The Autonomy Activity Status of Multinational Subsidiaries

Dzikowska, Marlena; Gammelgaard, Jens; Jindra, Björn

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ABSTRACT

Research concerning the autonomy of subsidiaries has been concentrated on the possession of decision-making rights. Building on the definitional and empirical argumentation, we claim that so understood autonomy has a prospective character, is not equal to the implementation of actual actions (or lack of thereof) and neglects the issue of the scope of potential actions. This paper aims to fill in the current literature gap by offering a holistic stance in which we assert that subsidiaries can be meaningfully differentiated according to their levels of autonomy and corresponding actions. We base this argumentation on the findings of real option theory and competitive dynamics perspective, develop a typology specific to a subsidiary's autonomy activity status (the position of a subsidiary in terms of its autonomy level confronted with the extent of actions taken in a corresponding area). We evaluate empirical validity of this approach on a sample of 377 foreign subsidiaries located in CEE countries. Our results (multinomial logit models) show that the proposed typology has the power to define internally consistent positions which are differentiated along four variables representing widely understood interdependencies within an MNE (sales dependence, sourcing dependence, technological dependence of the foreign investor upon the subsidiary and technological dependence of the subsidiary upon the MNE).

1. INTRODUCTION

For several decades the autonomy of subsidiaries has been used as a focal point of research concerning multinational enterprises (MNEs) (see, e.g.: Hedlund (1981); Garnier (1982); Taggart (1997); Edwards et al. (2002); Young and Tavares (2004); Johnston and Menguc (2007); Gammelgaard et al. (2012); Li et al. (2013); Wang et al. (2014)). In fact, a subsidiary's autonomy has been perceived as one of the critical contemporary issues for researchers and managers (Brooke 1984; Paterson & Brock 2002; Young & Tavares 2004). As such, it has been linked to, inter alia, a subsidiary's initiative and development (see, e.g.: Birkinshaw and Hood (1998); Birkinshaw et al. (1998); Jindra et al. (2009); Ambos et al. (2010)); performance (see, e.g.: Hedlund (1981); Birkinshaw and Morrison (1995); Ambos and Birkinshaw (2010); Gammelgaard et al. (2012); Li et al. (2013)), innovativeness (see, e.g.: Ghoshal (1986); Ghoshal and Bartlett (1988); Taggart and Hood (1999)), etc. At the same time, the so far empirical research while referring to the autonomy, focus only on a unit's empowerment to make decisions. On the other hand, the direct consequences of seizing these rights (understood as particular actions or lack of actions resulting from implementation of the decisions made), to the best of our knowledge, have not been analyzed so far.

In this paper, we argue that decision-making rights are not equal to actual actions as autonomy has a prospective character (see, e.g.: Brook (1984, p. 9); O'Donnell (2000, p. 528); Raziq et al. (2013, p. 591); Brock (2003, p. 58); Young and Tavares (2004, p. 228); Manolopoulos (2006, p. 49); Ambos et al. (2010)). Therefore, a low (high) autonomy of a subsidiary does not mean that the number, type or scale of actions taken as the result of the decisions made by the HQs (subsidiary) is necessarily insignificant (significant). A high level of autonomy also does not mean that the subsidiary possessing decision-making authority has enough resources at its disposal to implement its decisions (Gammelgaard et al. 2011). Nevertheless, so far the direct consequences of the decisions made at a subsidiary/the HQs level (actions) have not been integrated into studies concerning a subsidiary's autonomy. At the same time, the studies incorporated in the competitive dynamics perspectives (see, e.g.: Smith et al., 2001; Ndofor et al. (2011); Sirmon et al. (2011); Bridoux et al. (2013)), while focusing on the

consequences of business units' actions for MNEs, neglect the issue of the exchange of decision-making authority (delegation) which concerns the rights of control over actions. Individually, then, a subsidiary's autonomy and the competitive dynamics perspective provide an incomplete picture of the decision-making and its consequences within MNEs. We refer to the identified research gap while answering the following research question: *do multinational subsidiaries differ in terms of their levels of autonomy and corresponding actions?*

We believe that understanding of the causal relationships among the autonomy and at least some of the other MNE-related variables requires consideration of the actions that those decisions bring. Therefore, the findings of this paper open a perspective on the inclusion of a new, potentially meaningful, variable into the studies of MNE – a subsidiary's autonomy activity status (SAAS). SAAS is a position of the subsidiary in terms of its autonomy level confronted with the extent of actions taken in a corresponding area. Our results open an avenue for further studies on SAAS itself and the relations between SAAS, performance, power of subsidiaries, etc. Additionally, the incorporation of the autonomy into an MNE's actions extends necessary investigations into the internal context of firm actions (Bridoux et al., 2013). Furthermore, since the actions of exploiting and managing resources can make a vital difference to firm performance (Ndofor et al., 2011; Sirmon et al., 2011), it is important for managers to understand how firms can actively maneuver through a series of different actions and how those actions relate to a corporate unit's decision-making rights.

In this paper we assert that subsidiaries can be meaningfully differentiated according to their levels of autonomy and corresponding actions. By combining those two criteria we receive a two-by-two matrix representing four stylized types of SAAS: *active autonomy*, *inactive autonomy*, *active heteronomy* and *inactive heteronomy*[1]. The purpose of our approach is to develop this typology, to evaluate its empirical validity and to test its power to define internally consistent positions which can be differentiated along a number of strategic–dimensions. Our typological classification has the functions of codification and prediction (Tiryakian, 1968, p. 178). We identify the determinants of SAAS within innovation and investment areas with the use of multinomial logit model on a sample of 377 foreign subsidiaries located in Central and East European (CEE) countries.

The empirical results indicate that sales dependence (H1a), sourcing dependence (H2a) and technological dependence (H3a) within the MNE can be used as determinants of SAAS in innovation and investment areas. Moreover, age, size, cultural distance and entry mode are significantly related to SAAS. Additionally, a high level of internal sales is more likely for actively heteronomous subsidiaries than for any other type of foreign affiliate (H1b), but only for investment area. On the other hand, a low level of internal sourcing is more likely for actively autonomous subsidiaries than for any other type of foreign affiliate (H2b), but only for innovation area. At the same time, the existence of the technological dependence of the foreign investor upon a subsidiary is more likely for actively heteronomous subsidiaries than for any other type of SAAS (H3b), but only for innovation area.

In the second part of the article we justify the development of the typology on the argumentation derived from the real option theory and we identify the existing literature gap. Furthermore, we explain why a subsidiary's initiative does not reflect actions relevant to SAAS identification. Finally, we present the typology and formulate three hypotheses in reference to the SAAS determinants and four additional hypotheses relating to the characteristic of specific SAAS types. While developing the hypotheses we refer to the literature commenting on interdependencies occurring within an MNE (the control theory, the network theory and the resource dependency theory). In the third part of the paper, we verify the hypotheses with multinomial logit models. We conclude the paper with a presentation of our final comments.

