Upgrading and Subsidiary Autonomy: Experience of Hungarian Manufacturing Companies

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Abstract: This paper examines the patterns of subsidiary autonomy at the organizational periphery: at multinational companies' (MNCs) manufacturing subsidiaries in Hungary. It investigates the impact of upgrading on subsidiary autonomy.

Our case study-based investigation (27 in-depth interviews at 14 manufacturing subsidiaries) integrates three previously isolated lines of research: 1) subsidiary upgrading, 2) subsidiary autonomy and 3) headquarters' role in MNCs

We find no direct relation between upgrading and subsidiary autonomy, since external factors such as changes in the business environment and/or in parent companies' strategic decisions often counteract upgrading-induced effects.

It is shown that the subsidiaries' moving up the value chain is paralleled by similar upward shifts in parent companies' activity specialization. The reconfiguration of parent companies' activities, together with the expansion of the size and scope of the multinational company will necessarily have an impact on the headquarters' coordination and governance practices: over time they tend to become more formal.

[Key words: functional upgrading,subsidiary autonomy,headquarters-subsidiary relations,specialization in global value chains,Hungary]

1 Introduction

Following a meticulous description of the patterns and the drivers of upgrading, and after giving precise answers to a number of questions concerning headquarters-subsidiary relations, the interviewed CEO of 'Alpha', an automotive part supplier company, suddenly exclaimed: "You [researchers] will never understand how it really goes on. The better we perform and the more responsibility we undertake, the tighter the control and the less autonomy we have to manage the local affairs."

Indeed, despite a voluminous and continuously expanding literature on upgrading, the consequences of upgrading for subsidiaries' organizational status and autonomy remain relatively under-researched, at least empirically. It is implicitly assumed that upgrading improves subsidiary position within its multinational company (MNC) owner's organization: if upgrading performance reaches and moves beyond a specific

threshold, this triggers changes in subsidiaries' organizational status. From a 'peripheral implementer' they will turn into a 'strategic contributor' (Bartlett and Ghoshal, 1986) or, from a 'rationalized manufacturer' to a 'product specialist' (White and Poynter, 1984). The new status implies changes both in the subsidiary's autonomy and in parent companies' control and coordination methods, or at least it motivates the parent company to adopt a less authoritarian and less formalistic coordination style (Dörrenbächer and Gammelgaard, 2006; Ambos et al., 2011). Since upgrading is based on demonstrated subsidiary capabilities, it will allow more autonomy for some of the functional officers of the subsidiary, at least with respect to selected local issues (Martinez and Jarillo, 1989; Cantwell and Mudambi, 2005; Bouquet and Birkinshaw, 2008; and in a CEE context: Jindra et al., 2009; Majcen et al., 2009).

Nevertheless, the claims concerning the impact of upgrading on the legitimacy (and consequently

autonomy) of the subsidiary, presented in the referred papers are not substantiated by the above case, nor by several others. When preparing interviews in the framework of selected previous research projects (Szalavetz, 2010; 2012; 2013a, 2013b), we received a number of similar remarks, suggesting a lack of a direct causal relation between upgrading and changes in subsidiary autonomy.

Some empirical investigations carried out in Hungary find that the degree of local subsidiaries' autonomy is quite low on the average-irrespective of their accomplishments in increasing the value added scope of their activities.

Vince (2007) investigated among others the practices and the degree of owners' control, and conversely, the autonomy-level of the management of Hungarian companies. Aiming to reveal differences between foreign- and domestic-owned companies in the degree of managerial autonomy, he found that the scope of independent decisions of the management of foreign-owned subsidiaries is quite restricted. This survey provided a static picture however: the author did not investigate changes in the autonomy level of the management following upgrading. Makó et al. (2011) surveyed among others local managers' autonomy in developing business practices in Hungary (in a Slovakian comparison). The authors find evidence for substantial heterogeneity of the degree of the local management's autonomy. Note that the focus that survey not manufacturing was but knowledge-intensive business services. while manufacturing subsidiaries are characterized by a higher average level of hierarchical control than those in business services.

This paper focuses on manufacturing subsidiaries. Its objective is to add to the existing literature through investigating two under-researched issues: the impact of upgrading on subsidiary autonomy and the patterns of subsidiary autonomy at the organizational periphery.

Why is subsidiary autonomy an important issue to conduct research on? Some scholars share the opinion that a certain level of autonomy is indispensable for the further development of the subsidiary: only relatively autonomous subsidiaries have opportunity to demonstrate their capabilities which is necessary for further upgrading. Autonomy is associated with more legitimacy and capability to influence corporate decisions: this facilitates the achievement of subsidiary objectives (Bouquet and Birkinshaw, 2008; Ambos and Birkinshaw, 2010; Pisoni et al., 2010). Conversely, several papers assert that granting relatively more autonomy to subsidiaries is beneficial for the parent companies as well, since subsidiaries may possess some MNC-level strategic resources (intangible assets), that allows among others for reverse knowledge transfers from subsidiary to the headquarters (HQ) (Rugman and Verbeke, 2001; Schmid and Schurig, 2003; Cantwell and Mudambi, 2005; Ambos et al., 2006; see also: Yamin and Sinkovics, 2007) 1).

In this paper we undertake an exploratory investigation of our research questions, through interviews with functional officers of manufacturing MNCs' Hungarian subsidiaries. We explore the relation between upgrading and changes in subsidiary autonomy both directly (by inquiring about the patterns of and changes in the autonomy of the local management, within selected business functions) and indirectly.

In the framework of the latter approach we investigated the interplay between subsidiary upgrading and changes in parent companies' activity specialization. Our point of departure was that subsidiaries' moving up the value chain, i.e. their taking up increasingly sophisticated and knowledge -intensive tasks, functions and additional responsibilities, is not a unilateral move. Embedded in a complex system of intra-firm division of labor, subsidiary upgrading provokes changes in the HQ's activity specialization²⁾. HQs delegate increasingly advanced tasks to subsidiaries and become thereby more and more exclusively specialized in coordination, integration and business development. In turn, this triggers changes in the patterns of their coordination and control.

Hence, we propose two arguments to be validated

by our interviews. First, we argue that subsidiaries' moving up the value chain is paralleled by similar upward shifts in parent companies' specialization. The shifts in HQs' specialization, together with the expansion of the size and scope of the MNCs will necessarily have an impact on HQs' integration and coordination practices: over time they tend to become more formal because of increasing coordination complexity. This is (rightly) perceived by subsidiaries as a decline in their autonomy.

