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IT'S SIMPLY COMPLICATED!

Subsidiary Managers' Activities and Performance after Gaining an R&D Mandate: A Modular Microfoundations Perspective

Noushan Memar

Mälardalen University

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Noushan Memar

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School of Business, Society and Engineering

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Akademisk avhandling

som för avläggande av ekonomie doktorsexamen i företagsekonomi vid Akademin för ekonomi, samhälle och teknik kommer att offentligen försvaras fredagen den 19 december 2025, 13.15 i Beta, Mälardalens universitet, Västerås.

Fakultetsopponent: Professor Niklas Arvidsson, Kungliga tekniska högskolan

Akademin för ekonomi, samhälle och teknik

Abstract

Despite extensive research on subsidiary roles and mandates, the mechanisms through which subsidiary managers translate structural changes, such as gaining R&D mandates, into performance outcomes remain unclear. This dissertation addresses this shortcoming by developing a modular microfoundations framework that conceptually integrates the MNE-, subsidiary-, and subsidiary manager levels to explain how antecedents, mechanisms, and outcomes unfold across levels. Empirically, the dissertation comprises four papers focused on the subsidiary and subsidiary manager levels, examining 98 global subsidiaries of eight Swedish engineering multinational enterprises (MNEs). It analyses how managers' activities, managerial aptness, and subsidiaries' relational embeddedness shape subsidiary performance across three dimensions: strategic, innovation, and financial, following the gaining of an R&D mandate.

The findings reveal that subsidiaries are not passive recipients of R&D mandates. When headquarters grants such mandates, it simultaneously transfers control over the use and development of knowledge resources to the subsidiary. This shift positions subsidiary managers as central actors whose activities embed resources within internal and external networks. Through these behavioural mechanisms, subsidiaries enhance their capacity to innovate, strengthen their strategic influence vis-à-vis headquarters, and improve their positioning within the MNE's global value chain.

The results further show that innovation performance does not automatically improve after an R&D mandate gain. The value of new resources and responsibilities attached to the R&D mandate depends on how subsidiary managers direct their activities and manage relational embeddedness. Internal activities towards headquarters and sister units may constrain innovation, whereas external activities encourage exploration but may not yield immediate gains. Moreover, the internal relational embeddedness serves as an anchor, enabling subsidiaries to convert innovation outcomes into financial returns by aligning experimentation with effective appropriation.

Finally, the dissertation identifies managerial aptness as a key condition shaping managers' activities. Two distinct forms of aptness are defined: local aptness, which enhances external engagement and contextual responsiveness, and global aptness, which fosters alignment with global direction and corporate strategy. Local and global aptness guide how managers direct their influential activities across internal and external networks, ultimately shaping the subsidiary's strategic positioning and performance within the MNE network.

Overall, this dissertation demonstrates that subsidiary performance after structural change stems not from resource assignment alone but from the interplay among managerial aptness, behavioural mechanisms, and relational orchestration. The findings contribute to international business research by demonstrating how subsidiary managers transform structural change into multidimensional performance outcomes, providing a human-centred explanation of adaptation, resilience, and sustained effectiveness in the evolving MNE system.

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This work is dedicated to myself.
For every late night endured, every challenge faced,
and every moment of doubt overcome.
For the persistence to push through difficulties
and rise stronger each time.
For proving that perseverance, passion,
and courage can break any barrier.
This work stands as evidence that I dreamed, and I did.

Per aspera ad astra.

My way of saying thanks

This acknowledgement is not just a list of names; it is the narrative of my journey, my heart on the page, a celebration of the people, passion, and persistence that brought me here.

For as long as I can remember, I have loved observing the world, seeking patterns, and trying to understand why things work the way they do. My mind always sought the reasons, causes, and mechanisms that made a reality possible. Perhaps that is why my parents gave me the translated version of Arkady Leokum's "*Tell Me Why"* series of science books for children as soon as I learned to read. I also loved conducting experiments, from small investigations into how living creatures adapt and survive to exploring how heat, gravity, and even simple tools like scissors, as well as more complex devices like a VCR, could reveal fundamental principles of physics. Of course, not every experiment was a success. Take my (in)famous ant experiment: At the age of five, having learned that ants gather food in summer to survive the winter, I conducted an experiment to see if I could help them by filling every wall crack with sugar. My well-intentioned plan backfired spectacularly: the house was soon overrun with ants, an exterminator had to be called, and I found myself in trouble. But hey, pursuing science has its ups and downs, and I learned from every failed experiment. Each investigation was a step towards cultivating persistence, curiosity, and a love for discovery, traits that carried me through my PhD.

To me, my academic journey has often resembled the adventures of **Don Quixote**, where each new understanding seemed to challenge what came before, pushing the boundaries of my knowledge. At times, it also felt like the quest of a madman devoted to a noble yet sometimes unreachable cause. During my doctoral journey, there were times when I felt lost and alone, standing in a pitch-black night with no strength to take even a single step forward. I am grateful that in those moments, I had brilliant people who lifted me, gave me hope, and kept encouraging me to reach for that (un)reachable star.

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You three have been my one-of-a-kind compass. Your collective wisdom, patience, and confidence in me carried me through moments of doubt and pushed me beyond what I thought possible. Like the three wise men, each of you gifted me something special: insight, balance, and curiosity. Together, you influenced this dissertation and shaped the person I have become. For that, I am deeply and forever grateful.

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To Charlotta Edlund, my magical *Time-Turner*, whose efficiency and proactive spirit often made it feel as if time itself could bend to our will. From countless shared projects and initiatives to moments when your support

transformed overwhelming and chaotic tasks into manageable ones, you often brought joy and order to my most hectic days, a gift that eased my path and that I will always treasure.

Peter Ek and Michał Budryk, our conferences and conversations, made this journey unforgettable. My coffee club crew, Angelina Sundström Kärneus and Fredrik Jeanson, thank you for the supply of caffeine, joy, and entertainment on the hardest days. Izabelle Bäckström, your laugh and encouraging words helped me through a tough part of this adventure. Thank you!

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And to the most important people in my life, Mom and Dad, words cannot capture my gratitude. You guided me towards science and the pursuit of knowledge from an early age. Without your passion, sacrifice, and tireless belief in me, I would be nowhere. Thank you for always reminding me that I could, even when the world insisted I could not. Thank you for all the intellectual debates, which began long before I could fully grasp the concepts, and for your unconditional love and guidance.

