

## **Functional Upgrading and Productivity Growth of Multinational Subsidiaries in European Transition Economies**

**Abstract:** With economic transformation and European integration Central and Eastern European countries (CEECs) have been inserted into European and global production networks. The literature on global value chains (GVCs) suggests that firms' performance in terms of value creation and capture crucially depends upon their ability to 'upgrade'. Apart from product and process upgrading this refers to 'functional upgrading' i.e. the changing portfolio and nature of business functions executed by firms within the GVC. In principal this should hold also for multinational affiliates. They participate in GVCs through vertically integrated and specialized forms of organization. Their ability to upgrade is closely linked with their position, mandate and power asymmetries within the multinational network. Recent case study evidence documents functional upgrading in multinational subsidiaries located in CEECs. Yet, their ability to increase value capture through these processes has been contested. This paper tests the relationship between functional upgrading and productivity growth of multinational subsidiaries. We exploit a unique firm level dataset that matches state-of-the-art survey-based business function indicators with times-series accounting data for a representative sample of multinational subsidiaries in selected CEECs. The estimation results indicate that functional upgrading has a positive effect on foreign subsidiaries' average productivity growth. The effect is higher for subsidiaries with more recent entries of foreign investors. This finding is robust to different measures for functional upgrading. The positive effect of functional upgrading seems to be mainly confined to foreign subsidiaries in manufacturing industries.

## 1. Introduction

The fragmentation and the geographical dispersion of production is not a new phenomenon. The novelty in the contemporary phase rests in the depth and the scope of unbundling of firms' activities (Baldwin, 2006). In addition to core production activities also support activities and activities that enhance the intangible value of firms have become subject to fragmentation and geographic dispersion (ibid). A recent development of the finer-than-before division of labour is the offshoring of relatively advanced, high-level tasks also to peripheral global value chain (GVC) participants.

Recent survey evidence from selected European countries shows that up to 25 per cent of the total firm population do engage international sourcing i.e. the total or partial movement of business functions (formerly performed in-house or domestically sourced) to enterprises within or outside of your enterprise group located abroad, whereby in-house international sourcing dominates (Eurostat, 2013). International sourcing involves core business functions but even more frequently support business functions. The most frequently internally sourced support business functions are ICT services as well as R&D and engineering (ibid).

The offshoring of increasingly advanced tasks from advanced economies creates *upgrading* opportunities for firms located in emerging and transition economies. In this context it has been suggested that industrialisation and technological capability accumulation have become accessible for peripheral actors simply by joining a GVC and benefits related to technology transfers from actors located in advanced economies (Baldwin, 2012). Acknowledging the trends of the co-location of related valued-adding activities several scholars identify peripheral actors' functional upgrading (Ketoviki and Ali-Yrkkö, 2009; Pavlínek and Zenka, 2011; Winter, 2010). Others discussed the limits to offshoring-driven upgrading (Leamer, 2007; Kemeny, 2011).

The analysis of trade data shows that also Central and Eastern European countries (CEECs) have been inserted European and global production networks (Kaminski and Ng, 2001; Cheung and Guichard, 2009; Stehrer et al. 2011). Also recent business function survey evidence shows that, CEECs are the second most popular destination after EU15 countries for international sourcing by European firms (Eurostat, 2013). So far the issue of upgrading in CEECs has been analysed mainly using examples from the automotive industry and electronics industry (Radosevic, 2005; Szanyi and Sass 2012; Pavlínek et al. 2009, Pavlínek and Zenka, 2011; Domanski and Gwosdz, 2009; Jürgens and Krzywdzinski, 2009; Winter, 2010; Szalavetz, 2012). All of these studies underline the importance of foreign multinational companies (MNCs) for the upgrading processes of domestic firms, since they in almost all cases constitute the lead firms coordinating GVCs. This refers to direct contractual relationships of domestic firms with foreign MNCs as well as linkages with foreign subsidiaries in the region. The latter constitute economically dominant actors within many industries of CEECs.

Therefore, recent research on upgrading in CEECs focused more closely on processes within local multinational subsidiaries (Szalavetz, 2012, Sass and Szalavetz, 2013). The existing case study evidence from the Hungarian automotive and electronics sector suggests that multinational subsidiaries experienced various upgrading processes partially reinforced through MNCs' consolidation in reaction to the recent global economic crisis. Existing research identifies functional upgrading in breadth as a function of the run-up of production. Over time activities pertaining to higher order support functions were assigned to subsidiaries. Yet, most new business functions are routine and formalized activities to support local core activities and in rare cases implied MNC wide responsibilities. Also the complexity of activities related to the individual business functions increased, which necessitated continuous capability accumulation and lead to increased depth of business functions (ibid).