Second, we propose that subsidiary upgrading has minimal direct influence on HQs' integration and coordination practices and consequently on subsidiary autonomy: these latter are influenced rather by contextual factors, e.g. by changes in the global and local business environment.

The empirical context for our research is Hungary, a pioneer in FDI attraction following the regime transformation (Csáki, 2001; Sass, 2004). Note that FDI has been and remained the key engine of development driving the country ahead, along a modernization trajectory ever since the early 1990s (Szanyi, 2001; Sass and Kalotay, 2012)³⁾. Hungary represents an interesting case from the point of view of our research focus on the evolution of subsidiary autonomy for two reasons. First, because of its relative peripheral status, which in principle, allows for a long upgrading trajectory. Second, because of its pioneer status in FDI attraction: this permits the inclusion of long-established subsidiaries in the sample. Note that a consensus opinion of the relevant academic literature is that 'age' is an important explanatory factor of subsidiary autonomy since age implies experience (see survey by Young and Tavares, 2004).

This paper is intended to contribute to the existing literature in two ways. First, based on the findings of our qualitative interviews we give insights into the specifics of subsidiary autonomy at business function level. Second, we develop a framework that integrates three previously isolated lines of research: 1) subsidiary upgrading, 2) subsidiary autonomy and 3) HQs' role in MNCs.

Our findings demonstrate that the relation between

upgrading and autonomy is more nuanced than what has been postulated in the literature.

The rest of this paper proceeds as follows. We first provide a brief overview of the related literature. Next, we present our research method, and the sample of the companies we interviewed. Subsequently, we summarize the upgrading performance of the surveyed subsidiaries and review our findings about the specifics and evolution of their autonomy. Then, we proceed to the analysis of changes in the HQs' activity specialization, following their delegation of advanced tasks to their subsidiaries. The presentation of interview findings is followed by a discussion, where we integrate our findings and provide a conclusion.

2 Conceptual framework

Our research is related to three major strands in the literature. First, within the broad literature on global value chains (GVCs), it is related to papers discussing upgrading in general and subsidiary development in particular. Second, it is connected to the impressive body of papers in international business (IB) literature that investigate the drivers of increased subsidiary autonomy. Third, it is associated with the literature discussing the ways MNC headquarters manage and integrate geographically dispersed activities. We will briefly review these lines of research in turn.

In the present phase of the global disaggregation of value chains, the offshoring of relatively advanced, high value-added tasks to relatively peripheral GVC-participants has become quite common (Kenney et al., 2009; Contractor et al., 2010). Production-related support activities and activities that enhance the intangible value of firms and products have become subject to fragmentation and offshoring, which opened non-negligible up upgrading opportunities for the host economies. Upgrading, referred to as the bottom-up perspective of GVC-investigations (Gereffi and Fernandez-Stark, 2011), denotes GVC-participants' move towards higher -than-before value adding activities.

Upgrading can take several forms. According to Humphrey and Schmitz's (2002) taxonomy, upgrading

may take place in the field of the products manufactured by the given company. In this case, upgrading refers to the company's shift to higher-than-before unit-value products. Upgrading may be manifested in the efficiency improvement of the production processes (process upgrading), in the take-up of additional (more knowledge-intensive and higher value generating) business functions by companies specialised previously only in production (functional upgrading). Finally upgrading may be intersectoral, when the accumulated competencies are applied in new sectors that promise larger rents and beneficial externalities.

While upgrading in general, is strongly related to learning and competence accumulation, subsidiary upgrading also requires subsidiary entrepreneurship, i.e. the proactive behavior of the local management aimed at gaining additional mandates (Birkinshaw and Hood, 1998; Birkinshaw, 2000) and access to additional resources and influence (Ambos et al., 2011).

The GVC framework of analysis integrates these two dimensions of subsidiary upgrading by combining research on changes in the activity-level division of labor within GVCs with research on the ways power is distributed among actors in a value chain, i.e. changes in GVC governance (Gereffi et al., 2005; Coe et al., 2008). Changes in power relations are investigated among others in the context of shifting bargaining power between lead firms and large, global suppliers (Nolan et al., 2008; Gereffi, 2014) or in the context of transforming HQ-subsidiary relations ⁴).

A consensus finding of the vast literature on the drivers of subsidiary autonomy ⁵⁾ is that above and beyond subsidiary capabilities (and proactive behavior aiming to push the frontiers of its autonomy), its external embeddedness, i.e. relations with local stakeholders exerts significant positive influence on HQs willingness to grant more autonomy (Schmid and Schurig, 2003). Importance of host markets; industry-specific attributes of the value chain; subsidiaries' activity specialization and their consequent internal embeddedness (network centrality)

also make a difference with respect to the evolution of autonomy. Furthermore, HQ's original motivation that prompted the establishment of the subsidiary (local market-seeking or cost-seeking and export oriented); the mode of entry (acquisition or greenfield establishment); and changes in HQs' integration strategy driven by their expansion and/or adaptation to changes in the global and local business environment also shape subsidiary autonomy.

Given that the findings of the literature on the above-enumerated drivers and explanatory factors of subsidiary autonomy are sometimes controversial, the thought-provoking finding in Johnston and Menguc, 2007 (described in Pisoni et al., 2010) is worth being repeated here, since it sheds light on the evolutionary attribute of the issue in question. The authors find that as long as a subsidiary is relatively small, increasing subsidiary size will correlate with increasing resources in the subsidiary and a consequent increase in subsidiary autonomy. This positive linear relationship persists until an inflection point is reached, when subsidiary autonomy begins to decline because of increasing coordination complexity.

The third line of IB literature our research is associated with is concerned with this latter issue: with MNC owners' integration strategy and governance approaches ⁶⁾. Contributors to this scholarship seem to agree that the growing complexity, diversity and geographical spread of value chains together with the rising importance of specialized knowledge (and of other intangible assets) within MNCs' resources have prompted changes in MNCs' strategy and structure (Mudambi, 2002).

MNCs are to be modeled as networks rather than unitary, hierarchical organizations (Egelhoff, 2010). Due to advances in information and communication technology (ICT) that improved the 'visibility' of MNCs' subunits (Yamin and Sinkovics, 2007) and to organizational and managerial innovations ⁷⁷, several functions that used to be regarded as carried out 'per definitionem' by HQs can now be delegated to lower levels of the organization: even to operational subsidiaries (Alföldi et al., 2012).