2. SUBSIDIARY'S AUTONOMY ACTIVITY STATUS
– THE CONCEPTUAL BACKGROUND

From a sociological point of view, two separate theoretical perspectives explain the possession of decision-making rights and implementation of corresponding actions. Social exchange theory explains that rights of control over actions are exchanged between actors in the hope of acquiring the enhanced probability of achieving particular aims (Coleman, 1990). On the other hand, action theory focuses on a unit act and its components, which encompass ends, conditions, means, norms and the actor who performs the action (Parsons, 1937). However, while action theory takes into consideration the act and its results, conditions etc., it neglects the fact that

rights of control over actions (decision-making rights) can be exchanged[2]. In line with Stichweh (2000), we believe that these two approaches are complementary; especially when explaining decision-making rights distribution and action execution within MNEs. While research on subsidiary autonomy seem to be predominantly rooted in the social exchange theory, studies focused on companies' actions and their impact (competitive dynamics literature) relate primarily to the action theory. Individually, then, a subsidiary's autonomy and the competitive dynamics perspectives provide an incomplete picture of decision-making and its consequences within MNEs. At the same time, understanding of causal relationships among autonomy and various MNE-related issues requires considering not only who makes the decisions, but also what actions those decisions trigger.

2.1. A subsidiary's autonomy

In the international business literature one can find several definitions of subsidiary autonomy[3]. Brook (1984, p. 9) and Ambos et al. (2010, p. 1100) relate this concept to the ability, O'Donnell (2000, p. 528), Björkman (2003, p. 3), Brock (2003, p. 58) and Manolopoulos (2006, p. 49) to the degree of authority, Young and Tavares (2004, p. 228) and Raziq et al. (2013, p. 591) to the degree of freedom, while Dut (2013, p. 17) to the right. All of these definitions share a common denominator – they refer to decision-making at a subsidiary level. However, they also highlight several other matters.

First of all, issues related to autonomy exist at the interface of the HQ-subsidiary relationship and a bargaining process is permanently integrated into them (see e.g.: Brook (1984, p. 9); Taggart (1997, p. 55); Björkman (2003, p. 3); Manolopoulos (2006, p. 49); Raziq et al. (2013, p. 591); Dut (2013, p. 17)). Secondly, subsidiary autonomy is gradable (see e.g.: O'Donnell (2000, p. 528); Björkman (2003, p. 3); Brock (2003, p. 58); Manolopoulos (2006, p. 49); Raziq et al. (2013, p. 591)). Referring to both of the above-mentioned aspects, it can be added that over time the level of a subsidiary's autonomy may change (see i.e.: Taggart (1997, p. 55); Gammelgaard et al. (2012)). Finally, definitions of autonomy refer to the prospect (or its degree) of making certain decisions by a subsidiary. In fact, this point of view is explicitly stated in the above-mentioned definitions of autonomy, either by referring to the ability, authority,

right, discretion, freedom (see e.g.: Brook (1984, p. 9); O'Donnell (2000, p. 528); Dut (2013, p. 17); Raziq et al. (2013, p. 591)), which are substantially different from the obligation, or by highlighting that an autonomous subsidiary *may* make decisions or that autonomy *enables* making certain decisions (see e.g.: Brock (2003, p. 58); Young and Tavares (2004, p. 228); Manolopoulos (2006, p. 49); Ambos et al. (2010)). In addition, making decisions (for example, concerning entering new markets) is not equal to a certain type of action (entering a new market), as the decision can as well result in refraining from this action.

A theoretical approach, which reflects well the prospective character of subsidiary autonomy, is the real option theory. According to Myers (1977), firms' discretionary investment opportunities provide decision rights on real assets. These investment opportunities create real options which concede a firm the right, but not the obligation, to undertake certain actions in the future (Trigeorgis, 1996; Amram & Kulatilaka, 1999). The mentioned decision-making rights concern, inter alia, deferring, growing, altering, switching, abandoning of certain investments/operations or learning opportunities and, depending on the autonomy level, will be assigned either to the HQs or to a subsidiary. From a decision-maker's perspective, in an environment of uncertainty, the opportunity to wait before making an irreversible investment has value, as the conditions of sunk costs and uncertainty create an option value imbedded in the decision to make an investment (Dixit & Pindyck, 1994; Kogut & Kulatilaka, 1994; Chung & Beamish, 2005). Furthermore, the options embedded in one investment may shape the value of other options open to the firm and, as a result, the overall value of the option portfolio (Triantis & Hodder, 1990; Luehrman, 1998; Smit & Trigeorgis, 2004). In line with this reasoning, decisions concerning one field of operation (e.g., the budget of a subsidiary/investment within a subsidiary) influence options available in another field (e.g., new product development within a subsidiary), even though they constitute separate decisions and, from the perspective of an MNE, can be made at different management levels.

Applying the real option theory demonstrates that decision-makers, based on their evaluation of a situation, may opt not to take particular actions. On the other hand, even when decisions create actions one can still differentiate subsidiaries based on frequency of the decisions made and their scale, consequences and significance. We perceive this as the

decision's scope. This scope will differ in the case of the introduction of a new product, the introduction of several new products and the introduction of a new product range. Nevertheless, the dominating in the literature approach towards subsidiary's autonomy operationalization neglects the mentioned issues. Although researchers use different wording in reference to the variables of the subsidiary's autonomy, most commonly, they simply ask who (HQs or subsidiary) makes particular decisions (see, e.g.: Taggart (1997); Edwards et al. (2002); Johnston and Menguc (2007)). In addition, within the analyzed areas of autonomy, there is only limited evidence of taking into consideration a decision's scope and even in those cases the mentioned discrimination encompasses only some of the areas analyzed in a particular study. For instance, while Gates and Egelhoff (1986) differentiated between small and large changes in product prices and small and large changes in product design, they also asked about decisions regarding advertising and promotion in general. At the same time, while Ghoshal and Bartlett (1988) asked about influence on decisions concerning minor but significant modification of an existing product, they also questioned the modification of a production process, neglecting how far-reaching these modifications were if they had been implemented in the first place. The exact same comment can be made with regard to the operationalization of a subsidiary's autonomy in the research of, inter alia, Taggart (1996, 1997), Edwards et al. (2002), Johnston and Menguc (2007), Bouquet and Birkinshaw (2008), Boehe (2008), Ambos et al. (2010), Li et al. (2013), Wang et al. (2014). Therefore, existing research take into account only one dimension related to making decisions – the empowerment to make them. On the other hand, they ignore the actions and their characteristics related to the consequences of the decisions made. However, the products of managers are decisions and actions (Drucker, 1954). The latter have not been integrated into subsidiary autonomy studies and neither has been the scope of decisions made. Similarly, the fact that not every autonomous subsidiary has enough resources to implement its decisions and, consequently, does not have the ability to implement its decisions (Gammelgaard et al., 2011), has not been widely studied.

2.2. Competitive dynamics perspective

In line with the competitive dynamics literature, companies' actions are understood as specific and observable moves or behaviors initiated by firms to enhance their performance (Smith et al., 2001). In fact, designing actions deploying and utilizing company resources remains one of the most important tasks of managers (Castanias & Helfat, 1991; Mahoney, 1995; Majumdar, 1998; Adner & Helfat, 2003; Hansen et al. 2004; Kor & Mahoney, 2004; Sirmon et al., 2007; Holcomb et al., 2009). This is because, through actions, firms disrupt the status quo in the markets and engage themselves in a continuous race aiming to outpace each other (Schumpeter, 1942; Kirzner, 1979).

