INRA SCIENCES SOCIALES

N° 5-6 – NOVEMBER 2006

RESEARCH IN ECONOMICS AND RURAL SOCIOLOGY

Intra-firm Trade in the French Agrifood Multinationals:

What changes since 1993?

By definition, the multinational firm (MNF) controls a set of affiliates located in different countries. Therefore, it is able to internalize a part of its international trade within a market internal to its organization (intra-firm trade). By this very fact, does intra-firm trade (IFT) become the standard of international trade in the context of increasing corporate globalization and economic regionalization? At all events, they have strongly intensified in the agrifood sector. In 1999, one third of French international trade in agro food products was carried out inside multinational firms. Thus, far from generating a substitution between production and trade, setting up MNF leads to a transformation in the nature of trade, the determinants of which may differ from those directly carried out on the market.

Within this context, we will particularly deal with two matters hereafter: what factors encourage multinational firms to internalize international trade rather than directly sell on the markets? How did the European Single Market constitution affect corporate trade strategies? By basing themselves on the trade development of international agrifood corporate groups based in France between 1993 and 1999, the authors intend to answer these questions, in particular by using the "Globalization" survey conducted by the French statistics institute and a model analysing the determinants of intra-firm trade.

A Europeanization of production and agrifood trade

In Europe over the last decade, the increasing integration of product markets, due to the completion of the Single Market and implementation of the Economy and Monetary Union (EMU) on the first of January 1993 modified the conditions of competition between firms. The suppression of capital trade barriers facilitated the access of national markets to the company assets of other Member States. Firms do not only work on their own national markets but have an increasingly European, or even global perspective. This observation, made by the European Commission (2002) for the whole European Industry, also applies to the French agrifood sector. In fact we are witnessing an important development of European investments in the productive organization of the French agrifood sector. The number of European firms located in France was multiplied by 2.6 between 1993 and 1999 (against an increase in the number of firms of up to 20% for the whole sector). This is something of a European process in the sense that, comparatively, the weight of non-European foreign firms changed little.

However, the Europeanization movement of French agrifood companies does not express a trading intensification of the European market. The global share of agrifood trade with European partners stays stable over the whole period: it still represents 75% of exports and 68% of imports.

The increasing weight of intra-firm trade in French foreign trade.

Part of overall trade is carried out within the internal market of multinational firms, between affiliates of the same group. In 1999, intra-firm trade represented more than 27.1% of French foreign agrifood trade, that is to say 31% of exports and 23% of imports. Their weight is in constant evolution – in 1993, they only represented 23% of exports and 11% of imports of the agrifood sector, so the agrifood industry is catching up with the configuration of other industrial sectors in the French economy.

Intra-firm trade being often intended to contribute towards penetration of foreign markets, its evolution approximately varies with the nationality of assets (table 1). French company affiliates achieve nearly two thirds of intra-firm exports and this share has changed little since 1993. On the other hand, in 1999, French groups did not represent more than 19.4% of intra-firm imports whereas they accounted for one third of them in 1993. Conversely, in France, foreign groups carry out the majority of intra-firm imports of agrifood products. Among them, non-European groups increasingly use their internal market. In 1999, their internal flows covered nearly 75% of their imports and 67% of their exports. In 1993, that practice represented only a third of their trade. During this time, they saw the weight of intra-firm imports increase the most.

In terms of geographical distribution (table 2), the main proportion of intra-firm trade is turned towards Europe with a variety of developments according to the firm's nationality. Thus, French group affiliates greatly strengthen the use of their internal market in imports from the European Union. In this way, they have come closer to the profile of European affiliates, highly dependent on their European networks and their links with the head of the group (48% of their intra-firm imports are purchases from their parent company). At the other end of the scale, as far as exports are concerned, trade with the rest of the world remains important for French firms but also for European group affiliates, in spite of a clear tendency to refocus their exports on Europe.

For non-European firms located in France, characterized by a high intra-firm exchange rate[1], most of their internal transactions are also carried out in Europe. Conversely, this underlines their low share of trade with their sister affiliates located in the rest of the world. This analysis reveals the so-called "bridgehead" investment strategy carried out by foreign groups to bypass EU entry trade barriers and therefore penetrate the European Market, a penetration carried out via a network of French but also European affiliates. However, between 1993 and 1999, the development of their intra-firm imports from the rest of the world, which may have been stimulated by the reduction of European tariffs over that time, tends to reposition these non-European companies in their world group organization.

The determinants of intra-firm trade in the French agrifood industry

In order to address the reasons which drive MNF to trade within their internal organization, we analysed, via a probit model, the firms' decision to trade in their internal market (see box 1). The results obtained in accordance with the determinants brought to the fore by the literature (see box 2) at the same time underline that trade internationalisation allows companies to use their specific advantages and characteristics of the sector-based or macro-economic environment to which they or their partners belong.