At the same time it has become even more obvious than before that the way HQs design the MNC organization and allocate tasks, responsibilities and resources among subunits (Malnight, 1996) is a factor of competitiveness in itself, since it greatly influences MNC-level performance (Menz et al., 2014). With the unbundling of ever finer slices in the value chain (Baldwin, 2011) and the global sourcing of a variety of activities, the costs of management and coordination also increased. Hence, transaction cost economics proves to be an adequate framework when trying to identify the drivers of change in MNCs' governance and integration strategies (Tomassen and Benito, 2009) 8).

This paper is more or less related to each of these research strands. We will elaborate on the specifics of Hungarian subsidiaries' upgrading experience; on the patterns and scope of their autonomy and on changes therein as a consequence of upgrading. We analyze these empirical findings in the light of HQs' reconfigured activity specialization, as perceived by the interviewed managers.

3 Research method and sample

Given the qualitative nature of our research questions, we used a case study based investigation method (Yin, 2003). We used a questionnaire that contained open-ended questions about the evolution of the surveyed firms' activity portfolio (see Annex 1). We also inquired about the qualitative features (and the evolution thereof) of the activities delegated to the surveyed firms at business function level.

Further to asking the interviewed managers to describe the subsidiary's achievements in terms of gaining responsibility for increasingly advanced tasks, we inquired about their assessment of the degree and evolution of the subsidiary's overall autonomy. We interrogated our interview partners also about the scope of autonomous decisions and actions within individual business functions. Additionally, we selected one business function: procurement, and asked the interviewed officers to describe in a detailed manner the patterns of and the post-upgrading changes

in the local subsidiary's autonomy.

The last group of questions investigated subsidiaries' upgrading in combination with parent companies' changing GVC-specialization. We inquired about the interviewed managers' insights concerning parent companies' changed GVC-specializationensued as a result of their offshoring increasingly advanced tasks to subsidiaries within the given function.

We conducted interviews with the CEOs and/or with various functional officers 9). Our interviews provided a wealth and depth of information about the three main issues we investigated (upgrading, autonomy parent companies' changing specialization). Note that our analysis of this latter issue draws on the views and perceptions of the interviewed local managers (we did not have access to CEOs or functional officers at the HQ-level), which can be considered a limitation of our research. Nevertheless, the interviewed officers gave insightful accounts of the parent companies' coordination strategies and offered detailed accounts of their perceptions and assessments of the parent companies' changing activity specialization. This can partly compensate for the lack of first-hand information (interviews with foreign managers from the HOs).

We selected industries where value adding activities are typically structured around GVCs: manufacture of transport equipment (NACE 34-35; N=8); manufacture of electrical and optical equipment (NACE 30-32; N=4); and manufacture of machinery and equipment n.e.c. (NACE 29; N=2).

We conducted two rounds of interviews between April 2012 and October 2013 (20 interviews) and between July and September 2014 (7 interviews). Sample companies were selected from two databases. In the first round, they were selected from the authors' database of case studies and journal articles on the activities of Hungarian subsidiaries in the chosen sectors (11 companies); in the second round from a publicly available database of firms that were beneficiaries of the EU co-funded support scheme 'Support to enterprises' complex innovation

undertakings' (3 companies) 10).

While the former database consists of well-known 'blue chip' companies that show above-the-average upgrading performance, the latter allows for a wider assortment. It spans the 2011-2014 period and includes 476 companies (however, only a small percentage of the beneficiaries operate in the surveyed industries). Nevertheless, this database also requires caution with any generalization of the results, because the beneficiaries of the referred scheme were mainly long-established, high-performing companies 11) (see also Annex 2 for another methodological caveat). The database contains information among others about the amount of support granted, and the name of the supported project. Following an initial control of the beneficiary's activity (we checked whether the company meets the industry-specific selection criterion), we controlled for ownership (we only included foreign-owned companies in the sample). Ownership was checked from publicly available information in the national repository of balance sheet data and profit and loss accounts. We selected 8 companies and asked to grant us the possibility of a detailed interview. Our final sample (N=14) consists of companies that reacted positively to our request of an interview (only three companies in the second round of investigations). As the interviewed firms required anonymity, their names will not be disclosed.

Our sample comprises medium-sized and large ¹², long-established ¹³, foreign-owned ¹⁴, export-oriented ¹⁵, MNC subsidiaries. We conducted altogether 27 interviews, since some companies granted us the possibility to interview more than one representative of the management and several respondents were interviewed twice over the course of three years. The interviews lasted 40 to 120 minutes, depending on the willingness of the interviewed CEO or functional officer to expound on details.

Interview information was complemented in the case of each firm with written documents, newspaper articles, the firms' information brochures, publicly available balance sheet and profit and loss statements, as well as with the official 'notes to the financial

statement'. We also consulted the websites of the subsidiaries and of the parent MNCs, parents' annual reports and other documents available on the web.

4 Results

4.1 Patterns of upgrading

Our first questions addressed the patterns of local manufacturing subsidiaries' upgrading.

We found plenty of evidence for product and process upgrading. An important similarity of the narratives was that local subsidiaries evolved jointly with their MNC-owners. Since MNCs introduced new products to the market on a regular basis and upgraded their product mix, subsidiaries specialized in manufacturing activities experienced continuous product upgrading. Obviously, this product upgrading was rarely the result of subsidiary-level knowledge generation (see more details below, when discussing functional upgrading): it was the outcome of mother companies' decision to locate the manufacture and assembly of the new products (developed at other business units) to the surveyed Hungarian subsidiaries. In this vein, mother companies 'pulled' their peripheral subsidiaries with themselves, along their own growth trajectories.

Parent companies have not only implemented substantial investments in technology and process upgrading, i.e. in the upgrading of the processes of the core (manufacturing) function, but sizeable tangible investments were made that permitted also the upgrading of support functions, such as materials management, warehousing, logistics, testing and quality control equipment. These latter investments have also contributed to the overall improvement in process efficiency.

The example of a subsidiary engaged in the manufacturing of car components illustrates the potential intra-firm spillover and upgrading multiplier effects of tangible investments.