The types of actions that are considered in competitive dynamics studies (see e.g.: Rindova et al. (2010); Bridoux et al. (2013)) encompass, inter alia, new product/service introductions, entering new markets, communication, branding and promotion actions, alliances, price changes, distribution agreements, acquisitions etc. Therefore, in general, it can be said that the types of actions under investigation are in line with the types of decisions considered in autonomy-related studies (see, e.g.: Taggart (1997); Edwards et al. (2002); Ambos et al. (2010)). Nevertheless, the competitive dynamics literature cannot fill in the research gap (the build-in prospective character of autonomy and lack of obvious relation between autonomy and actions). This is because the subsidiary autonomy issue has not been integrated into competitive dynamics studies[4]. Even in the case, when such research refer to the control issue within MNEs (see: Yu and Cannella's (2005)), this matter is represented by the percentage of an MNE subsidiary's equity held by its HQs, which in the case of MNEs can be substantially different from decision-making rights. At the same time, incorporation of the autonomy issue into MNE's actions constitute a response to the highlighted in the literature need for investigation into the internal context of firm actions (Bridoux et al., 2013).

2.3. Actions as direct consequences of decisions vs subsidiary initiative

It could be claimed that the concept of the subsidiary initiative equals to the actual actions of a subsidiary. However, we believe that due to several conceptual and operational issues subsidiary initiative does not accurately reflect actions of a business unit.

Subsidiary initiative has been defined as "*the entrepreneurial pursuit of international market opportunities to which the subsidiary can apply its specialized resources*" (Birkinshaw et al., 1998, p. 226) and "*a discrete, proactive undertaking that advances a new way for the corporation to use or expand its resources*" (Birkinshaw & Riddlerstrale, 1999, p. 151). This means that multinational subsidiaries engage in entrepreneurial activities independent of their HQs' will and that initiative constitutes a bottom-up complement to the many HQ-inspired actions (Dörrenbächer & Gammelgaard, 2016). At the same time, Ambos et al. (2010) note that subsidiary initiatives need to attract HQs' attention in order to be successful. The involvement of HQs is required either for the approval of subsidiaries' initiatives or for additional resources to support their initiatives (Dörrenbächer & Gammelgaard, 2016). The need for approval refers to cases in which a subsidiary does not have the appropriate decision-making rights; however, a request for additional resources to support initiatives may be relevant even for subsidiaries which are autonomous within corresponding areas.

The link between actions at a subsidiary level and initiative is also visible when taking into consideration the possible measurements of the latter construct. In seminal studies (see, e.g.: Birkinshaw et al. (1998); Ambos et al. (2010)), initiative was measured by asking respondents to indicate the frequency of the past occurrence of particular activities. These activities encompass, inter alia, new products developed locally and then sold internationally, successful bids for corporate investments, acquisitions of local companies led by subsidiary management, new international business activities which were first started locally, enhancements to product lines which are already sold internationally, new corporate investments in R&D or manufacturing attracted by local management.

Arguably, the notion of actions at a subsidiary level is not fully reflected by measuring initiative this way, because in some areas (e.g. bids for corporate investments, acquisitions of local companies *led by subsidiary management* and new corporate investments *attracted by local management*), the focus on subsidiary initiative limits responses *only* to actions which were initiated or led by subsidiary management. However, the HQs may also dictate a particular

course of actions for the subsidiary. Additionally, in some of the above-indicated areas, the operationalization refers only to the frequency of actions which have had international consequences (e.g. new products developed locally and *then sold internationally*, *new international business activities* that were first started locally and enhancements to product lines which are *already sold internationally*), while neglecting actions which had only local scope. This is relevant, as the operationalization of a subsidiary autonomy (see subsection 2.1.) does not take into account the distinction between decision-making rights for the same issues in local and international scopes. Thirdly, the enquiry concerning a subsidiary's initiative, in general, refers only to the frequency of particular actions while neglecting the dimension of the actions' scale, significance, etc. Meanwhile, when referring to actions such as, inter alia, new corporate investments or acquisitions of local companies, the level of investments seems at least as much important as the frequency of their occurrence. Therefore, we believe that the subsidiary initiative concept cannot be equated with our understanding of actions implemented as a result of decisions. In particular, when concentrating on the frequency of specific action type, subsidiary initiative reflects only some of the actions that are taken within particular area.

In sum, although it is widely recognized that the level and areas of autonomy differentiate the subsidiaries of MNEs, we know very little as to whether subsidiaries with relatively similar levels autonomy differ in terms of the actions taken within corresponding areas of foreign affiliates' operations. This brings us to the main research question of this study:

Q: Do multinational subsidiaries differ in terms of to their levels of autonomy and corresponding actions?

2.4. Subsidiary's autonomy activity status – typology development

Although, our research question has not been directly addressed by the existing research, there are few studies that indicate evidence for discrepancies between autonomy and actions in selected areas. In particular, in a study of product development in emerging market subsidiaries, Boehe (2008)[5] indicates five clusters which differ between each other in terms of, inter alia, the share of activities dedicated to the new product development (lets call it proxies of actions[6]).

These groups could be divided into more and less innovative. At the same time, in a different part of the paper Boehe states that there exist differences among the clusters in terms of innovativeness-related autonomy. Prepared by us juxtaposition of group-related information presented in various parts of the article allows us to claim, that these variations are visible not only between less and more innovative groups, but also among them. This suggests that the assumed differences in terms of the level of autonomy and corresponding actions may exist.

By combining the two above-mentioned dimensions – decision-making rights and the actions drawn therefrom, we receive a two-by-two matrix presented in figure 1. A "low-autonomy subsidiary" is one which is not empowered to make decisions independently (decisions are made by HQs or with their involvement), while a "high-autonomy subsidiary" has such empowerment. An "inactive subsidiary" is one which is characterized by the relatively low number/ value[7] of actions, while an "active subsidiary" is a unit in which the actions corresponding to the area of autonomy occur relatively often/ have a large scale.

Figure 1: Autonomy-actions matrix.

Source: Authors.

From this we can derive four stylized types of subsidiaries. We can indicate subsidiaries which are autonomous and take significant actions within areas for which they have decision-making rights and units which are autonomous but, in fact, do not implement any significant actions within those areas. Therefore, subsidiaries are *actively autonomous* (AA) only in the former case. In the latter case, we refer to *inactively autonomous* (IA) subsidiaries. Furthermore, the fact that a subsidiary has no autonomy in a particular area or is characterized by a low autonomy level (*is heteronomous*) does not imply that no significant actions are taken at the subsidiary level within this area. Such an assumption would mean that, for example, a subsidiary which has no authority to make decisions concerning new market entry would always

be restricted only to its local marketplace. This is possible; however, it cannot be treated as a rule. Based on the real option theory, it should be rather expected that an investor would seize the opportunity of a new market entry when noticing its relative attractiveness. This rule holds regardless of whether the decision is made by the HQs or subsidiaries. Differences that refer to the decision-maker should rather encompass speed and correctness of the decision. Therefore, we differentiate between *active heteronomy* (AH) and *inactive heteronomy* (IH). In the former case significant actions are introduced at a subsidiary level due to the decisions made by the HQs. In the latter case, low autonomy level is accompanied by a lack of significant actions.

