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Subsidiary contribution to the MNC – impact of strategic initiatives

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ABSTRACT

The purpose of this paper is to investigate subsidiary strategic initiatives in the light of dynamic headquarters-subsidiary relations. The study is based on cross-sectional questionnaire survey data from 105 subsidiary top managers in subsidiaries located in Europe, Asia, and the USA within the ICT industry. The assumption of similar behavior by subsidiaries in the same industry is a sufficient motive for concentration on single industry. Theoretical contribution is reflected in the testing of models in subsidiaries within single rapidly growing turbulent industry that is abundant with hyper-competition and competitive dynamics, and where strategic initiatives are fundamental for survival, and by modeling variables in a different way than previously explored. Furthermore, the additional contribution is reflected in the conceptual model of the interdependence of subsidiaries and MNC in the process of subsidiary strategic initiatives, and besides providing a new perspective in this area, provides a framework for future research. The obtained results show that subsidiary networking and autonomy have a significant impact on subsidiary strategic initiatives whereas top management support and subsidiary innovativeness have no impact on the same variable. The results show that subsidiary strategic initiatives have a significant impact on its contribution to the multinational corporation (MNC).

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1. Introduction

The subsidiary strategic initiatives are defined as entrepreneurial activities performed by subsidiaries within MNCs (Birkinshaw & Ridderstråle, 1999). The area of subsidiary strategic initiatives has become an area of increased interest in HQs' awareness of the growing pragmatic state of the country towards the development of industrial clusters and understanding of the impact that subsidiaries can have on local economies in the countries in which they operate (Birkinshaw et al., 1998). MNCs are becoming aware of their subsidiaries' power that can actively contribute to business

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excellence by strengthening their position in the home country through external network development. Studying subsidiary initiatives is important since MNCs' competitive advantage depends on their superiority in utilizing innovations generated by subsidiaries (O'Brien et al., 2019).

Considering MNCs as complex, multifaceted entities, it is not surprising that they have been, and are still, studied through many conceptual lenses. In this paper, as in much of the recent literature of the MNC (Ambos et al., 2010; Birkinshaw, 2014; O'Brien et al., 2019), the focus is on the critical role played by subsidiaries as contributors to the development of firm-specific advantages. Although the phenomenon of the subsidiary strategic initiative has received increasing attention in recent years, it remains underexplored in the literature. Starting in the mid-1990s, the subsidiary development research stream extends the scope to cover how subsidiary roles have changed over time, from being passive implementers to become active contributors to the development of firm-specific advantages (Birkinshaw & Morrison, 1995; Roth & Morrison, 1992; Taggart, 1997).

The combination of both traditional and contemporary perspectives to the phenomenon of strategic initiatives increases understanding how subsidiary role contributes to the formation of strategic initiatives. The contributions presented point to the fact that the domains of strategic initiatives are not clearly framed, making them ideal candidates for conducting research that consequently points to new conclusions. The provisional conclusion is that MNC subsidiaries can not only contribute to firm-specific advantage creation, they can also drive the process. The fundamental problem lies in measuring the success of a strategic initiative contribution and dilemmas, whether it can be uniquely determined as a result of strategic initiatives or, other determinants determine it.

The paper is focused on internal determinants that have an impact on the phenomenon of subsidiary strategic initiatives and the impact of subsidiary strategic initiatives on MNC. The research model used in this paper represents a different approach than in previous researches, setting subsidiary strategic initiatives as a variable mediator between subsidiary internal determinants and MNC internal determinants. Internal determinants explain the subsidiary context that is generally shaped by HQ. Latent variable subsidiary strategic initiatives could be seen as a mediator between internal determinants shaped by HQ and contribution that refers to the perceived impact of subsidiaries on MNC. Accordingly, subsidiary strategic initiatives are observing as a mechanism of its contribution to the MNC which implies the fact that although HQ defines subsidiaries' structural context, the level of entrepreneurship within subsidiaries will influence the manifestation of structural context regarding contribution to the MNC. The model used in this paper, unlike other literature, presents how internal determinants together with the subsidiary strategic initiatives phenomenon contribute to the MNC, thereat emphasizing the phenomenon of subsidiary strategic initiatives as a critical factor which to a greater or lesser extent contributes to the MNC.

The quantitative research is based on a rigorous empirical test focused on a large sample of subsidiaries from different countries within a single industry. Subsidiaries in 10 countries within the ICT industry – served as a sampling frame. Plenty of

research was oriented on a few countries as Canada, UK, Sweden, and Japan (Birkinshaw, 1995, Ambos et al., 2010) but no researches were focused on a single industry.

2. Literature review

2.1. Structural context of subsidiaries

Subsidiary performance is simultaneously affected by factors at multiple levels, including the HQ, the local environment, and the structural context of the subsidiary itself (Sarabi et al., 2020). Structural context includes different aspects, and some of them are top management support, the importance of networking, innovativeness of subsidiaries, and a degree of autonomy. According to many studies (Ambos et al., 2010, Birkinshaw et al., 2000), this context is broader but in this study, four variables have been selected as prominent influencers on subsidiary growth and development, as well as contributors to the overall strategy of MNC. Furthermore, in many studies (Birkinshaw & Hood, 1998, Dimitratos et al., 2014) mentioned variables were used in the empirical studies that tried to investigate how subsidiaries can contribute to the MNC. Below are presented the mentioned variables.