"We managed to convince the owner to invest in CNC machining technology. Previously we outsourced the given activity to a specialized manufacturing services provider, but with this investment we managed to in-source this processing task. Moreover, we persuaded the owner to choose the machinery we identified as the best solution, although it was more expensive than the equipment he recommended to be purchased. Of course, we prepared the necessary cost-benefit analysis and a feasibility study to substantiate our arguments. We specified a strict schedule of the deployment and installation of the equipment, and of the run-up of the new activity. We managed to meet all the stipulated deadlines, (some phases were accomplished even before the deadline) and the quality features of the operation proved to be excellent as well. We have soon become a benchmark for our owner's other manufacturing subsidiaries: their experts would come to Hungary to study the technical features (layout, related material flows etc.) of this activity. Now, since we have installed this expensive machinery, our objective is to become the competence center with respect to this processing task, and to undertake the given activity in the form of manufacturing services provision for partner subsidiaries as well. This would allow further upgrading for us." (CEO, automotive company)

Although less spectacular than the above-mentioned tangible investments, a variety of intangible investments in the subsidiaries' ICT assets have also improved process efficiency. Moreover, continuous process upgrading has been driven ahead also by various mechanisms that ensure the systematic intra-MNC diffusion of best practice. Several companies in our sample employ so-called best practice managers responsible for continuous improvement and best practice sharing ¹⁶.

The main lesson is that local subsidiaries' embeddedness in their MNCs' organization ensures continuous process upgrading. Moreover, as the case of a German automotive subsidiary makes it clear, initial upgrading achievements may have a multiplier effect.

"Our mother company introduced Yokoten system

at all its manufacturing subsidiaries. The system is about the regular exchange of best practices with respect to solutions of specific technical problems. Subsidiaries have to report every problem (together with the applied solutions) that emerged either in the course of the manufacturing process or was signaled by the customers. The experts of the HQ would analyze the compiled data on a weekly basis and select three cases they consider especially important. Information about these cases (the problem and the solution) is sent to each manufacturing subsidiary. In turn, experts of the manufacturing facilities have to check whether the problem spotted elsewhere may become relevant for them. They would then adopt a preventive action, applying the suggested solution, but they may also experiment with another solution. In this latter case information about the new solution is sent to the HQ and to partner subsidiaries. I was assigned to devise a web-based application for the Yokoten system that would ensure better flow of information and would support the selection among the compiled cases. The application we have developed is bound to be applied by all partner subsidiaries." (chief information officer, *automotive company)*

As for functional upgrading, we found evidence across the sample for each of its three dimensions identified in Sass and Szalavetz (2013): for functional diversification (upgrading in breadth); for functional upgrading in depth (increased sophistication and knowledge-intensity of the tasks performed within individual business functions); and also for upgrading in scope (acquisition of MNC-wide, or at least regional, responsibilities).

Functional upgrading in breadth was more or less automatic, being function of 'age', i.e. of the run-up of production. The subsidiaries' activity portfolio became more diversified as a result of the gradual assignment of more and more operation related support functions, such as administration, factory maintenance, payroll management, personnel recruitment, training, warehousing, quality control, etc. Over time, activities pertaining to higher order support functions were also

assigned to the subsidiaries: controlling, IT (troubleshooting activities and adaptation of the IT system to local specifics), industrial engineering (process control and optimization), logistics, order management, etc. Above a certain size threshold, subsidiaries in-sourced some activities that used to be outsourced to local services providers such as environment management, and legal services. Hence, the size of the subsidiaries' management increased with newly created positions.

Similarly to functional upgrading in breadth, initially, the interviewed executives perceived upgrading in depth (i.e. increase in the complexity and skill-intensity of the tasks) also as a quasi automatic development. Over time however, the automatic development in terms of both the quantity and the quality of functions slowed down or halted. Further upgrading in breadth such as the delegation of procurement related and, in particular, of R&D tasks were conditional on and shaped by subsidiaries' proactive and entrepreneurial behavior, and by their demonstrated capabilities. This applies also to further upgrading in depth, i.e. to the further increases in the complexity of locally performed activities.

We found examples of functional upgrading in depth that exceeded a certain quality threshold mainly in the field of ICT. In a number of cases, the employees originally hired for routine maintenance and adaption tasks were later assigned application development. Upgrading in depth as a result of proven capabilities was manifested also in other R&D-related tasks. Innovative process optimization solutions, or demonstrated capabilities in routine R&D tasks implied additional, more complex assignments in the field of process design, applied R&D, testing, implementation of new projects (new product launch), and even in product development.

The necessity of locating equipment development tasks, tooling and materials testing near to production was also an important driver of upgrading. Similarly, in large manufacturing facilities, it soon became obvious that procurement tasks should also be located 'where needs arise'. Over time, some Hungarian

procurement departments undertook the responsibility of negotiating with suppliers about MNC-level quantities, i.e. the Hungarian subsidiaries carried out procurement related activities tasks with respect to partner subsidiaries' production inputs as well.

Local subsidiaries' upgrading in breadth and depth took a further qualitative turn when they gradually became entrusted with tasks that supported not only the core operations of the local facility but started to be provided in the form of services to partner subsidiaries and/or to the HQ. In this sense, the local subsidiaries gained MNC-wide responsibilities. This type of upgrading is referred to by Sass and Szalavetz (2013), as upgrading in scope. Our interviews revealed a multitude of cases of upgrading in scope, triggered partly by parent companies' reconfiguration of the value chain and by the establishment of shared services centers (SSC) at the premises of the Hungarian subsidiary ¹⁷⁾.

The interviewed managers were far from unanimous when assessing the main drivers of subsidiary upgrading performance. Some of them maintained that these achievements were due to the proven local capabilities that were recognized by the HQ. The translation of this recognition into acts (i.e. the delegation of higher order assignments to the subsidiary) was 'pushed' by the management's proactive, entrepreneurial behavior (hence, upgrading was driven by the subsidiary). Conversely, other CEOs acknowledged, the functional upgrading achievements were partly related to the exceptional competences of one manager (or of a handful of talented employees). Others emphasized the benefits of multiplier effects: that expansion necessitated the co-location of certain support functions to production, or that the implementation of specific support tasks pulled other tasks with it, which eventually triggered continuous evolution. Others again, asserted that subsidiary upgrading was influenced mainly by the parent company's strategy (upgrading was driven by HQ).

Altogether, these cases suggest a substantial upgrading performance at the surveyed subsidiaries,

which obviously cannot be generalized because of the small sample and the previously outlined selection bias.

4.2 Patterns of subsidiary autonomy and impact of upgrading

Our next questions concerned the patterns of autonomy both at subsidiary-level and at the level of business functions, with a special emphasis on procurement. We also inquired about the perceived impact of upgrading on subsidiaries' autonomy.