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Dad, you have always been my sparring partner in debates, challenging me on every topic and sharpening my thinking with every argument. Yet, when it comes to this dissertation, you have been a source of calm and strength. And in between it all, your humour cut through the pressure, reminding me not to take everything too seriously and helping me breathe.

You have been my parents, teachers, best friends, and advocates. Even when I was not in my corner, you were there, fighting for me. I am who I am, standing here at the finishing line of yet another adventure because of you. Thank you for believing in me and, most of all, for giving me life, as well as the chance to thrive in this world.

For me, this PhD is not just an academic achievement but rather a tribute to all of you who have been part of my journey, teaching me that reaching for the (un)reachable star, no matter how weary the pursuit, is indeed glorious.

Thank you all.

Noushan
November 2025, Västerås

List of Papers

This thesis[1] is based on the following papers, which are referred to in the text by their Roman numerals.

I. Gillmore, E., Andersson, U., & **Memar, N**. (2018). How subsidiaries influence innovation in the MNE value chain. *Transnational Corporations*, 25(1), 73-100.

II. **Memar, N.,** Andersson, U., & Gillmore, E. (2022). What Happens when Subsidiaries Go through a Change? Impact of Gaining an R&D Mandate on Subsidiary Managers' Activities and Subsidiary Innovation. In: Batas, S., Kuivalainen, O., Sinkovics, R.R. (eds) *Megatrends in International Business: Examining the Influence of Trends on Doing Business Internationally. The Academy of International Business.* (pp. 159-181). Palgrave Macmillan, Cham.[2]

III. **Memar, N.,** and Yildiz, H.E. (working paper) Is it a Mirage? Rethinking the link between R&D mandate and Profit from innovation.
Previous versions of this paper have been accepted for presentation competitively at the 48th Annual Conference of the European International Business Academy in 2022 in Oslo, Norway, and at the 49th Annual Conference of the Academy of International Business, UK & Ireland Chapter in 2023 in Glasgow, Scotland.

IV. **Memar, N**. (working paper) The Linchpin of Subsidiary Strategic Performance: Unpacking the Role of Managerial Aptness.
This paper has been accepted for presentation competitively at the Annual Conference of the Academy of International Business, UK & Ireland Chapter, 2025, and at the Annual Conference of the European International Business Academy, 2025.

Reprints were made with permission from the respective publishers and under open access premises.

[1] I received the Michael Z Brooke Prize for the Best Doctoral Paper, showcasing my dissertation at the 50th annual conference of the Academy of International Business, UK & Ireland Chapter, in 2024 hosted at Aston Business School, Birmingham, UK.

[2] This study has received a nomination for the Global Strategy Journal Best Paper award at the Academy of International Business annual conference, UK & Ireland Chapter in April 2021 hosted online by the University of Greenwich, London, UK.

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1. Setting the Scene

- Gottfried Wilhelm Leibniz (1646–1716), the German philosopher, tells us that "we can find no true or existent fact without there being a sufficient reason why it is thus and not otherwise, although most of the time these reasons cannot be known to us" (Monadology, 1714, §32)

Research on globalisation demonstrates that the global value chains (GVCs) of multinational enterprises (MNEs) utilise resources, talents, and capabilities from around the world to forge a better path to innovation and corporate performance, thereby securing competitive advantages on a global scale (Nowacki & Bachnik, 2016). This approach leads to efficient capital and technological flow among businesses and amplifies net efficiency-benefits[3] in the global economy (Verbeke et al., 2018).

Considering the evidence of net efficiency-benefits derived from the globalisation strategy of MNEs across various industries, along with the steady increase of economic interdependence among countries, even in the face of disruptive events and uncertainties (e.g., the digital revolution that began in the 1980s, the 2008 Great Recession, the rise of economic nationalism movements since 2016, the COVID-19 pandemic, and the de-globalisation trend), scholars in the field of international business (IB) advocate that the most constructive and sustainable approach for enhancing corporate performance continues to be globalisation (Contractor, 2021; Verbeke, 2020) through fine-slicing value chain activities (Contractor et al., 2010; Jensen & Pedersen, 2010). In this view, the totality of MNEs' success increasingly hinges on their ability to navigate complexity through subsidiaries that perform well globally. This interdependence reflects the differentiated yet interconnected structure of the global economy (Verbeke et al., 2018) and, in turn, points to the importance of understanding the *micro-level* mechanisms underlying GVC management (Kano et al., 2020).

However, this mechanism cannot be fully understood in isolation; to capture this reality, an approach that integrates multiple levels of analysis is required. The *microfoundations* perspective (Felin et al., 2015) provides such a lens by emphasising that any macro-level phenomenon ultimately stems from

[3] Verbeke et al. (2018) state that "net efficiency-benefits reflect lower resource usage per unit of output, and the international diffusion of better industry practices, ranging from high-quality accounting systems to proprietary technologies".

the individuals' actions and interactions (Hedström & Swedberg, 1998). From this view, the global economic order can be understood as a multi-level nested system in which capital, knowledge, and resources flow across borders, with MNEs functioning as the coordinators of these exchanges. Inside MNEs, three interrelated levels can also be identified: the *macro level*, capturing the MNE as a corporate whole; the *meso level*, where subsidiaries operate as critical nodes, connecting the local host environment with HQ and the rest of the MNE; and the *micro level*, where individual managers engage in activities that ripple upward to affect subsidiary performance and ultimately the MNE outcome. Given the turbulence of the global economic environment (e.g., heightened volatility, uncertainty, and techno-nationalist pressures), understanding the mechanisms and causalities between MNE levels is increasingly critical. Such global dynamics compel MNEs to boost their foreign direct investment (FDI) through diversified globalisation strategies as a means of securing growth (Petricevic & Teece, 2019) and to develop more resilient global value chains (Gereffi, 2020; Sharma et al., 2020) that contribute to a sustainable global economy (UNCTAD, 2025).