2.5. Determinants of subsidiary's autonomy activity status – hypotheses development

The above proposed organizational configuration[8] represents a typological approach and, therefore, has a deductive character. Since we know little about the co-occurrence of a subsidiary's autonomy and corresponding actions, the presented model has an explorative nature. Nevertheless, we believe that the literature concerning MNEs allows for the formulation of some hypotheses referring to factors which can influence the occurrence of a specific SAAS. While developing the hypotheses, we focus on the interdependencies that occur within an MNE.

The existing literature makes a distinction between HQ-subsidiary interdependencies and inter-subsidiary interdependencies. HQ-subsidiary interdependencies refer to the extent to which HQs and subsidiaries depend upon each other in terms of providing, inter alia, business relationships, demand, supply, resources, information, knowledge and technologies (Bartlett & Ghoshal, 1987; Ghoshal & Nohria, 1989; Birkinshaw & Morrison, 1995). Inter-subsidiary interdependencies exist when the subsidiaries of an MNE depend on each other (Genctruk & Aulakh, 1995; O'Donnell, 2000; Ambos & Schlegelmilch, 2007). For the purpose of this study, we combine those two types of interdependencies while referring to intra-firm interdependencies. Interdependencies can be reciprocal (Ghoshal & Nohria, 1989; Ghoshal & Bartlett, 1990; Nohria & Ghoshal, 1994; O'Donnell, 2000); however, they are not necessarily equally distributed. As intra-firm interdependencies increase, the successful accomplishment of the tasks of subsidiaries (or HQs) is more influenced by the actions of HQs (or subsidiaries). Consequently, subsidiary's (or HQs') managers face a higher level of uncertainty, since the

interdependencies increase the number of factors which are out of their control, even though the entity remains dependent upon them.

If decisions require high levels of specific information about, for example, the environment of the unit (which increases knowledge transfer costs (Jensen & Meckling, 1992)), and there is more local knowledge at the unit, local management will be better placed to both gather and interpret this knowledge than the HQs (Melumad et al., 1992). However, there is a trade-off between access to the superior knowledge of local managers through the delegation of decision-making rights and the loss of control at firm HQs (Acemoglu et al., 2007; Christie et al. 2003). While the distribution of decision rights reduces knowledge transfer costs, it can also create control problems within the MNE (Christie et al., 2003). In particular, subsidiary managers may not have access to all of the relevant information necessary to reach a decision that is optimal for the whole MNE or they may simply act in their self-interests (Eisenhardt, 1985). In both cases, the decision made would not be aligned with the interests of the whole MNE. Furthermore, as intra-firm interdependencies increase, so do the costs of suboptimal decision-making, as actions will impact other interdependent organizational units (Abernethy et al., 2004; Bushman et al., 1995). Therefore, HQs will reserve the right to make decisions concerning subsidiaries not only when it will be better placed to both gather and interpret information, but also when it is especially important to ensure that the affiliates act in the interest of the HQs rather than in their own.

Sales dependence

HQ's role encompasses the coordination of the value creation process within the MNE. The more integrated the MNE's global operations are, the greater the level of coordination required and the more controlled a subsidiary is. This is because such a subsidiary has a clear role to play in a centrally directed global strategy (Taggart, 1997) and the costs of their suboptimal decisions increase for the whole corporation (Abernethy et al., 2004; Bushman et al., 1995). Additionally, as subsidiaries lack an overview of the business needs of other units, HQs are better placed to gather and interpret information required for the coordination of an MNE's activities across individual subsidiaries by pooling resources and centralizing value-added activities (Ambos &

Mahnke, 2010). Therefore, actively heteronomous subsidiaries are expected to be units which are highly integrated in the internal networks of the MNEs, in the sense that a relatively large share of their sales is internal. The low strategic autonomy level of those subsidiaries is crucial for the HQs in their efforts to bring together the finished products from the value-adding activities of the various affiliates and to maximize the overall competitive advantages. At the same time, due to their important role in the internal network (such subsidiaries influence not only their own performance, but also the results of co-operating units), the described subsidiaries are provided with a sufficient amount of resources and attention for strategic actions implementation.

> H1a: The level of the subsidiary's intra-MNE sales is related to its autonomy activity status.
> H1b: Specifically, a high level of intra-MNE sales is more likely for actively heteronomous subsidiaries than for any other type of multinational affiliate.

Sourcing dependence

A subsidiary which acquires resources and expertise on its own reduces its dependence on the HQs (Prahalad & Doz, 1981). Moreover, a subsidiary's knowledge acquisition from its external business networks increases its autonomy (Young & Tavares, 2004). Actively autonomous subsidiaries are units which are relatively strongly dependent on their external environment, in the sense that a relatively large share of their purchases is external to the MNE. Due to their direct relationship with external suppliers they are better equipped to gather and interpret specific information about their environment. At the same time, owing to their unique position, they are suitably important for the whole MNE to be provided with a sufficient amount of resources and attention for strategic actions implementation.

> H2a: The level of the subsidiary's intra-MNE sourcing is related to its autonomy activity status.
> H2b: Specifically, a low level of intra-MNE sourcing is more likely for actively autonomous subsidiaries than for any other type of multinational affiliate.

Technological dependence

In MNEs, influence is organized around access to and use of resources such as capital, managerial talent and knowledge (Pfeffer & Salancik, 1978, p. 259; Hardy & Clegg, 1996, p. 626; Mudambi & Pedersen, 2007). From the moment of their establishment, subsidiaries require resources from the HQs. On the other hand, foreign affiliates are able to acquire or develop

valuable resources for the MNE. In such a case, the HQs become, to some extent, dependent on the subsidiary, and we can talk about mutual dependence between HQs and subsidiaries (Pfeffer & Salancik, 1978; Astley & Sachdeva, 1984). One type of resource which creates interdependencies within an MNE is technology. In fact, it is said that ability to transfer and exploit technology across geographic locations more efficiently than market mechanisms is one of the reasons for the existence of MNEs (Dunning, 1988; Kogut & Zander, 1993; Conner & Prahalad, 1996; Frost, 2001). Moreover, the efficiency of MNEs in this regard is not limited to cost reduction, but also encompasses the exploitation of existing technologies, and the recombination of these technologies to produce new technologies (Kogut & Zander, 1992, 1993). Nevertheless, the effect of subsidiary autonomy on knowledge transfer is ambiguous (see e.g.: Ghoshal and Bartlett (1988); Gupta and Govindarajan (2000); Foss and Pedersen (2002)). We believe that the possession of and request for appropriate technology is also linked to a unit's ability to attract necessary attention and resources for implementing the corresponding actions.

> H3a: The existence of technological dependence between the foreign investor and a subsidiary is related to the subsidiary's autonomy activity status.

An MNE's technological dependence upon a subsidiary

High levels of knowledge flow from a subsidiary to the MNE enable HQs to exploit local competencies and to act as a knowledge intermediary, knowledge integrator or as a facilitator to such activities (Mudambi & Navarra, 2004). If a subsidiary's knowledge is distinct from other MNE's units, it constitutes a specialized resource (see, e.g.: Birkinshaw and Morrison (1995); Birkinshaw et al. (1998)). A subsidiary's control over specialized resources may create governance problems (Verbeke & Kenworthy, 2008) or lead to perceptions of empire building (Birkinshaw & Ridderstrale, 1999) and subversive behavior (Tavares, 2001). Therefore, a possible reaction of HQs to the development of specialized technological resources at a subsidiary level could be exercising control over the unit and decreasing its level of autonomy. At the same time, when the foreign investor is dependent on those technological specialized resources, it can be also expected that such subsidiaries are suitably important for the whole

MNEs to be provided with a sufficient amount of resources and attention for strategic actions implementation.