2.1.1. Top management support

The role of the top management is to lead the subsidiary towards achieving objectives. Subsidiary top management performs two roles, the role of leader and the role of corporate entrepreneur. Kanter (1985) introduces the concept of entrepreneurial culture and points out that the role of subsidiary top managers is to create an environment in which governs entrepreneurial culture which leads to strategic initiatives taking and risk-taking. Birkinshaw (1995) points out that the first and most crucial role of subsidiary top management is to focus the entrepreneurial efforts of middle management since they are the key players in identifying opportunities and undertaking strategic initiatives, while the top management should ensure their implementation. Another role of subsidiary top management is to support important strategic initiatives actively. The subsidiary top management should be well-networked, both with the HQs and with other subsidiaries, and capable of ensuring the successful implementation of subsidiary strategic initiatives (Birkinshaw, 1995). The role of subsidiary top managers is to initiate subsidiary strategic initiatives and, consequently, to ensure the expansion of existing responsibilities or even international responsibility (Bishop & Crookell, 1986; Burgelman, 1983). O'Brien et al. (2019) argue that the subsidiary CEO is the central actor who is responsible to translate the benefits of subsidiary entrepreneurship for initiatives realization. Sarabi et al. (2020) argue that subsidiary CEOs with stronger entrepreneurial leadership can benefit subsidiary performance. According to Schweizer and Lagerström (2019), subsidiary top managers, in order to be successful, need to avoid having their headquarters perceive an initiative as a wag the dog initiative by balancing their need to sell persistently the initiative with avoiding negative attention.

2.1.2. Networking

Researches confirm networking as one of the company's competencies and consider it as a critical element of the entrepreneurial process, which implies undertaking strategic initiatives (Jack & Anderson, 2002). Good networking allows access to various valuable resources such as physical resources or intangible resources such as advice and/or information (Singh et al., 1999). The researchers also consider that networking, except for access to valuable resources, is also of particular importance for reducing the costs of resources that are necessary for undertaking subsidiary strategic initiatives (Johannisson, 2000).

Researches have also confirmed that subsidiaries, which are developing internal and external networking, show a higher level of entrepreneurial behavior, i.e., they undertake more strategic initiatives than subsidiaries that are not working on network development (Stevenson & Jarillo, 2007). In addition to a greater orientation towards strategic initiatives, researchers have confirmed the connection of the level of networking with innovative behavior of subsidiaries which also represents one of the internal determinants that affect the undertaking strategic initiatives in subsidiaries (Andersson et al., 2005).

Subsidiary internal network refers to the internal market, i.e. an internal network in which international subsidiaries operate. The relative strength of the internal market will also shape possible options for the behavior of subsidiaries, where subsidiary top management will undertake strategic initiatives following threats and market opportunities to ensure the excellence of the operations of subsidiaries (Birkinshaw et al., 2005).

Subsidiary external network consists of stakeholders with whom the subsidiaries are interacting, and they are located outside the boundaries of the multinational corporation (Dimitratos et al., 2014).

2.1.3. Innovativeness

Subsidiary innovativeness is reflected in the development of ideas which are preceded by the undertaking of strategic initiatives (Birkinshaw & Hood, 1998; Ghoshal & Bartlett, 1990) which contribute to their own and competitive advantages of headquarters (Ambos et al., 2010; Birkinshaw et al., 1998). Subsidiary innovativeness is partially explained through integration into the internal and external environment (Anderson et al., 2002). According to Franko (1989), innovation of subsidiaries enables the improvement of subsidiary capabilities and strengthening of the competitive position in the market.

Recent researches prove that subsidiaries have a significant role in innovation within an MNC (Venaik et al., 2005) and, consequently, in the global expansion of innovative activities.

The innovation of subsidiaries, apart from the mentioned events on the external and internal markets, affects decisions about the investment of headquarters in activities such as research and development (R&D) in subsidiaries (Ettlie et al., 1984). Innovation can also help subsidiaries to seize a better position within an MNC (Anderson et al., 2007).

2.1.4. Autonomy

Autonomy is defined as the degree to which subsidiaries can make decisions independently (Roth & Morrison, 1992). A high degree of autonomy occurs when subsidiaries participate in strategic decision making, and a low degree of autonomy implies the adoption of strategic decisions which were made by headquarters (Birkinshaw & Morrison, 1995).

The concept of autonomy in researches has almost always been positively associated with undertaking strategic initiatives of subsidiaries (Zahra, 1991). Other researchers have linked the concept of autonomy with the potential of innovative subsidiaries (Gupta & Govindarajan, 1991; Jarillo & Martiánez, 1990). Birkinshaw and Morrison (1995) point out that the exceptionally high and low degree of autonomy (but not the middle degree) leads to better subsidiary performance and thus to a more considerable contribution to the MNC.