While existing research has advanced the understanding of globalisation strategies and GVC management, the causal pathways operating within and across levels remain insufficiently examined. Much of IB literature tends to adopt a single-level focus, examining either the corporate or the subsidiary level, and often treating these two levels separately. This approach risks overlooking the interdependencies across levels within MNEs and neglecting the micro-level causal actions through which higher-level outcomes emerge (Ambos et al., 2025). To address these shortcomings, this dissertation adopts the *modular microfoundations* perspective (Ambos et al., 2025), which conceptualises causal links as discrete yet interdependent modules. This modular structure enables the isolation and examination of each causal mechanism, thereby achieving a level of causal precision that traditional linear or aggregate models cannot provide. Extending this logic, the dissertation's framework is structured around antecedents, mechanisms, and outcomes. This approach strengthens the explanatory power of microfoundations research in IB by enabling the explicit theorisation of mechanisms rather than merely implying them. This method also shows that modularity can be organised around mechanism-centric explanations rather than being limited to linear causal chains.

Furthermore, although causal language is often used in IB literature, many studies in practice focus on the associations between antecedents and outcomes or rely primarily on cross-sectional data – for example, linking subsidiaries' access to innovation-related resources with their performance, without sufficiently theorising or testing the underlying causal mechanisms that connect and trigger these relationships. This approach has contributed to a fragmented understanding of subsidiary management as a key mechanism, particularly regarding its dynamic role in linking subsidiary behaviour to performance outcomes (Meyer et al., 2020). This dissertation addresses this

limitation by employing a quasi-experimental research design involving a unique dataset of R&D mandate assignments across Swedish MNEs globally. These mandate events are quasi-exogenous, providing a natural experiment context that enables stronger causal interpretation and analytical precision.

Against this backdrop, this dissertation departs from the *macro-level* discourse on corporate globalisation strategy and focuses solely on the *meso-level*, the subsidiary, as the primary level of investigation. It identifies and connects meso-level antecedents to meso- and micro-level mechanisms, ultimately linking them to meso-level outcomes. In doing so, it emphasises that *subsidiary performance* – and, by extension, the MNE's success in the global economy – rests on the *micro-level explanans* of individual subsidiary managers, whose activities and interactions in their environment bridge levels of analysis and shape outcomes across the multi-level, nested system (see Figure 1).

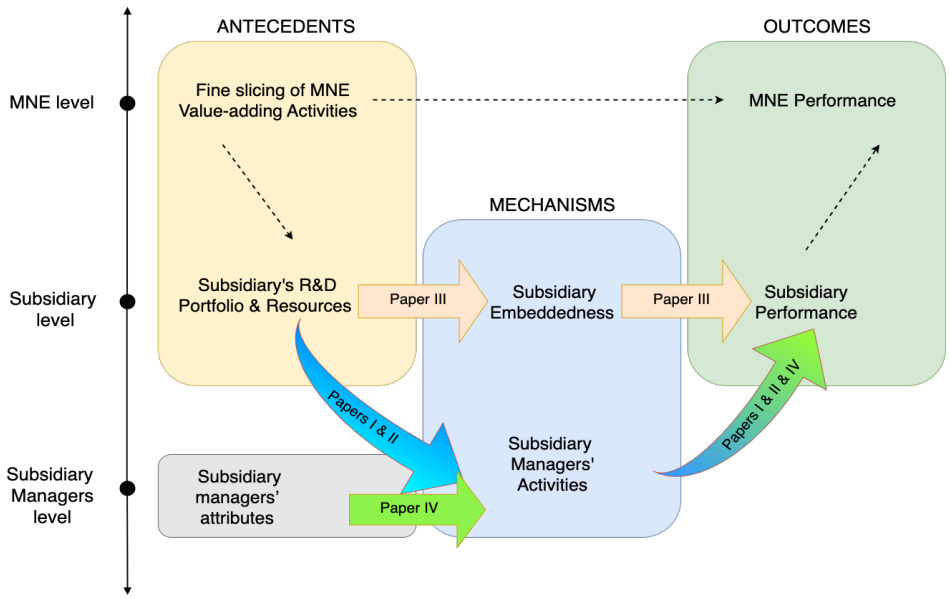

Figure 1 – Illustration of the research framework of this dissertation

Figure 1 illustrates the research framework and modular logic of this dissertation. The axis captures the three levels within the MNE (*micro, meso,* and *macro*), and the figure positions the dissertation's four papers within this framework, showing how each paper isolates and tests a specific mechanism module of the broader causal chain while remaining interdependent with the others.

To illustrate this nested reality, Vignette 1 brings this multi-level interplay to life. It is based on various data from the study, compiled for explanatory purposes.

Vignette 1 – Illustrative Case: From Mandate to Momentum

"In the heart of an industrial region in East China, within a cluster of innovation hubs, lay the regional subsidiary known as *Alfa*. Alfa was part of the Swedish engineering multinational company, *Gamma Industrial Corporation (GIC)*. GIC specialises in manufacturing industrial materials and equipment, including stainless steel, chemical engineering materials, alloyed iron, and machine components.

Alfa was set to become a thriving centre of innovation and profitability under the leadership of General Manager *Henry M*.

It was the beginning of the week for Henry, but this Monday was particularly significant. He had an important meeting with the top management team at GIC headquarters (HQ). This was a follow-up meeting; HQ wanted to assess the implementation and performance of Alfa's recently assigned Research and Development (R&D) project in *Hot isostatic pressing (HIP)*[4]. The project mandated Alfa to explore HQ's vision of finding a sustainable yet profitable technique in the HIP field. To support this vision, HQ had allocated a generous budget and granted Henry full authority over expenditures.

Though this follow-up meeting had a clear agenda from HQ, Henry had his own agenda. He intended to lobby for a sub-project that had emerged from the HIP project's material testing phase. This was not the first time Henry had negotiated on behalf of his subsidiary with the Swedish HQ. Since GIC established Alfa in China 20 years ago, Henry's subsidiary has shouldered multiple responsibilities, including production, sales, and various R&D projects.

The meeting began. After emphasising the strategic importance of the investment for GIC, HQ's top management requested an update on the project. Henry presented his team's findings, explaining that they had developed a viable solution to enhance the quality of HIP processes. He then introduced his additional proposal: the materials generated from HIP testing had given rise to an idea for a new R&D sub-project in the *Wire area*[5], exploring the potential applications of the superior materials. He elaborated on the value and advantages of utilising these superior materials in alignment with the corporation's sustainability vision.

Following an extensive discussion, HQ acknowledged the feasibility of the sub-project and decided to include it in Alfa's new portfolio. They also allocated additional funding to Alfa's HIP project.

This decision was good news for Alfa, but hardly a revolutionary development. Henry's unit had already established itself as an innovation leader in the local region and within GIC. As an experienced manager who had handled numerous R&D projects before, Henry understood that the success of this new endeavour, like previous ones, depended on maintaining a delicate balance in managing relationships with HQ, sister subsidiaries, and local collaborators.

