Innovation Management and Commercialisation in Small Firms: A Study of Low and High R&D Intensity Firms from Australia and France

Tim Mazzarol a, Sophie Reboud b

a University of Western Australia
b Professor - A/Dean for Research - Burgundy School of Business*

Abstract

This study examines the nature of innovation within small firms across two OECD countries with a particular focus on the differences between firms with low R&D intensity and those with high R&D intensity. Drawing on a sample of small to medium enterprises (SME) who were engaged in the commercialisation of at least one innovation, the study finds that while most OECD countries appear to be seeking to provide similar levels of support for innovation and commercialisation within SMEs, such programs need to address the needs of both high and low to mid-tech firms.

I - Introduction

The Global Financial Crisis (GFC) of 2008-2009 has evoked a strong interest within countries throughout the 34 countries that comprise the Organisation for Economic Co-operation and Development (OECD) into ways to encourage the growth and innovation of small to medium sized enterprises (SMEs) (OECD 2010a). This is a response to the desire by governments to stimulate their economies and to foster the creation of jobs. This pattern of activity is reminiscent of the 1970s and 1980s when high levels of unemployment and economic stagnation in many OECD countries fostered a strong interest in the SME as a potential creator of jobs and new products (Birch 1987). Academic interest in the growth and performance of SMEs was stimulated as a result of this and many papers sought to examine the strategic behaviour (Robinson and Pearce 1984), growth and new product development (Gibb and Scott 1985), and the general theory of small firms (D’Amboise and Muldowney 1988).

In many respects this GFC rekindling of interest in the role of the SME is a case of “back to the future” as researchers and policy makers seek ways to unlock the potential of the small firm within their national economies and national innovation systems (NIS).

This study seeks to understand the nature of innovation within SMEs across two OECD countries Australia and France, and within firms that have high or low levels of innovation intensity (as measured by percentage of annual turnover invested in R&D where >5% are classified as high-tech and those <5% as low to mid-tech) (Hirsch-Kreinsen, Hahn and Jacobsen 2008). First, it examines the nature of these two countries approaches to the support of innovation and commercialisation amongst SMEs with reference to their respective NIS. Second, it examines the behaviour of SMEs with low and high levels of R&D intensity in their approach to commercialisation.

II – The national innovation systems of Australia and France

The concept of a National Innovation System (NIS) has emerged within the academic literature over the past thirty years, with Schienstock and Hämiläinen (2001) suggesting that the idea was first introduced by Lundvall (1985), and then widely diffused as a result of Freeman’s (1987) analysis of the economic growth of post-war Japan. Since the 1980s further research into the NIS concept has been undertaken (e.g. Nelson 1992; Edquist