

## Chapter 4

# Internationalization of Indian Pharmaceutical Industry: A Study on Export Performance Using Structural Model

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### ABSTRACT

*Focusing on internationalization process of firms of developing countries, the present study attempts to identify the important determinants/ variables which affect the Indian pharma firms' export performance. A causal model was built using contingency theory perspective by including important external variables, internal variables, export strategy and export performance affecting Indian pharma firms and was tested using Structural Equation Modeling (SEM) method. The finding of this study support the conceptual model build using contingency framework and contributes both to export performance researchers for building further the theory and Indian pharma industry to focus on important determinants for export success.*

### INTRODUCTION

For the past few decades, Internationalization has been an important activity carried out by the Indian pharma firms. It is defined as the successive development in a firm's international engagement in terms of geographical spreading in markets, products and operation forms, and changes in management philosophy and organizational behavior from beginning of process to current situation (Albaum et al 2002).

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Firms go for internationalization mainly through exports/imports and FDI. Excluding the imports route, firms internationalize to various international markets depending upon risk and control undertaken from exports, joint ventures, licensing, and foreign direct investments (Johanson et al 1990). Out of all the entry modes, exports have been the traditional and most preferred route followed by most Indian pharma companies. In the Indian context after adoption of process patents in 1972 (Indian Patents Act, 1970), the exports of Indian pharmaceutical industry has risen from Rs. 373.3 millions in 1973-74 (Agarwal A 2004) to Rs.160 billion in 2004-05, growing at a CAGR of 21% compared with domestic CAGR of 12%(Pradhan 2006). At present, export accounts for 46% of total production of pharmaceuticals in India. The country exports to around 200 countries worldwide including highly regulated countries like America, UK and Japan. Looking at these figures, it is interesting to find out the main determinants which affect Indian companies export performance in international markets.

Studies on Indian pharmaceutical industry is very rich and have mainly focused on origin and history of the industry, R&D activities, access to medicines, sustainability of organization. Studies have been made on TRIPS effect on the industry with respect to various streams like research and development, price of medicines, patient welfare, foreign direct investments, etc. However, there are relatively few studies which have focused on export performance of the industry (Pradhan 2003, Pradhan 2004, Agarwal 2004, Chadha A 2005).

Studies on export performance have been in limelight for about four decades starting from the pioneer work of Tookey (1964). Although exporting in an era of globalization has been well acknowledged in the academic literature, theoretical developments in the area have not matched the development in practice (Dhanaraj C & Beamish W P 2003). For the past four decades, researchers have presented various descriptive models of export performance but theoretical developments are limited. The reason attributed for the limited theoretical development may be the rapid changes which occur in the external and the internal environment for a firm, for example government regulation and policies, industry competitiveness, changes in technology, etc. Moreover, these studies have been in the developed countries (Sousa 2005) and have taken all sectors in a particular country into consideration, creating a question mark on the homogeneity of the data collected.

The present study contributes to the ongoing debate of export performance in several ways. Firstly, it focuses on a particular sector, the pharmaceutical industry in a developing country, India. Secondly, it is studied in a changed regulatory environment that is after implementation of TRIPS in 2005 in India. Thirdly, it categorizes the determinants into groups that could be conceptually meaningful and help in development of theoretical framework to the ongoing discussion of export performance. Finally, it aims at helping managers to know the important determinants for export performance, and export decision making. It may also help policy makers to frame appropriate policies for Indian pharma firms to perform better in overseas markets.

## **LITERATURE REVIEW**

Our literature review on export performance<sup>1</sup> showed that although there have been lot of studies on export performance worldwide, there were relatively few studies which have been carried on a developing country like India, particularly in the pharmaceutical sector. The literature on export performance has been discussed with respect to export performance measurement, external and internal influences and export marketing strategy and studies on Indian pharmaceutical industry.

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