[4] Hot Isostatic Pressing (HIP) is a high-temperature, high-pressure manufacturing process used to densify, strengthen, and remove defects from metal, ceramic, and composite materials. It's particularly valuable for materials used in industries such as aerospace, automotive, and medical device manufacturing.

[5] The Wire area focuses on producing round and flat wires from high-performance materials, which are supplied to a wide range of industries, including medical, aerospace, oil and gas, and electronics.

With this in mind, Henry initiated negotiations with local companies. These discussions involved problem-solving, consulting, and collaborative project development efforts among all parties. Subsequently, Henry arranged a meeting with *Jessie N.*, the manager of *Beta*, another GIC subsidiary located in Myanmar, a neighbouring country with a production plant specialising in *Wire*. During their discussion, Henry proposed a strategic alignment of resources to enhance regional productivity for both subsidiaries. His offer was clear: Alfa's top-skilled engineers and managers would mentor Beta's plant workers in the Wire Division. In return, Alfa would gain access to Beta's plant for *Wire R&D experimentation*. After a series of negotiations, both parties finalised and agreed upon the deal.

Five Years Later

As a result of the deals Henry had negotiated, Alfa successfully leveraged the expertise of local collaborators and Beta's advanced manufacturing capabilities. Through relentless research and experimentation, Alfa invented a unique pattern for *high-quality, finely knitted wire pads.* These pads were designed to serve as filters in airbag safety systems, ensuring that no debris or residue from the explosive components would compromise the airbag's functionality.

This innovation quickly attracted global attention. Companies from various industries, as well as GIC global clients, expressed keen interest. Henry's unit, which had initially been one of the few regional subsidiaries with a similar portfolio of activities, was now the designated subsidiary responsible for the global production and sale of this unique pattern under the GIC flagship product line.

With Henry's effort, Alfa not only expanded its market and network but also added substantial value and a consistent profit line to GIC's overall performance. What had started as a routine project review had evolved into a transformative opportunity, one that cemented Alfa's role as a pivotal innovator in the corporation's global strategy."

This case, although fictional[6], highlights how *micro-level* mechanisms come into play when implementing a *macro-level* corporate globalisation strategy, with direct implications for *meso-level* subsidiary performance. Theoretically, this case reflects the critical role of subsidiary managers' activities (O'Brien, 2014; Wooldridge et al., 2008), the impact of available resources in the environment (Casciaro & Piskorski, 2005; Hillman et al., 2009; Pfeffer & Salancik, 1978), and the influence of the subsidiary's internal and external relationships (Andersson et al., 2002; Cantwell & Mudambi, 2005; Foss & Pedersen, 2002; Grabher, 1993) on subsidiary performance and the overall MNE outcome. Accordingly, this dissertation challenges the assumption that structural assignments derived from corporate globalisation strategies automatically lead to predictable subsidiary outcomes by demonstrating that performance is contingent on subsidiary managers' orchestration mechanisms.

The following section situates this dissertation within IB literature by reviewing macro-, meso-, and micro-level studies, presenting the theoretical foundation and highlighting the research gap that frames the research questions of this study.

[6] The story presented here is fictional, drawing its inspiration from the empirical data and interviews used in this dissertation.

1.1 Problematisation, Research Aim and Questions

The macro-level phenomenon of globalisation strategy originates from the MNE and has been widely discussed in the outsourcing and offshoring literature. This strategy entails the "slicing" of value chain activities with the goal of relocating the sliced activities to one or more of the MNE subsidiaries across borders in optimal locations (Demirbag & Glaister, 2010; Jensen & Pedersen, 2010). Initially, MNEs divided their value chain into broad categories such as manufacturing, R&D, marketing, and administration, before moving to "fine-slicing" the functions and operations within each group (Contractor et al., 2010; Jensen & Pedersen, 2010).

Scholars have discussed how the offshoring decision for these fine-sliced activities tends to follow the "smile of value creation" logic (Mudambi, 2007). This view suggests that MNEs tend to relocate low-value-adding activities to low-cost host countries, while retaining high-value activities in high-cost locations. This understanding was challenged as MNEs began offshoring fine-sliced high-value-adding activities, such as R&D, from high-cost locations near the core competencies of the MNE (i.e., at a central R&D unit co-located with HQ) to low-cost destinations with easy access to high-quality skills and knowledge (Jensen & Pedersen, 2012; Lewin et al., 2009). Through the offshoring of high-value-adding activities, MNEs were able to take advantage of foreign inputs (Cantwell & Mudambi, 2005; Contractor et al., 2010), host-country resources, and business networks (Kedia & Mukherjee, 2009), thereby enhancing their overall performance (Nieto & Rodríguez, 2011), although managing increasingly dispersed operations has proven more complex than anticipated (Dibbern et al., 2008; Larsen et al., 2013).

This macro-level phenomenon of offshoring fine-sliced value-adding activities has changed the role of the HQ to that of an orchestrator of resources (Ambos & Schlegelmilch, 2007; Ghoshal & Bartlett, 1988) and a controller of finances and investments (Foss, 1997). This reconfiguration of roles has elevated subsidiaries at the meso-level to become the primary drivers and heart of the MNE's performance. Yet, while macro-level research explains where, how, and why MNEs relocate value-adding activities, it offers limited insight into how such structural reallocations translate into performance outcomes.

To understand how global strategic reallocations manifest as subsidiary performance outcomes, the analytical lens must shift to the level below, specifically the link between the macro and meso levels, as discussed in the literature on subsidiary evolution and performance.

In practice, as the MNE globalisation strategy for fine-sliced, value-adding activities becomes more widespread, it has become increasingly common practice to reallocate R&D, among other functions, to subsidiaries in resource-rich countries (Contractor et al., 2010; Lewin et al., 2009). This practice is

referred to as R&D *mandating*[7]. Typically, when HQ assigns an R&D mandate to a subsidiary, it apportions considerable resources to that unit to develop the capabilities required for the new responsibility. This quasi-exogenous allocation of new resources expands the subsidiary's resource base (Birkinshaw & Hood, 1998) and transfers responsibility for controlling the use and development of assigned R&D resources and activities to the subsidiary.

