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ROLES AND STRATEGIES OF FOREIGN MNE SUBSIDIARIES IN NEW ZEALAND

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ROLES AND STRATEGIES OF FOREIGN MNE SUBSIDIARIES IN NEW ZEALAND

ABSTRACT

This study examines the roles and strategies of foreign-owned subsidiaries in New Zealand, with the aim to develop an improved classification of subsidiaries of multinational enterprises (MNE). Previous research has proposed a range of subsidiary classifications indicating various ways in which subsidiaries can be distinguished. There are, however, still concerns that critical contingencies such as the subsidiary development capacity and its own strategy, remain ignored. This study addresses these gaps by drawing on network theory to develop a novel and overarching subsidiary classification framework. Based on the framework, it empirically derives a three-part subsidiary classification: entrepreneurial, constrained autonomous, and constrained. The empirical classification is based on data from 429 foreign subsidiaries in New Zealand. Implications for theory, public policy, and management practice are made.

Keywords: *Subsidiary Role, Subsidiary Strategy, Subsidiary Development, Subsidiary Classification, MNE Management Structure.*

ROLES AND STRATEGIES OF FOREIGN MNE SUBSIDIARIES IN NEW ZEALAND

INTRODUCTION

MNE-subsidary research offers a number of subsidiary classifications indicating various ways in which subsidiaries can be distinguished. The overall approach adopted in classifications, however, is limited in that the existing studies typically emphasize the strategies of the parent MNE or processes at the corporate level of the MNE, ignoring important contingencies such as the subsidiary own strategy (Enright and Subramanian, 2007, Morschett et al., 2015). The overall knowledge of subsidiary typologies is therefore, limited to the MNE-strategy or process driven subsidiary types (Enright and Subramanian, 2007), whereas certain firm-specific factors such as subsidiary size, nationality, and experience in a particular economy or region are equally relevant to the subsidiary roles (Yip, 1995, Yip and Hult, 2012). While there is an emergent recognition that subsidiaries interface with various environments simultaneously rather than in isolation, previous studies mainly zoom in on a particular aspect of the subsidiary environment such as the subsidiary itself, the headquarter, internal networks, or external networks (Bouquet and Birkinshaw, 2008). By contrast, in this study we start from the presumption that subsidiaries are not isolated from the various environments, and argue that a synthesis that takes account of multiple environments interfacing with the subsidiary is critical. Existing typologies/classifications are based on frameworks that have been criticised for being simplistic (as they are based on only two dimensions) and isolationistic (as they draw little from other frameworks); see e.g. (Hoffman, 1994). They lack a theoretical basis, and their dimensions are often arbitrary (Schmid, 2004, Schmid et al., 2014). They are limited in establishing the importance of the dimensions they are based on (Morschett et al., 2015).

This paper aims to fill these gaps and derives a subsidiary classification from a theoretically driven generic framework. The framework is drawn on the network

conceptualization of the MNE. The primary purpose of the empirical study is to develop a classification of subsidiaries operating in New Zealand based on their roles and strategies. While New Zealand has a large and historically significant presence of foreign subsidiaries, MNE subsidiary roles and strategies in the country are under-researched and poorly understood. The examination takes an approach that differs from those of existing studies on subsidiary classifications. Whereas existing studies focus on one or two aspects such as knowledge flows, competence, MNE global strategy, or scope of activity, to develop their subsidiary typologies, the basic premise taken in this paper is that it is insufficient for a subsidiary typology to draw on only one or two aspects of the MNE or subsidiary (Enright and Subramanian, 2007). Furthermore, because subsidiary roles can evolve over time, it is important for subsidiary classifications to consider the drivers of subsidiary role changes as well. With an aim to offer a more realistic and a comprehensive subsidiary classification, this paper first develops an overarching subsidiary classification framework, which is based on a broad set of determinants of subsidiary roles and drivers of subsidiary role development. Second, based on subsidiary characteristics (such as industry and management structure) and the subsidiaries' present roles, individual developmental paths for how they may be able to further enhance their roles, are proposed for the various subsidiary types.

Data from 429 foreign-owned subsidiaries operating in New Zealand are used in a cluster analysis that reveals three subsidiary types: Entrepreneurial, Constrained Autonomous, and Constrained. Entrepreneurial and Constrained Autonomous point to moderately developed roles, while the Constrained subsidiary type indicates an under-developed role. No fully developed subsidiary role type, emerges from the data, but is theoretically feasible. Results are discussed and implications for theory, policy and management practice are made.

THEORY AND CONCEPTUAL DEVELOPMENT

Existing MNE subsidiary classifications (see Appendix Table A for a description) largely assume that the headquarters assign a subsidiary strategy or role, and that subsidiaries only take on one role at a time. In reality, subsidiaries may simultaneously implement the MNE assigned role as well as their own strategy (Birkinshaw, 2014, Enright and Subramanian, 2007). So, a subsidiary role can be the result of the HQ assigned role as well as their own local or global/regional strategy. Furthermore, subsidiary roles can evolve or enhance (in terms of charter and scope of activity) over time (see Birkinshaw and Hood, 1997, Dimitratos et al., 2009), and such enhancements are driven by either of the three environments – i.e. the headquarters, the subsidiary (internal), and the subsidiary local environment (Birkinshaw and Hood, 1998) – the subsidiary interfaces. With regards to headquarters, it is usually suggested that headquarters' strategic decisions (e.g. in the way of a directive) drive the subsidiary development (Chang, 1995, Malnight, 1996). With regards to the subsidiary itself, it is the subsidiary characteristics such as the subsidiary's organisational structure, manager, and culture (Birkinshaw and Hood, 1998, Verbeke et al., 2007), which drive subsidiary development. Of central importance to this perspective is that subsidiary initiatives are assumed to be responses to changes in the environments in which the subsidiary operates. With regards to the local environment, the subsidiaries are influenced by, and adapt to, their unique environments such as customers, suppliers, competitors, and the local bodies, and so stimulate the subsidiary development (Birkinshaw and Hood, 1998). Since a typical subsidiary interfaces all the three environments simultaneously, developing a comprehensive insight about subsidiary development or enhancement of roles requires looking into the combined interaction of the three environments (Birkinshaw, 2014, Birkinshaw and Hood, 1998, Verbeke et al., 2007).

Birkinshaw and Hood (1998) focused on the three drivers of subsidiary development when proposing an organising subsidiary evolution framework, and argue that subsidiary evolution is reflected by the changes in their charters and capabilities. Their framework has received empirical support. Pedersen (2006), for example, takes subsidiary autonomy as the headquarters determinant, and subsidiary initiative as the subsidiary determinant of subsidiary development. He shows that subsidiary initiative is positively associated with all the three drivers of subsidiary development, and so is the primary determinant of subsidiary development. Egeraata and Breathnacha (2012) argue that subsidiary development is determined by the HQ, the subsidiary, and, in particular, the subsidiary's external (global rather than local) environment. Tracking subsidiary evolution over time, Filippov and Duysters (2012) find that subsidiary initiative is both a determinant and a consequence of subsidiary evolution. Cavanagh and Freeman (2012) show that where subsidiaries develop resources and take initiatives together, they develop the highest level of contributory roles. Filippov and Duysters (2014) take subsidiary scope, competence, MNE-subsidiary interdependence, and external embeddedness, as indicators of subsidiary development and study the determinants of subsidiary evolution. Filippov and Duysters (2014) report that subsidiary initiatives combined with subsidiary autonomy lead to better performance, competence development, and functional scope. Initiatives are strongly associated with both the subsidiary internal and external embeddedness. For a summary of the key aspects of the evolution of subsidiary roles literature, see Appendix Table B.