Our sample proved quite heterogeneous with respect to the perceived degree of overall autonomy. There were cases ¹⁸⁾ of minimal local autonomy, where parent companies exercised strong, hierarchical, and formal control. One case exemplified the other extreme: that of a nearly full autonomy, where the foreign owner behaves like a strategic partner and gives practically a free hand to its subsidiary ¹⁹⁾. Obviously, most cases were in between these two extremes, which makes us conclude that subsidiary autonomy cannot be perceived as an 'either-or issue'. Subsidiaries' overall autonomy lies rather between the two extremes of full autonomy and lack of autonomy.

Overall autonomy usually concealed some inter-business function variations. Even in subsidiaries with the lowest scope of autonomous action there were functions that enjoyed relatively higher autonomy (e.g. operations management; human resources management), and conversely, some business functions were characterized by owners' relatively stronger control (e.g. financial management) even at subsidiaries with a high overall degree of autonomy.

We selected one business function: procurement, to investigate about the patterns of the local management's autonomy.

We found considerable heterogeneity with respect to the scope of autonomous actions also in procurement. In the majority of the cases MNC owners adopted centralized procurement strategy. A central procurement unit (a procurement department at the HQ; or at the regional HQ; or at a partner subsidiary in Europe or at a shared services center) was responsible

for negotiating about MNC-wide quantities. As an interviewed manager expressed: "Even the price of electricity is centrally negotiated upon". Nevertheless, practically all local procurement specialists could decide autonomously on purchases of low-value indirect materials.

Under centralized procurement, local procurement officers' role is restricted to signaling current needs to the central procurement department and to handling the sourcing process. This latter bundle of tasks includes the supervision of the quality of the supplied parts and components, the provision of feedbacks to suppliers about any emerging quality problems. If the procurement of selected items becomes localized, local procurement officers or supplier quality engineers gradually become entrusted also with monitoring suppliers' actions aimed at fixing the signaled problems.

Upgrading within the local procurement function initially refers to taking up the task of supplier relations management, for example the transfer of the specifications and product requirements (designed by the HQ) to suppliers. We identified some subsidiaries whose procurement specialists (or rather supplier quality engineers) took part in the standardized supplier audit processes 20) and who were entrusted also with supplier development (with respect to components the procurement of which was localized). Supplier development activities included the of suppliers' implementation ongoing evaluations, which implied regular visits to suppliers' premises and the control of their manufacturing, packaging, logistics and quality control processes; and the design and execution of supplier development programs.

Regarding these latter tasks, the assessment of autonomy proved quite elusive for the interviewed officers. On the one hand, they had to learn and master the standardized routines (of supplier development) developed at the HQ, which can be interpreted as if the local officers were simple implementers. On the other hand, they were granted substantial autonomy with respect to managing the specific emerging issues,

managing supplier relations, handling complaints, evaluating suppliers and implementing joint actions for supplier improvement.

As for the impact of upgrading on subsidiary autonomy, our interviewees expressed highly different views. Some felt, upgrading had no impact at all on the degree of autonomy: the scope of independent actions has not changed. Others indicated that the subsidiary's autonomy changed: declined over time irrespective of their upgrading performance. The reasons of declining autonomy were manifold. In one case the mother company was taken over by another company that adopted formal, hierarchical coordination methods. In another case subsidiary autonomy declined because the mother company opened a new production site in the Philippines, which necessitated much attention and resources. Decline in autonomy referred in this case to subsidiary 'voice': its proposals were even less accepted or listened to than before. Several interviewees emphasized that the introduction of new MNC-wide (business function-specific) enterprise software systems or rather the weaving of new elements into the existing enterprise resource planning system (e.g. shift to an integrated e-kanban system; introduction of a new decision support tool for improved procurement risk management; implementation of an integrated e-procurement system) caused a decline in the scope of their independent actions. A salient quotation illustrates this perception:

"With the new system everything became much more formalized. Local specialists are considered robots that act according to the specifications, and then they meticulously document every action. There is no scope for personal decisions, no opportunity of implementing creative actions based on our own assessment." (purchasing manager of a subsidiary, electrical and optical equipment industry)

Another interviewee recalled the establishment of a shared services center in India, which implied the centralization of the given function, and an increased standardization of procedures. This, obviously, had a detrimental effect on the perceived autonomy.

Nevertheless, some managers could indeed identify a positive relation between upgrading and subsidiary autonomy.

"Now we are involved somewhat earlier in the new product launch process. Hence our operations management experts, our engineering solutions providers and also people from purchasing can express their opinion. And, indeed, some of our suggestions were acknowledged as useful ... as something that really adds value." (CEO, automotive company)

"With the expansion of production and the taking up of new, advanced functions, it became necessary to establish linkages with local universities to ensure the supply of adequately skilled graduates. New opportunities were discovered in the field of gaining government support that would finance part of the necessary technological investments. We took up new tasks in the field of the optimization of operations. These activities are all carried out more or less autonomously: our owner does not interfere in what we do, or how we do it." (HR & communication manager, automotive company)

The conclusion that emerges from these accounts is that the relation between upgrading and changes in subsidiary autonomy is ambiguous: no direct positive impact can be discovered. Subsidiary autonomy seems to be influenced by a number of factors that may counteract or, conversely, reinforce upgrading-induced effects. Note that in firms reporting about increased autonomy, the examples of autonomous actions mentioned by our interviewees were all related to the concept of operational, rather than to strategic autonomy (Birkinshaw and Morrison, 1995; Young and Tavares, 2004).

4.3 Offshoring-triggered changes in parent companies' activity specialization

The last group of questions addressed the changes, the offshoring of selected tasks and business functions triggered in parent companies' activity specialization. We explored subsidiary CEOs' and functional executives' perceptions and interpretation of these changes, based on their experiences with respect to parent companies' coordination, control and integration of business functions.

Our inquiries were structured in a similar manner as in the case of the questions addressing the issue of autonomy: we investigated our interview partners' assessment of a) overall changes in parent companies' specialization; b) changes at business function level; and c) we asked them to provide a detailed account of parent companies' activities within the procurement function.

The first finding that crystallized from the answers is that MNC units' GVC-specialization cannot be described in terms of business functions: it cannot be claimed that HQs specialize in specific business functions, such as R&D, design, marketing, procurement, financing etc.