However, much of the R&D mandate-performance literature assumes that the structural allocation of R&D responsibilities and resources automatically translates into enhanced subsidiary performance. The prevailing assumption is that such R&D assignments increase the level of R&D activities undertaken in the subsidiary, thereby enhancing the *likelihood* of generating more innovations within the subsidiary and the MNE (Cantwell, 1989, 1995; Cantwell & Janne, 1999; Cantwell & Mudambi, 2005; Pearce, 1999; Papanastassiou & Pearce, 1997; Zander, 1999). This assumption overlooks the organisational reality that structural assignments alone do not determine outcomes. Instead, performance depends on the mechanisms through which subsidiaries integrate and utilise their newly assigned responsibilities and associated resources within internal and external networks. This conceptual oversight leaves the causal mechanisms at the meso-level, between mandate allocation and subsidiary performance, partially theorised.

To address this conceptual limitation, it is necessary to explore the meso-level mechanisms through which subsidiaries convert structural reallocations into realised performance. One such mechanism is *embeddedness*, referring to the continuous knowledge exchanges and interactions through which subsidiaries build relational ties and interdependencies within the MNE's internal and external networks.

The subsidiary innovation literature offers valuable insights into this process. Knowledge gathered beyond the boundary of the subsidiary is an important contributor to innovation performance (e.g. Andersson et al., 2002; Cohen & Levinthal, 1990; Egelhoff, 1988; Hansen, 1999; Lawrence & Lorsch, 1967; Nowacki & Bachnik, 2016; Pfeffer & Salancik, 1978; Powell, Koput, & Smith-Doerr, 1996; Tsai, 2001; Uzzi, 1997).

External embeddedness arises through engagement with host-country partners and other external actors, enabling subsidiaries to access context-specific knowledge and resources that foster collaboration, adaptation, and learning (Hansen, 1999; Uzzi, 1996). Such collaborations support opportunity exploration (Moran, 2005) and contribute to innovation outcomes (Hallin et al., 2011). Internal embeddedness, in parallel, develops through continuous interaction within the MNE network, facilitating communication, adaptation, and cross-unit learning (Pu & Soh, 2018). These processes enable subsidiaries to

[7] A mandate refers to an activity assigned by HQ to a subsidiary, in which the latter is granted a scope of responsibilities across local, national, regional, and global levels (Birkinshaw, 1996; Birkinshaw & Hood, 1998; Roth & Morrison, 1992).

transfer and integrate externally sourced knowledge into the internal MNE network (Ferraris, Santoro, & Scuotto, 2020), thereby strengthening the MNE's overall knowledge base and enhancing innovation (Gölgeci et al., 2019; Laursen, 2012), which ultimately contributes to improved financial performance (Andersson, Forsgren, & Pedersen, 2001).

However, while internal and external embeddedness have been widely recognised as drivers of subsidiary innovation and financial performance, they remain under-examined in the post-R&D mandate context. Following the acquisition of an R&D mandate, subsidiaries undergo a reconfiguration of relationships and responsibilities as they integrate the mandate into their existing portfolio and leverage opportunities and resources across internal and external environments (Berry, 2014; Birkinshaw, 1997; Delany, 2000). This reconfiguration impacts the post-mandate performance by influencing the relational dynamics that govern how subsidiaries mobilise, integrate, and utilise resources within and across networks. Additionally, embeddedness mechanisms enable subsidiaries to consolidate their position within the MNE network (Memar et al., 2021), strengthen their capacity to influence HQ resource allocation (Andersson et al., 2007), and ultimately expand their strategic influence as implementers of HQ strategy and active agents shaping resource distribution and direction within the MNE (Gillmore et al., 2018).

While meso-level research has advanced understanding of how subsidiaries develop relationships and embeddedness, and shown that distinct collaborations in sustained relationships (Gillmore et al., 2021) affect subsidiary performance differently scholars increasingly highlight the need to uncover the causal pathways through which these relational mechanisms operate and to explore the pivotal role of individual managers as the micro-level actors driving them (Ferraris, Bogers, & Bresciani, 2020).

Hence, to unpack this meso-level phenomenon (i.e., the change in subsidiary relationships and embeddedness after gaining an R&D mandate that results from the MNE's globalisation strategy), it is imperative to explore a more granular level, the micro-level (Felin et al., 2015), focusing on the individual actions of subsidiary managers.

The globalisation literature highlights the complexity that arises for subsidiary managers, particularly in a technological and R&D-driven context, when they gain control over essential resources and responsibilities related to the high-value-adding activities of GVCs (Balogun et al., 2011). Following the assignment of such mandates, the HQ exercises monitoring and intervention in subsidiary managers' control over market-oriented strategies (Buckley, 2009; Buckley & Ghauri, 2004; Conroy & Collings, 2016). However, MNEs also expect subsidiary managers to take control in developing subsidiary-specific advantages (Rugman & Verbeke, 2001), lead proactive initiatives within their networks, and engage in the local environment (Birkinshaw, 1997), thus contributing knowledge and innovation to the entire MNE (Bartlett & Ghoshal, 1997; Birkinshaw & Pedersen, 2009; Verbeke et al., 2007). In other

words, subsidiary managers are responsible for actively taking control of strategies to co-create and share knowledge within their local networks, thereby fostering innovation for the overall benefit of the MNE, while remaining subject to monitoring and intervention by HQ regarding the strategies involved.

As a result, subsidiary managers are tasked with integrating and facilitating communication between HQ, sister subsidiaries, and external counterparts (Ahearne et al., 2014; Chadwick et al., 2015; O'Brien, 2014; Wooldridge et al., 2008). In fulfilling these tasks, they adapt the subsidiary's behaviour to facilitate, explore, and exploit the potential of the assigned mandate and its accompanying resources (Sirmon et al., 2007). Hence, subsidiary managers are the ones who utilise their experience to gather and analyse information related to existing resources, capabilities, and new opportunities within the MNE's internal environment, including sister subsidiaries and HQ, as well as the external MNE environment of the subsidiary entailing vertical business partners such as customers and suppliers, and horizontal partners like R&D centres, competitors, and institutional actors (e.g., Achcaoucaou et al., 2014; Andersson & Forsgren, 2000; Andersson et al., 2001 Andersson, Forsgren, & Holm, 2001, 2002; Bhatti et al., 2016; Meyer et al., 2011). The process of analysing the knowledge obtained from the environment provides a set of stimuli that, driven by past experiences, creates visions and objectives that guide subsidiary managers' actions (Simon, 1947), which ultimately influences the subsidiary's performance (Brown & Eisenhardt, 1995).

