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Regional social capital: Embeddedness, innovation networks and regional economic development

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Abstract

Technology is a necessary but not a sufficient condition for regional economic development. Regional innovation networks transform technology into competitiveness of firms and thus contribute to economic development. Intangible assets, such as social capital, decide how effective regional innovation networks function. Differences in regional social capital thus help explain regional differences in economic development. Regional social capital originates from the embeddedness of firms in regional webs of social relations. The norms, values and customs of these networks facilitate collaboration for mutual benefit. As innovation is increasingly a network effort, embeddedness and social capital also help explain how and why networks of innovating companies are successful, as the case study of the Stimulus Cluster Scheme shows.

Keywords: Regional development; Social capital; Embeddedness; Innovation; Networks

Investments in technology lead to innovations, innovations make firms more competitive, more competitive firms pay higher wages and more taxes and thus contribute to economic development. Or so the story goes. The truth is rather more complicated. It is the aim of this paper to explain on the basis of theoretical arguments how regional social capital affects whether or not a region benefits from the

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technology development efforts of its companies. We do so by discussing the key arguments of regional development theory and by considering the role of tangible and intangible regional assets in regional economic development. Next we consider the concept of social capital, which we discuss in relation to embeddedness. Our argument is that economic science is lacking a realistic conceptualization of human behaviour. Social capital plays an important role in explaining human behaviour but it is a characteristics of networks and societies rather than individuals. We suggest that embeddedness is the mechanism through which social capital affects human behaviour. In the final section we discuss the theoretical and managerial implications of our argument. Although, at first sight, this article may seem a bit exotic in a special issue on technology foresight and market research, in fact, it is not. This article aims to shed light on the social context in which companies work, that is, on their web of relations with other companies and how this affects company behaviour. When studying innovation activities of companies, such as technology foresight and market research, the networks of these companies with other companies help explain the success of these efforts. We demonstrate this in a case study of the Stimulus Cluster Scheme at the end of this article.

1. Stating the case

Economics is a science that, among others, aims to explain how economic activities contribute to the creation of wealth or prosperity. In 1776, in economics' first book, Adam Smith made an inquiry into the wealth of nations. However, in explaining its first question economics also runs into its first problem, that nations, or regions, are more than merely economies. Economics is capable of explaining and predicting much of the behaviour of individual companies and it understands how individual companies create added value in terms of profits and jobs. Economics also understands that this added value of companies contributes to economic development on the level of nations or regions, but it is underdeveloped when it comes to explaining why and how. The reason behind this may actually be quite simple. Economics has individual actors or companies as its level of analysis whereas economic development is also a characteristic of nations and regions. Causal mechanisms that function on one level may not be simply translated to another level, as social factors, factors pertaining to nations and regions as societies, will be of importance too. Moreover, even though economics is increasingly open to these social factors, .e.g. institutions [1], trust [2] and social capital [3], their conceptualization in economics is still heavily informed by its traditional disciplinary focus on boundedly rational, rent-seeking and opportunism-prone individuals. The fact that most of the time human societies function decently proves that, for real humans, life tends to be somewhat more socially sophisticated than economics would like us to believe. In fact, one of the most renowned economists of our time, Paul Krugman, has argued that:

> "Economics is marked by a startling crudeness in the way it thinks about individuals and their motivations… Economists are notoriously uninterested in how people actually think or feel" (Krugman in [4]).

Consequently, to understand how economic development of nations and regions really comes about requires a multi-disciplinary approach where this issue is addressed at the proper level of analysis paired to a more realistic view of human actors. The fact that this conclusion is hardly original is testimony of the increasing awareness that it enjoys. The fact that it is still relevant to raise the issue is testimony of its inherently complex nature.

In this paper we use the concept social capital to address the issues of multi-disciplinarity and the conceptualization of human actors on the level of the region. In recent years the concept of social capital