Factors Driving the Subsidiary Role Development Process

Research now increasingly takes a network view of the MNEs in that they can be both hierarchical and heterarchical in their relationships with their units (Hedlund, 1986, Wolf and Egelhoff, 2012, Birkinshaw and Morrison, 1995). MNEs are complex and differentiated

(vertically and laterally) inter-organisational networks rather than monolithic firms (Ghoshal and Bartlett, 1990, Nohria and Ghoshal, 1997), and embedded both internally and externally in networks of relationships (Forsgren, 2008). An MNE subsidiary can be vertically or laterally connected to other subsidiaries. A subsidiary is also embedded with a number of external actors such as customers and local firms. Overall these relationships form a subsidiary ‘business network’ (Forsgren, 2008, Andersson et al., 2007). As per the network perspective of the MNE, subsidiaries develop both capabilities and resources through their embeddedness in the network, and can assume a strategy and role on their own (Birkinshaw et al., 2005, Birkinshaw and Hood, 1998, Andersson and Forsgren, 1996).

The subsidiary role development process can be grounded in the network perspective of the MNE. The network perspective takes subsidiary internal and external relationships as key subsidiary resources (see Andersson et al., 2002). In the context of the MNE internal environment, a key resource is the MNE organizational structure (i.e., the ways, processes and procedures through which headquarters manage their subsidiaries in the MNE network); (see Barney, 1991, Tomer, 1987). Through this resource MNEs facilitate transfer of innovations throughout the MNE network and potentially ease subsidiary development (Dellestrand and Kappen, 2011, Decreton et al., 2017), as well as enable themselves to implement a particular strategy (Bartlett and Ghoshal, 1989, Bartlett and Ghoshal, 1990, Donaldson, 2009).

With regards to the external environment, the network perspective emphasizes subsidiaries’ external embeddedness. According to this perspective, subsidiary embeddedness refers to the willingness and trust in adapting to resources, procedures, and processes of the collaborating organisations in the subsidiary network (Gammelgaard et al., 2011). Subsidiary embeddedness in the local environment leads to the development of subsidiary competences (Andersson et al., 2005, Andersson et al., 2002, Schmid and Schurig, 2003). External embeddedness induces subsidiary innovation processes; improves the market performance of

subsidiaries and their sister subsidiary units, and improves product and the production development processes (Holm et al., 2005, Andersson et al., 2002). It supports subsidiaries in developing R&D mandates (Achcaoucaou et al., 2014).

The network perspective suggests that subsidiaries in their local networks interface three markets: local, internal and global. Subsidiaries making use of their valuable and specialized resources take entrepreneurial initiatives in the three markets (Birkinshaw, 1997, Birkinshaw, 2014). Subsidiary initiatives are autonomous actions, which reflect a subsidiary's entrepreneurial behaviour (Birkinshaw, 1997, Birkinshaw, 2014). With regards to the three markets, subsidiary initiatives can be classified as: (i) local market (opportunities identified in subsidiary host country); (ii) internal market (opportunities identified within the MNE); and, (iii) global market (opportunities identified outside the local and the internal markets) (Birkinshaw, 1997, Birkinshaw, 2014).

Subsidiary initiatives lead to the development of unique subsidiary resources, which become more specialised across the MNE. Subsidiaries with such resources are assigned internal mandates, such as contributory roles (Cavanagh and Freeman, 2012, Birkinshaw, 2014) and broad geographical mandates (Birkinshaw and Hood, 1997, Birkinshaw and Hood, 1998, Filippov and Duysters, 2014). Subsidiaries assigned a contributory role are considered as possessing specialised resources in the MNE, which are recognised and are readily useable by the MNE (Birkinshaw and Pedersen, 2010). Subsidiaries with such resources are crucially linked to firm-specific advantages (Andersson et al., 2014, Rugman and Verbeke, 2001).

Subsidiaries with a contributory role possess high levels of autonomy and influence in the MNE network (Mudambi et al., 2014a, Drees and Heugens, 2013). Autonomy is a discretion, power or a degree of freedom that a subsidiary may have to pursue its own independent agenda that may or may not be already endorsed by the parent headquarters (Brock, 2003, Brooke, 1984, Manolopoulos, 2006, Raziq et al., 2013). Subsidiary autonomy is

a degree of freedom that subsidiaries often aim for as well, so they may make independent decisions (Egelhoff, 1984), and is a freedom needed to take actions that are important for the subsidiary own development (Paterson and Brock, 2002, Birkinshaw and Hood, 1998, Birkinshaw and Pedersen, 2010).

Summarizing the above, subsidiary role development is determined by the combined interaction of factors in the three environments: the headquarters, the subsidiary itself, and the local environment. At the headquarters level, the MNE organizational (or management) structure (Decreton et al., 2017, Dellestrand, 2011, Dellestrand and Kappen, 2011) and subsidiary autonomy determine subsidiary roles and development (Hedlund, 1986, Pedersen, 2006). At the subsidiary level, the level of initiatives determine its role development (Birkinshaw, 1997, Birkinshaw, 2014). At the local environmental level, the subsidiary local or external embeddedness determine subsidiary role development (Andersson et al., 2014, Birkinshaw et al., 2005). The subsidiary charter or the subsidiary scope of activity enhances or declines as a result of the above factors of the three environments (Birkinshaw, 2014, Birkinshaw and Hood, 1998).

As a subsidiary is embedded in the three environments (headquarter, subsidiary itself, and local environment) simultaneously, it is important to note that the drivers of subsidiary development interact in an iterative manner. For example, MNE management structures can be hierarchical (intermediaries, e.g. RHQ, DHQ) or heterarchical (e.g. a network organisation), where the latter will generally provide higher autonomy than the former (Wolf and Egelhoff, 2012). The structures vary in terms of their characteristics, and so their influence on the subsidiary role development also varies (Wolf and Egelhoff, 2010). From the outset, MNEs generally assign their subsidiaries a limited geographical scope. However, with time subsidiaries start developing their own strategies, and through initiatives (Birkinshaw, 2014), and innovation (Zhou et al., 2017), extend their roles to multiple geographical and product

markets. While own strategies, or initiatives (Achcaoucaou et al., 2014, Andersson and Forsgren, 1996) would require a certain level of autonomy, the autonomy would be further enhanced as a result of initiatives (Birkinshaw, 2014), as well as the competence developed by the subsidiary (Mudambi et al., 2014a). External embeddedness may help developing the subsidiary's resource-base, and its contribution and influence within the MNE (Cavanagh and Freeman, 2012, Mudambi et al., 2014a, Achcaoucaou et al., 2014, Santangelo, 2009). Together with the subsidiary internal embeddedness (as reflected by the subsidiary's contributory role), such a dual embeddedness will lead to the further enhancement of the subsidiary's specialised role in the MNE (Achcaoucaou et al., 2017).

An Overarching Subsidiary Classification Framework

Based on the subsidiary role development process outlined above, an overarching subsidiary classification framework can be presented. The overarching subsidiary classification framework is conceptualised in a network relationship (across heterarchy and hierarchy) fashion (Figure 1). Subsidiary types are differentiated across their capacities in terms of the geographical scope, initiative taking, autonomy, contributory role, and external embeddedness across hierarchy and heterarchy. With this framework, an alternate and a broad subsidiary classification is expected.

***** Insert Figure 1 here *****

The overarching framework, offers a simple and generalisable classification of subsidiaries from which specific subsidiary types (based on further empirical observations) may be drawn. Subsidiaries with different types and levels of capabilities, and managed in various ways, can potentially form three broad developmental subsidiary types: developed,

moderately developed, and under-developed subsidiaries. Amongst them, a range of specific subsidiary types could be drawn through empirical examination. How far given subsidiaries vary in their roles and developmental capacities across the management structures would have to be established empirically and hence they are hard to establish a priori. Each of the three-generic developmental subsidiary types are conceptualised as follows:

Developed Subsidiary. Such subsidiaries have either of the two capacity levels: (1) A high-level capacity on all the dimensions, e.g. high contributory role, high initiative, high autonomy, high external embeddedness and high (broad) geographical scope; or (2) a combination of high and moderate capacities in terms of the contributory role, initiative, autonomy, geographical scope, and external embeddedness, and no low-level capacity in any of the dimensions.