McDonald et al. (2008) prove a positive connection between a degree of autonomy and subsidiary performance. On the other hand, a too high degree of autonomy can lead to excessive distance from the headquarters and thus occupation of peripheral positions within an MNC which affects the reduction of support of headquarters in future periods (Phelps & Fuller, 2001).

2.2. Subsidiary strategic initiatives

The literature provides various typologies of subsidiary initiatives based on the opportunity pursued (Birkinshaw, 1995) or the internal and external knowledge, source and capabilities leveraged to identify and exploit the initiative (Ahsan & Fernhaber, 2019). Kirzner (1973) considers that market opportunities are the initiators of subsidiary strategic initiatives which are defined as actions taken by subsidiary top management in response to observed market opportunities. According to Kanter (1982) subsidiary strategic initiatives represent the identification of existing opportunities in which the existing corporate resources can be utilized and expanded. On the other hand, Burgelman (1983) characterized subsidiary strategic initiatives as critical creators of values that influence the role of subsidiaries as well as the position within an MNC. Subsidiary strategic initiatives represent entrepreneurial activities that lead to the expansion of their areas of responsibility. According to Egelhoff (1982), subsidiary strategic initiatives also represent the entrepreneurial behavior of subsidiaries leading to changing their roles. Birkinshaw and Ridderstråle (1999) simply define subsidiary strategic initiatives as entrepreneurial actions that affect the development of a subsidiary. Gupta and Govindarajan (2000) view a subsidiary strategic initiative as a proactive behavior of subsidiaries, which deepens the link between them and HQ. According to Phelps and Fuller (2001), successful strategic initiatives lead to better positions of subsidiaries within an MNC. Rugman and Verbeke (2001) specify subsidiary strategic initiatives as activities that occur outside the HQ (location) and allow entering new business ventures. These activities relate to a new product developed by subsidiaries, preparing for merging other companies or attracting new investors. Sargent and Matthews (2006) define subsidiary strategic initiatives as activities through which subsidiaries can improve their technological and managerial skills.

Dörrenbächer and Geppert (2009) point out that strategic initiatives are influenced by three factors, the way the HQ directs them, the resources it owns, and the specifics of the location and industry in which it operates.

Subsidiary strategic initiatives are essential for an MNC for two reasons (Birkinshaw, 2014). The first reason is that through them, MNC is entering new business opportunities in markets around the world. Another reason is that they improve operational efficiency through internal communication between subsidiaries.

Strategic initiatives are desirable because they can have positive consequences for the whole enterprise, but in practice, they can be described as ‘elusive beast’ which means that they are seldom visible and rarely are realized. Many MNCs that have been the subject of research hinder the entrepreneurial spirit of their subsidiaries, while others agree with the concept of a subsidiary strategic initiative, but they disable their development in practice. Birkinshaw (2014) points out that subsidiary managers need to be resourceful, responsive, persistent, and ‘lucky’ if they want to implement their strategic initiatives effectively. The system that exists in all organizations and disables the development of strategic initiatives is called the corporate immune system, and it exists in most large organizations. Its role is to disable the development of subsidiary strategic initiatives because of the fear of endangering the rest of the organization (Birkinshaw & Hood, 1998). Subsidiary strategic initiatives are important because they serve to understand that changes can occur even far from the HQ (Cantwell & Mudambi, 2005). In addition to this, the concept of strategic initiatives is also important for understanding other determinants of subsidiaries such as roles, areas of responsibility, capabilities, and relationships with the parent company. All of these determinants are related to strategic initiatives (Ambos et al., 2010).

3. Methods

According to the theoretical model, the following model and hypotheses are proposed (Figure 1).

H1. The subsidiary top management support is positively associated with subsidiary strategic initiatives.

The subsidiary top management is in charge of creating an environment in which subsidiary strategic initiatives and risk-taking are positively considered (Kuratko et al., 1990). Studies confirm that an environment that positively looks at initiatives and taking risks will lead to more subsidiary strategic initiatives (Birkinshaw et al., 1998). Also, Ghoshal and Bartlett (1990) point out that subsidiary top management should be the most responsible in developing an open environment where employees are encouraged to take risks which ultimately lead to many strategic initiatives taken by employees.

H2. The subsidiary networking is positively associated with subsidiary strategic initiatives.

