

BARRIERS FOR INNOVATION IN SMES IN SRI LANKA

Seshika Kariyapperuma

*Department of Business Administration, Faculty of Management and Commerce,
University of Sri Jayewardenapura*

Keywords: *SEMS; Barriers to Innovation; Innovation; Less Developed Countries*

Introduction

The purpose of this article is to contribute to the empirical literature which investigates barriers for innovation in less developed countries. Small and medium enterprises (SMEs) have been identified as an important strategic sector for promoting growth and social development of Sri Lanka. When compare with most of the countries in the region SME sector in Sri Lanka exhibit its underdeveloped features. The sector faces many challenges with rapid expansion of globalization as trade barriers are disappearing in many regions and becoming integrated at a fast rate. Though the SME sector known as the 'engine of the economic growth', the affect it has brought in reduction in poverty, unemployment and inequality of the country remain at a very insignificant level and the annual growth rate is at a low level due to lack of innovation and inefficient management. Thus, this research, conducted in Sri Lanka, a small less developed country, concentrates on barriers approach to innovation. There are some theoretical explanations in respect to barriers for innovation in SMEs. Further, the literature highlights that most of studies examining barriers to innovation in SMEs have been conducted in the western context and very few in developing country context. However, no substantive empirical study has been conducted to investigate barriers to innovation in SMEs in Sri Lanka. This was the research gap that was primarily addressed in this research paper. This study concentrates on the identification of barriers and their ranking in terms of importance by owners or managers. The impact of barriers, a complicated issue, is not further considered here. By reviewing a relatively large amount of previous research, an extensive list of external and internal innovation barriers (Mohnen & Rosa, 1999; Freel, 1999; Kaufmann & Tödtling, 2002; Tourigny & Le, 2004; Rammer, 2005; SCB, 2006; Vinnova, 2007; Tiwari & Buse, 2007) were found, summarized and used for the research purpose.

Methodology

The empirical analysis was carried out at the firm-level, on the ground of a survey covering 50 SMEs in Sri Lanka. For our purposes small are those with 5-50 employees (investment up to 5million SLR) and medium between 51 and 150 (investment up to 5-50 million SLR). A random sample is the ideal for a research project, but in this case it was difficult (if not impossible) to achieve for a number of reasons: (a) access to firms was important for completion of a questionnaire, (b) a balance was also aimed in terms of innovative/less innovative firms in the sample (or at least the inclusion of several truly innovative firms, which are a rather rare species in the Sri Lankan context.) There were 63 completed questionnaires during the two months data collection period yielding a 41 percent response rate. Out of these 50 were found usable for this study. These account for 32 small organizations and 18 medium sized organizations. A questionnaire of 6 pages was constructed and pretested with 7 firms. It was then adjusted, corrected and re-worded according to the results of the pilot testing. The interviews for the questionnaire completion were face-to-face, since it was felt that the response rate with a postal questionnaire of such length and complexity would be unacceptably low. The secondary data was collected from the Central Bank Annual reports, World Bank Reports, presentations made by Agith Nivad Cabral on the relevant topics, working papers prepared by Institute of Policy Studies of Sri Lanka on contemporary national and international economic issues and white papers prepared by Task Force for Small & Medium Enterprise Sector Development Program

and the internet. Further various research papers have been referred on similar situations to gather various experiences. The data gathered through questions were analyzed through quantitative methods and those data were measured by percentage analysis. The interviews conducted and the information collected were analyzed and included in final discussion and conclusion.