Moderately-Developed Subsidiary. Such a subsidiary type has either of the two capacity levels: (1) A moderate level capacity on all the dimensions: contributory role, initiative, autonomy, geographical scope, and external embeddedness; or, (2) a combination of high, moderate, and low capacities in terms of the contributory role, initiative, autonomy, geographical scope, and external embeddedness.

Under-Developed Subsidiary. Such subsidiaries have either of the two capacity levels: (1) A low-level capacity on all the dimensions: contributory roles, initiatives, autonomy, geographical scope, and external embeddedness; or (2), a combination of low and moderate capacities in terms of the contributory role, initiative, autonomy, geographical scope, and external embeddedness, and no high-level capacity in any of the dimensions.

Based on these varying capacities a number of specific subsidiary types can potentially emerge. For example, some subsidiaries within the developed subsidiary type may have all-high capacities, some might have equally high and moderate, while others have one dominant level capacity over the other. For example, some subsidiaries may be high in the contributory role, but moderate in external embeddedness while others may show high levels on both the dimensions. Similarly, their characteristics can be multifaceted, e.g. some subsidiaries may be high in operational autonomy, but moderate in strategic autonomy. Some may be high in local initiatives, but moderate in internal or global initiatives.

METHODS

Multinationals and their activities are important for New Zealand, which is a geographically isolated and small developed economy, heavily reliant on inward foreign direct investment (FDI) and trade (Scott-Kennel and Akoorie, 2013, Raziq and Perry, 2013). Over the years, the country has attracted a considerable population of foreign-owned MNEs, some of which have a history dating back to the 19th century (e.g. ANZ bank established in 1840 in Petone). MNEs have played a vital role in the development of the New Zealand's economy and infrastructure. Foreign MNEs have laid the foundations of many industries, particularly banking, meat processing and dairy (Scott-Kennel, 2001). Previous studies of foreign subsidiaries in New Zealand are mostly dated (see Akoorie, 1996, Scott-Kennel, 2001, KPMG, 1995), and are mostly focused on the FDI vehicle itself.

While much of the evidence regarding subsidiary roles and strategies is based on peripheral economies (Enright and Subramanian, 2007), little is known about geographically isolated economies such as New Zealand, even though it is well established that subsidiary local/regional environment greatly influences its role in the MNE network (Benito et al., 2003, Evans et al., 2017, Harzing and Noorderhaven, 2006a). A significant portion of the inward FDI

to New Zealand comes from countries such as Australia, USA, UK, the Netherlands, and Germany. Some, such as UK and USA, are geographically distant from New Zealand, but less so in terms of psychic distance (i.e. cultural, economic, social and political) (Vahlne and Wiedersheim-Paul, 1973) and institutional distance (Berry et al., 2010). Some, such as Germany and the Netherlands, score highly in geographic distance, but, also to some extent in terms of psychic and institutional distance. Other investors, such as Asian or South American, are very distant in terms of the psychic and institutional, as well as geographic distance.

Distance matters in the international business (Ambos and Ambos, 2009, Nachum and Zaheer, 2005), which can be observed within (e.g., across subsidiaries in an MNE) and across (e.g., between MNEs) firms, in terms of financial, administrative, demographic, knowledge, as well as geographical dimensions (Berry et al., 2010, Ghemawat, 2001). For example, a subsidiary may be lower in knowledge outflows than other subsidiaries, and also high in terms of geographic distance from the rest of the MNE. Geographically isolated subsidiaries (from the MNE network) often have narrow roles and mandates (Harzing and Noorderhaven, 2006a). The high distances typically lead to constrained strategic autonomy (Jong et al., 2015) and higher difficulty in the transfer of subsidiary and firm-specific advantages across the MNE, as well as low subsidiary development opportunities due to its relative isolation (Ferraris, 2014).

Research suggests that MNEs should adjust their activities in accordance to cultural and geographical distances (Ambos and Ambos, 2009) within and across the MNEs. For example, since New Zealand is geographically isolated, the MNEs may primarily manage their subsidiaries through regional, divisional or independently managed offices (Raziq et al., 2014). While it is no surprise that MNEs today disaggregate their activities across their other offices (Baaij et al., 2015, Decretton et al., 2017, Benito et al., 2011, Benito et al., 2014, Benito and Narula, 2007); in the case of New Zealand, MNE disaggregation coupled with high distance matters, since distance affects subsidiary roles and development (Ferraris, 2014), and each

aspect of the MNE organizational structure carries different implications for subsidiary development (Wolf and Egelhoff, 2010). So, theoretically, New Zealand offers an interesting and appropriate case for studying the roles and strategies of foreign subsidiaries.

The paper offers a nation-wide experience of New Zealand as it draws on a large sample covering all the foreign-owned subsidiaries in New Zealand. Large samples are generally important for studies developing typologies that reflect significant variations among types (Patel et al., 2003), and are appropriate for subsidiary classification studies that involve a multidimensional framework (Enright and Subramanian, 2007). This study takes a holistic picture, offers a generic typology, draws on a multidimensional framework, and so benefits from a large sample.

Sampling Frame and Sample Size

The target population comprises foreign-owned multinational enterprise subsidiaries operating in New Zealand. The sampling frame was established through Kompass New Zealand, which provided contact information on 960 foreign-owned firms. Postal addresses of all the companies in the sampling frame were verified via telephone. The verification process left a useable sample population of 952 firms.

Data Collection and Analysis

Data were collected using a survey, which was conducted from November 2011 to April 2012. Out of the sample population of 952, the survey yielded a response rate of 45.69%, with 435 responses in total. Out of 435, six responses were incomplete and were, therefore removed from the analysis, leaving 429 responses and a final response rate of 45.06%. The survey gathered empirical evidence from the subsidiary's top management (such as CEO, country manager, general manager, managing director) to have an overall and a broader view of their

firm's operations and strategy. The questions are presented in Table 1. Most questions were about opinions/attitudes formed on Likert scales.

***** Insert Table 1 here *****

As the study aims to develop a typology, a technique is required which can derive a classification or a distinct grouping of subsidiaries from the data. To achieve a classification through quantitative data analysis, appropriate approaches include factor analysis and cluster analysis (Enright and Subramanian, 2007). Factor analysis reduces a large number of original variables into smaller meaningful dimensions or factors, and reduction is achieved across variables (column-wise). Cluster analysis reduces observations (rather than variables) into different categories (row-wise), so that there is homogeneity within a category and heterogeneity across the categories. Factor analysis would be used mainly where data reduction across variables is required prior to the cluster analysis (see e.g., Wang et al., 2009). In this study, two variables – subsidiary initiative and subsidiary autonomy – are converted to second order variables using exploratory factor analysis. The second order variables are then validated vis-à-vis literature. Subsequently, the cluster analysis technique is used to develop a typology. This study hence employs both the factor and the cluster analysis techniques.

Subsidiary role studies using survey methods have typically used the cluster analysis technique (See e.g., Harzing and Noorderhaven, 2006b, Taggart, 1997a, Taggart, 1997b), mainly due to its appropriateness for typology generation purposes. For this study, a two-step cluster analysis technique (other methods include K-means (non-hierarchical), and hierarchical techniques) was chosen. The technique handles complex data well, such as large datasets like that of this study, and is an appropriate technique to process both categorical and continuous variables together in the same analysis. This is important since the 'management structure'

variable in the overarching classification framework is an unordered nominal/categorical variable, which requires an analysis technique that takes both categorical and continuous variables together.

