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Industrial clusters, transactions costs and the institutional determinants of MNE location behaviour

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Abstract

This paper discusses the institutional and organizational assumptions underlying many of the currently popular notions of industrial clustering. By adopting a transactions costs perspective, we explain that there are three fundamentally different types of industrial cluster. We then discuss how the institutional differences between each of these clusters provide different possibilities for the location behaviour of the multiplant or multinational firm. Using two examples from the global semiconductor industry, we show that observations of industrial clusters must be interpreted very carefully when we are discussing multinational firms. The reason for this is that many simple clustering notions are predicated on assumptions which are often incompatible with multinational firms. The potential advantages of industrial clustering can only be understood when location strategies are considered with respect to the organizational and institutional logic of both the firm and the cluster.

Keywords: Clusters; Transactions; Semiconductors; Institutions; Organizations

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1. Introduction

Market mechanisms are mediated via a range of different types of institutions, which can be of an economic, political or legal nature. In situations where institutional environments differ significantly between countries, the overcoming of such differences may incur non-trivial transactions costs. From the perspective of international business, the existence of such transactions costs leads to reduced firm efficiency, and where such costs are very significant, they can lead to missing markets and an absence of trade. In order to encourage economic growth and efficiency, the harmonization of institutional environments between countries is therefore one of the fundamental strategies used in the development of areas of economic integration, such as is the case with the EU (Rosamond, 2000; Addison & Siebert, 1997), the ASEAN region (Yeung, 1999) and NAFTA (Clement, del Castillo Vera, Gerder, Kerr, MacFadyen, Shedd et al., 1999). According to neo-classical trade theories (Borts & Stein, 1964) the long run effect of these institutional changes will be a convergence in the economic performance of the various countries within the zone of integration (Barro & Sala-I-Martin, 1992) and an equalization of factor proportions across these countries. However, underlying this conclusion is not only the assumption that factors are mobile across space, but also that at the equilibrium prices, all areas are equally attractive as investment locations.

More recent developments in economics (Krugman, 1991) and management science (Porter, 1990, 1998), however, have highlighted the role that geography can play in engendering localized increasing returns to scale, thereby leading to consistent variations in the spatial patterns of investment both between countries (Krugman & Venables, 1990) and also within countries (Fujita, Krugman & Venables, 1999). In particular, variations in local information externalities (Jaffe, Trajtenberg & Henderson, 1993), labour hysteresis effects (Simpson, 1992; Audrestch & Feldman, 1996), and location-specific input sources, can generate conditions under which not only is economic growth localized, but also different locations are consistently specialized in different activities. Under these kinds of conditions, factor price adjustments are not sufficient to ensure that all areas are equally attractive as investment locations, either for a single sector, or for all sectors. The insights, however, provide international business research with something of a problem, in that the nation state is not necessarily an appropriate, or even a meaningful spatial unit of analysis, for multinational enterprise (MNE) decision-makers concerned with the location of foreign direct investment (FDI). Increasingly, it is becoming accepted that FDI location issues must be discussed at the sub-national regional and urban levels (Cantwell & Iammarino, 2000), where the geographical extent of information spillovers, and variations in local input supplies, labour quality and environmental amenities, can be explicitly considered.

In order to help discuss how these explicitly geographical issues relate to the behaviour of the MNE, the nation of ‘industrial clusters’ (Porter, 1990, 1998) has recently been added to the familiar set of international business analytical tools, which already includes the OLI paradigm (Dunning, 1971) the product-cycle models (Vernon, 1966) and the stage theory of MNE evolution (Johanson & Vahlne, 1977).