> H3b: The existence of technological dependence of the foreign investor upon a subsidiary is more likely for actively heteronomous subsidiaries than for any other type of multinational affiliate.

A subsidiary's technological dependence upon MNE

A subsidiary receives knowledge from its parent company in order to fulfill its objectives (Meyer, 2003). In addition, knowledge flows from the MNE to the subsidiary allow the subsidiary to exploit a home-base knowledge advantage (Mudambi & Navarra, 2004). In the existing literature, there is evidence that subsidiaries provided by HQs with an abundant level of resources perform well in their local markets (Luo, 2003) and that sourcing of technology from the MNE is positively associated with the subsidiary's performance in the foreign country (Manolopoulos et al., 2009). We believe that this notion can be expanded in terms of the general activity of the subsidiary, in the sense that subsidiaries which are dependent upon and provided with technology by the MNE will be more active than those that are not using such resources.

> H3c: The existence of the technological dependence of a subsidiary upon the MNE is more likely for actively autonomous subsidiaries and actively heteronomous subsidiaries than for any other type of multinational affiliate.

3. METHODOLOGY AND BASIC FINDINGS

3.1. The sample

For the following analyses we use data from the 2013 survey of the IWH-FDI-Micro-Database. We selected this data source, since it offers rich information of foreign subsidiaries autonomy, trade structure and internal flows of technological knowledge. The dataset includes foreign subsidiaries located in six Central and Eastern European countries (East Germany, Poland, Czech Republic, Slovak Republic, Hungary and Romania) (Gauselmann et al., 2013). However, in our study data of subsidiaries located in East Germany with ultimate ownership originating from West-German have been excluded from the analysis[9]. The population includes enterprises with at least one foreign shareholder who holds either a minimum of 10% direct shares/voting rights or a minimum of 25% indirect shares/voting rights (Gauselmann et al., 2013). These enterprises are independent affiliates with their own legal entity or branches with their own

commercial register entry. The survey was implemented by means of computer assisted telephone interviews.

For the original dataset (including subsidiaries located in East Germany), a total population of 14,748 firms was identified based on the online AMADEUS Database in 2012 (Bureau van Dijk). From this population 1,001 interviews were completed with foreign subsidiaries, of which 215 were located in East Germany and 786 in CEE countries. After the exclusion of interviews with missing data and outliers (see section 3.3.) we achieved a final sample of 377 observations. Table 1 presents the information concerning the host countries and the sizes of the foreign subsidiaries under investigation.

Table1: Host countries and the sizes of the subsidiaries under investigation.

	Germany	Poland	Hungary	Romania	Czech Republic	Slovakia	Total
N	90	85	53	44	84	21	377
Size (number of employees)							
Mean	84.04	226.18	332.34	117.75	210.01	172.95	187.95
(SD)	(125.97)	(465.09)	(596.49)	(154.89)	(296.76)	(204.92)	(363.67)
Min	1	10	10	11	15	15	1
Max	654	3000	3679	683	1750	750	3679

Source: own calculations.

3.2. Variables

Subsidiary's autonomy activity status. Since the autonomy of a subsidiary can be differentiated based on the areas concerning decision-making rights[10], the autonomy-actions matrix can be taken into consideration with regard to all those areas. Due to the possible problems with the aggregation of action proxies for several areas, it is reasonable to consider them separately. Furthermore, since operational autonomy is required for a subsidiary's day-to-day, routine operations (Chang & Taylor, 1999), it is more difficult to indicate realistic values for the corresponding actions, than it is for strategic decisions. Therefore, in this study, we verify our hypotheses for the two separate strategic areas of SAAS: innovation and investments.

With regard to autonomy, respondents were asked who was making decisions on the adoption of major advanced technologies and investments, while given five possible answers (1= "only your enterprise", 2= "mainly your enterprise", 3= "equally your enterprise and your foreign investor", 4= "mainly your foreign investor" or 5= "only your foreign investor"). In reference to subsection 2.4. (see figure 1), values 1-2 are perceived as high autonomy, while values 3-5 are seen as low autonomy.

The respondents also answered 4 questions (possible answers: yes/no) concerning the introduction of product innovations; new or significantly improved methods for producing goods or delivering services (process innovations); new or significantly improved logistics, delivery or distribution methods for goods or services (process innovations); and new or significantly improved supporting activities for processes (for example, maintenance systems or operations for purchasing, accounting, or computing) (process innovations) during years 2011-2013. In this paper, the proxy of actions in the area of innovation has been created as a sum of those dummy variables (1= "yes", 0= "no"), where values 3-4 (the introduction of 3 or 4 different types of innovations) represented a high number of innovative actions and values 0-2 a low number thereof.

Additionally, the respondents were asked: "*What did your enterprise on average invested in plants, machinery, equipment and ICT between 2011-2013?*". The answers were provided in per cent of annual turnover. Values below 10% were perceived as less significant actions, while an average investment of 10% and above was considered as indication of significant investment actions[11]. SAAS variables were created by confronting low/high autonomy with low/high actions in the appropriate areas (see section 2.4.). As a result, the SAAS variables have four values, where 1= "active autonomy" (AA), 2= "inactive autonomy" (IA), 3= "active heteronomy" (AH) and 4= "inactive heteronomy" (AH). Table 2 shows the juxtaposition of the sample distribution in terms of the level of action and autonomy levels for both of the considered areas.

Table 2: The sample distribution in terms of action and autonomy levels.

	Innovation area			Investment area	
	Autonomy			Autonomy	
	Low	High		Low	High
Actions High	*Actively heteronomous* **N=110**	*Actively autonomous* **N=23**		*Actively heteronomous* **N=143**	*Actively autonomous* **N=27**
Actions Low	*Inactively heteronomous* **N=186**	Inactively autonomous **N= 58**		*Inactively heteronomous* **N=180**	Inactively autonomous **N=27**

Source: own calculations.

Sales dependence. During the interviews, the respondents were asked to approximate the share of seven different types of internal and external clients in their total turnover for the year

2013. The sum of all sales totalled 100%. In this paper, sales dependence is expressed as the subsidiary's share of sales generated within the MNE (internal customers) in the total sales of the foreign affiliate in 2013.

Sourcing dependence. The construct of sourcing dependence is analogous to sales dependence variable. It is measured by the subsidiary's share of purchases from internal suppliers (within the MNE) in the total supplies and intermediate inputs of the foreign affiliate in 2013.

Technological dependence. Technological dependence is expressed by two separate dummy variables. Respondents were asked: "*To which extent does the technological development of their foreign investor depend upon R&D and/or innovation activities of your enterprise?*". Four possible answers were indicated: "not at all", "in areas of a specific technology", "in a specific technology in general" and "in different technologies". We coded this information into a dummy variable. *The MNE's technological dependence upon subsidiary* takes the value of one when the technological development of the foreign investor depends upon R&D or innovative activities of the subsidiary in terms of particular areas of a specific technology, a specific technology in general or different technologies. Otherwise the variable takes a zero value. The respondents were also asked: "*Did your enterprise co-operate for R&D or innovation activities with any other units, external firms or organisations between 2011 and 2013?*". If this was the case, the subsidiaries were required to indicate the importance of different cooperation partners as source for knowledge relevant for R&D and innovation in the foreign subsidiary. We encoded this data into a dummy variable, where 1 means that the subsidiary is *technologically dependent upon MNE* (meaning upon HQ or other affiliates), and 0 that it is not cooperating within MNE for R&D or innovative activities.