Discussion and Conclusion

According to the survey a major barrier for SME sector in Sri Lanka is the shortage of capital for R & D and new product development due to number of reasons such as lack of access to bank facilities, lack of knowledge of bank procedures, long delays and inability to provide guarantees. Although there are some loan schemes available, the high rate of interest makes the venture unattractive. According to the study made on the SME sector in Sri Lanka, nearly 85% of them have identified procurement of capital as the area in which they needed most support to succeed in innovations. Absence of technical and managerial skills (labour) have also been identifies as important external barrier affecting SME innovation. The level of technology is directly related to the innovation and operational efficiency of SMEs. Lack of technical applications has severely constrained the SME's ability to develop new products and services. In many instance, the use of technology levels tend to be low and is not frequently available for rural based enterprises. In this regard, state-owned science and technical institutions including universities have failed to establish links with SME sector enterprises and address their problems. In a small developing country like Sri Lanka innovation is largely incremental and therefore too easy to copy. There is therefore a major issue of "the appropriability of returns to innovation" i.e. the extent to which innovations can be protected from competition. Fast introduction of new products to markets and secrecy are some of the ways of protection against innovation copying. Finally inadequate relationships with other firms, technological institutions (lack of social capital) have been identified as the fifth most important barrier for Sri Lankan SMEs. SMEs are increasingly becoming subject to great demands brought about by world trade liberalization and globalization. Capturing the market opportunities that are becoming available is not easy for individual SMEs to do, with many unable to achieve economies of scale and carry out functions such as training and technological innovation. Clusters are a powerful means by which SMEs can address some of their problems with regard to demand fluctuations, and procurement of inputs, as well as enjoy economies of scale and improve their bargaining position. It also becomes more cost- effective for the government, large enterprises, universities and other supporting agencies to provide broad services to a whole cluster of enterprises, rather than to individual enterprises in several locations. Although business clusters are well established among larger enterprises in Sri Lanka, it is still rare and nascent in the SME sector.

Inadequate financial means was the top ranking internal barrier, followed by lack of qualified managerial and technical persons, inadequate R& D, excessive perceived risk of innovation and lack of time. Sri Lankan owners/managers try to carry out as many tasks as possible within the firm themselves. This is understandable for micro-businesses and small firms, but it becomes a problem when the firm grows e.g. beyond the limit of 50 employees. Fire-fighting and routine work then drives out planning for the future and concentration on future related activities including innovation. Relating to excessive perceived risk of innovation Chandrakumar (1995) has found that most of the Sri Lankan managers are law risk takers. Some suggestions for elimination or alleviation of important barriers, at the level of national innovation policy, include an industrial bank specializing in the manufacturing sector. Reorganization of the technical education and seminars on time management for owners/managers are other significant measures. More attention on the most important barriers, as revealed in the research, and open communication with the private firms' managers can to more effective joint action for innovation promotion. The joint action presupposes a deeper understanding of the perceptions and preoccupations of the private sector managers by the government officials.

References

- Central Bank of Sri Lanka, Annual Report (2010), Colombo, Sri Lanka.
- Chandrakumara, A (2003). Work and value orientations of Sri Lankan Manufacturing Sector employees: A empirical study, paper presented at the International Conference of Business Management of Developing Countries; University of Sri Jayewardenepura.
- Freel, M. (1999). Where are the skills gaps in innovative small firms? *International Journal of Entrepreneurial Behavior & Research*, 5(3), 144-154.
- Kaufmann, A., & Tödting, F. (2002). How effective is innovation support for SMEs? An analysis of the region of Upper Austria. *Technovation*, 22(3), 147-159.
- Mohnen, P. and Rosa, J. (1999). *Barriers to Innovation in Service Industries in Canada, Science and Technology Redesign Project*, Research Paper No. 7, Ottawa
- Rammer, C., Löhlein, H., Peters, B., & Aschhoff, B. (2005). *Barriers for Innovation*. Mannheim: Zentrum für Europäische Wirtschaftsforschung.
- SCB.(2006). Barriers for Innovation in SMEs. Retrieved 2008-10-25, from http://www.scb.se/templates/Product_8889.asp
- Tidd, J., Bessant, J., & Pavitt, K. (2005). *Managing innovation: integrating technological, market and organizational change* (3rd ed.). New York: John Wiley & Sons.
- Tiwari, R., & Buse, S. (2007). Barriers to Innovation in SMEs: Can the Internationalization of R&D Mitigate Their Effects? Hamburg University of Technology.
- Tourigny, D., & Le, C. (2004). Impediments to innovation faced by Canadian manufacturing firms. *Economics of Innovation and New Technology*, 13(3), 217-250.