The overall explanatory factors

The results (table 3) show more precisely that the recourse to internal market increases when a firm tries to make economies of scale and develop its specific assets to protect itself from the international competition. In this way, the probability of intra-firm selling increases with the product's technological level, the employees' qualification and promotion of the product brand-image. On the other hand, the decision to export via the internal market is favoured, at the international level, by the degree of experience of the group to which the firm belongs. This reveals the part played by economies of scale, which are generated at the group level, in order to minimize the costs linked to the market information and creation of new infrastructures to distribute products.

As to the effects induced by the company's economic environment, they take place at different levels. At the competitive environment level, we show that MNF trading is internalized on concentrated markets. From a theoretical point of view, the internalization may be analyzed as a means for firms to protect their monopolistic advantage, or even create new trade barriers. At the sector level, it appears that when France has a marked competitive advantage in the export of a product towards a given country, the sector-based dynamics play negatively on the intra-group relations. Therefore, a national comparative advantage on a product allows good knowledge of the goods by foreign consumers thanks to the existence of a brand image on which the firm may rely, and of genuinely settled sales networks. In this context, intra-firm trade becomes less useful to the firm penetrating a foreign market. On the contrary, the fewer comparative advantages France has on a market, the more its companies will have to mobilize their own specific advantages, and the more recourse to internal market is intense. Lastly, there is a particularly strong probability of exporting intra-firm in the sectors such as dairy, cereals and animal food-processing in comparison with the meat sector which in France is characterised by a high export rate but which exchanges directly on foreign markets. This result is due to the nature of the product but also to the degree of internationalisation of the actors. In the meat sector, few firms belong to multinational groups or operate within an international division of labour.

What is the impact of the Single Market on intra-firm trade determinants?

In the overall previous model, it appears that whatever the company's nationality (French, European or non-European), multinational firms have a stronger tendency to resort to use their internal market as soon as their transactions take place in the European Space. Does this lead to different trade motives according to transaction destination?

To answer this question, in a second part of the work we compare the determinants of the decision to trade intra-firm, according to the trading destination zone (EU and the rest of the world). Taking into account trading zones reveals different motives of internalization. In this way, advertising expenses as well as brand promotion appear to be important criteria for the development of intra-firm trade towards the EU. This movement is due to the fact that, in the European networks, intra-firm traded products are technological products requiring a skilled workforce and the use of goods is essentially final. So, using affiliate economies of scale, multinational firms trade different varieties of the same good (or different goods of a same range) within the EU in order to meet consumers' demand. On the contrary, on the markets of the rest of the world a division of labour is observed in

[1] The greatest share of their internal transactions in the global trade amounts to 62%, that is to say, the highest rate of the population of firms observed.

parallel, marked by intra-firm imports of intermediate goods and exports of final goods.

These different results tend to express the fact that, in spite of a trade barriers reduction in the EU, different factors still work in favour of the creation of internal flows: an incentive to capital mobility and direct foreign investments, the necessary condition for the existence of an internal market, but also the possibility to manage better the specific corporate advantages in a more integrated space. Thus, by reducing transaction costs, the implementation of the Single Market allowed a better coordination of the activities between affiliates of a same group within the European Space, which is in favour of intra-firm trade. The creation of intra-regional networks, contributors to the European integration process, is an element brought to the fore by results. It comes with the classical factors of international labour division and the classical attempts to circumvent the trade barriers transferred at the Union borders.

Emmanuelle Chevassus-Lozza, INRA Lereco, Nantes
Danielle Galliano, INRA ESR, Toulouse
chevassus@nantes.inra.fr – galliano@toulouse.inra.fr

For further information

Chevassus-Lozza, E.; Galliano, D. (2006). *Intra-firm trade and European integration: Evidence from the French multinational agribusiness.* Cahiers du GRES, n°2006-25, 29 p.
Chevassus-Lozza, E.; Galliano, D. (2005). *Les échanges internationaux au sein des groupes agro-alimentraires: le contexte du marché européen.* In: Robin, Y. (éd), L'industrie en France et la mondialisation, collection Analyses, SESSI, Montreuil, pp 191-214.
Chevassus-Lozza, E.; Gallezot, J. ; Galliano, D. (2004). *External versus internal market of the multinational entreprise: intra-firm trade in the French multinational agribusiness.* In: Rama, R. (éd.) Multinational Agribusiness, Howard Press, New York, pp 191-214.
Chevassus-Lozza, E.; Galliano, D. (2003). Local spillovers, firm organization and export behavior: evidence from French food industry. *Regional studies,* vol 37, n°2, pp 147-158.

Published by the INRA Social Sciences, Agriculture and Food, Space and Environment Publishing unit
Editorial Director: Hervé Guyomard – Editor: Didier Aubert (Chief Editor), translation and composition: Ariel Gille

Copyright: 4th term 2006 - ISSN 1778-4379