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EDITORIAL

Symposium on organization, heterogeneity and trade

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The growing importance of multinational corporations in world trade has been widely documented in the empirical literature. UNCTAD (2002), for instance, finds that the sales of foreign affiliates of multinational corporations have increased much faster than exports of goods and non-factor services. Trade in intermediate inputs has also expanded substantially and FDI in the service sector has grown at an unprecedented pace.

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As a result, researchers working in international trade have devoted renewed interest to the development of theoretical models to study firms' decisions to internationalize their activities. The aim of this symposium is to offer a selection of recent contributions that tackle some of the more relevant questions discussed in this literature.

The first two papers look inside the firm, and study the optimal organization structure for a multinational corporation. In particular, Marin and Verdier (2008) focus on the allocation of power within the organization and to that end, they develop a model that explicitly incorporates the distinction between formal and real authority introduced by Aghion and Tirole (1997). To carry out a project in a foreign country, a multinational corporation hires a manager to implement the production plan in the foreign subsidiary and local labor to run the local production plant. The MNC can decide whether to retain formal control over the implementation of the project or delegate it to the subsidiary's manager. Fundamentally, the authors show that there is a trade-off between control (which prevents the local manager from diverting profits in the subsidiary) and delegation (which increases his incentives to gather relevant information for local production). In particular, whenever the multinational does not have access to high quality information, delegation of power to the subsidiary's manager might turn out to be optimal, even if it involves an inefficient diversion of part of the returns to the project to the subsidiary's manager. Furthermore, it is shown that delegation of authority also turns out to be optimal for intermediate levels of local market competition in the host country. Under these circumstances, the better incentives given to the local partner when it has formal authority over the project more than offset the costs of its opportunism.

Che and Facchini (2008) study the optimal mode of entry decision for a multinational in a foreign market. New to the literature, they simultaneously consider three alternative scenarios, which differ on the basis of the allocation of formal authority over the implementation of the project: a licensing agreement, a joint venture and a wholly owned subsidiary. In an environment characterized by insecure property rights and asymmetric information on the characteristics of the local market, they show that the relationship between the degree of control retained by the foreign multinational and the institutional features of the new market is non-monotonic. In particular, licensing will be chosen only if property rights are strictly enforced. For an intermediate level of property right enforcement, the better use of local information made possible by shared control under a joint venture can work as a double-edged sword. On the one hand, it makes the monitoring activities of the multinational more credible, but on the other hand, it offers insurance to both parties, making it more difficult to discipline the local partner.

The next two papers study the link between the firm's internationalization decision and the location of R&D activities. Lai et al. (2008) propose a model of R&D outsourcing. To address this important question they model a monopolistically competitive firm, the principal, who decides whether or not to outsource R&D to a subcontractor, the agent, who is able to innovate faster and more cheaply. Due to a potential information leakage—the possibility that the research subcontractor could sell the information on the innovation to potential competitors—outsourcing will not always be chosen, even if it would be efficient to do so. Their main results are that R&D will be carried out in house by the multinational as long as the principal's loss and the agent's gain from information leakage are large. Outsourcing with revenue sharing is only optimal if the agent's gain from leakage is sufficiently small and the principal's loss is of intermediate size. If the demand faced by the firms becomes more elastic, outsourcing by using a lump sum contract becomes more likely, hence information leakage will occur.

Naghavi and Ottaviano (2008) study the effect of offshoring on product innovation and growth in the country of origin of the multinational corporation. In a two-country growth model, where the South has a Ricardian advantage in the intermediate goods sector, production and transportation costs affect only the static decision to relocate plants, but not R&D. Since offshoring may reduce the feedback between plants and laboratories, offshoring might be undertaken to search for static gains, even if it is likely to cause dynamic losses to the country. The authors find that these losses are more likely to occur when the country of origin is large, and in sectors in which R&D is comparatively cheap and product differentiation is strong.

The last two papers look outside the firm, highlighting the effect of heterogeneity among producers in shaping trade flows and welfare. Okubo (2008) introduces heterogeneous firms a' la Melitz (2003) in a Ricardian framework. By doing so, he is able to account for intraindustry trade, but more importantly he can identify which firms are active in equilibrium, which firms export, and which ones serve only the domestic market for each sector. He then performs a series of interesting comparative statics exercises to consider the effects of population growth, asymmetric technological progress and a reduction in trade costs.

Calvo Pardo (2008) considers another type of heterogeneity: heterogeneity in beliefs across economic agents and the process through which they may or may not converge. By investigating this issue using a simple, basic model of international trade, he provides a new rationale for the 'fear of globalization', adopting the educative learning perspective to expectation formation pioneered by Guesnerie (1992). More precisely, he shows that, in a context where the standard gains from trade exist, a free trade policy generates multiple rationalizable equilibria, even if the standard competitive equilibrium is unique. The basic intuition is as follows. By increasing the supply curve elasticity, globalization can have a destabilizing effect on the functioning of the market convergence process. This is more likely, the more heterogeneous the agents operating in the market. It follows from this that there is a tradeoff between the source of the usual gains from trade (depending positively on heterogeneity) and the likelihood of destabilizing expectations. From an ex-ante perspective, as multiple equilibria cannot be probabilized, the move from autarky to free trade increases the uncertainty perceived by producers, and thus the 'fear of globalization'.

The papers offered in this symposium provide a good sample of the recent, very exciting research in international trade theory. The "black box" of the firm is opened and, as in other fields of economics, international trade scholars increasingly take into account the crucial implications of heterogeneity across economic agents interacting in the global economy. This generates stronger and more robust theoretical foundations for the stylized empirical facts of contemporary trade flows. It also opens up new lines of research and provides important insights to better understand the process of globalization and its socio-economic consequences.

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