RESULTS

Out of the 429 subsidiaries, 187 subsidiaries belong to manufacturing industries, 5 to the primary industries (3 mining, and 2 forestry), and the remaining (237) to services industries. 97 are in the wholesale sector, and the remaining from accommodation (4); administrative services (7); construction (4); education and training (2); electricity (1); financial and insurance (21); food services (2); forestry (2); health care (4); information technology (1); motion picture and sound recording (3); professional, scientific, and technical services (30); publishing (16); real estate (9); retailing (3); sport and recreation activities (2); support services (2); telecommunications (1); transport (26); and, waste services (2).

The country of origin of the 429 subsidiaries are as follows: USA (111), Australia (112), UK (37), Japan (38), Germany (31), and the remaining from Western Europe, Asia, and Oceania. With regards to the entry-mode, 182 subsidiaries are greenfield investments, 219 are M&As, whereas the remaining are alliance-type subsidiaries (joint ventures). More than half of the subsidiaries (249) were established in New Zealand prior to the year 1990, and the remaining 180 were established after that. More than half of the subsidiaries (228) have less than 50 employees, 117 subsidiaries have up to 200 employees, and the remaining (84) have employees ranging from 200 to above 1000.

With regards to the management structures, 126 subsidiaries are managed heterarchically (independently), and the remaining are managed hierarchically, with 44 directly by the corporate headquarters (CHQ), 226 by the regional headquarters/office (RHQ), 18 by the mandated subsidiary units, and 15 under a matrix structure. The management profile of

subsidiaries provides support to the overarching framework in terms of the diversity needed to develop a typology. Cronbach Alpha scores, and the outer factor loadings of the constructs: local initiative, global initiative, internal initiative, strategic autonomy, operational autonomy, and contributory role are above 0.6. The means, standard deviations, and bivariate correlations of variables (prior to cluster analysis) are presented in Table 2.

***** Insert Table 2 here *****

Cluster analysis on the data exposed excellent cluster membership. Three clusters emerged. Out of the three, two clusters did not differ on dimension global initiative and two others on the dimension external embeddedness. Otherwise, all differences are highly significant. While in cases where there are more than two clusters, it is not required for each cluster to differ from the other clusters on every dimension, although the maximum the variations, the better (Burns and Burns, 2008). A dimension on which at least two clusters do not vary indicates a poor cluster membership. Deletion of such a dimension from the framework is recommended. Such was not the case here. A summary of clusters is presented in Table 3.

***** Insert Table 3 here *****

As the next step, each of the clusters' capacity (see Table 4) is then ranked in a relative sense into A, B, C capacities (where A refers to the highest and C to the lowest capacity), and in an absolute sense into low, moderate, and high. An analysis of variance shows that cluster 1

subsidiaries are significantly smaller than cluster 2 subsidiaries,¹ and cluster 3 subsidiaries². A chi-square test indicates that cluster 1 and cluster 2 subsidiaries predominantly belong to the services industry, and cluster 3 to the manufacturing industry³. Cluster 3 subsidiaries are mainly managed heterarchically and under matrix structures, while clusters 1 and 2 are managed hierarchically (i.e., under CHQ, RHQ or mandated subsidiaries)⁴.

***** Insert Table 4 here *****

In an absolute sense (based on the generic subsidiary classification criteria devised in the study), cluster 1 subsidiaries fall under the under-developed subsidiary category as they do not show a high-level capacity on any of the dimensions. Conversely, cluster 2 and cluster 3 subsidiaries fall under the moderately developed subsidiary types as both the subsidiary types are low in one or more dimensions each. In a relative sense, however, cluster 3 subsidiaries show the highest level and opportunity to develop, followed by the cluster 2 subsidiaries.

DISCUSSION

The Overarching Framework's Classification

The three-part classification (i.e., the three clusters) shows that subsidiaries vary in terms of their role and development in that there are subsidiaries showing the highest level of capacity as well as subsidiaries showing the lowest. Interestingly, there is no subsidiary type that is consistent in terms of a single rank along all the dimensions of the framework. This indicates that when subsidiaries are classified over multiple dimensions, then a predominant all-high, all-moderate or an all-low capacity subsidiary type does not emerge (as opposed to what can

¹ H = 28.047; p>0.001; M (1) = 113.22; M (2) = 158.31

² H = 44.416; p>0.001; M (1) = 101.78; M (3) = 158.75

³ p<0.01

⁴ p<0.001

be seen in the existing two-dimensional and dichotomous (low-high) frameworks. The subsidiary capacities vary so that a subsidiary may be high in one area, but low in the other. The theoretical implication of this finding is that a subsidiary's contributory role, for example, could be influenced positively by global initiatives (as the results indicate). However, it is not given that a subsidiary having a high level of global initiative will necessarily be high in contributory role too. This is a key limitation of previous frameworks as they seek evidence of the subsidiaries which fit their a priori framework. Several researchers have voiced disquiet about the existing typologies (see Enright and Subramanian, 2007, Rugman et al., 2011, Haugland, 2010, Morschett et al., 2015). This study suggests that such an approach is unlikely to work on multiple dimensions.

It is, therefore, pertinent to look at the predominant patterns. Cluster 3 subsidiaries show a balance of moderate and high capacities; cluster 2 low and high, and cluster 1 low and moderate. As per the results, the most interesting subsidiary type from a developmental perspective is, therefore, the cluster 3 subsidiary. But, it would be even more interesting if a fully developed subsidiary was found. Theoretically, they are of course feasible. However, earlier studies have noted that while developed subsidiaries, such as centres of excellence and world/product mandate subsidiaries, do exist, they are rather rare (Young et al., 1994). Subsidiary development studies mostly find the developed subsidiary category to display the lowest frequency. While there are few investigations into highly developed subsidiaries on a broad range of dimensions, based on the findings of this study, a reasonable inference is that while fully developed subsidiaries may exist, they are likely to be few in number.

The complete overarching framework is shown in Figure 2. As no developed subsidiary type is found, that space is left blank in the figure. As pointed out above, that does not refute/contradict the possibility of a fully developed subsidiary. Context may matter. Had the framework been used in another empirical context, it is possible that fully developed

subsidiaries might emerge. Empirical evidence suggests variations. For example, in their analysis based on the intergration-responsiveness framework, Jarillo and Martínez (1990) did not find a subsidiary in Spain with low integration and low responsiveness. Conversely, Taggart (1997b) did find that subsidiary type in UK, and argue that the emergence of such a subsidiary is a reflection of the difference in strategies of Spanish and UK subsidiaries.

***** Insert Figure 2 here *****

The subsidiary types are discussed further below, with the intention to conceptualize likely developmental paths for subsidiaries.

Entrepreneurial. Cluster 3 subsidiaries can be referred to as ‘Entrepreneurial’ subsidiary types. Such subsidiaries have significant market scope and initiative level. The subsidiaries are highly autonomous, and low to moderate in external embeddedness and contributory role. The key distinction of the entrepreneurial subsidiary is their initiative level, which is higher in an absolute sense, and also in relative sense to the other subsidiary types. Mainly for this reason, this subsidiary type is named as entrepreneurial. However, the subsidiary type has a low contributory role (although in comparison to the other subsidiary types, the contributory role is the highest). Therefore, for this reason, this subsidiary is classified as moderately developed.