To rule out any plausible alternative explanations, a set of *control variables* was also included in the models. First, the subsidiary's size and age may play a role (Gates & Egelhoff, 1986) in our study. We control for this by using the natural log of the total number of employees at the subsidiary and the natural log of the number of years since the establishment of the subsidiary. Additionally, the cultural distance between the home and host countries can influence managerial attitudes towards risk in the host countries. We use Kogut and Singh's

(1988) cultural distance measure to account for this issue. For this variable, information concerning the country of origin of the subsidiary's ultimate owner and the host country had been derived from the AMADEUS database before the interviews were conducted and this information was further supplemented with secondary data concerning the dimensions of cultural distance. Moreover, we capture entry mode by using a dichotomous variable for partial acquisition versus full ownership, where 1= "partial acquisition" and 0= "full acquisition or green field". Finally, we use a variable showing share of employees fulfilling marketing and sales function in the total employment of the subsidiary. This allows us to control for those subsidiaries, whose main function is marketing and sales.

3.3. Statistical model and results

Since SSAS is a non-metric variable a multinomial logit model (MNLM) has been chosen as an appropriate analytical tool. Our model is not used to model choices and, therefore, the SAAS variable does not create any problems regarding the violation of the independence of irrelevant alternatives (IIA) assumption. The probability that a subsidiary n will have autonomy activity status k, out of K possibilities of autonomy activity statuses, is expressed in the following way:

$$Prob_{nk} = Prob(Y_n = k|X_n) = \frac{e^{X_n\beta_k}}{\sum_{i=1}^{K} e^{X_n\beta_k}} \qquad .$$

The analyses were carried out separately for innovation (model 1) and investment (model 2) areas. In the both cases SAAS was used as the dependent variable, where 1= "AA", 2= "IA", 3= "AH", and 4= "IH". Respectively, active autonomy and active heteronomy were used as the base categories for comparison with the remaining categories for both models. The logit models, therefore, estimated the probability of the occurrence of other autonomy activity statuses compared with, respectively, AA and AH. In all the models the dependent variables were non-metric and the independent variables were metric or dichotomous. Therefore, the level of the measurement requirement for the analyses was satisfied. Since omitting the outliers did generate an increase in classification accuracy slightly greater than 2% for both models, these observations were excluded from the sample.

Model fitting for innovation and investment areas show that the probabilities of the overall models χ^2 statistics (respectively 203.011 with df = 27 and 135.103 with df = 27) are significant (p<0.000). This indicates that there are statistically significant relationships among the dependent variables and the sets of independent variables. Moreover, based on the goodness-of-fit tests, there is no reason to reject the hypotheses that the models adequately fit the data. In both models none of the independent variables have a standard error larger than 2.0. Therefore, no numerical problems, such as, inter alia, multicollinearity among the independent variables, were identified. The common-method bias was also not a serious problem, as the variable concerning cultural distance was based on secondary sources of information (see subsection 3.2.). Additionally, the questionnaire had been developed in relation to other research topics (functional upgrading and value creation in foreign subsidiaries). Furthermore, the dependent variable and some of the independent variables were constructs created by us with the use of separate observable indicators. Thus, the probability that the respondents could have predicted the casual relationship applied in the analyzed models is extremely low.

The proportional by chance accuracy rate in the analyses is 35.57% and 38.15% for the first and the second model respectively. A 30% improvement was applied as the criterion for an adequate model (46.25% for the first model and 49.60% for the second model). The fitted models yield 56.80% and 53.60% as classification accuracy. Therefore, the criteria for classification accuracy are satisfied. Altogether the overall fitted models are adequate and the parameter estimates of the independent variables are presented in table 3.

Table 3: The multinomial logit models – likelihood ratio.

Test	Model 1			Model 2		
	Chi-square	df	Sig.	Chi-square	df	Sig.
Model Fitting	203.011	27	0.000	135.103	27	0.000
Goodness-of-Fit						
Pearson	871.591	1101	1.00	827.846	1101	1.00
Deviance	676.574	1101	1.00	693.021	1101	1.00
Likelihood Ratio						
Age (ln)	15.432	3	0.001	12.426	3	0.006
Size (ln)	25.318	3	0.000	8.703	3	0.034
Cultural distance	9.082	3	0.028	6.341	3	0.096
Investment form	30.796	3	0.000	21.152	3	0.000
Sales and marketing	4.218	3	0.239	3.226	3	0.358
Sales dependence	24.745	3	0.000	34.476	3	0.000
Sourcing dependence	24.582	3	0.000	11.255	3	0.010
Technological dependence of foreign investor	26.785	3	0.000	5.342	3	0.148
Technological dependence upon foreign investor	8.050	3	0.045	6.584	3	0.086

Source: own calculations.

The likelihood ratio tests (table 3) indicated that sales dependence (χ^2=24.745, p=0.000, df=3), sourcing dependence (χ^2=24.582, p=0.000, df =3), technological dependence of the foreign investor upon the foreign subsidiary (χ^2=26.785, p=0.000, df=3) and technological dependence of the subsidiary upon MNE (χ^2=8.050, p=0.045, df=3) are significantly related to the SAAS within innovation area. In the case of investments area, sales dependence (χ^2=34.474, p=0.000, df=3), sourcing dependence (χ^2=11.255, p=0.010, df=3) and technological dependence of the subsidiary upon the foreign investor (χ^2=6.584, p=0.086, df=3) are also significantly related to the SAAS, however, at a lower significance level. At the same time, technological dependence of the foreign investor upon the foreign subsidiary is not significantly related to the SAAS within investment area. Thus, there is no ground to reject hypotheses H1a (*the level of the subsidiary's intra-MNE sales is related to SAAS*), H2a (*the level of the subsidiary's intra-MNE sourcing is related to SAAS*) and H3a (*the existence of technological dependence between the foreign investor and a subsidiary is related to SAAS*) for the analyzed areas. Finally, age, size, cultural distance and entry mode are significantly related to SAAS in both, innovativeness and investment, areas. Table 4 shows the results when compared at a group level, allowing for verification of the hypotheses H1b, H2b, H3b and H3c.

The comparisons of the active heteronomy status with the remaining SAAS types within innovation area (model 1AH) show that for sales dependence all coefficients are negative. Nevertheless, this relationship is not statistically significant for comparison with inactively heteronomous subsidiaries. This means that, if internal sales dependence is high, then the subsidiary is more likely to be characterized as actively heteronomous when compared to active autonomy and inactive autonomy statuses. However, this is not true for comparison between actively and inactively heteronomous subsidiaries. Therefore, the hypothesis 1b (a *high level of subsidiary's intra-MNE sales is more likely for actively heteronomous subsidiaries than for any other type of foreign affiliate*) must be rejected for the innovation area. At the same time, for investment area (model 2AH) all coefficients for sales dependence are negative and statistically significant. Thus, H1b holds true for the investment area.

