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Functional Upgrading and Value Capture of Multinational Subsidiaries

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A B S T R A C T

This paper investigates the relationship between the value capture of multinational subsidiaries and functional upgrading, which is defined as a diversification of employment from primary business functions to higher value adding activities such as ICT, R & D, marketing or logistics. By combining survey-based business function indicators with longitudinal accounting data for a representative sample of multinational subsidiaries located in six Central and Eastern European countries (CEECs), we assess the impact of functional upgrading on foreign subsidiaries' value capture. The results provide robust evidence that the breadth as well as the scope of functional upgrading induces an upward shift of subsidiaries' value added. The effect of functional upgrading is stronger in the earlier phases after entry of the foreign investor, while the long-term growth trend remains unaffected.

1. Introduction

The concept of global value chains (GVCs) captures information on activities that are directly and indirectly related to the production of final goods and services. Since the ongoing fragmentation of production across borders coincides with increasing international competition within industries and a rise in intra-firm trade flows, it is essential to understand how global production activities generate income and employment (see Timmer et al., 2013 and Beugelsdijk et al., 2009). In this context, multinational enterprises (MNEs) can be considered as key drivers of GVC dynamics (Mudambi, 2008). The shift towards internationally integrated MNE strategies led to production networks in which multinational subsidiaries perform different business functions with changing mandates. This integration of multinational subsidiaries into GVCs via their parents creates upgrading opportunities. This applies also to subsidiaries located in emerging economies, which strive to move up the value chain (Pananond, 2013).

Functional upgrading in subsidiaries is part of a more general process of subsidiary competence-creation (Cantwell and Mudambi, 2005) and subsidiary entrepreneurship (Birkinshaw, 1997). However, the related literature focuses primarily on the development of specific business functions such as R & D and innovation. Yet, other business functions such as ICT, marketing or logistics may also be associated with higher value adding activities (Mudambi, 2008). Therefore, the literature on GVC analysis (see e.g. Sturgeon and Gereffi, 2009) differentiates more generally between the primary business function (namely, the production of goods or services for sale at the final market) and other upstream/downstream business functions, which support the primary business function within a

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specific GVC. A process of diversification of a firm's employment from the primary business function to these support business functions is defined as functional upgrading. This process is expected to generate increases in value added captured by the GVC participant (see e.g. Kaplinsky and Morris, 2001, or Humphrey and Schmitz, 2004).

Multinational subsidiaries experience functional upgrading (downgrading) when their parents reallocate specialised business functions (or parts of it) between different subsidiaries or between headquarters and subsidiaries. So far only few studies (such as Ali-Yrkkö et al., 2011, Majcen et al., 2009, Sass and Szalavetz, 2013) provide insights to what extent functional upgrading (downgrading) alters multinational subsidiaries' value added. This is partly related to a lack of attention to the outcome of changes to subsidiaries' business functions as well as a lack of appropriate data. In addition, the current evidence challenges the hypothesis that functional upgrading allows subsidiaries to appropriate increases in local value added.

Against this background, our paper applies a state-of-the-art measure of functional upgrading to test its impact on the value capture of multinational subsidiaries located in Central and Eastern European countries (CEECs). In particular, we investigate how a changes in the breadth (the addition of new business functions) and in the scope (changes in the employment structure) of business functions affect value capture of foreign subsidiaries. To do this, we exploit information from a large and representative subsidiary-level survey from six CEECs combined with longitudinal accounting data from an external source.

The results indicate that functional upgrading in upstream and downstream activities is not a widespread phenomenon among multinational subsidiaries in CEECs. However, the results provide robust evidence that functional upgrading induces an upward shift of subsidiaries' value capture; furthermore, productivity and employment are also positively affected.

This paper contributes in different ways. First, we advance a more general concept of functional upgrading in international management research in the area of subsidiary development. Second, rather than analysing the determinants of upgrading trajectories, we focus our attention to test the effects of functional upgrading on multinational subsidiaries' value capture. Third, we overcome limitations of existing research by combining survey-based indicators for functional upgrading with external longitudinal accounting data at subsidiary level. This allows new and statistically robust insights into the dynamics of the effects of functional upgrading on multinational subsidiaries' value capture. Finally, this paper adds to the literature on GVC analysis, which has been mainly focusing on effects upon domestic owned firms in emerging economies so far.

2. Conceptual framework

Two streams of the literature are of specific interest for studying functional upgrading of multinational subsidiaries, namely the literature on subsidiary development and subsidiary entrepreneurship, as well as the literature value appropriation through upgrading processes in GVCs. These two literatures represent firm-based and location-based views respectively. Recently there has been a call to integrate these two views to develop co-evolutionary models in IB to incorporate the fact that MNEs and locations affect each other both in terms of strategy as well as in terms of outcomes (Cano-Kollmann et al., 2016). By analysing subsidiary upgrading within GVCs, our paper fits within this new framework.

2.1. Subsidiary development and the notion of upgrading in GVC analysis

The general shift towards internationally integrated strategies within MNEs has been associated with the establishment of a network of specialised subsidiaries (Cantwell and Mudambi, 2005), which follow different strategies and have different roles. Some subsidiaries may develop a specific contribution to the MNE beyond the concerns of their own most immediate market (Birkinshaw et al., 1998). Entrepreneurship at the subsidiary level has not only the potential to enhance local responsiveness but also worldwide learning and global integration (Birkinshaw, 1997).

The literature on subsidiary development focuses on the process through which MNE subsidiaries enhance their resources and capabilities and by doing so, add value to the whole MNE (see e.g. Dörrenbächer and Gammelgaard, 2006). The subsidiary development approach explains that specific additional functions undertaken by subsidiaries on their own initiative might constitute sources of subsidiary-specific advantages (Rugman et al., 2011) and of increased value added. This leads to the upgrading of a subsidiary's mandate within the value chain of the MNE's network.

Most studies investigating subsidiary roles and mandates focus on the emergence of so-called ‘centres of excellence’ or specific business functions such as R & D and innovation (see e.g. Kuemmerle, 1999; Cantwell and Mudambi, 2005). However, when focusing on the consequences of a subsidiary's upgrading, it seems appropriate to account for changes within a broader set of general business functions and their mutual interaction, which goes beyond analysing a single upstream function such as R & D.

Kaplinsky and Morris (2001) stress that upgrading captures changes in firms' activities, primarily relating to improvements in products and processes of firms that are partners in GVCs. Humphrey and Schmitz (2002, 2004) also identify the option of functional upgrading in a GVC, where a firm acquires new functions (or abandons existing ones) to increase the overall skill content of activities. Consequently, the concept of functional upgrading is GVC specific (Kaplinsky, 2013) and has been primarily covered in the literature of global production networks (see Ernst, 2011) or in research on GVC analysis (see e.g. Sturgeon and Gereffi, 2009).

2.2. Functional upgrading and value capture by multinational subsidiaries

According to the so called “smile” curve of value creation in chains, production-oriented activities account for less value added than pre- and post-fabrication stages, such as product concept, design, and R & D on the one hand, and sales, marketing, and after-sales services on the other (Everatt et al., 1999; Mudambi, 2007). Mudambi (2008) differentiates between standardised and