Thesis Synopsis

Title: Dynamics of firm performance: An empirical study for India and China

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Emerging economies are gaining widespread attention in modern research studies and the insights obtained from these studies are widely used by firms seeking entry into these markets. Besides, the contribution of emerging economies to the global GDP is constantly increasing and they now contribute more than half of the world‘s GDP (in terms of purchasing power parity indices). Apart from their contribution to the GDP, emerging economies are also playing a major role in certain crucial aspects. These include reduction in poverty levels, generation of employment opportunities, serving as potential markets, and acting as a source of low cost and skilled workforce (Haggblade et al., 2010; Gonzalez et al., 2015). There is a pressing need to conduct an in-depth analysis of emerging economies and its various facets. Many past studies have looked into various aspects of emerging economies such as firm performance, role of governments, and education & skill development (Curimbaba, 2002; Brenes et al., 2014). Though some of these issues are significant for both developed and emerging economies, their relevance is much more for the emerging markets. This is primarily because emerging economies have diverse institutional and cultural setups that are fundamentally different from those of the developed economies (Bruton et al., 2008; Reynoso et al., 2015). These institutional and cultural setups make the research on emerging markets more interesting and at the same time more challenging.

The preceding discussion highlights that there is a need for an in-depth analysis of emerging markets. Therefore, the study focuses on analyzing diverse aspects of firm performance for two major emerging economies – India and China. Firm performance is a critical subject of analysis. This is because a study of firm performance can yield useful insights that can be exploited to enhance overall efficiency and profitability of different firms (Mesquita et al., 2008; Yeyati and Williams, 2014). Moreover, a study of firm performance across several industries can also help in better inter-industry comparisons (Sivadas and Dwyer, 2000; Barrick et al., 2015). Further, an in-depth analysis of firm performance will also provide valuable insights on the links between firm and overall economy (Hansen and Wernerfelt, 1989; Al-Tuwaijri et al., 2004). India and China make for an important setup for studying firm performance in emerging economies. This is because the two nations are among the most prominent emerging economies in terms of their overall GDP contribution. Moreover, these two economies are poised to become the largest and the second largest economies of the world in the next one and half decade.

The thesis has three broad objectives. The first objective is to investigate the key factors impacting firm performance for firms operating in different industries in India and China. The main rationale here is that such a study will reveal the inter-industry heterogeneity that has been usually ignored in many past studies. The second objective involves estimating the threshold levels of the important variables impacting firm performance in India and China. This involves estimating the optimal values of various firm level factors such as size, marketing intensity, capital expenditure intensity and leverage. The key rationale here is that such an analysis will help managers in efficient allocation of resources for various activities. The final objective is to estimate the nature and degree of performance persistence for firms operating in different industries in India and China. This will help in determining the applicability of the competitive environment theory for India and China.

The dataset for the thesis consists of records on several firs-specific factors for various publicly listed firms in India and China. The final sample includes 1,516 firms operating in India and 742 firms operating in China. A 10 year time frame ranging from 2005 to 2014 for Indian firms and 2004 to 2013 for Chinese firms has been considered. This has been done since Indian firms follow April to March fiscal year whereas the Chinese firms follow January to December fiscal year. All the firms have been segregated into different industries. The North American Industry Classification System (NAICS) codes have been utilized to classify the firms into different industries.

The dependent variable – firm performance – has been measured by considering two key accounting ratios including Gross Return on Assets (GROA) and Net Return on Assets (NROA). Moreover, five variables: Firm’s Size (SIZE), Marketing Intensity (MI), Capital Structure (CS), Growth Intensity (GROWTH), and Research and Development Intensity (RNDI) have been considered as the prime explanatory variables. Also, five more firm specific variables have been included in the empirical analyses as control variables. Three different panel data regression techniques, including the fixed effects model, the threshold panel model (Hansen, 1999) and the dynamic panel model (Arellano and Bond, 1991), have been deployed for estimating the results. The fixed effect technique has been deployed to estimate the linear impact of various variables on firm performance. Threshold panel technique has been applied to estimate the non-linear impact of the key explanatory variables on firm performance. The dynamic panel technique has been utilized to estimate the nature and degree of performance persistence.

The empirical results show that the variable SIZE, CS, GROWTH and MI are the most important factors impacting firm performance across different industries in India and China. These factors significantly impact both the gross measure (GROA) and the net measure (NROA) of firm performance. The results further reveal that the impact of these factors varies considerably across different industries in India and China. Besides, it is mostly observed that SIZE is having a negative impact on firm performance. Similarly, the impact of other explanatory variables on firm performance also varies considerably across different industries. In order to empirically validate the non-linear relationships, the threshold panel estimations have been carried out. In the empirical analyses, SIZE has been considered as the threshold variable and CS, GROWTH and MI have been considered as the regime- dependent explanatory variables. The results confirm the existence of non-linear relationships for manufacturing and services sectors in India and China. The final set of analyses includes estimating the degree of performance persistence across various industries in India and China. The results confirm that there exists positive persistence across all the selected industries in both the countries. However, the degree of persistence in firm performance varies greatly across different industries in both these economies. Further, the degree of persistence, within a particular industry, also varies a bit across the gross and net measures of firm performance. The overall results bear certain useful implications for managers and regulators in the emerging economies.