According to Jack and Anderson (2002), the development of a network of subsidiaries is one of the key elements influencing the subsidiary strategic initiatives. Better development of the network of subsidiaries leads to better access to different types of resources, such as physical capital and intangible resources such as information (Hoang & Young, 2000). Also, other researchers emphasize the importance of

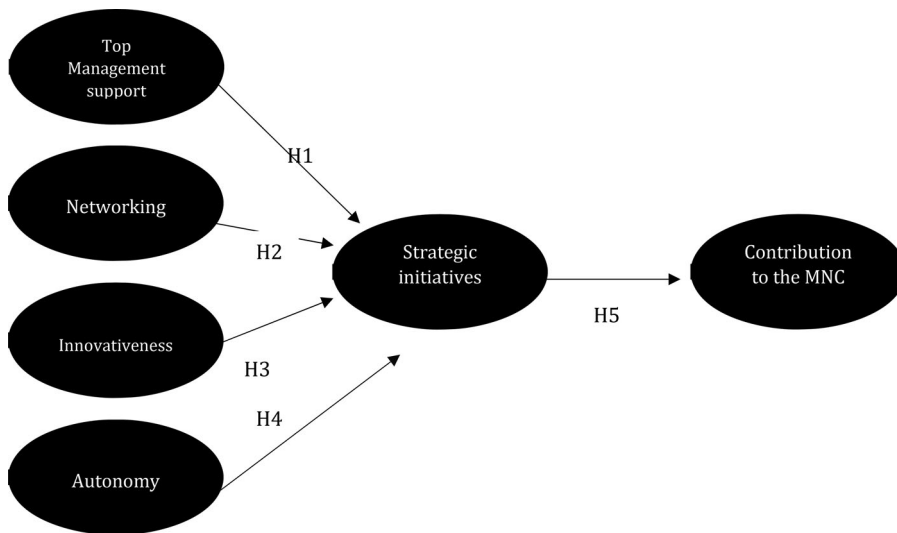


Figure 1. The hypothesized model.

Source: Authors.

developing a network of subsidiaries, not only because of access to different resources but also because of the possibility of lowering the cost of individual resources (Johannisson, 2000). Stevenson and Jarillo (2007) argue that the development of a network of subsidiaries leads to promoting resource sharing and increasing the visibility of subsidiaries in relation to other subsidiaries.

H3. The subsidiary innovativeness is positively associated with subsidiary strategic initiatives.

Subsidiary innovation demonstrates the tendency to support experiments, change, creativity, and thus represent a departure from the established practice of doing business (Guth & Ginsberg, 1990; Lumpkin & Dess, 1996). In literature, subsidiary innovation is perceived as one of the key dimensions influencing the subsidiary strategic initiatives (Covin & Slevin, 1991; McDougall & Oviatt, 2000).

H4. The subsidiary autonomy is positively associated with subsidiary strategic initiatives.

The primary objective of the subsidiary is to successfully respond to the expectations of the HQ, in order to achieve business goals in line with expectations. With the desire of a subsidiary for better positioning to an HQ, the subsidiary top management should develop much wider and more ambitious goals than those that only bring the planned results. Looking from a resource perspective, it is expected that subsidiaries will try to increase their negotiating power within an MNC (Andersson et al., 2007), which can be achieved by increasing control over strategic resources. The mentioned negotiating power can be used to increase the autonomy of a subsidiary (Ambos et al., 2010).

Given the above, it is expected that autonomy will be a potentially important factor for subsidiaries, once they achieve the goals expected from them. The issue here is how the degree of autonomy will help subsidiaries in undertaking subsidiary strategic initiatives. Subsidiary strategic initiatives are allowing an increase in the

subsidiary resource base. In line with the extent to which a subsidiary has succeeded in achieving its strategic initiatives, its resource base and negotiating power will be increased to its HQ (Ambos et al., 2010). The HQ will consider subsidiary as more reliable because they have less knowledge of new products or investments (Astley & Sachdeva, 1984), or it will look more credible for the success achieved by undertaking subsidiary strategic initiatives (Ghoshal et al., 1994).

H5. The subsidiary strategic initiatives are positively associated with the subsidiary contribution to the MNC.

Successful subsidiary strategic initiatives strengthen the position of the HQ with respect to other subsidiaries (Ambos et al., 2010). Subsidiary strategic initiatives can also focus on the local development of a subsidiary, but the focus of this paper is on subsidiary strategic initiatives that contribute to the HQ and potentially relevant to the entire MNC. Examples of new R&D operations that contribute to the development of products that can be marketed in all international business markets (Andersson et al., 2007; Delany, 2000) can be mentioned as an example. Research conducted by Birkinshaw (1995), Bishop and Crookell (1986), Ghoshal (1986) also show that subsidiary strategic initiatives play an important role and affect the contribution of subsidiaries to the HQ. Subsidiaries can be distinguished and differentiated from other peer subsidiaries by leveraging strategic initiatives and affecting their HQ.

4. Data

The research methodology includes two parts, a sample of research and a measuring instrument. For the purpose of this research, a survey questionnaire was used for subsidiary top management within the ICT industry. Likert scale 1–7 was used. In addition to questions that represented manifest variables to explain latent variables, the questionnaire also contains issues related to subsidiary as well as the respondent.

Foreign-owned subsidiaries in 10 countries - Croatia, Germany, UK, Ireland, Czech Republic, Slovakia, Slovenia, Hungary, USA, and Japan, within the ICT industry – served as a sampling frame for this study. The bulk of the data used in this analysis came from a survey based on the perception of subsidiary managers in the ICT industry. This approach enables to collect data on the cognitive dimensions of headquarters-subsidiary relationship, which matter more than objective accounts, as managers act based on their perceptions.