Our findings confirmed the assertion that business functions are decomposable (Contractor et al., 2010; Szalavetz, 2012): the same business functions are present at peripheral but to some extent already upgraded subsidiaries, and at regional headquarters (in several cases at global headquarters as well). Activities within a given business function (and related responsibilities) may differ substantially. As a procurement officer explained:

"Of course there are procurement officers just as myself at the HQ, and also at several partner subsidiaries. We took over the task of procurement but this does not mean that our owners and partner subsidiaries are devoid of such tasks! For example, I negotiate on MNC-level quantities with respect to a couple of components that are strongly related to our production and also to the production of partner subsidiaries in Poland and in Romania. However the partner subsidiaries have also procurement officers (the one in Poland has similar mandates as I have, but of course with respect to other inputs, while the one in Romania has only partial mandates with respect to

some indirect local inputs). We all monitor the local markets for additional suppliers and for localization possibilities. In reality however, we do not decide upon anything: we conduct negotiations and transfer information to Germany. Decisions are taken by the German procurement department. You see, our division of labor is very complex, but indeed, we carry out increasingly high-responsibility tasks: much evolution has taken place in this respect." (chief procurement officer, automotive company)

With the offshoring of relatively advanced tasks and functions to captive facilities, HQs' specialization in governance and business development related intangible activities was further reinforced.

"People at the HQ are responsible mainly for decision-making and for determining the new directions." "The same [functional] departments are present at the HQ as in selected subsidiaries: R&D; sales; finances, etc. But except for R&D, HQ experts are not involved in day-to-day affairs: they strategize, integrate and organize [manage the MNC's organization], decide ... briefly: they govern." (CEO, machinery industry)

In procurement, our interviewees found that mother companies' activities address the design and modification of the MNCs' overall procurement strategy.

"It is up to the owner to decide whether specific purchases are ordered from one single supplier [globally or regionally] or whether to maintain a portfolio of suppliers of the same inputs. Obviously, they were the ones that decided about the introduction of the new, integrated e-procurement system." (CEO, automotive industry)

"It is the central procurement department that decides whether efforts should be made to localize the procurement of selected input items or whether to keep everything centralized. HQs have the final say in the selection of key suppliers. Obviously, it is up to the HQ [the central procurement department] to decide about the value threshold up to which local subsidiary procurers have a signatory authority." (procurement officer, electrical and optical equipment industry)

"They have devised the 'Supplier Relationship Management Manual' according to which we carry out the specific activities. They prepare supplier risk management analyses and all kinds of strategies to optimize the procurement process." (procurement officer, automotive industry)

"The most important is that they try to build linkages between procurement and quality; procurement and R&D; procurement and finances, etc. As a matter of fact, they try to ensure a more central position for procurement in the overall business development strategy by trying to bridge the functional departments: a fairly difficult task!" (financial officer, electrical and optical equipment industry)

We found similar HQ-subsidiary differences in the features of activities related to the operations management function. Drawing on capacity planning and demand forecasts, as well as on the analysis of economies (or diseconomies) of scale, HOs determine the optimal plant size. Capacity planning and demand forecasts substantiate HQs' decisions also with respect to the timing and extent of capacity expansion: the related authority is retained at the HQ. Drawing on feasibility analyses that calculate the investment necessity of launching the production at a given site. the availability of human resources, and the current task loads of the facility, HQs decide about the location of the operations, and also whether to locate the new production tasks to one or to several facilities. HQs are responsible for deciding about the features (fixed versus flexible) and about the extent of automationbased on their decision concerning the optimal production model. This latter depends on the planned product variations and product improvement schedules (the planned length of the product cycle): decision

about these issues also pertains to the HQ's authority.

Conversely, subsidiaries are responsible for the implementation of the operations strategy, devised by the parent company. At some of the surveyed subsidiaries this covered routine activities (scheduling and monitoring work; making minor adaptations to workstations and to the production line, to increase productivity). Most of our interview partners expressed however that there is a large scope for upgrading. Over time, subsidiary engineers were increasingly involved in plant layout planning, material flow planning, designing and reconfiguring the production lines, improving the efficiency of operations, minimizing changeover costs, minimizing non-value-adding time, systematically eliminating the factors causing production line disruptions.

A similar pattern of specialization dynamics is manifest in terms of the R&D function. The parent companies of the surveyed subsidiaries have shown increasing commitment to leverage their Hungarian subsidiaries' knowledge and technological expertise. Among the surveyed companies, the scope for subsidiary upgrading was in fact the largest within the R&D function (including IT-specific, applied and basic engineering services). R&D and Recognized subsidiary capabilities and linkages with local cutting-edge university research departments were the main drivers of parent companies' decision on the delegation of increasingly advanced R&D activities to the surveyed subsidiaries.

Parent companies retained selected key R&D tasks which the interviewed managers usually refrained from disclosing details on. Furthermore, HQs design the organizational interfaces between the dispersed development activities (knowledge integration). The scope of retained authorities included decision about the main directions of development efforts (selection among competing technologies and among the possible development trajectories), decision about product architecture (and about the architecture of the IT system), decision about the configuration of activities and about the degree of opening up the innovation process.

5 Discussion and conclusion

The rich and insightful accounts of the interviewed officers have made it clear that intra-MNC division of labor is manifested in terms of *activities*, rather than in terms of business functions. The substantial scope of subsidiaries' *co-evolutionary upgrading* ²¹⁾ notwithstanding, the main dividing line between peripheral subsidiaries' and HQs' specialization, stretches between *operational* and *strategic activities*.

Subsidiary upgrading was accompanied by changes in parent companies' activity portfolio as well. Over time parent companies became more and more exclusively focused on coordination and business development. Assigning the responsibility for more and more tasks to subsidiaries (and/or outsourcing them to external suppliers) HOs become engaged practically exclusively with 1) system integration: with establishing and refining the organizational structure, designing and managing the interfaces; 2) coordination and control; 3) planning and budgeting; and 4) business development. In a sense, this restructuring of parent companies' activity portfolio can also be interpreted as upgrading (Szalavetz, 2015): by delegating relatively low-value adding tasks to subsidiaries parent companies increasingly specialize in high-barriers-to-entry, intangible-capital-intensive, non-contestable, high-return activities, i.e. in activities that are associated ownership-specific with advantages.

On the other hand, HQs' focus on governance, integration and coordination related activities made them pay more attention to the costs of these HQ-specific activities (attention to the costs of governance was also impelled by the global crisis and by the ongoing increases in the complexity of MNCs' organizations). Hence, parent companies became increasingly concerned with devising innovative organizational and technological solutions to reduce governance and integration related costs.

It was in this context that the surveyed subsidiaries operated, tried to upgrade and enhance the scope of their autonomy.

Some of the surveyed subsidiaries managed to enhance the degree of their autonomy (overall or within selected business functions), nevertheless increases in autonomy remained in the realm of operational autonomy. Changes in the degree of subsidiary autonomy were however not necessarily driven by their upgrading performance: upgrading seems to have had little direct influence on autonomy.

