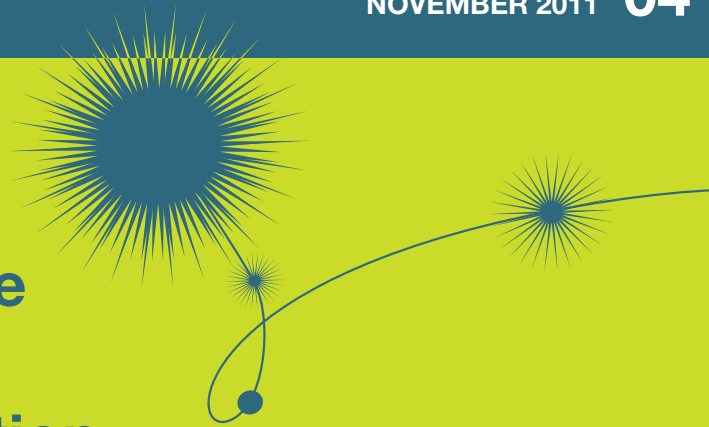


Tight Clusters or Loose Networks? The Critical Role of Inward Foreign Direct Investment in Cluster Creation



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Summary:

The purpose of this paper is to investigate the role of inward foreign direct investment (FDI) in instigating a clustering process. In particular the study examines the situation in which FDI is initially attracted to a region as a result of public policy initiatives rather than the existence of sophisticated local capabilities. Under these circumstances the presence of large foreign-owned multinational corporations (MNCs) is shown to result in local knowledge transfers and regional reputation effects. These effects give rise to a clustering process, which contrary to other perspectives (PHELPS 2008) shows that external economies can be captured locally from FDI.

Research Context

The concentration of industrial activity in a particular region of an economy has long been acknowledged in the literature as being a source of innovation and competitiveness (Marshall 1919, 1920; Porter 1990). Such a concentration of activity, termed industrial cluster, is sustained by the development of external economies such as a skilled labour pool, specialised suppliers and knowledge spillovers arising from interacting cluster members (Porter, 1990; Krugman, 1990, 1991a, 1991b). As regions become specialised in particular sectors foreign investors are attracted to the region to take advantage of such economies (Dunning 2000). This has led to research on the contribution and effect such FDI can have on the dynamics of an existing cluster.

However, it is acknowledged in the literature that there is less known on whether FDI can be used as a tool to instigate a clustering process. Although it may be the expectation of policy-makers that such investment will lead to local economies there is limited evidence either to support or refute this.

Key Questions

The paper aims to address the ambiguity in the literature on whether inward FDI can create a clustering effect in a region. More specifically, the following research question is examined: In agglomerations generated by FDI through a 'top-down' policy approach, how if at all, can such investment instigate a clustering process?

Research Method

A case study of an agglomeration of firms around cardiovascular medical devices on the west coast of Ireland was used to investigate the research problem. The genesis of the agglomeration is rooted in public policy that attracted large foreign investors in the sector to the region. There were two main stages to the research approach. First a company database of all medical technology firms both past and present that existed in Galway, which is the main economic centre in the West of Ireland, was compiled and analysed. For each year up to 2009 data was collected on the investments, nature of investment, main activity of investments, divestments as well as mergers and acquisitions. This allowed for an understanding of how the medical technology sector evolved in the region and identified the existence of a cluster of activity around cardiovascular medical devices in particular. Analysis of the database was combined with data from nine interviews carried out with relevant interest groups, such as industry associations, academic institutions and industry development agencies. Subsequently,

semi-structured interviews were conducted with foreign-owned and indigenous firms in the cardiovascular medical device cluster to understand the dynamics of the agglomeration and any clustering effects taking place.

Key Findings

Even though the firms are embedded in a global context as they are highly export-oriented, significant clustering processes take place locally that create an agglomerative effect. These processes are primarily occurring through the presence of two large world-leading foreign-owned multinational corporations (MNCs) in the region, that is, Boston Scientific and Medtronic. Knowledge is transferred to the region through these MNCs in the form of new start-up firms as previous employees of the MNCs have established their own companies. Also the MNCs have created research linkages with the local higher education institutes and they transfer knowledge to local suppliers ensuring they meet international standards. Furthermore, the MNCs create by far the most employment in the field of medical technology in the region and as a result they have significantly contributed to the development of a skilled labour pool. On a more intangible level the presence of the MNCs is creating a clustering effect by establishing a positive international reputation for the region in the field of medical technology. Consequently, international actors are drawn to the region to visit the MNCs and an international conference in the medical

technology field is held in the region each year. This provides a means for local indigenous companies to create contacts. Finally as these two MNCs in particular are world-leading and are both engaged in the production of drug-eluting stents from the region, Galway is recognised internationally as a hub of activity and this facilitates smaller companies in establishing networks abroad.

Conclusions/Implications:

Overall the case study of the agglomeration in cardiovascular medical devices on the west coast of Ireland reveals that the establishment of foreign-owned MNCs in the region have resulted in the emergence of a cluster and more significantly, clustering processes have developed. While these processes may be of a more intangible nature as opposed to being extensive local trading linkages, they are creating an agglomerative effect. The challenge for policymakers now is how to develop the capabilities of the local indigenous base so that new business is attracted to the region but there is a movement away from a dependence on foreign-owned investment.

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