Summary of the Project Entrepreneurial Innovation and Competition Policy

This project takes its starting point in the fact that in the last decades, we have witnessed a large number of firms that have become international leaders in a short time. Prominent examples are Google and Facebook which have generated exports revenues of substantial amount at impressive speed. Moreover, we observe inventions made by small entrepreneurs being acquired by incumbents who use the inventions to gain a strong competitive advantage in the world market. One example of this type of process is Skype who first was acquired by Ebay and later by Microsoft. The success of these so called ”born to be global firms” has spurred an interest in the determinants and welfare effects of these types of firms. The purpose of this paper is to contribute to the generation of such knowledge.

However, entrepreneurial firms with a global potential face considerable problems when trying to fully exploit the potential value of an invention or business idea internationally. Complementary assets such as distribution networks, marketing channels, financial resources, manufacturing know-how and brand names – i.e. assets typically held by large established firms – are often needed, and we observe a significant amount of inter-firm technology transfers, ranging from joint ventures and licensing to outright acquisitions of innovations.

Thus to understand the phenomena ”born to be global firms”, we need to understand how the economic environment affects the incentive of business development for selling to incumbents relative business development for own export.

We construct a model with the following ingredients: There are several incumbent firms competing in oligopoly fashion in the world market. Moreover, there is a domestic entrepreneur outside this market who invests in an innovative activity that could lead to the creation of a unique business idea (invention), which increases the profit of the possessor and decreases the profits of the rival firms. The interaction takes place in three periods. In the first period, the entrepreneur decides on how much to invest in the innovative activity, where more investments increase the probability of a successful business idea (invention). In the second period, the incumbent firms compete to acquire the entrepreneur's business idea (invention) or, if no sale occurs, the entrepreneur either sells only locally in its home country, or expands in order to also export to the world market. Finally, in the third stage, firms compete in oligopoly fashion in the world market and the entrepreneur generates profits locally if she does not sell her business.

The starting point of the analysis is the process of international integration of product and ownership markets in the last few decades, which has been driven both by policy changes such as WTO agreements (e.g. TRIPS) and the EU single market program and also by technology advances reducing international transportation and transaction costs. How will international market integration affect the commercialization choice (entry or sale) and incentive international entrepreneurship?

We first establish that a trade liberalization (reduction in trade cost), in absence of an acquisition market, implies that it is more likely that an entrepreneurial firm with a successful invention goes global. The reason is that the cost of exploiting the entrepreneurial invention decreases as the cost of trade per unit has decreased.

However, we then show that despite trade liberalization implying that the incentives for entrepreneurs to create ”born to be global firms” increases, it is not clear that the amount of born global firms increases. The reason is that when market integration is not complete, the incentive to sell the entrepreneurial firms to incumbents is stronger than those for entering the market. Why? The incumbents have a substantial amount of market power when markets are not fully integrated and are willing to pay a substantial amount to prevent the entrepreneurial firm from entering the market. When market integration becomes more complete the incumbents have less market power and are not willing to pay so much for entry deterring. As a result, the entrepreneurial firm will enter the world market. Consequently, only at sufficiently complete market integration will the amount of born global firms increase.

How does trade liberalization affect the incentive to create entrepreneurial firms? The incentive to create born to be global entrepreneurial firms will increase. First, the cost of exploiting the entrepreneurial invention in the world market will decrease since the trade cost per unit of sales decreases. Moreover, even if entry does not occur, the bidding competition among the incumbents over the entrepreneurial invention implies that the entrepreneur will capture the trade cost reduction in the form of a higher sales price of its firm (invention).

We then proceed to other important parts of the international market integration process. A prominent change is the strengthened practice of international cartel policy. In its 1997 Annual Report, the World Trade Organization (WTO) highlighted the growing significance of international cartels for policy makers, noting ”there are some indications that a growing proportion of cartel agreements are international in scope”. Evenett, Levenstein, and Suslow (2001) show that in a sample of 20 cartels prosecuted by the United States and European Union in the 1990s, the annual worldwide turnover in the affected products exceeded US$30billion. Connor (2004) examines the antitrust fines and private penalties imposed on the participants of 167 international cartels discovered during 1990-2003, and finds that more than US$ 10 billion in penalties has been imposed. Evenett, Levenstein, and Suslow (2001) as well as Connor (2004) argue that a series of reforms to national policies and steps to enhance international cooperation are needed to further strengthen the deterrents against international cartelization.

How does a stricter enforcement of international cartel policy affect international entrepreneurship? We show that a stricter international cartel policy will reduce the profit from exporting relative to that from selling the entrepreneurial firm to an incumbent. Why? The reason is that when the cartel is broken up, the importance of becoming the leading firm in the market increases and thus the bidding competition over the target firm increases.

Current status of research output

The project has emanated in the paper ”Born to Be Global and The Globalization Process” which solicited for a special issue of the international journal *World Economy*.