Changes in subsidiary autonomy were rather explained by external factors: by developments in some of the MNC owners' global markets; by parent companies' decisions on further takeovers/divestments or on the consolidation of the GVC. These and other external factors such as business expansion or crisis-driven organizational restructuring, provoked changes in parent companies' coordination and integration strategies. Over time HQs adopted increasingly formal coordination strategies: they applied formal protocols and standardized manuals that describe work procedures.

Technology development in the field of enterprise information systems also pushed mother companies in this direction. The more HQs' specialization shifted towards governance and coordination, the more important it became to minimize the costs of governance (above and beyond the HQs' traditional drive for the minimization of the costs of operations). This prompted the mother companies to implement additional decision support systems and enterprise information systems, and reduce thereby the amount of resources spent on monitoring and on communication. MNC owners' shift towards standard operating procedures and practices in new and new business functions reduced subsidiaries' perceived degree of autonomy.

Another organisational development had an opposite effect on subsidiaries' perceived autonomy (compared to that of electronic integration). Several mother companies set up teams and task forces across individual subsidiaries to enhance and facilitate inter-subsidiary communication of the specialists in various business functions. Some of the interviewed functional managers reported, they participated in best

practice exchange workshops; travelled to the premises of partner subsidiaries, or were visited by partner subsidiary experts to discuss and learn about partners' solutions. Consequently, subsidiaries became increasingly 'networked' within the MNCs and had more 'horizontal experiences' as opposed to the usual 'vertical and hierarchical' knowledge transfer by parent companies. This increased the perceived degree of subsidiary autonomy.

In summary, our interviews substantiated our propositions that subsidiary autonomy is shaped by a wide range of contextual factors and by the owners' strategic considerations that both, may exert a stronger influence on autonomy than upgrading. Moreover, subsidiary autonomy is in a state of flux (increases in autonomy are not irreversible), given the continuous reconfiguration of value chain activities and of MNC owners' organizations.

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Note

- 1) A distinct body of the literature is concerned with the opposite direction of causality: with the impact of autonomy on subsidiary performance (see survey by Gammelgaard et al., 2012). Research findings with respect to this latter relation are mixed: both high and low autonomy subsidiaries can feature high performance. This paper will however not investigate this issue.
- 2) Note that the upgrading of a given subsidiary frequently implies changes also in the specialization of other subsidiaries within the MNC owner's global network.
- 3) This statement is debated among others by Iwasaki and Tokunaga (2014) who following a comprehensive survey and meta-analysis of the relevant literature contend, that the positive macroeconomic impact of FDI in transition economies is not unambiguously supported by the evidence. Acknowledging that the assessment of the positive and negative external effects of FDI (as well as of their balance) is subject to authors' interpretation, the author of this paper argues that over the past quarter-of-a-century economic history of Hungary, no other engine of modernization can be identified that would have propelled the country ahead through non-abating tangible and intangible investments and transfers. Of course, better economic policy could have enhanced the positive effects (improve the final balance) of

FDI (Rugraff, 2008).

- 4) When discussing HQ-subsidiary relations, the GVC framework of analysis draws on two classical strands in the literature: 1) the integration responsiveness framework (Bartlett and Ghoshal, 1989; Prahalad and Doz, 1987; see also a recent application and extension of this framework to Central European countries in Meyer and Estrin, 2014) and 2) agency theory (reviewed by Eisenhardt, 1989). Albeit closely related to our research, a detailed summary of the assumptions and tenets of these theories is beyond the scope of this paper.
- 5) Extensive surveys of the literature are provided among others by Young and Tavares (2004) and Ambos et al. (2011).
- 6) Classical references include Chandler's (1962) path-breaking contribution about the alignment between firms' strategy and structure, as well as his later paper Chandler (1991) about the basic roles of MNC HQ (entrepreneurial and 'administrative', integrative, and loss preventive). Another, more recent, widely-cited reference is Collis et al. (2007), who advanced a more detailed classification of HQ functions including a) 'obligatory tasks' such as legal requirements (tax and financial reporting), treasury and general management; b) 'shared services' to obtain scale economies; c) 'coordination' and 'control'; and d) 'value creation'. A recent comprehensive survey and synthesis of the literature is provided by Menz et al. (2014).
- 7) Organizational innovations are oft-forgotten though crucial aspects of industries' globalization. Most papers mention only the radical decline in the costs of processing and transmitting information together with the development of product standards and business protocols. Thereby the codification of transactions has become easier (cf. Gereffi et al., 2005), which facilitated the coordination of complex activities from a long distance.
- 8) We refer here to one tiny segment of the broad scholarship on transaction cost economics: applied to analyze MNCs' choices of governance. A detailed summary of transaction cost economics thinking is beyond the scope of this paper.
- 9) The functional officers we made interviews with included four procurement officers; a chief information officer; a chief technology officer; two chief human resources officers; and a chief financial officer.
- 10) Support (to R&D initiatives and/or investments in technology upgrading) was granted in the framework of the New Széchenyi Plan's Science and Innovation program (http://www.szechenyi2020.hu, accessed on 13th, August, 2014).
- 11) According to the criticism advanced by the evaluation report of the given scheme (http://palyazat.gov.hu/a_komplex _vallalati_technologiafejlesztes_kis_es_kozepvallalkozasok_s zamara_kiirt_konstrukcioinak_ertekelese, accessed on 14th, August, 2014), project selection was based on the evaluation of the potential beneficiaries, rather than on the assessment of the innovativeness of the proposed undertakings.