4.1. Sample

The survey was e-mailed to top subsidiary managers working in ICT companies in different countries. Of the 1300 questionnaires distributed, 105 completed and usable questionnaires were returned, representing a response rate of 8.07 percent. Questions related to the respondents relate to demographic characteristics, while issues related to the subsidiary relate to the year of establishment, the form of establishment, the number of employees, the number of activities performed, the HQ and the percentage of ownership. [Table 1](#) lists the respondents' demographic characteristics.

Table 1. Respondents and subsidiary characteristics.

N = 105		Percent share for each characteristic
Age	31–40	21%
	41–50	60%
	51–60	14%
	more than 60	4%
Gender	Female	10%
	Male	90%
Education	High school	5%
	Undergraduate	4%
	Graduate	46%
	Postgraduate	46%
Position	Low level management	0%
	Middle level management	0%
	Top management	100%
Subsidiary establishment	Acquisition	15%
	Joint Venture	2%
	Merger	5%
	Greenfield	78%
Parents ownership	Above 50%	90%
	Below 50%	10%
HQ	Corporate HQ	39%
	Regional HQ	61%
	Local HQ	0%
	Divisional HQ	0%
HQ location	Africa or the Middle East	4%
	Asia	10%
	Europe	70%
	North America	12%
	Australia & Oceania	3%
	South or Latin America	1%
Number of employees in subsidiary	<50 employees	22%
	50–250 employees	20%
	>250 employees	58%

Source: Authors.

4.2. Measures

Construct measures were adopted from earlier research where possible, most notably from previous MNC subsidiary studies by Roth and Morrison (1992) and Ghoshal (1986). Measures were also taken to limit potential common method variance, that is, dependent and independent variables or items for constructs were placed at different positions in the survey, or scale anchors were changed. In order to diminish the effects of consistency artifacts dependent variables are placed after the independent variables in the survey. From the flow of the survey, it was unlikely that respondents could map hypothesized relations between constructs, thereby avoiding social desirability bias. In order to further reduce the risk of social desirability bias informants were asked to answer survey questions in an indirect way, from the current perspective of a group of managers rather than from their own.

The 6-items from Kuratko et al. (1990) was used to measure the variable top management support. Mentioned items were concerned with the openness of the subsidiary's working environment to risk-taking and entrepreneurship. The variable networking was operationalized using a 6-item scale taken from Dimitratos et al. (2014) that asked about subsidiary cooperation with HQ, peer subsidiaries, its customers as well as with its suppliers, research & academic institutions and government or professional associations. During the EFA (exploratory factor analysis) two of the

items were dropped because they loaded very weakly on the construct, leaving four items. Autonomy was measured with a 6-item scale taken from Roth and Morrison (1992) that asked subsidiary managers to identify whether certain strategic decisions were made with or without much consultation with HQ. During the EFA three of the items were dropped because they loaded very weakly on the construct, leaving three items. Subsidiary innovativeness was measured using a 3-item scale taken from Dimitratos et al. (2014). All three items loaded strongly on a single construct in the factor analysis. The operationalization of subsidiary strategic initiatives was adapted from Bishop and Crookell (1986). The scale included twelve items and referred to various aspects of subsidiary strategic initiatives. During EFA seven of the items were dropped, leaving five items. Contribution to the MNC was measured by a scale adopted from Ambos et al. (2010). Respondents were asked to indicate their perception of positioning its subsidiary towards HQ with respect to other subsidiaries. All four items loaded strongly on a single construct in the factor analysis.

5. Discussion

SEM results are presented in two stages. In the first stage, the measurement model is presented to show that the measures used as operationalization of the underlying constructs are reliable and valid. In the second stage, the path coefficients between constructs can be interpreted.

The measurement model was assessed by looking at the internal consistency between items intended to measure the same construct, and the discriminant validity between constructs. Internal consistency was determined using Cronbach's alpha. As shown in Table 2, all the constructs exceeded the level of 0.6 which is considered very good for exploratory research.

The Kaiser-Meyer Olkin (KMO) and Bartlett's Test measure of sampling adequacy were used to examine the appropriateness of Factor Analysis (Table 3).

The KMO statistic of 0.79 is also large (greater than 0.5). The approximate of Chi-square is 1066.66 with 231 degrees of freedom, which is significant at 0.05 level of significance. Hence Factor Analysis is considered as an appropriate technique for further analysis of the data (Table 4).

The pattern matrix is obtained by a Promax rotational method, which rotates the initial factor structure according to the target structure, thus achieving a simpler structure. Because some variables did not rotate around common factors and did not have a factor load of more than 0.5, it was necessary to exclude them from further

Table 2. Cronbach's Alpha.

Construct	Number of items	Cronbach's Alpha
Top management support	3	0.917
Networking	4	0.726
Innovativeness	3	0.615
Autonomy	3	0.676
Strategic initiatives	5	0.808
Contribution	4	0.852

Source: Authors.