Considering this process and building on notions of humans' limited attentional capacity and bounded rationality (Ocasio, 1997; Simon, 1947), it is reasonable to argue that when subsidiary managers focus on one specific process or environment, they inherently divert their efforts away from other environments. Thus, it can be challenging for managers to balance their activities and focus on different tasks in the internal and external MNE environments. This situation becomes even more complicated when HQ closely monitors the subsidiary's strategy and performance, highlighting the importance of understanding the impact of different subsidiary managers' activities, as the HQ expects the subsidiary to perform.

Despite the substantial attention paid to subsidiary managers' activities, empirical evidence remains inconclusive. Some studies emphasise that boundary-spanning activities foster innovation (Ancona & Caldwell, 1992; Hansen, 1999; Tushman & Katz, 1980), while others show that excessive external orientation can hinder internal knowledge transfer and reduce performance (Cross et al., 2002; Khan et al., 2015). Given managers' limited attention and the competing demands they face, identifying which activities are performance-enhancing and under what conditions remains a critical unresolved issue in IB.

The literature also shows that the subsidiaries' R&D behaviour is influenced by factors such as subsidiary managers' decisions (Birkinshaw & Hood, 1998) and the extent to which the managers integrate competence-creating

activities (Frost et al., 2002). Beyond these behavioural aspects, managers interpret and act on strategic issues through personalised cognitive frameworks shaped by their attributes, such as experiences, values, and traits (Hambrick & Mason, 1984; Hambrick, 2007). Research has shown that such individual characteristics (e.g., international experience, education, tenure) systematically affect the strategic decision-making behaviour of managers (Ting et al., 2015) and their actions (Recendes et al., 2024). This fact implies that subsidiary managers' attributes condition how they understand and respond to the externally induced change of gaining an R&D mandate, thereby influencing which activities they prioritise and pursue. Complementing this argument, the boundary-spanning literature conceptualises managers as interface agents whose effectiveness depends on their individual bundles of relational, cognitive, and integrative competencies (Williams, 2002). In internationally dispersed MNEs, these competencies become even more critical, as managers' bounded rationality intensifies under information complexity and competing demands, shaping how they act and allocate their attention (Georgakakis et al., 2023). Taken together, these perspectives suggest that, within subsidiaries, managerial attributes function as micro-level enablers that impact managers' activities following the gain of a mandate. Hence, while subsidiary managers are recognised as pivotal actors in shaping subsidiary performance, the specific mechanisms through which their attributes and activities bridge subsidiary outcomes remain underexplored.

In summary, the review across macro, meso, and micro levels exposes a systematic under-investigation of how structural changes, such as R&D mandate gains, translate into realised subsidiary performance. The macro-level literature explains where and why MNEs reallocate value-adding activities but does not detail how these reallocations unfold at the subsidiary level. Meso-level research highlights the impact of gaining an R&D mandate on the subsidiary and highlights the role of relational embeddedness, yet it fails to explain how embeddedness functions as a performance mechanism following structural change. Furthermore, micro-level research acknowledges subsidiary managers as pivotal actors but has yet to fully investigate and specify the attributes and activities through which their actions link to subsidiary outcomes. Collectively, these gaps call for an integrated, multi-level explanation of how gaining an R&D mandate is translated into subsidiary performance.

Since no single study can comprehensively capture all relevant levels of analysis (Ambos et al., 2025; Felin et al., 2015), this dissertation adopts a modular and cumulative microfoundations approach, focusing on subsidiary managers' activities as the micro-level mechanisms, and subsidiary embeddedness as the meso-level mechanism, linking mandate gain to subsidiary performance, while explicitly considering the influence of managerial attributes and keeping the macro link to overall MNE performance acknowledged yet tangential.

Accordingly, this dissertation is positioned within the fields of subsidiary roles (Birkinshaw, 1996; Dörrenbächer & Gammelgaard, 2006) and subsidiary strategy (Birkinshaw & Hood, 1998; Garcia-Pont et al., 2009; O'Riordan et al., 2023). The overarching aim of the study is to clarify the mechanisms through which structural changes, such as R&D mandate gains, translate into subsidiary performance, thereby advancing theoretical understanding of the performance dynamics of MNEs. Guided by this aim, the dissertation addresses three research questions:

> RQ1: How does the management of a subsidiary and relational embeddedness mediate the effect of gaining an R&D mandate on subsidiary performance outcomes?
>
> RQ2: Which specific types of subsidiary managers' activities enhance or constrain innovation, strategic, and financial performance following an R&D mandate gain?
>
> RQ3: How do different dimensions of managerial aptness shape the allocation of subsidiary managers' activities, and through these mechanisms, influence subsidiary performance after gaining an R&D mandate?

The findings derived from these questions advance the understanding of how subsidiaries convert structural reallocations of R&D mandate into realised performance outcomes. They also contribute to the broader IB literature on organisational adaptation and performance during adverse events (Fisher et al., 2019; Meyer et al., 2020). The investigation illuminates how individual-level managerial mechanisms underpin subsidiary resilience and effectiveness (Gölgeci et al., 2020; Ryan et al., 2020) and how these mechanisms enable subsidiaries to navigate global uncertainty and technological transformation in the contemporary international business environment (Cavusgil, 2022).

1.2 Research Approach

To answer these research questions, the dissertation comprises four studies. An overview of their link to the research questions is given in Figure 2. Each study addresses a specific module within the research framework illustrated in Figure 1, thereby theorising the causal mechanisms while allowing for cumulative integration within the dissertation's modular design.

Paper I qualitatively investigates the strategic performance of the subsidiary by unpacking how changes in subsidiary managers' activities following the gain of an R&D mandate can provide leverage to influence MNE strategy. By linking context (R&D mandate gain), individual managers' activities, and subsidiary-level outcomes, this study provides an *abridged modular*

microfoundations explanation (Ambos et al., 2025). It explores the subsidiary manager's role and its importance, serving as the conceptual foundation that guides the direction and focus of the quantitative data collection for this dissertation.

Paper II focuses on the innovation performance of the subsidiary and quantitatively examines how the quasi-exogenous change of gaining an R&D mandate affects subsidiary innovation performance through changes in subsidiary managers' innovation-enhancing activities toward internal and external actors. This framework links contextual change to action and outcomes, representing an *abridged modular microfoundations* explanation (Ambos et al., 2025). The study also considers whether the degree of newness of the R&D mandate impacts the magnitude of change in subsidiary managers' innovation-enhancing activities.

