Table 4. We find that both the variables were non-stationary at level, but after their first order difference, we can reject null hypothesis of non-stationarity at 1% significance level. In all, the variables were I(1).

Table 4				
SHOWING UNIT ROOT TEST WITH LEVEL & 1ST DIFFERENCE				
Variables	LLC Test	IPS Test	LLC Test	IPS Test
	Individual Intercept	Individual Intercept	Individual Intercept & trend	Individual Intercept & trend
Exportconc	-1.59 (0.05)	-3.60 (0.06)	-6.706(0.000)*	-5.169(0.000)*
ΔExportconc	-8.32 (0.000)*	-3.58 (0.02)*	-9.30(0.00)*	-1.40(0.00)*
innovation	-2.735(0.003)*	3.659(0.999)	1.3668(0.914)	0.135(0.553)
ΔLGSDP	-6.324 (0.000)*	-4.861 (0.000)*	-4.735(0.000)*	-1.829(0.000)*
proactiveness	-3.59 (0.05)	-2.21 (0.06)	-2.736(0.07)*	-0.27(0.39)
Δproactiveness	-5.28 (0.000)*	-2.52 (0.02)*	-13.24(0.00)*	-1.92(0.00)*
risk	-0.72(0.23)	0.849 (0.80)	-2.53(0.06)	0.43(0.66)
Δrisk	-3.92 (0.000)*	-2.02 (0.02)*	-4.42(0.00)*	-0.40(0.00)*

Note: Number in parentheses is p value, * denotes 1% level of significance.

Panel Johansen Co-Integration Test

Given all the results are I(1), we test for the existence of a co-integrating relationship as the next step. It was done using Pedroni (Engle-Granger) Johansen co-integration test.

$$H_0: \beta = 0(\text{no co-integration})$$

$$H_1: \beta \neq 0(\text{co-integration})$$

Pedroni proposes several tests for co-integration that allow for heterogeneous intercepts and trend coefficients across cross-sections (Pedroni, 1995). Out of 11 outcomes of the p values in no intercept & trend 6 outcomes show statistically significant values (refer Table 5). If the majority p values are significant then the long run association-ship is satisfied. Null hypothesis of no co-integration between the two variables can be rejected at 1% level of significance for all the states. Hence, the co-integration test result supports the existence of a panel co-integration between export performance and entrepreneurial orientation.

Table 5		
JOHANSEN COINTEGRATION TEST (PEDRONI)		
Panel Co-integration test	Individual Intercept	No Intercept & trend
Within Dimension		
Panel v-Statistic	-1.553 (0.9398)	-2.912(0.9982)
Panel rho-Statistic	1.2532 (0.8949)	-8.387 (0.000)*

Table 5 JOHANSEN COINTEGRATION TEST (PEDRONI)		
Panel PP-Statistic	-0.1508(0.4400)	-7.881 (0.000)*
Panel ADF-Statistic	-0.8156 (0.2074)	-7.989(0.000)*
Weighted statistics		
Panel v-Statistic	-0.1360 (0.5541)	-2.847 (0.9978)
Panel rho-Statistic	0.3023 (0.6188)	-6.781 (0.000)*
Panel PP-Statistic	-1.6212(0.0525)	-6.9776 (0.000)*
Panel ADF-Statistic	-2.337(0.0097)	-7.3993 (0.000)*
Between Dimension		
Group rho-Statistic	-0.6409(0.2608)	1.5264(0.9365)
Group PP-Statistic	-5.3589(0.000)*	0.1029(0.5410)
Group ADF-Statistic	-5.447(0.000)*	-0.4408(0.3296)

Table 6 JOHANSEN FISHER PANEL CO-INTEGRATION TEST : NO DETERMINISTIC TREND				
No. of CE(s)	Trace Test	Prob	Max-Eigen Value	Prob
None	102.4	0.000*	86.03	0.000*
At most 1	55.99	0.0054	55.99	0.0054
Note: *denotes 1% & 5% level of significance				

Table 7 JOHANSEN FISHER PANEL CO-INTEGRATION TEST: LINEAR DETERMINISTIC TREND				
No. of CE(s)	Trace Test	Prob	Max-Eigen Value	Prob
None	81.98	0.000*	80.07	0.000*
At most 1	36.53	0.2664	36.53	0.2664
Note: *denotes 1% level of significance				

Fisher Panel Co-integration Test conducted (Tables 6 & 7), showed that the trace statistics is greater than the maximum Eigen value and this also implies the existence of at least 1 co-integration relationship between Export Concentration Ratio and the three dimensions of Entrepreneurship Concentration on higher education thereby rejecting the null hypothesis of no co-integration. It is important to state here that the presence of co-integration among the variables does not explain any long or short run relationship of the variables. In order to do this, the study went further to estimate the Vector Error Correction Model (VECM).

Long Run Relationship: Panel Granger Causality (VECM)

The Engle and Granger model (Engle & Granger, 1987) was used for the causality analysis. This entails a two-step procedure to investigate both the short run and long run dynamic relationships between Entrepreneurial Orientation and export performance. First an estimation of equation was done to capture the long run and then we define the lagged residuals obtained as the Error Correction Term (ECT).

The result obtained (Table 8) supports the long-term causality running from three dimensions of Entrepreneurship Orientation to Export Concentration in all the selected nations. This indicates that in the long-run Entrepreneurship Orientation has a significant impact on export performance.

Table 8 VECM ESTIMATES: LEAST SQUARE			
Dependent Variable	Independent Variable	Independent Variable	Independent Variable
Exportconc	Innovation	Proactiveness	Risk
Linear Trend in data	-0.774362(0.000) *	-0.56432(0.000) *	-0.3432(0.000) *
Note: Lag lengths: 2, P-value listed in parentheses &* indicates significance level of 1%			

ECT shows (-) sign and probability value significant at 1% level establishes a long-term association between the export performance and all three dimensions of EO at lag 2.

Short Run Relationship:

The null hypothesis states that there is no short run causality running from entrepreneurial orientation to export performance. Wald Test was conducted between lagged values of the independent variable in the coefficient diagnostic.

$$H_0: c(4) = c(5) = 0$$

$$H_1: c(4) \neq c(5) \neq 0$$

Table 9 Wald Test			
Test Statistic	Value	Df	Probability
Chi-Square	0.817636	2	0.6644

The result (Table 9) is statistically insignificant at 1% or 5% significance level. It shows that there is no short run causality between them.

CONCLUSION

The dependence on export in South Asian nations highlights the need for entrepreneurial orientation as an important enabler. For South Asian countries policy makers and entrepreneurs have to pay more attention to improving innovativeness, proactiveness and risk taking capabilities among entrepreneurs. The research confirms the long run dependency of export performance on three dimensions of entrepreneurial orientation. The result of this study suggests the need for South Asian Nations to diversify the mix of product and services exported or markets to quickly pace up, reduce their export concentration ration and to be at par with the other developed countries.

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