Table 3. KMO and Bartlett's Test of Sphericity.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.79
Bartlett's Test of Sphericity	Approx. Chi-Square	1066.66
	df	231
	Sig.	.000

Source: Authors.

Table 4. Pattern Matrix.

Construct	Factors					
	1	2	3	4	5	6
networking_3				0.516		
networking_4				0.627		
networking_5				0.544		
networking_6				0.903		
innovativeness_1						0.682
innovativeness_2						0.59
innovativeness_3						0.575
top management support_3		0.891				
top management support_4		0.834				
top management support_5		0.852				
initiatives_1			0.715			
initiatives_3			0.886			
initiatives_4			0.852			
initiatives_10			0.534			
initiatives_12			0.587			
autonomy_2					0.565	
autonomy_5					0.671	
autonomy_6					0.801	
contribution_1	0.711					
contribution_2	0.912					
contribution_3	0.908					
contribution_4	0.612					

Source: Authors.

analysis. Furthermore, all manifest variables that did not have a factor load more than 0.5 were excluded from further analysis.

The Composite Reliability (CR) and Average Variance Extracted (AVE) were used to test the measurement model's convergent validity. The item had a loading factor of greater than 0.50. This shows that there exist some common points of convergence (Hair Jr et al., 2010). The CR shows results which are higher than 0.70 which means that the variables did converge at some point. The Average Variable Extracted (AVE) values for the variables are above 0.50. This shows that the latent variables also had a high convergent validity (Hair Jr et al., 2010). The Maximum Shared Squared Variance (MSV) was used to test the discriminant validity of the measurement model. The MSV result needs to be lesser than the AVE for the discriminant validity (Hair Jr et al., 2010). Table 5 shows that the MSV results are lesser than the AVE values which means that the discriminant values hold, and the measurement model is according to the assumptions which were initially made (Table 5).

The overall model fit reported in Table 6 showed the overall fit indices for the CFA model were acceptable, with $\chi^2/df = 1.3$, CFI = 0.938, GFI = 0.931, AGFI = 0.878, RMSEA = 0.044. Based on suggestion by Hair Jr et al. (2010), at least three indices must be fitted well to determine the model fit. Keeping with the advice of

Table 5. Convergent and discriminant validity.

Constructs	CR	AVE	MSV
Initiatives	0.701	0.541	0.190
Networking	0.893	0.807	0.144
Top management support	0.760	0.615	0.296
Innovativeness	0.741	0.590	0.249
Autonomy	0.833	0.626	0.296
Contribution	0.860	0.610	0.223

Source: Authors.

Table 6. Model fit indices for CFA model.

Fit index	Observed value
Chi-square/df (cmin/df)	1.3
Comparative Fit Index (CFI)	0.938
Goodness-of-Fit Index (GFI)	0.931
Adjusted Goodness-of-Fit Index (AGFI)	0.878
Root Mean Square Error of Approximation (RMSEA)	0.044

Source: Authors.

Hooper et al. (2008) the model fit well since $RMSEA = 0.0044 < 0.08$, $CFI = 0.938 > 0.90$ and $\chi^2/df < 3$ are very good fit.

The tests of reliability, the convergent validity, and the discriminant validity meet the criteria of the model's measurement quality. This shows that the measurement model is sufficient for the testing of the path coefficients which seek to determine the theoretically developed relationship of the model to the study which is conducted. The indices of the model fit reported that the overall fit was within an acceptable range as can be seen in Table 7 with chi-square/df = 1.325, the comparative fit index (CFI) = 0.931, the Goodness-of-Fit Index (GFI) = 0.924, the adjusted goodness-of-fit Index (AGFI) = 0.875, the root mean square error of approximation (RMSEA) = 0.05, which shows that the SEM model is acceptable and fit to the data (Hair Jr et al., 2010).

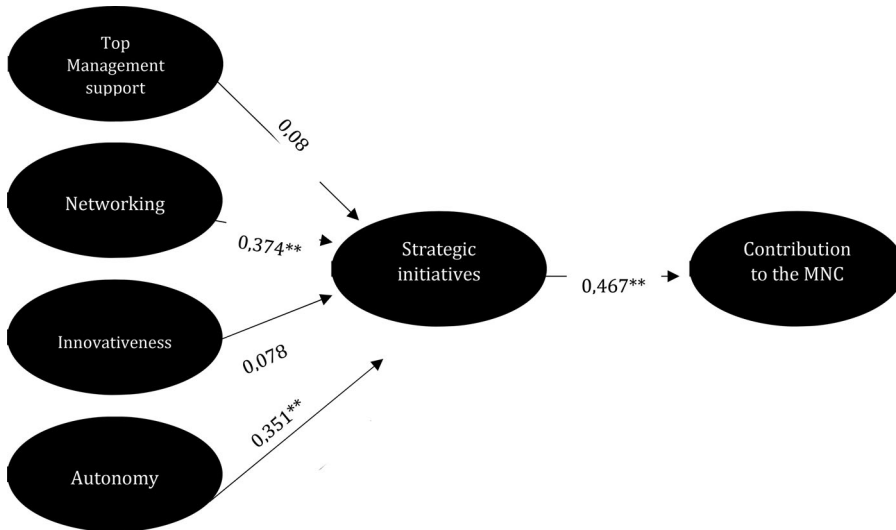
Table 7 shows the indices of structural model reliability and degree of model suitability with analyzed data. All index values are satisfactory and consistent with the recommended values suggesting that a model is acceptable for further analysis (Hu & Bentler, 1999). The next step is the analysis of the structural model itself, with the aim of testing set hypothesis. Figure 2 shows the structural model which is tested in the research and it was calculated in AMOS version 24.