Birkinshaw (2014) identifies subsidiaries that are highly proactive in the three markets as having the highest opportunities to develop. What distinguishes such subsidiaries from the ordinary subsidiaries (i.e. those that just undertake the parent role assigned to them) is their high-level entrepreneurial orientation. Another aspect is the external embeddedness, which is moderate. As the two concepts (i.e., initiative and external embeddedness) have not previously been examined in studies focusing on subsidiary classification, this category of subsidiaries is

an alternate one but also likely one that may be found in most empirical contexts. The high-level autonomy aspect places this subsidiary among the subsidiaries of existing studies, which are classified as high-high on the two dimensions; for example, the 'active' subsidiary in Jarillo and Martínez (1990). However, the low competence-creation and moderate market scope brings them down to a low-high class as of some other studies like White and Poynter (1984) and Gupta and Govindarajan (1991). Overall, this is the most interesting subsidiary type in New Zealand.

This subsidiary is moderate in global initiative. These subsidiaries are predominantly managed either heterarchically or under a matrix structure. Around a quarter are managed hierarchically, but this is predominantly in the manufacturing industries. This subsidiary type may enhance its own strategy and take a higher level of global as well as local market initiative. Due to the high level of autonomy of these subsidiaries, through initiatives they can further develop their resources, increase their contributory role, and transform to a fully developed subsidiary.

Constrained Autonomous. Cluster 2 subsidiaries can be referred to as 'Constrained Autonomous'. These subsidiaries have a decent market scope, are highly autonomous and are managed predominantly hierarchically, but are low to moderate in external embeddedness and low in contributory role, and global and internal initiatives. What differentiates these subsidiaries from the entrepreneurial is their low levels of internal and global initiatives. These subsidiaries are predominantly services industry subsidiaries, managed hierarchically, locally-focused, and they operate in highly competitive local environments.

These subsidiaries are called constrained autonomous, which reflects that they have high autonomy but their autonomy is limited to the local market only. Based on their characteristics these subsidiaries can be closely matched to some subsidiaries in literature such as Autonomous (high responsiveness, and low integration). The caveat here is that these

subsidiaries are moderate in external embeddedness. One might expect a highly locally-focused subsidiary to be highly externally embedded. Likewise, since such subsidiaries have moderate external embeddedness, moderate level internal contribution could also be expected (see Achcaoucaou et al., 2014, Santangelo, 2009). This study shows that is not necessarily true, which makes such subsidiaries somewhat different from those previously described in the literature as locally-focused or dual-embedded subsidiaries. The count for this subsidiary type is slightly higher than the entrepreneurial subsidiary type, and from a developmental perspective it is the second interesting one after entrepreneurial type subsidiaries.

Clearly, these subsidiaries have lower opportunities to develop than the entrepreneurial subsidiaries. Their development paths are, therefore, different from those of entrepreneurial subsidiaries. These subsidiaries need to capitalise on the highly competitive local markets in which they operate, and typically embed more deeply. These subsidiaries (predominantly managed formally) are also likely to face a high-level of resistance from the MNE if they shift their focus from the local market. A quarter of these subsidiaries are managed heterarchically, but these are predominantly services subsidiaries. A third of these subsidiaries belong to the manufacturing industries with a good number managed heterarchically.

There are two main developmental paths for these subsidiaries. The contingency seems to be as follows: (1) Where the subsidiaries belong to the manufacturing industry and/or are managed heterarchically, the subsidiaries have a broader opportunity to develop than where the subsidiaries are services and/or are managed hierarchically. The subsidiaries need to be active in seeking MNE facilities for transfer to the local market and/or seek MNE support for increasing the size of their local operations. These subsidiaries need to be more explorative, and engage in exports. Following that path, these subsidiaries (not misaligning with the MNE goals and objectives) will likely transform to a more developed subsidiary type. (2) Services subsidiaries and/or subsidiaries managed hierarchically can often do more than just sales. In

particular, they can innovate or develop competences which they can bid internally for mandates. An example is to develop a unique IT management system or through gaining expertise in Big Data analytics, guide local, regional or global strategy making for the MNE. Subsidiaries may also develop internal resources on which others depend on, thereby increasing reputation and gaining credibility, even when facing constrained autonomy and formal HQ control. Dörrenbächer and Gammelgaard (2006) report cases where sales units have successfully gained mandates in this way.

Constrained. Cluster 1 subsidiaries can be referred to as ‘Constrained’. These subsidiaries are under-developed. The most predominant feature of these subsidiaries is that all of them are managed hierarchically (CHQ, RHQ, mandates) and are low in autonomy. This is what clearly differentiates them from the constrained autonomous subsidiaries. Other distinctive characteristics of these subsidiaries are low scores on external embeddedness and initiative level.

Being of low capacity overall, this subsidiary type is the most constrained one in New Zealand. Such subsidiaries are comparable to subsidiary types that persistently score low-low on focused dimensions, such as ‘Vassal’ subsidiaries described in Taggart (1997a). On the positive side, these subsidiaries are not just engaged in sales of their products, they also engage in local market initiatives at a moderate extent. Their autonomy (both operational and strategic) is also at a moderate level. This is what makes these subsidiaries distinctive from the ones identified as low-low in capacity in the literature. Despite being relatively lowest in frequency, they still amount to a considerable number (116), and as under-developed subsidiaries they require serious effort to develop.

Obviously, these subsidiaries would risk a lot if they take initiatives as that requires some level of autonomy. Therefore, to develop, these subsidiaries need to increase their external embeddedness. External embeddedness is positively linked to autonomy (Andersson

et al., 2007, Birkinshaw et al., 2005). Through collaboration with local firms these subsidiaries may gain autonomy and subsequently shift to a more responsive strategy. Having amassed a sufficient level of autonomy, these subsidiaries can then take local initiatives through which they can further develop. As these subsidiaries are mostly managed hierarchically they will probably need to follow the same developmental path (i.e., through local innovations) like the hierarchically managed constrained autonomous subsidiaries.

An Alternate Subsidiary Typology?

The overarching framework developed in this study provides a novel and superior subsidiary classification. The novelty of the subsidiary classification from this study is threefold: (1) The classification is based on a broader set of dimension, hence capturing a significantly larger array of possible and actual cases (Morschett et al., 2015). Besides identifying possibilities, the classification links each subsidiary type to distinctive developmental paths. (2) The classification is more nuanced as dimensions are measured in both relative and absolute senses. With this approach, the classification becomes more reflective of reality, especially with regard to identifying which areas a subsidiary is lacking. For example, the entrepreneurial subsidiary type, although scoring relatively highest in our data, nevertheless need to improve in an absolute sense (in contributory role) to be labelled as a fully developed subsidiary. A relative measure alone can hence be misleading. (3) The classification is based on subsidiary roles and development concepts grounded in a ‘macro level’ theoretical perspective of MNEs as networks, thereby facilitating an overarching and holistic approach. With a broad issue at the core – i.e. subsidiary evolution – the framework is more meaningful and less arbitrary than the earlier frameworks.

Contribution to Subsidiary Research

The study has both theoretical and empirical contributions. Regarding the empirical contribution this study provides an extensive and detailed examination of the roles and strategies of foreign subsidiaries in New Zealand that surpasses any previous study on the topic. Apart from a few previous studies such as that by Scott-Kennel (2004), which looks at the impact of FDI on the local economy, and Harzing and Noorderhaven (2006a) who examine subsidiary roles in a small sample of 13 subsidiaries, subsidiary research has largely ignored the evidence from New Zealand. Our large data set shows that New Zealand is as important as other peripheral economies in terms of the MNE activity, and that the New Zealand context has unique features in terms of its geographical remoteness in general and regarding major investors, which makes it a special case for subsidiary research.