Paper III builds on the insights from Papers II and considers the structural dimension of relational embeddedness to examine how different internal and external ties condition subsidiary performance. The paper defines an often-overlooked aspect of subsidiary financial performance (particularly in subsidiaries with an R&D portfolio), namely the subsidiary's ability to appropriate value from innovation, measured as *profit from innovation* (Teece,1986). The study focuses on this innovation-appropriation outcome and quantitatively examines how different forms of relational embeddedness shape this subsidiary-level outcome. The paper challenges the assumption that R&D mandates inherently lead to financial gain through resource expansion and associated shifts in relational embeddedness and instead argues that the subsidiary's ability to appropriate innovation outcomes after gaining an R&D mandate depends on how its relational ties are mobilised and configured. This study is positioned as a *single-level (meso) module*, within the dissertation's modular design, examining how R&D mandate-driven resource changes reshape embeddedness as the mechanism driving subsidiary-level value appropriation.

Paper IV extends the findings of Papers I-III by focusing on subsidiary managers' individual attributes as antecedents of their activities. The study defines two dimensions of managerial aptness and examines how global and local aptness shape subsidiary managers' activities and, in turn, the strategic performance of the subsidiary. In doing so, the paper connects individual-level aptness to meso-level outcomes, offering a micro-to-meso module within the dissertation's design and moving towards a *partial modular microfoundations explanation* (Ambos et al., 2025). This quantitative study complements the qualitative research conducted in Paper I.

In short, the dissertation focuses on the micro-level explanans (i.e., changes in the activities of subsidiary managers) regarding the meso phenomenon (i.e., subsidiary performance) and proposes mechanisms and causalities within and across levels (Felin et al., 2015).

The four studies were conducted in a quasi-experimental setting, in which subsidiaries undergo an identifiable organisational change—gaining an R&D mandate. This context is particularly suitable for examining microfoundational mechanisms, as the mandate introduces a discrete shift in responsibilities, control over activities, and access to additional resources, enabling close observation of how subsidiaries adjust their activities and relational structures to foster innovation and innovation-related value outcomes. Such HQ-provoked change requires subsidiary managers to advance their unit's capabilities by relying on their experience, relationships, and resources to overcome the mismatch between the subsidiary's official charter and its existing capabilities (Birkinshaw & Hood, 1998). Consequently, subsidiaries are pushed to engage in more intensive R&D activities, thereby increasing the likelihood of innovating and generating value outcomes (e.g., Achcaoucaou et al., 2014). Importantly, the R&D mandate also serves as a unifying empirical anchor that enables the *modular microfoundations* design (Ambos et al., 2025) of this dissertation. While each study isolates and investigates a distinct mechanism at the micro-meso interface, cumulatively, they help explain how subsidiary managers' activities link antecedents and mechanisms to shaping subsidiary outcomes, and, in turn, MNE performance.

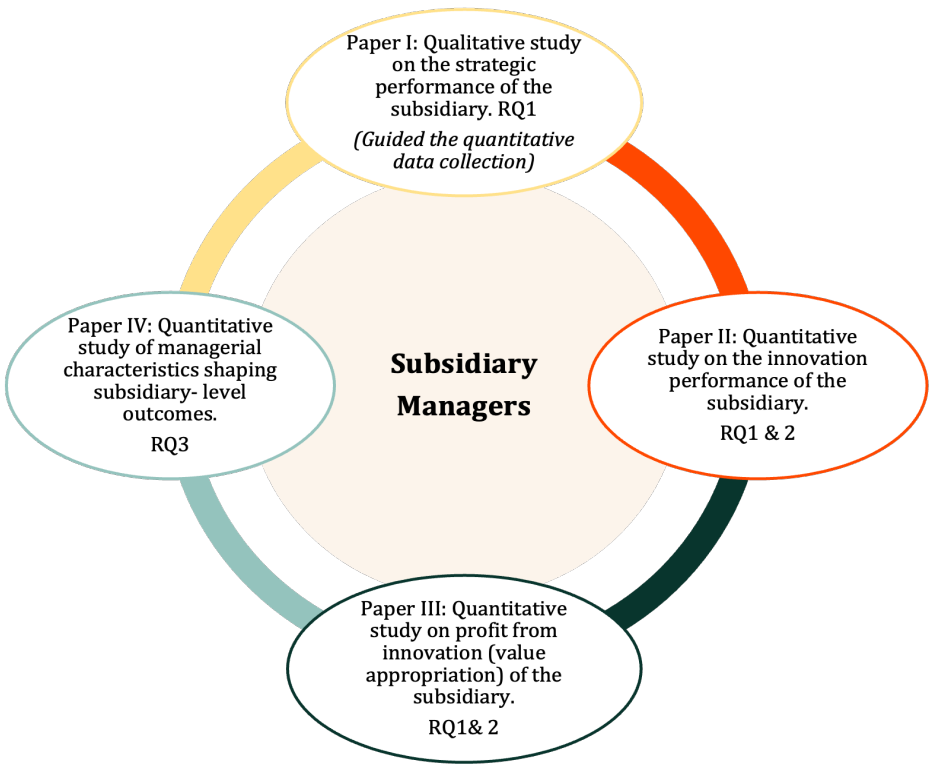

Figure 2 – Overview of papers and research questions

1.3 Dissertation Outline

The structure of the remainder of this dissertation is as follows. Chapter 2 conceptualises various types of subsidiary performance. It also reviews the relevant literature concerning subsidiary managers' activities that impact the subsidiary performance, which together form the theoretical foundation of this thesis. Chapter 3 discusses the employed methodology, detailing the processes related to quantitative data collection and analysis. Chapter 4 provides a summary of the four studies included in this dissertation, highlighting the primary focus of each paper. Chapter 5 concludes the dissertation by presenting an overview of the main findings, revisiting the dissertation's aims, offering concluding remarks on the conducted research, and describing the implications of the findings.

2. Main Theoretical Foundations

2.1 Subsidiary Performance

Performance in IB literature is conceptualised and measured in various ways, including financial, business, and operational performance (e.g., Saridakis et al., 2017). Yet, despite its centrality, the field lacks a clear consensus on what defines subsidiary performance, highlighting the need for multidimensional frameworks that capture the variety of subsidiary outcomes (Meyer et al., 2020).