The statistical analysis show strong relationships between networking and initiative, between autonomy and initiative, and between initiative and contribution to the MNC. However, there was no relationship between top management support and initiative, and innovativeness and initiative. The insignificant relation was the one between top management support and strategic initiatives, that is, hypothesis 1. This result is in line with Birkinshaw et al. (1998). The networking is positively associated with strategic initiatives where an increase of 0.374 percent is experienced when networking is increased by 1 percent. The result indicates significant importance of intra and extra network since higher developed networking results in higher social embeddedness where a subsidiary in interaction with others can discover new opportunities which can lead to more strategic initiatives.

Table 7. Model fit indices for the structural model.

Fit index	Observed value
Chi-square/df (cmin/df)	1.325
Comparative Fit Index (CFI)	0.931
Goodness-of-Fit Index (GFI)	0.924
Adjusted Goodness-of-Fit Index (AGFI)	0.875
Root Mean Square Error of Approximation (RMSEA)	0.05

Source: Authors.

**Figure 2.** The final structural model.** $p < 0.01$.

Source: Authors.

The variable networking significantly influences the contribution to the HQ through the variable of the subsidiary strategic initiative as the indirect variable. The specific intensity of the variable networking influence on the variable contribution can be estimated by calculating the indirect impacts of a mismatch of standardized structural coefficients between the variable networking and the variable contribution. The value of the mentioned indirect variable networking on variable contribution is 0.174 (0.374×0.467), which suggests that the variable contribution will increase by 0.174 percent if the variable networking increases by 1 percent.

Innovativeness, such as top management support, has no significant impact on subsidiary strategic initiatives. Dimitratos et al. (2014) in their research have proved that innovativeness has a positive impact on subsidiary strategic initiatives. The problem might be in a small number of manifest variables or because all respondents are from ICT industry where all solutions are perceived as innovative one. Mentioned industry is innovative per se, and since this research has been conducted among the largest MNC within ICT industry, it can be concluded that innovativeness is an integrated part of their daily business and it is not considered as something out of usual business.

Autonomy is positively associated with strategic initiatives where an increase of 0.351 percent is experienced when the networking is increased by 1 percent. For subsidiary top management to undertake strategic initiatives, is a prerequisite for at least some discretion in decision making. Descriptive data analysis in this study has shown that subsidiaries have on average an above-average level of autonomy. When subsidiaries would have no autonomy, they would not be able to undertake or at least try to undertake strategic initiatives. This hypothesis has been proved many times in different research papers (Ambos et al., 2010; Dimitratos et al., 2014). Similarly, Birkinshaw (1995) has confirmed how lack of autonomy decreases the number of a strategic initiative undertaken and therefore smothers the entrepreneurial spirit within subsidiaries. Of all the variables that are assumed to influence strategic initiatives, autonomy is the most frequently mentioned and thus an essential part of all studies of this type.

Strategic initiatives are positively associated with contribution to the MNC where an increase of 0.467 percent is experienced when the strategic initiatives are increased by 1 percent. Moreover, this result indicates that more strategic initiatives undertaking leads to a higher contribution to the MNC which implies better position within MNC that consequently leads to the new responsibilities, new roles, increased number of resources, budgets, etc.

6. Conclusion

The results confirm the mediate impact of subsidiary strategic initiatives between internal determinants that shaped subsidiary structural context and contribution to the MNC providing a better understanding of its contribution improvements to the MNC.

Five hypotheses have been detected. Four hypotheses presumed a positive association between subsidiary internal determinants, while the fifth hypothesis presumed a positive association of strategic initiatives and contribution to the MNC.

The first hypothesis that has not been confirmed is hypothesis H1 that assumes that the openness of subsidiary top management is positively associated with subsidiary strategic initiatives. The openness of subsidiary top management is a latent variable that measures the environment of a subsidiary strategic initiatives, whether it is an environment-oriented risk, stimulates innovation, and so on. The distribution of data of the analyzed variable is characterized by a negative asymmetric distribution, which is not surprising given that respondents 'evaluate' themselves and how they create an environment that should encourage employees to assume responsibility and risk regardless of the consequences. It is assumed that the subjective assessment in these responses is highly involved. Also, the fact that respondents work in the best MNCs suggests a better development of internal determinants, hence the greater openness of subsidiary top managers to undertake subsidiary strategic initiatives.