For theory and subsidiary research, our contribution is first that we address the call to extend MNE subsidiary role research, especially to broaden its scope to consider contingencies such as subsidiaries' own strategies, MNE organizational structures, subsidiary role development, and subsidiary autonomy, as well as taking into account multiple industries, large samples, and cases from peripheral economies, in order to develop multidimensional subsidiary role frameworks (Manolopoulos, 2008, Young and Tavares, 2004, Enright and Subramanian, 2007). We address these contingencies in our overarching framework. We also address research calls from Schmid (2004) and Schmid et al. (2014) that subsidiary roles research should be based on theory. We draw our framework on the network conceptualization of the MNE. We contribute by integrating multiple research streams of subsidiary research such as subsidiary processes, strategy-structure, HQ-subsidiary relationships, subsidiary roles, and the evolution of subsidiary roles (Birkinshaw and Pedersen, 2010), thereby taking note of Bouquet and Birkinshaw (2008) advice that subsidiary research needs to draw upon and integrate several literature streams as subsidiary issues are typically multidimensional and multifaceted. In

particular, we have drawn on the subsidiary evolution framework proposed by Birkinshaw and Hood (1998), which presents key determinants of subsidiary role development.

In addition, we develop an alternative three-part subsidiary typology, which is based on subsidiary characteristics. Importantly, due to the multiple dimensions included in our classification, our model allows forecasting role developmental paths for subsidiaries, which has largely been lacking in the previous subsidiary classifications. The novel emphasis on ‘MNE management structure’ in our framework provides us an opportunity to combine both MNE and subsidiary level strategies to provide a more fine-grained typology of subsidiaries. We present an overarching framework for analyzing subsidiary roles as well as their role development opportunities.

Subsidiary classification studies tend to be empirical in nature (Enright and Subramanian, 2007). As such this study is not unique. However, as noted above it addresses several research calls, and so tentatively advances subsidiary research in a novel and, we think, better direction. We believe our framework is general and provides a useful foundation for other studies investigating subsidiary roles and role development in other contexts than that studied here.

CONCLUSIONS, IMPLICATIONS AND FUTURE RESEARCH

This study has looked at the roles and strategies of foreign-owned subsidiaries in New Zealand. An underlying assumption of the analysis is that the subsidiaries are not just assigned roles by their HQs. They may also assume roles on their own through own initiatives, and ultimately strategies, and subsidiary roles may enhance over time. While examining subsidiary roles in a context it is important to note the subsidiary’s role development potential, especially in order to obtain more realistic assessments of current roles and develop sensible projections of potential future role changes.

The study reveals that there are three types of foreign subsidiaries in New Zealand: entrepreneurial, constrained autonomous, and constrained. The subsidiaries vary according to the roles, and level and opportunities for role development. There are some commonalities among all foreign-owned subsidiaries in New Zealand; some of which can be seen as negatives while other positives. The negatives are: (i) moderate levels of geographical scope; (ii) minor contributory roles; and, (iii) low to moderate levels of external embeddedness. For subsidiary development, these levels need to be enhanced. The positives are: (i) a considerable presence of network organisations; (ii) fairly high autonomy levels; and, (iii) and a reasonable level of subsidiary initiatives.

With regard to individual role developmental paths, the ‘entrepreneurial’ subsidiary type has a fair involvement in initiatives, and may further enhance their role through exploring the possibilities of applying their advantages at the firm level, and involve in reverse knowledge transfers. With regard to the ‘constrained’ subsidiary, which has the relatively least specialised role in the MNE, the subsidiaries are currently mainly acting as agents of their HQs, and need to gain autonomy through which they can take initiative. Subsidiaries also need to increase their external embeddedness, which should increase favourable attention by the MNE. With regard to the ‘constrained autonomous’ subsidiaries the role developmental path is twofold: (1) Manufacturing and heterarchically managed subsidiaries may seek to get MNE value-added functions transferred locally, be more explorative, and engage more in exports; (2) service subsidiaries and subsidiaries managed hierarchically need to involve in innovations, and through developing quality solutions for the MNE, may seek broader MNE mandates. Overall, we conclude that subsidiaries in New Zealand have a good opportunity for their role development.

Implications for Theory, Management Practice, and Policy-makers

The network perspective of the MNE suggests that subsidiaries can assume various roles in their networks (see Andersson and Forsgren, 1996). Our results identify important contingencies. While external embeddedness is critical for the subsidiary, the possible contingencies to role development are subsidiary initiatives, the MNE organizational structure, and the industry sector to which the subsidiaries belong. Subsidiaries may take initiatives locally, globally and internally. It is, therefore, critical for the subsidiaries to consider the opportunities in the environments in which they operate, and seek dual embeddedness (both MNE internal and external). The network model of the MNE, which looks at both the MNE internal (Ghoshal and Bartlett, 1990), and external (Andersson and Forsgren, 1996) networks is, hence, an appropriate research lens to classify subsidiaries based on their roles and the possibilities of their role development.

Based on our results, there are five broad implications for the subsidiary managers: external embeddedness, taking initiative, innovation, internal issue-selling (and efforts to get MNE functions transferred locally), and converting subsidiary specific advantages to firm-specific advantages. These factors lead to gaining MNE mandates. Subsidiary managers may benefit if they engage actively in local collaboration with the industry and seek partnerships with local firms. These local relationships are important to reap maximum benefits from the host economy, as well as to develop innovations (Kostova et al., 2016), to gain sufficient autonomy to undertake initiatives (Andersson et al., 2001, Birkinshaw, 2014), and get the bargaining power and influence within the MNE to seek broader mandates (Mudambi et al., 2014a).

The role of initiatives for subsidiary role development is well established (Dörrenbächer and Gammelgaard, 2016). It is, therefore, important for subsidiary role development that subsidiary managers are able to sense and respond to the threats and opportunities in the local,

global, and internal markets, and where possible, seize the available opportunity. It is also important for the subsidiary managers to engage in issue-selling for MNE favourable treatment. However, for that, they also need to develop subsidiary level advantages (Dörrenbächer and Gammelgaard, 2016), which can be applied at the MNE level (Mudambi et al., 2014a, Mudambi et al., 2014b). As stated, one path of such transformations is through developing local innovations. Subsidiary innovations, developed through the subsidiary external embeddedness have the potential to be applied at the MNE level as a whole (Andersson et al., 2014, Decreton et al., 2017, Dellestrand and Kappen, 2011).

Policy-making with regard to subsidiary roles is important, yet has received little attention (Pearce and Tavares, 2000, Manolopoulos, 2008). Based on our results, we have two implications for policy-makers in New Zealand. First, our findings show that subsidiaries are generally low in external embeddedness. The question as to what would motivate the local and foreign firms to collaborate with each other remains unexamined. Theoretically, it is the firm's resource which is more valuable or unique to the other firms. This can motivate other firms to collaborate (Barney, 1991, Pfeffer and Salancik, 1978). What should the policy-makers do? A suitable answer could be a higher level of investment in R&D. If New Zealand gets more R&D intensive the local industry will benefit directly, and the foreign firms will have to work harder to compete with the local industry. But, inter-firm collaboration will also increase. Policy-makers can play a key role in enhancing the R&D base of New Zealand. Second, this study identifies a subsidiary type (entrepreneurial) which may transform to a fully developed subsidiary if its contributory role enhances. The subsidiary type predominantly belongs to the manufacturing industry, managed heterarchically or under a matrix structure, highly autonomous and high in initiatives. A key public policy recommendation is how to increase such subsidiaries, and how to encourage their continued development. For subsidiaries to develop, they should enhance their resources, be involved heavily in initiatives, seek

investment support from a number of sources (including domestic) or through their own means, and be less internally isolated and more externally embedded. Policy-makers need to encourage developed subsidiaries, as this may encourage other narrow scope foreign and local firms to determine and follow their appropriate developmental paths.

