Global innovation is a two-way street

Does globalization mean outsourcing from West to East and brain drain from East to West? This is the oft-repeated dire story that leads regulators and managers alike to fear knowledge-sharing in global networks. New research, however, shows that global innovation networks (GINs) are beneficial for all participants. Companies and governments alike should support GINs rather than worry about them. When taking the lead in establishing and extending such networks, companies can become their central hubs or nodal points, and the result is enhanced innovation, productivity and growth, not only for the involved companies, but for society at large.

A new arena for innovation – global and networked

The INGINIUS (Impact of Networks, Globalisation and their INteraction with EU Strategies) project begins from the observation that innovation is moving out of companies' in house research and development centres, through the learning organization as a whole and is now increasingly located in learning networks. Criss-crossing alliances are being formed between a host of actors, such as local branches of multinational corporations (MNCs), companies with complementary competencies and in various geographic settings, universities and other research organisations, to name but the most readily apparent participants.

Furthermore, these global networks are moving from a knowledge exploiting to a knowledge augmenting mode, thus becoming truly innovative. That is, companies have traditionally used local knowledge to adapt their already existing products to local markets, as when e.g. a Danish dairy product is adapted to the tastes of the Arab consumer. Now, however, complementary insights are sometimes applied in relational processes in order to generate new knowledge, as when e.g. research on bio-fuel is conducted in a network of scientists from private companies as well as universities and (other) public research centres. Thus, we are no longer solely dealing with a transfer of products, knowledge, etc. from one geographic context to the other; instead, we are witnessing the rise of innovative processes in which knowledge is created in and through networks and cannot be limited to or anchored in any single geographical location, but rather exists globally.

While this trend is readily observable, it has not yet been determined how important and frequent it is, its consequences have not been studied fully, and policy makers are uncertain of how to react to it. The INGINIUS project, which is sponsored by the 7th Framework Programme of the European Commission and ran from 2007 to 2011, seeks to answer these questions.

The INGINIUS project – participants, research questions and empirical data

The INGINIUS project is conducted by a consortium consisting of researchers from 11 different countries: Brazil, South Africa, India, China, Estonia, Italy, Germany, United Kingdom, Norway, Sweden, and Denmark. Department of Business and Politics is the Danish partner, and the involved researchers are professor Susana Borrás and assistant professor Stine Haakonsson.

The leading research questions move from description through explanation to recommendation:

- What are GINs and why are they created?
- How do European firms perform in terms of creating and participating in GINs?
- Is Europe an important node or hub in GINs?
- What can European policy makers do to reap benefits and reduce costs and risks of GINs?

The empirical core of the project is a quantitative survey of 1215 companies' involvement in GINs. Furthermore, each partner conducted case studies of particular companies' GIN-activities. At DBP, four large Danish agro-food companies were investigated.

Create hubs for strong networks – findings and recommendations

The main descriptive finding of the project is that very few firms are in fact globalized, innovative, and networked. Only 1.32% of the surveyed firms score highly on all three counts. However, 50% are engaged in GIN-activity to some degree, scoring highly or moderately on all three counts.

At the explanatory level, it turns out that GINs are drivers of not only innovation, but also productivity and growth, and that this is true of not only the involved countries, but also their geographically defined home base. Thus, European regions that have off-shored parts of their innovative activities have higher productivity than regions with only local activities. Furthermore, it is especially the networks in which new knowledge is created, as opposed to those that only exploit existing knowledge, that augment growth.

Given the benefits of participating in GINs and the limited participation of many companies in them, the project recommends policy initiatives that may enhance GINs and encourage more companies to participate in them. A pro-active approach in which a company, country or region becomes the hub of a GIN is especially beneficial, but it is important to recognize that internationalization of innovation is a bi-directional process. Successful GINs are beneficial to all involved, but the success depends on the active participation of all involved actors; in a GIN you only get what you give, so to speak. Policy-makers, then, should seek to create the best possible conditions for the creation of strong GINs in which Europe is a hub, but this does not necessarily lead to a request for more policy intervention. However, as most of the companies that are already involved in GINs are MNCs, policies aimed at supporting and enhancing the participation of small- and medium-sized companies (SMEs) could prove to be especially beneficial to Europe as a region and to the further development of GINs from the current early stage to fully-fledged drivers of global innovation and growth.

Find out more about INGINIUS at: www.ingineus.eu. Here you can find objectives, results, policy briefs, etc.