Manifest variables that explain variability in openness have a high-value factor indicating consistent responses. The argument above is supported by the alpha reliability coefficients, which are the highest for this variable and stand at 0.917, which indicates excellent reliability. The problem here is the omission from the analysis of

two manifest variables which for some reason have not explained enough the latent variable, which is important for creating an environment that would encourage undertaking of subsidiary strategic initiatives. Excluded manifest variables are 'subsidiary top management is for innovative activities' and 'subsidiary top management has experience with innovations.' The hypothesis of openness of subsidiary top management is positively associated with subsidiary strategic initiatives as such has not been confirmed even in the research conducted by Birkinshaw et al. (1998).

Hypothesis H2 has been statistically confirmed and refers to the positive association between networking and subsidiary strategic initiatives. The subsidiary network is unique since it consists of both internal and external network. The developed network is an essential prerequisite to subsidiary strategic initiatives: not developed internal network brings lack of local and internal embeddedness which turns in the subsidiary inability to detect potential market opportunities that can be realized through strategic initiatives undertaking. The less strategic initiatives subsidiary undertakes, the less attention from HQ attracts. The importance of network development stems from the ability to access new sources of knowledge and ideas, which consequently impacts subsidiary strategic initiatives (Bartlett & Ghoshal, 1986).

Hypothesis H3 has not been statistically confirmed. It refers to a positive association between innovativeness and subsidiary strategic initiatives. Reason for that can be found in the fact that respondents are from ICT industry which is innovative by itself, and, accordingly, innovativeness has been incorporated in business as usual and is not considered as something out of business as usual. Also, it can be assumed that a low number of manifest variables could be a potential reason why this hypothesis has not been statistically confirmed. Furthermore, ANOVA test did not show any significant differences between answers from respondents.

Hypothesis H4 has been statistically confirmed and refers to a positive association between subsidiary autonomy and subsidiary strategic initiatives. The level of autonomy shows the subsidiaries strength through bargaining power and level of decision-making discretion within MNC. The higher level of autonomy leads to stronger subsidiaries bargaining power. Stronger bargaining power leads to a higher number of subsidiary strategic initiatives.

When it comes to autonomy, it is important to be careful since a too high degree of autonomy can cause the higher distance between HQ and its subsidiaries which can have a negative impact on their mutual collaboration. If successful, subsidiary strategic initiatives make stronger subsidiary position toward HQ compared to other subsidiaries.

Hypothesis H5 proposed that subsidiary strategic initiatives have a positive relationship with a contribution to the MNC. The result confirms the significant positive relationship which implies that subsidiaries can contribute to the MNC with strategic initiatives undertaking.

The descriptive analysis results confirmed that perceived subsidiary contribution to the MNC has been, in average, similar or a little bit above the contribution in relation to other peer subsidiaries, which is in line with research conducted by Ambos et al. (2010). Positive relation of strategic subsidiary initiatives and contribution to the MNC has been partially confirmed in the research conducted by Ambos et al. (2010)

and fully confirmed in the research conducted by Birkinshaw et al. (1998). Partially confirmation refers to confirmation through indirect impact via HQ attention which indicates that the role of HQ is a crucial factor within the process of subsidiary strategic initiatives undertaking. This conclusion is in line with other research papers as well (Dutton & Ashford, 1993; Ling et al., 2005).

The theoretical contribution of this paper is reflected in the comprehensive understanding of the subjects of research, analysis and synthesis of existing theoretical frameworks and their implications for the contribution of subsidiary strategic initiatives to the HQ, expanding relatively humble scientific literature in the field of international management considering relation of subsidiaries to the MNC. The contribution is reflected in the testing of models in subsidiaries within single industry and by modeling variables in a different way than previously explored. Furthermore, the additional contribution of this paper to the existing scientific literature is reflected in the conceptual model of the interdependence of subsidiaries and MNC in the process of subsidiary strategic initiatives, and besides providing a new perspective in this area, provides a framework for future research.

The limitations of this study should be considered when evaluating its findings. One principal limitation is related to the managerial perception. Furthermore, in this paper, it was only analyzed the phenomenon from one perspective, from the perspective of subsidiaries; therefore, the findings may not be generalizable. The suggestion for future work in this area is to analyze HQs and subsidiaries simultaneously, considering countries that are usually thought of as culturally similar and those that are not. This should increase the likelihood that the results can be generalized. Even though the analysis of subsidiaries is related to one industry, cultural values and norms are different and therefore should be taken into consideration. Future studies could seek to validate propositions of this paper using larger samples of firms and including other internal determinants of subsidiary strategic initiatives as compensation systems, learning, knowledge sharing, etc. Given the importance of subsidiary strategic initiatives, longitudinal studies may well suit the objective of looking at the subsidiaries within one MNC and so more in-depth case studies that track the process over time will be very supportive for provoking further theoretical knowledge.

Disclosure statement

No potential conflict of interest was reported by the authors.

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