Limitations and Future Research

A key limitation with the new subsidiary classification offered in this study is that the data are collected from a single economy. Data collected from a single economy or from MNEs from a single economy will have some contextual limitations. It has been argued that no country, including the large ones like USA or China, can reflect the entirety of subsidiary types, because a subsidiary may be created in a host country for a location-specific reason or it could be based on what a predominant MNE needs in a home country (Enright and Subramanian, 2007). Therefore, while the best efforts have been made for a nation-wide study, it can still not be claimed that this study reflects the entirety of the subsidiary types in New Zealand. Future studies on New Zealand, therefore, may examine the subsidiary types with additional factors such as local innovations, and more importantly include the headquarters perspective in the subsidiary classification. Existing studies have mainly classified subsidiaries based on their perceptions of their MNE strategy or process. What is needed is a dyadic, triadic or a multi-level data involving the subsidiary, the HQ, the intermediary between the subsidiary and the HQ (such as RHQs), as well as the subsidiary manager.

The evidence suggests that theoretical or generic frameworks do not provide the same subsidiary types across contexts, as subsidiary types vary from country to country due to changes in their overall strategies (Taggart, 1997b). Still, the overarching framework presented here should be applicable for other contexts. We also think the results from this study on New Zealand, may apply to subsidiaries in small and developed European economies, with whom

New Zealand shares many characteristics such as politics, economy, and infrastructure. Research indicates that small and developed economies share characteristics in terms of their roles (Gammelgaard et al., 2009). For better insights, however, it would be useful if future research uses data from multiple similar economies.

Our discussion has implicitly assumed that subsidiaries would get enhanced roles over time, but development can be cyclical as it can go both ways, and so a subsidiary may instead get devolved over time. Some subsidiaries lose charters and mandates, and even got dissolved (Birkinshaw and Hood, 1998, Dörrenbächer and Gammelgaard, 2010). It is, therefore, important to consider the subsidiary role changes over time. Related to that, a key methodological limitation of this study is its cross-sectional design. Since changes or enhancements in roles can be best studied over time, a longitudinal study is more appropriate than a cross-sectional study (see e.g. Birkinshaw and Hood, 1997). We hence recommend that longitudinal designs are used in future examinations of subsidiary roles and role development.

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Appendix

***** Insert Table A here *****

***** Insert Table B here *****

Figure 1: An Overarching Subsidiary Classification Framework

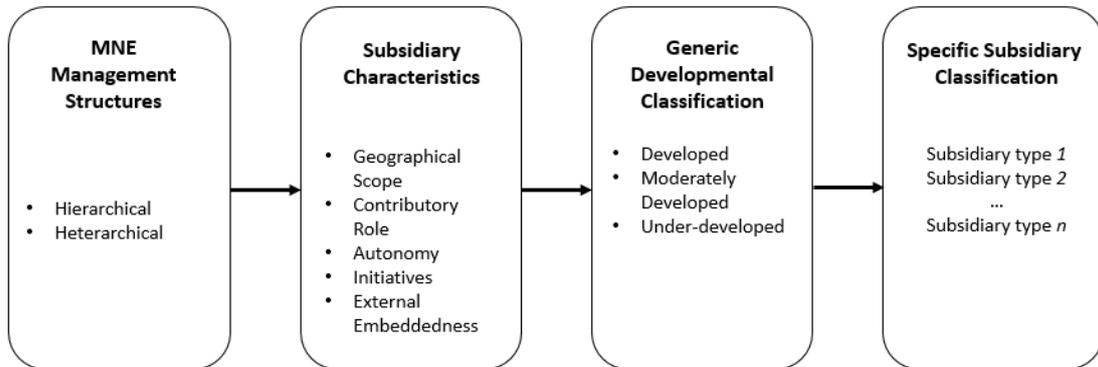


Figure 2: The Overarching Framework (Complete)

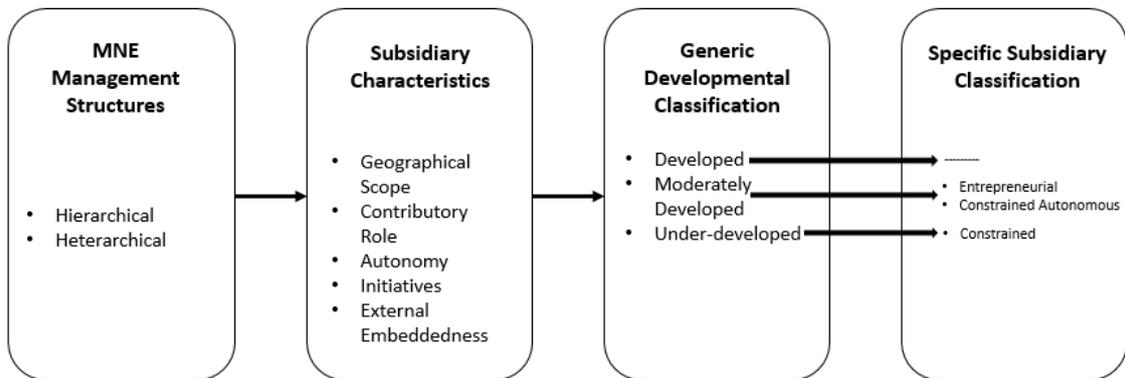


Table 1: Overarching classification framework variables

Variable Name	Variable Components
Subsidiary External Embeddedness (Adapted from Gammelgaard et al. (2011), Birkinshaw and Ridderstråle (1999))	Extent of the subsidiary activity? Subsidiary collaborative agreements with local firms
Subsidiary Geographical Scope (Concept taken from White and Poynter (1984))	Extent of the subsidiary activity? <ul style="list-style-type: none"> • Serve local market • Serve international market
Subsidiary Contributory Role (Adapted from Birkinshaw et al. (1998), Harzing and Noorderhaven (2006a))	Extent of the subsidiary activity? <ul style="list-style-type: none"> • Undertakes R&D for the MNE as a whole • Product management for the MNE as a whole • Supply inputs to the MNE as a whole
MNE Management Structures (Concepts taken from Birkinshaw and Hood (1997), Enright (2005), Wolf and Egelhoff (2012))	How are subsidiaries managed? <p style="text-align: center;">Hierarchically</p> <ul style="list-style-type: none"> Corporate headquarters Regional headquarters/office Mandated subsidiary Matrix <p style="text-align: center;">Heterarchically</p> <ul style="list-style-type: none"> Independent management
Autonomy (Adapted from Birkinshaw et al. (1998), Gammelgaard et al. (2012), Gammelgaard et al. (2011), Mudambi and Navarra (2004))	Subsidiary autonomy for following activities? <p style="text-align: center;">Strategic Autonomy</p> <ul style="list-style-type: none"> • Hiring senior officials • Outsourcing product/services • Market development • Product development • Annual budget setting • Changes in organisation of activity • Financing • Choice of technology • Overall autonomy <p style="text-align: center;">Operational Autonomy</p> <ul style="list-style-type: none"> • Changes in standard operating procedures • Changes in product/service design • Day-to-day management
Initiatives (Adapted from Birkinshaw (1997), Birkinshaw et al. (1998))	Engagement in following activities in last 5 years? <p style="text-align: center;">Local Initiatives</p> <ul style="list-style-type: none"> • Offering new products/services to host country • Enhancements to existing products/services • Market development • New technology adaptation <p style="text-align: center;">Global Initiatives</p> <ul style="list-style-type: none"> • Developed new products/services to be sold internationally • Expanding R&D activity <p style="text-align: center;">Internal Initiatives</p> <ul style="list-style-type: none"> • Transfer of production process to host country • Acquisition of local companies • Expanding company operations in host country

Table 2: Correlations, means, and standard deviations (SD)

