

DO DOMESTIC FIRMS NEED TO LEARN FROM MNCS TO EXPORT? EVIDENCE FROM SWISS MANUFACTURING INDUSTRY

Ben Hamida, Lamia

La Haute école de gestion Arc, University of Applied Sciences and Arts Western Switzerland// HES-SO, Neuchâtel, Switzerland

ABSTRACT

Our paper attempts to examine how domestic firms¹ manage to benefit from the export activities of large multinational corporations (MNCs). We analyze export spillovers from MNCs, in which export specific knowledge of MNCs that are experienced on foreign markets may spill over to domestic firms, improving their export performance. Multinational firm has a significant advantage over domestic firm since it can benefit from the existing international network of the entire corporation to start export operations and overcome the fixed costs induced by these activities (Blomström and Kokko, 1998). The contacts of domestic firms with export oriented MNCs provide both knowledge about the product and process technologies and international market conditions and access to foreign marketing and distribution networks – for example, foreign preferences regarding design, packaging, and product quality – raising the export and productivity performances in domestic firms through export spillovers.

The export activities of MNCs may benefit domestic firms when the export specific knowledge that MNCs are experienced on foreign markets may spill over to domestic firms, allowing them to reduce the cost of access to these markets. By learning from MNCs, domestic SMEs are likely to raise their export propensity or intensify their export volume.

Our paper analyzes export spillover effects from MNCs to domestic firms in terms of propensity and intensity. These effects have been studied by a number of scholars (Aitken et al., 1997; Greenaway et al., 2004; Ruane and Sutherland, 2005; Koeing et al., 2009; Giuliano et al., 2014; and so on), nonetheless, the empirical results are rather mixed and evidence on this kind of spillovers demonstrates considerable heterogeneity (Harasztosi, 2016). For example, Greenaway et al. (2004) supported the finding of positive export spillovers from the foreign affiliates' export operations on the export decision of domestic firms in United Kingdom. They also tested export spillover effects on the domestic firms' exported volume on which they failed to find a significant effect. Ruane and Sutherland (2005) also found that the decision by domestic firms in Ireland to enter the export market

¹ Domestic firms used in this paper refer to exporting and non-exporting firms that are not investing in FDI. A great number of them is small and medium enterprises "SMEs".

is positively associated with the presence of foreign affiliates in their sector, while, their export intensity is negatively associated with the export sales ratios of foreign affiliates. In addition, Barrios et al. (2001) and Lutz et al. (2003) failed to find evidence on the probability those domestic manufacturing firms in, respectively, Spain and Ukraine will export following the export activity of MNCs' affiliates in the same sectors. Only other foreign affiliates benefit from export spillovers. Görg and Strobl (2003) failed as well to find evidence on export spillovers from MNCs or from other domestic firms in Spain between 1990 and 1998.

We argue that knowledge transfer is not an automatic process and the resultant spillover benefit depends on different key factors. First, it depends on the contact between the sender and the recipient of the knowledge. Domestic firms can enhance their exports when investing in learning activities by observing and imitating MNCs counterparts and/or reinforcing vertical linkages with MNCs' suppliers and customers. Export learning is more likely to be vertical than horizontal. That is, when domestic products are exported, foreign customers can suggest improvements to the manufacturing process (Grossman and Helpman, 1991). By doing so, foreign customers transmit tacit knowledge and sometimes knowledge from other suppliers (Wei and Liu, 2004). They also tend to transmit prototypes of exported products, knowledge of foreign markets and provide technical assistance to domestic users (Minska-Strusik, 2012). The knowledge received by domestic users would be spill over to other domestic forms (suppliers or customers) through vertical linkages. Second, knowledge would be transmitted more efficiently when the domestic receiver is located nearby the MNC sender and its transmission costs are assumed to increase with distance (Audretsch, 1998). Domestic firms in the same region observe and imitate foreign knowledge more efficiently than more distant ones (Aitken and Harrison, 1999). The channels of knowledge diffusion are then reinforced at regional level (Crespo et al., 2008). Third, we think that higher cultural and geographical distances may hamper the path of domestic international expansion, since exporting costs increase with destination's geographical and cultural distances (Lawless, 2010, Giuliano et al. 2014). MNCs that have multi-market presence would be then a valuable source of knowledge on foreign market, allowing domestic firms to export to the culturally and geographically distant destinations.

According to the above arguments, we expect the following hypotheses:

H1. The presence of export spillovers on the export decision and the export volume of domestic firms is more pronounced with neighboring MNCs.

H2. Export spillovers on the export decision and the export volume of domestic firms are more likely to be vertical (from MNCs' suppliers and customers) than horizontal (from MNCs' counterparts).

H3. Export spillovers on the export decision and the export volume of domestic firms are higher as export destination's geographical and cultural distances increase.

We test our hypotheses using firms-level data from manufacturing industry in Switzerland. Our data is derived from innovation activity survey (2015) of manufacturing firms, with at least five employees, conducted at the Swiss Institute for Business Cycle Research (KOF). Switzerland is an interesting case study since export is a preeminent activity in Swiss economy (BFS, 2016). More than a third of the turnover of Swiss manufacturing firms in 2015 (34.4%) was generated by exports, making manufacturing the most export-oriented industry in Switzerland (FTA, 2017). In addition, Swiss government, especially at canton level, is more and more active in encouraging export activities. And there has been no investigation of the potentially beneficial export spillover effects of MNCs on domestic manufacturing firms in Switzerland.

Our Probit and OLS regression results show that (1) domestic firms benefit from the presence of MNCs' exporters in their industry and from the export activities of their upstream MNCs' suppliers. This seems true for export propensity and intensity of Swiss domestic firms. The benefit from forward linkages is three time larger than that of horizontal effects. (2) Both horizontal and vertical effects are higher when spillovers are specific by destination and domestic firms do not seem to use the same channel when exporting to different destinations. The decision of domestic firms to enter European market is positively determined by the export activities of their MNCs' counterparts and suppliers attending the same market, while only the export activities of their MNCs' suppliers improve their export volume to this market. Domestic firms exporting to USA seems to benefit from export activities of their MNCs' counterparts in terms of export propensity and from their MNCs' customers in terms of export volume. And regarding Asian destination, domestic firms benefit from export activities of their upstream MNCs' suppliers to start exporting and from horizontal effects to intensify their export volume. (3) Spillover benefits seem to be larger when domestic firms decide to enter Asian and American markets. (4) Only the effect of spillovers intensity seems to become stronger when MNCs and domestic firms are located in the same region. And (5) domestic firms need to invest in learning activities when absorbing foreign knowledge to intensify their export volume.

On the policy front, suggestions with respect to encourage export, following such findings, must consider that MNCs are important catalysts for the export performance of domestic firms. Horizontal and vertical linkages are both important for export intensity and propensity of domestic firms. Actions should encourage collaborations between domestic firms and MNCs to promote the flow of knowledge between firms and facilitate the assimilation and absorption processes. Nonetheless, they should consider the heterogeneity of domestic firms regarding the channel they choose to export to a

specific destination. In addition, domestic firms need to invest in absorbing foreign knowledge to successfully intensify their export volume.

Keywords: Export, SMEs, Spillovers, knowledge transfer, vertical linkages, geographical distance, export destination

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