Table 4: The multinomial logit models – coefficients.

| MODEL 1 (AA - innovation) | Innovation area: active autonomy vs | | | | | |
	inactive autonomy		active heteronomy		inactive heteronomy	
Constant	1.144	(1.485)	-0.389	(1.501)	1.972	(1.443)
Age (ln)	1.586***	(0.447)	1.082**	(0.427)	1.062**	(0.417)
Size (ln)	-1.094***	(0.285)	-0.734***	(0.281)	-0.953***	(0.276)
Cultural distance	0.005	(0.003)	0.006**	(0.003)	0.007**	(0.003)
Investment form (partial acquisition)	0.020	(0.764)	3.608***	(0.935)	-2.482***	(0.869)
Sales and marketing	-0.031	(0.026)	-0.01	(0.029)	-0.029	(0.029)
Sales dependence	0.012	(0.017)	0.037**	(0.016)	0.036**	(0.016)
Sourcing dependence	0.077*	(0.046)	0.097**	(0.046)	0.096**	(0.046)
Technological dependency of foreign investor (1)	2.632***	(0.951)	3.608***	(0.935)	2.935***	(0.925)
Technological dependency upon foreign investor (1)	0.087	(0.620)	0.329	(0.628)	-0.386	(0.609)

| MODEL 1 (AH - innovation) | Innovation area: active heteronomy vs | | | | | |
	active autonomy		inactive autonomy		inactive heteronomy	
Constant	0.389	(1.501)	1.534*	(0.888)	2.362***	(0.612)
Age (ln)	-1.082**	(0.427)	0.503*	(0.283)	-0.020	(0.179)
Size (ln)	0.734***	(0.281)	-0.36**	(0.150)	-0.220**	(0.096)
Cultural distance	-0.006**	(0.003)	-0.002	(0.001)	0.001	(0.001)
Investment form (partial acquisition)	3.175***	(1.078)	3.195***	(0.851)	0.693	(0.819)
Sales and marketing	0.010	(0.029)	-0.021	(0.021)	-0.019	(0.012)
Sales dependence	-0.037**	(0.016)	-0.025***	(0.007)	-0.001	(0.003)
Sourcing dependence	-0.097**	(0.046)	-0.020***	(0.007)	-0.001	(0.004)
Technological dependency of foreign investor (1)	-3.608***	(0.935)	-0.976**	(0.396)	-0.673**	(0.278)
Technological dependency upon foreign investor (1)	-0.329	(0.628)	-0.242	(0.388)	-0.715***	(0.261)

| MODEL 2 (AA - investments) | Investment area: active autonomy vs | | | | | |
	inactive autonomy		active heteronomy		inactive heteronomy	
Constant	-0.971	(1,280)	-0.506	(0.989)	0.339	(0.990)
Age (ln)	1.365***	(0.434)	0.502*	(0.292)	0.712**	(0.292)
Size (ln)	-0.403*	(0.243)	0.031	(0.177)	0.136	(0.177)
Cultural distance	0.003	(0.003)	0.003	(0.002)	0.004**	(0.002)
Investment form (partial acquisition)	-2.181***	(0.804)	-2.233***	(0.610)	-2.749***	(0.621)
Sales and marketing	0.038	(0.025)	0.012	(0.024)	0.008	(0.024)
Sales dependence	-0.029	(0.019)	0.020**	(0.009)	0.007	(0.010)
Sourcing dependence	0.002	(0.014)	0.020*	(0.012)	0.022*	(0.012)
Technological dependency of foreign investor (1)	0.524	(0.674)	1.122**	(0.546)	0.859	(0.542)
Technological dependency upon foreign investor (1)	-1.054	(0.649)	-0.629	(0.534)	-1.075**	(0.529)

| MODEL 2 (AH - investments) | Investment area: active heteronomy vs | | | | | |
	active autonomy		inactive autonomy		inactive heteronomy	
Constant	0.506	(0.989)	-0.465	(1.057)	-0.070	(0.539)
Age (ln)	-0.502*	(0.292)	0.863**	(0.372)	0.210	(0.166)
Size (ln)	-0.031	(0.177)	-0.434**	(0.201)	0.105	(0.088)
Cultural distance	-0.003	(0.002)	0.000	(0.002)	0.001	(0.001)
Investment form (partial acquisition)	2.233***	(0.610)	0.053	(0.754)	-0.515	(0.511)
Sales and marketing	-0.012	(0.024)	0.026	(0.019)	-0.004	(0.011)
Sales dependence	-0.020**	(0.009)	-0.049***	(0.017)	-0.013***	(0.003)
Sourcing dependence	-0.020*	(0.012)	-0.018**	(0.009)	0.003	(0.004)
Technological dependency of foreign investor (1)	-1.122**	(0.546)	-0.598	(0.487)	-0.263	(0.249)
Technological dependency upon foreign investor (1)	0.629	(0.534)	-0.425	(0.487)	-0.446*	(0.246)

*p<.10, **p<.05, ***p<.01.
Source: own calculations.

The comparisons of the active autonomy status with the remaining SAAS types within innovation area (model 1AA) show that, for sourcing dependence, all of coefficients are positive and statistically significant. This means that, if internal sourcing dependence is low, then the subsidiary is more likely to be characterized as actively autonomous when compared with other SAAS types within the innovation area. Thus, there is no ground to reject hypothesis 2b (*a low level of subsidiary's intra-MNE sourcing is more likely for actively autonomous subsidiaries*

than for any other type of foreign affiliate) for this area. On the other hand, within the investment area, for the same comparisons (model 2AA), the sourcing dependence variable also has only positive coefficients. However, this relationship is not statistically significant for the comparison between actively and inactively autonomous subsidiaries. Therefore, for the investment area the hypothesis 2b is rejected.

The comparison of the active heteronomy status with the remaining SAAS types within innovation area (model 1AH) show that, for the technological dependence of a foreign investor, all the coefficients are negative. Moreover, all of these relationships are statistically significant. Therefore, within the innovativeness area, if the foreign investor is technologically dependent upon subsidiary, then a subsidiary is more likely to be characterized as actively heteronomous when compared with other SAAS types. Thus, there is no ground to reject hypothesis 3b (*the existence of the technological dependence of the foreign investor upon the subsidiary is more likely for actively heteronomous subsidiaries than for any other type of foreign affiliate*) for innovation area. It is also worth adding that, when comparing active autonomy status with the remaining SAAS types in this area (model 1AA), it is clear that, if the foreign investor is technologically dependent upon a subsidiary, then this subsidiary is less likely to be characterized as actively autonomous when compared with other SAAS types. We have not hypnotized this. However, it is an interesting result, especially in reference to previous studies focusing on the relationship between the autonomy and innovativeness of subsidiaries. At the same time, since the technological dependence of a foreign investor is not significantly related to the SAAS within investment area, hypothesis 3b must be rejected for this area.

Hypothesis 3c (*the existence of the technological dependence of a subsidiary upon the MNE is more likely for actively autonomous subsidiaries and actively heteronomous subsidiaries than for any other type of foreign affiliate*) is rejected as, in both of the models, the relationships were statistically insignificant for at least one necessary comparison.