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9
1 Local Market Scope	4.08	0.927	1.000								
2 International Market Scope	2.29	1.129	-0.507**	1.000							
3 External Embeddedness	2.37	0.990	0.012	0.025	1.000						
4 Contributory Role	1.68	0.811	-0.366**	0.396**	0.027	1.000					
5 Strategic Autonomy	3.47	0.830	0.014	0.159**	0.142**	0.152**	1.000				
6 Operational Autonomy	3.75	0.860	-0.042	0.132**	0.172**	0.102*	0.711**	1.000			
7 Local Initiative	2.97	0.718	0.130**	0.051	0.209**	0.208**	0.369**	0.320**	1.000		
8 Global Initiative	1.97	0.969	-0.284**	0.405**	0.089	0.557**	0.380**	0.314**	0.362**	1.000	
9 Internal Initiative	1.89	0.742	0.067	0.018	0.097*	0.085	0.254**	0.220**	0.340**	0.220**	1.000

Notes: * p<0.05; ** p<0.01

Table 3: Summary of clusters

Overarching Framework Dimension	Clusters' Summary								
	Mean Score			Clusters' Differences					
	Cluster 1 - (N=116)	Cluster 2 - (N=162)	Cluster 3 - (N=151)	Clusters 1 and 2		Clusters 1 and 3		Clusters 2 and 3	
	μ	μ	μ	h	sig	h	sig	h	sig
Geographical Scope									
<i>Local</i>	4.08	4.52	3.62	27.923	.000	13.304	.000	72.801	.000
<i>International</i>	2.08	1.76	3.01	7.026	.008	44.844	.000	91.69	.000
Contributory Role	1.45	1.27	2.3	4.929	.026	66.033	.000	122.538	.000
Initiative									
<i>Local</i>	2.48	3.06	3.25	43.383	.000	74.707	.000	7.338	.007
<i>Global</i>	1.41	1.51	2.9	2.988	.084	136.988	.000	158.75	.000
<i>Internal</i>	1.55	1.9	2.14	17.751	.000	38.051	.000	6.594	.010
Autonomy									
<i>Strategic</i>	2.56	3.64	3.98	129.001	.000	172.875	.000	25.179	.000
<i>Operational</i>	2.81	3.97	4.23	133.964	.000	162.536	.000	13.423	.000
External Embeddedness	1.75	2.07	2.01	9.631	.002	6.34	.012	0.365	.546

Table 4: Ranking of cluster capacity

Clusters' Capacity Ranked						
Overarching Framework Dimension	Relative Ranking (A, B, C)			Absolute Ranking (Low, Moderate, High)		
	Cluster 1	Cluster 2	Cluster 3	Cluster 1	Cluster 2	Cluster 3
Geographical Scope	C	B	A	Moderate	Moderate	Moderate
Contributory Role Initiative	B	C	A	Low	Low	Low
<i>Local</i>	C	B	A	Moderate	High	High
<i>Global</i>	C	B	A	Low	Low	Moderate
<i>Internal</i>	C	B	A	Low	Low	Moderate
Autonomy						
<i>Strategic</i>	C	B	A	Moderate	High	High
<i>Operational</i>	C	B	A	Moderate	High	High
External Embeddedness	C	A	B	Low	Moderate	Moderate

Table A: Subsidiary roles

Classification Framework / Role Typology	Research Motive / Question	Subsidiary Types and their Description
Scope Framework (White and Poynter, 1984)	Changes in subsidiary strategy in response to the changing business environments.	Miniature Replica Business (A small-scale operation producing and marketing parent's or related product lines); Marketing Satellite Business (Importers/marketers of products produced centrally); Rationalized Manufacturer (Produce for international/global markets); Product Specialist (Produce, market, and develop products for global markets); Strategic Independent (Subsidiaries with an unconstrained product, market and value-adding scope of activity).
Competence-Strategic Importance Framework (Bartlett and Ghoshal, 1986)	How to organise to be globally competitive and achieve the global strategic objectives.	Implementer (low strategic importance, low competence); Contributor (low strategic importance, high competence); Strategic Leader (high strategic importance, high competence); Black Hole (high strategic importance, low competence).
Integration-Responsiveness Framework (Jarillo and Martínez, 1990, Taggart, 1997b)	Balancing subsidiary goal congruence with the MNE (global integration), with local market demands (local responsiveness).	Quiescent (low local responsiveness, high global integration); Autonomous (high local responsiveness, low global integration); Active (high local responsiveness, high global integration); Receptive (low local responsiveness, high global integration).
Knowledge Flows Framework (Gupta and Govindarajan, 1991)	Differences in terms of subsidiary capacities to provide and receive knowledge to and from the MNE.	Global Innovator (high outflow, low inflow); Integrated Player (high outflow, high inflow); Implementer (low outflow, high inflow); Local Innovator (low outflow, low inflow).
Organising Role Typology (Birkinshaw and Morrison, 1995)	How subsidiary structural context varies according to their strategy.	World Mandate (high strategic autonomy, low internal product flows, high international value-chain configuration, high performance); Specialized Contributor (intermediate strategic autonomy, high international value-chain configuration, high internal product flows, low performance); Local Implementer (low strategic autonomy, low international value-chain configuration, high internal product flows, high performance)
Autonomy-Procedural Justice Framework (Taggart, 1997a)	Can subsidiaries be classified across autonomy and procedural justice?	Vassal (low procedural justice, low autonomy, high configuration, high integration, high responsiveness, low coordination and low market/product/value-added scope); Collaborator (high procedural justice, low autonomy, high market scope, high coordination, high configuration, high integration, and low responsiveness, low product/value-added scope); Militant (low procedural justice, high autonomy, high responsiveness, high product/value-added scope, low coordination, low configuration, low market scope, and low integration); Partner (high procedural justice, high autonomy, high coordination, high market/product/value-added scope, low configuration, low integration and low responsiveness)
Organising Framework (Enright and Subramanian, 2007)	Organisation of the earlier frameworks using a four-dimensional approach.	A 24-part subsidiary role typology emanating from four national subsidiary types: Leader, Innovator, Implementer, and Observer , each of which leads to three subsidiary types: <i>Global, Regional, Local</i> , where the product scope is high, and three subsidiary types: <i>Global Specialist, Regional Specialist, Local Specialist</i> , where the product scope is low.

Table B: Evolution of subsidiary roles

Study	Drivers of Subsidiary Role Development	Indicators of Subsidiary Role Development
Organizing Subsidiary Evolution Framework (Birkinshaw and Hood (1998))	<ul style="list-style-type: none"> •Head office assignment •Subsidiary choice •Local environment determinism. 	Changes/enhancement in: <ul style="list-style-type: none"> • Subsidiary Charters • Subsidiary Capability
Empirical testing of the Organizing Subsidiary Evolution Framework (Pedersen (2006))	<ul style="list-style-type: none"> •Subsidiary autonomy •Subsidiary initiative •Supplier quality and customer demands 	Changes/enhancement in: <ul style="list-style-type: none"> • Subsidiary scope • Subsidiary competence • MNE-subsidiary interdependence
Drivers of Subsidiary Evolution (Egeraata and Breathnacha (2012))	<ul style="list-style-type: none"> •Headquarters •Subsidiary •MNE internal and subsidiary external environment 	Subsidiary enhanced roles in process R&D
Drivers and elements of subsidiary evolution (Filippov and Duysters, 2014)	<ul style="list-style-type: none"> •Subsidiary autonomy •Subsidiary initiative •Local environment dynamism 	Changes/enhancement in: <ul style="list-style-type: none"> • Subsidiary scope • Subsidiary competence • MNE-subsidiary interdependence • Subsidiary external embeddedness
Subsidiary role development (Cavanagh and Freeman (2012))	<ul style="list-style-type: none"> •Subsidiary resource development •Subsidiary initiative 	Changes/enhancement in: <ul style="list-style-type: none"> • Subsidiary contributory role