- 12) In 2013, the average number of employees was 847 at the surveyed firms and average sales amounted to $\ensuremath{\varepsilon}$ 208 million.
- 13) In 2014, the surveyed firms have been operating in Hungary for 16 years on the average.
- 14) The sample included subsidiaries of American, Danish, Dutch, French, German, and Japanese MNCs.
- 15) The average share of exports in total sales was $89.9\,\%$ in 2013.
- 16) Irrespective of ownership, we found the application of Japanese management principles at practically each of the surveyed (American, Dutch, German etc.) companies in the automotive industry; and at several of the surveyed companies in the electrical and optical equipment industry. From time to time the interviewed managers referred to catchwords such as kanban, kaizen, yokoten as guiding principles of their manufacturing activities (About the diffusion of leading-edge management practices in Hungary and workplace innovations due to foreign investors' intangible transfers see: Makó, 2005; Makó et al., 2011).
- 17) One subsidiary (or rather a specific executive officer) became responsible for MNC-wide launch management tasks (assisted the HQ in building new subsidiaries from scratch). Shortly after the Hungarian subsidiary had become operational, the parent company established several new production facilities in South-Eastern Europe and in the Middle East. The interviewed officer was assigned to offer management assistance to the newly established subsidiaries, participate in personnel selection, advise the newly appointed local management on issues including facility selection, production planning, etc. There were three companies in the sample that have become their HQ's European distribution centers. Some of the interviewed subsidiaries were deeply integrated in their MNCs' networked R&D undertakings: their engineers participated in international development teams or were entrusted with all kinds of R&D tasks related to specific product groups.
- 18) Given the small size of the sample, it makes no sense to calculate percentage distribution.
- 19) In this case a rapidly evolving Hungarian firm decided on the involvement of a well-capitalized investor in the mid 1990s, in order to carry out large-scale technological investment; speed up internationalization and shift thereby to an even higher-order growth trajectory. Although foreign ownership exceeds 70%, the owner behaves as a strategic alliance partner, and not as a hierarchical owner of a captive facility. The Hungarian subsidiary undertakes all business functions from strategic planning to product development, business development and sales. Strategic partnership is reflected by a systematic HQ-subsidiary division of labor. For example, the Hungarian subsidiary is responsible for business development towards 'the East' while the mother company is responsible for the 'West' and the 'North'. Although the group the Hungarian firm belongs to is large and global with more

- than a dozen facilities or representation offices worldwide, the status of the Hungarian subsidiary is special, which is explained by the complementarity of its specialization (two-way knowledge flows) and by the significant contribution of the subsidiary to the overall business success of the group.
- 20) The procedure involves various audits, inspections and appraisals of the potential suppliers' capabilities, including technical, operational, and financial audits, evaluation of operational capability and of costs, assessment of the quality control system, appraisal of the system of continuous improvement; of environmental and safety compliance, etc. Procurement specialists also check the potential suppliers' electronic data interchange system; document management system; and packaging practice.
- 21) The term co-evolutionary upgrading refers to the phenomenon outlined in section 4.1 that mother companies draw their peripheral subsidiaries with themselves, along their own growth trajectories.

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 Business Functions Functional Upgrading at

 Manufacturing MNCs' Hungarian Subsidiaries

- [Szolgáltatás jellegű vállalati tevékenységek fogoly típusú kiszervezése funkcionális feljebb lépés a hazai feldolgozóipari leányvállalatok szemszögéből], *Külgazdaság*, 57(5-6), pp. 35-61.
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Annex 1: Interview protocol

I Evolution of products, processes and expansion of the activity portfolio

- 1. Please tell some details about the evolution of the product mix manufactured at your company! What was the main driver of product upgrading?
- 2. What were the main drivers of the improvement in the overall efficiency of the production process?
- 3. Please tell some details about the support functions your company undertakes in addition to production!
 - Is your subsidiary responsible for tasks, such as HR; communications; finance; information technology; legal affairs; environment management; procurement; design; quality tests

- and simulations; tool development; process development; R&D; logistics; distribution; marketing; sales; customer relationship management; other support functions.
- What exactly are the tasks that are performed locally? (Describe them in the case of each support function!)
- Were these support functions delegated gradually to the subsidiary or how was the introduction of the individual support functions scheduled?
- Did the knowledge-intensity of the individual support functions evolve over time? Can you tell some examples about the evolution of procurement, R&D; and/or of other relevant functions?
- In your assessment, what was the impact of this quantitative and qualitative functional upgrading on the subsidiary in general, and on the autonomy of the local management in particular?

II Patterns and evolution of subsidiary autonomy

- 4. What is your general opinion about the scope of autonomous actions in your subsidiary? In which respects do you think more autonomy should be granted to the local management?
- 5. Do you perceive any changes in the degree of subsidiary autonomy over the past half a decade? If yes, what were the main drivers of the changes?
- 6. Are there any inter-function differences in the autonomy of the local management? Please describe what the local management is allowed to decide upon more or less autonomously within procurement; R&D; process development; environment management; other business functions?
- 7. How can you explain the reason of inter-function differences in the degree of the local management's autonomy, if there are any?

III Functional upgrading and changing specialization at the headquarters

8. Do you see any association between the evolution of

- the knowledge-intensity of the tasks within the individual support functions carried out by the subsidiary and the evolution of the autonomy of the local (functional and top) management?
- 9. Can you tell some support function-level examples about what happened at the headquarters, once new, knowledge-intensive tasks had been delegated to the local subsidiary? What did people at the headquarters specialise in, once they had offshored specific tasks, carried out previously by themselves? Did the patterns of coordination and control change? Can you explain what the main features of the new coordination patterns are?

Annex 2: Some methodological problems of relying on collections of newspaper articles on local subsidiaries' upgrading

The ad hoc nature of firms' information dissemination and the dubious reliability of the assessment of corporate developments by the press releases were revealed by two interviews. In the first case extensive information was published on capacity development at one of the surveyed firms, which implied the creation of 150 new jobs. On the other hand no information was released on a very important quality-based upgrading move: on the establishment of a product development team. Although this latter decision implied the creation of only a dozen of new jobs, nevertheless the deployment of a new advanced business function can be considered a more important milestone in the subsidiary's upgrading process, than a simple capacity expansion.

In another case, it was widely publicized that the interviewed subsidiary became the European competence center of a specific product within its MNC owner's product mix. In reality, as our interview with the CEO revealed, this was the result of the subsidiary's failure to preserve a 'healthy' position in the context of the MNC owner's global product life-cycle management. Previously, the representatives of the subsidiary management performed extensive lobbying to gain the responsibility for the manufacture

and assembly of another product, which represents a new technological solution. Instead, the interviewed company has become the competence centre of a product that represents a phasing out technology. Consequently, the real meaning of the owner's decision on the creation of a 'competence center' in Hungary was that the production of an end-of-life-cycle product was concentrated in Hungary (relocated from other European subsidiaries).

a matter of fact, the location of As end-of-life-cycle products to the newly established 'competence center' may also involve qualitative upgrading, since these products are still subject to further development. Moreover, it is often easier for a peripheral subsidiary to gain the responsibility for relatively advanced business functions that support end-of-life-cycle products. Nevertheless, subsidiaries specialized in end-of life-cycle products are more likely to be divested in the medium run. Hence, this case can be interpreted both as downgrading and as upgrading, which calls for the refinement of the 'upgrading' concept.