Referring to the control variables, it is worth adding that, if a subsidiary is older, then the subsidiary is less likely to be characterized as actively autonomous when compared with other SAAS types. This is true for both of the analyzed areas. At the same time, if a subsidiary is bigger, then it is more likely to be actively autonomous within innovation area. On the other

hand, if an investor's entry mode was partial acquisition, then a subsidiary is more likely to be actively autonomous in investment area.

4. CLOSING COMMENTS

Even though autonomy related studies and competitive dynamics literature provide complementary points of view with regard to decision-making and its consequences, researchers have been analyzing these issues separately, and as a consequence they provide an incomplete picture of MNEs' operations. The lack of confrontation between autonomy and corresponding actions constitute a substantial simplification in apprehension of the decision-making rights delegation and its consequences. This research gap is somehow surprising when taking into consideration that autonomy has been used as both, predictor and dependent variable, in studies linking the level of subsidiary's autonomy with inter alia its performance (see, e.g.: Hedlund (1981); Birkinshaw and Morrison (1995); Ambos and Birkinshaw (2010); Gammelgaard et al. (2012); Li et al. (2013)), embeddedness (see, e.g.: Andersson and Forsgren (1996); Jindra et al. (2009); Gammelgaard et al. (2012); Li et al. (2013)), market orientation (see, e.g.: Garnier (1982); Martinez and Jarillo (1991); Harzing 1999; Luo (2001); Li et al. (2013)), initiative (see, i.e.: Birkinshaw et al. (1998); Jindra et al. (2009); Ambos et al. (2010)) and innovativeness (see, e.g.: Ghoshal (1986); Ghoshal and Bartlett (1988); Taggart and Hood (1999); Boehe (2008)). Even more so, as the importance of specific subsidiary actions has been recognized, inter alia, in the competitive dynamics literature, where characteristics of the MNEs' actions are considered as the explanatory factors of their performance (see, e.g.: Ferrier et al. (1999); Smith et al. (2001); Ferrier and Lee (2002); Rindova et al. (2010); Bridoux et al. (2013)). We assert that understanding of causal relationships among the autonomy and various MNE-related issues requires considering not only who makes the decisions, but also what actions those decisions trigger.

Our study makes several contributions to the existing research. First, we introduce subsidiary's autonomy activity typology. Second, we demonstrate that although majority of the analyzed SAAS's determinants are similar for different autonomy-actions areas, there also exist differences in this regard (see, e.g., the technological dependence of the foreign investor). Third,

our results show that even in the cases in which a SAAS's determinant for different autonomy-actions areas is the same, its relationship with a particular SAAS type can be different (see, sales dependence and sourcing dependence) for specific areas. We believe our findings provide a perspective for the inclusion of a new, potentially insightful, variable into subsidiary-related research – SAAS. Based on this perspective, our study creates an avenue for research on SAAS itself and the relations between SAAS, performance, power of subsidiaries, etc.

We are aware of the limitations of our empirical study. First, of all we have focused only on two types of autonomy-actions areas (innovation and investments), so the results should not be generalized for other areas. Secondly, our models are not equally accurate in terms of the classification of particular SAAS types. This was especially visible for inactively autonomous subsidiaries within investment area, where our classification accuracy was significantly higher than the proportional by chance accuracy rate, but still substantially lower than for the other SAAS types in model 2 or model 1 in general. Thirdly, we have focused only on subsidiaries located in CEE countries. It is possible, that subsidiaries located in this region have specific characteristics that we have not managed to capture. Thus, studies of subsidiaries located in other parts of the world could reflect on that. Additionally, while searching for SAAS determinants, we have focused on selected intra-firm interdependencies. However, the inclusion of other variables in future studies, for example, external and internal embeddedness, could provide additional valuable information. We find those two variables potentially interesting as they extend understanding of interdependencies existing between subsidiaries and their internal and external networks. Finally, other action proxies could be found, some of which could be more precise (this is especially relevant for the innovation area). Being aware of this study's drawbacks, we should recall that this research is only first attempt to fill in the identified research gap.

END NOTES

[1] When talking about MNEs that are centralized and decentralized within particular areas of decision-making, decentralization refers to the transfer of authority. However, in the analysis of a subsidiary's autonomy activity status, we refer directly to a foreign affiliate as a unit of an MNE and focus on whether this unit is independent in terms of making decisions or whether it is subjected to the HQ's decisions. From a purely definitional point of view "heteronomous" (subjected to external controls and impositions) is the opposite of "autonomous". Furthermore, both terms were introduced as an antonym into moral psychology studies (Kant, 1785), where heteronomous agents are perceived as the ones, who draw principles of action from outside themselves, for example, by being influenced by the will of others. Thus, we believe that, in the context of this paper, it is more accurate to speak of autonomous and heteronomous subsidiaries. Consequently, even though, to the best of our knowledge, this has not been previously done in international business studies, in the article we use "heteronomous" as the opposite of "autonomous".

[2] Action theory perceives the actor as a person implementing actions, which is not always equal to the person who makes the decision.

[3] For an overview, see also: Dut (2013).

[4] This can be explained by the fact that competitive dynamics studies are mainly based on secondary sources of information involving, for example, press releases etc. Meanwhile, collecting data concerning a subsidiary's autonomy requires access to primary sources of information. Nevertheless, we have additionally validated this assumption within the existing literature. In particular, we have looked for simultaneous use of the terms "competitive", "dynamics" and "subsidiary" in abstracts, titles and key words on the Ebsco, Emerald, Sage Research, Proquest and Science Direct electronic databases. These databases cover all the major management and international business journals. Although the list of the provided articles was relatively long, when taking into consideration their contents, only one paper (see: Yu and Cannella (2005)) combined actions of subsidiaries with control issues of MNEs.

[5] The described issue is not directly addressed in the article. Noticing the discussed relationships requires confronting the information presented in separate parts of the article (see pages 38 and 40).

[6] The actual number of the introduced innovations would be closer to our understanding of the proxies of actions.

[7] Depending on the area of investigation and the applied proxies of actions, either the number of activities or the values characterizing them can be more appropriate.

[8] A multidimensional constellation of conceptually distinct characteristics which commonly occur together (Meyer et al., 1993).

[9] Respecting the differences between East and West Germany, due to (among other issues) the existence of a subsidiary and the investor within the same institutional environment, we have decided not to treat such cases as foreign investments.

[10] There are different types of autonomy, for example strategic or operational (see, e.g.: O'Donnell (2000, p. 528)) and assigned, earned or acquired (see, e.g.: Young and Tavares (2004, p. 228)). The autonomy of subsidiaries can be also analyzed according to business functions (see, e.g.: Garnier et al. (1979); Jakobsen and Rusten (2003); Jindra et al. (2009); Li et al. (2013)) and specific decision areas (see e.g.: Gates and Egelhoff (1986); Taggart (1996); Edwards et al. (2002); Wang et al. (2014)). In the case of the application of the mentioned divisions, subsidiaries may have high levels of autonomy in some areas and low levels in others.

[11] The mean investment level in the sample amounted to 17.11%. However, 54.9% of subsidiaries invested values of up to 8% of their average annual turnover, while the remaining 45.1% invested 10% or more therein. Since the distribution of the investment level was skewed we decided to base our division on the value closer to the median. Additionally, we have tried to divide the population into active and inactive at the level of 8% investment and above. We found results which were consistent with the results presented in the paper.

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