

## Foreign Direct Investment and Indigenous Entrepreneurship: Evidence from Wales and Ireland

S. Terjesen<sup>a,b</sup> and Z. Acs<sup>c</sup>

<sup>a</sup>Queensland University of Technology, B423, BGSB, 4001 Brisbane, Australia

<sup>b</sup>Max Planck, Queensland University of Technology, 4001 Brisbane, Australia

<sup>c</sup>George Mason University, Washington, Washington, Washington D.C. code, United States of America  
s.terjesen@qut.edu.au

### Principal Topic

Foreign direct investment (FDI) plays an important role in the economic development strategies of several countries. FDI inflows bring in the latest technology, create employment and lead to tradable goods. FDI not only enables the transfer of intangibles to another country but also makes knowledge spillovers possible and therefore may play a major role in indigenous entrepreneurship. These knowledge spillovers can lead to the establishment of new indigenous enterprises in the host country leading to further economic development (Young, Hood & Peters, 1994).

However, not all types of FDI have the same potential for knowledge spillovers. The potential for knowledge spillovers is related to the type of FDI and the level of human capital in the host country. FDI in high technology industries is more likely to generate knowledge-intensive spillovers (Buckley, Newbould & Thurwell, 1988). High levels of human capital (formal education, on-the-job training including industry, management and business development experience) make it easier for entrepreneurs to start high value-added firms. Individuals working in MNEs obtain higher levels of training and development than in local firms (Chen, 1983; UNCTAD, 1994) and wish to obtain the best returns for these skills. Individuals may feel unable to realize appropriate returns in the existing firm or may believe that the bureaucratic MNE does not value this knowledge, and seize the opportunity to create a new entity (Acs & Varga, 2004).

While several studies examine the relationship between formal education and FDI (OECD, 2002), and other studies are concerned with the relationship between human capital and entrepreneurship (Bates, 1990), very few studies explore the relationship between FDI, human capital and entrepreneurship.

Using a combination of case studies and Global Entrepreneurship Monitor (GEM) population surveys in four regions, we explore how the link between FDI spillovers and indigenous entrepreneurial activity varies by human capital and cultural context in Ireland and Wales.

### Methodology/Key Propositions

The data is drawn from case studies and GEM survey data. The purpose of the case studies is to provide a context for our comparison of entrepreneurship in the four regions. Specifically we describe FDI in Ireland and Wales, and present evidence at firm and individual levels of how knowledge spillovers from FDI impact the extent and nature of entrepreneurship. For example, in Ireland FDI from MNEs in the software industry led to indigenous software start-ups (O'Malley & O'Gorman, 2001; Barry, 2003).

Survey data is drawn from GEM population samples estimating the prevalence rates of start-ups and established business. A standardized telephone survey was conducted of a representative sample of adults in 2002-2004 yields a total sample of over 16,000 individuals. The survey requested a broad array of information related to individuals' demographics, perceptions of the country environment for entrepreneurship, attitudes and awareness of entrepreneurship and the self-reporting of involvement in entrepreneurial activities. (See Reynolds 2005 for a review of GEM methodology and approach.) We report, at the population and the entrepreneur sample, differences in entrepreneurial activity and perception levels. We also examine regional differences in new venture start-up types by sector and growth expectations and the individual entrepreneurs' demographics.

Countries benefit from FDI spillovers when there are high levels of human capital and strong cultural context that support indigenous entrepreneurial activity. Thus, we put forward a number of propositions. First,

different types of FDI enable different levels of knowledge spillovers. Next, we expect that entrepreneurial activity will be more pervasive in sectors where entrepreneurs are exploiting opportunities relating to MNE economic activity. In tandem, we anticipate that for entrepreneurs to exploit opportunities that arise from knowledge spillovers, entrepreneurs need the appropriate personal 'knowledge' and resources. While these cannot be measured directly, we expect that higher levels of human capital (particularly work experience) might indicate that entrepreneurs are using higher levels of 'knowledge' in their entrepreneurial activity. In terms of the nature of entrepreneurial activity, economic development theory suggests that entrepreneurs will differ in terms of 'type' of persons exploiting entrepreneurial opportunities and the nature of the opportunities exploited. Such a context will lead to more individuals perceiving entrepreneurial activity as a desirable economic choice.

Therefore, we expect differences among the four regions in terms of total entrepreneurial activity and entrepreneurs' (i) formal education levels, (ii) new venture sectors and (iii) business goals.

### **Results and Implications**

As predicted by theory, countries with higher value-added FDI also have higher value-added entrepreneurial sectors. It appears that Ireland is creating policies to take advantage of knowledge spillovers from FDI, for example in the software industry (Lenihan & Hart, 2005). The case study suggests that in Ireland, entrepreneurial activity became increasingly important about a decade ago. There is also a suggestion that policies directed at attracting FDI and linking foreign MNEs to indigenous firms maximized the benefits of inward FDI on indigenous industry.

Is there anything for other regions and countries to learn from the Irish model? We suggest that the other regions need policies that seek to attract FDI that leads to spillovers that local entrepreneurs can exploit. This requires policies that encourage entrepreneurial activity among those with the resources and knowledge to exploit knowledge spillovers. For example, Wales has limited knowledge creation and no large indigenous MNEs and needs to ensure that there are knowledge spillovers from FDI, and that entrepreneurial opportunities created by that activity are acted upon. Local indigenous entrepreneurs must respond with their knowledge, create value added, and the foreign inflow will take advantage of it.

### **Contact**

Siri Terjesen. Queensland University of Technology, B423, BGSB, 4001 Brisbane, Australia.  
(T) +61 7 3864 1105, (F) +61 7 3864 1299, Email: s.terjesen@qut.edu.au