Among these dimensions, financial performance remains the most commonly used construct, typically assessed through returns on investment, financial growth, and stock market performance (Hamann et al., 2013). However, in the context of subsidiaries, performance cannot be evaluated solely through financial metrics, as assessing subsidiary financial performance is particularly challenging due to host-country institutional factors such as tax regulations, accounting policies, and transfer pricing (Birkinshaw & Morrison, 1995; Brouthers et al., 2008; Eden & Smith, 2001; Gong, 2003; Meyer & Su, 2015). Thus, relying solely on traditional financial indicators risks underestimating the impact of subsidiaries within an MNE. In line with this view, Gundelach (2021) argues that performance is not solely about profit maximisation but also about "*fulfilling a purpose"* for a broader organisation. This assertion implies that subsidiary performance should be assessed based on the value it creates for multiple stakeholders (Bititci, 2015; Melnyk et al., 2004; Neely et al., 1995). For instance, when a subsidiary is assigned an R&D mandate, its financial gain depends on its ability to appropriate value from innovation (profit from innovation, a concept explored in Paper III). Hence, this financial outcome is therefore linked to strategic decisions, such as how the subsidiary positions itself to capitalise on internal and external connections (e.g., Andersson et al., 2002; Figueiredo, 2011).

From a strategic perspective, subsidiaries often do not operate based solely on traditional economic rationality. Instead, they may act strategically to secure long-term positioning within the MNE network, even at the expense of short-term financial gains (e.g., Andersson et al., 2005; O'Brien et al., 2019). This strategic behaviour aligns with the broader definition of business performance, which extends beyond financial metrics to include managerial best practices and business policies that contribute positively to the organisation (Sheehan, 2014; Venkatraman & Ramanujam, 1986). Thus, subsidiary

performance also includes the ability to shape the subsidiary's position and power within the MNE network (Dörrenbächer & Gammelgaard, 2011), which plays a crucial role in ensuring long-term survival and enhancing its strategic performance (a concept explored in Paper I).

Beyond strategic positioning, a subsidiary's ability to sustain and enhance its role within the MNE network also depends on its capacity for continuous capability and innovation development, which represents another critical dimension of subsidiary performance. Innovation encompasses new or significantly improved products (goods and services), business models, production techniques, marketing processes, and product designs (Dellestrand, 2010; Nelson, 1993). It also includes product development and knowledge flow, which can transform industrial production processes (Gupta & Govindarajan, 1991; Hedlund, 1994; Kogut & Zander, 1993; Simonin, 1999; Zander, 1999). Successful innovation within subsidiaries relies on their ability to integrate existing knowledge with environmental resources, enhancing learning and leveraging capabilities to generate new competitive advantages (Andersson et al., 2002; Ghoshal & Bartlett, 1990; Gupta & Govindarajan, 1991; Mudambi & Swift, 2011; Nohria & Ghoshal, 1997; Tsai, 2001). This aspect relates to operational performance, which encompasses employee productivity, process efficiency (Dyer & Reeves, 1995; Huselid, 1995), learning, integrating new assets, and exploiting existing resources. Operational performance is particularly crucial for subsidiaries with R&D responsibilities, as their success is often measured by innovation output and the value they generate within the subsidiary and the MNE environment (a concept explored in Paper II).

Taken together, these perspectives suggest that subsidiary performance cannot be captured by a single indicator and instead requires a broader framework to reflect its full contributions (Gundelach, 2021; Gundelach & Nielsen, 2023). The concept is inherently multidimensional, spanning financial, strategic, and innovation outcomes (see Table 1), particularly in subsidiaries with R&D portfolios and mandates to develop new capabilities for their MNEs. To understand the components underlying this multidimensional performance, the following section explores subsidiary strategy and the role of subsidiary managers in shaping these outcomes.

Table 1 – Conceptualisation of subsidiary performance dimensions in R&D mandated units

Subsidiary performance dimension	Specifics for R&D subsidiaries
Financial	Extends beyond traditional metrics by capturing financial gains directly attributable to innovation (e.g., profit from innovation).
Strategic	Reflects the subsidiary's role as a powerholder within the internal MNE network, not merely an implementer of HQ strategy.
Innovation	Encompasses innovation outputs such as new products, patents, and knowledge creation, core expected outcomes of R&D mandates.

2.2 Subsidiary Strategy and Performance

It is widely recognised that MNEs' HQ serve as the primary source of strategic direction for subsidiaries. However, research suggests that the effective implementation of MNEs' strategic objectives requires support from the middle of the firm–that is, the subsidiary and, in particular, the subsidiary managers who enact and interpret HQ strategy (O'Brien, 2014). While HQs dictate overarching strategies, subsidiary managers play a crucial role in evaluating, adapting, and implementing these strategies to align with local conditions and optimise subsidiary performance (e.g., Gillmore et al, 2018; Memar et al., 2022).

The strategic role of subsidiaries is not purely passive, as they do more than execute HQ-mandated directives. Instead, subsidiary managers exercise a degree of strategic choice in shaping their subsidiary's strategy to balance HQ expectations with local market demands and operational realities (Birkinshaw & Hood, 1998; Dörrenbächer & Gammelgaard, 2010; Garcia-Pont et al., 2009). This ability to interpret and adjust HQ strategies contributes to subsidiary performance and highlights the importance of subsidiary-level managers' activities within the MNE network.

The middle management perspective in MNEs (e.g., Boyett & Currie, 2004; Delany, 2000; Dutton & Ashford, 1993; Dutton et al., 1997, 2001; O'Brien, 2014) suggests that subsidiary managers leverage their dual embeddedness to develop a comprehensive strategic outlook (Meyer et al., 2011).

Dual embeddedness enables subsidiary managers to operate across boundaries by leveraging resources and capabilities in the external host environment and the internal MNE network, involving the HQ and sister subsidiaries. This position allows them to scout, identify, and capitalise on opportunities, thereby enhancing their ability to align subsidiary strategy effectively with the knowledge flow and knowledge-sharing mechanisms within their networks

(Bartlett & Ghoshal, 1989; Forsgren et al., 2005; Giroud & Scott-Kennel, 2009; Porter, 1990). This alignment, in turn, influences knowledge and capability development, thereby increasing subsidiary performance (Achcaoucaou et al., 2014; Andersson & Forsgren, 2000; Andersson et al., 2005; Andersson et al., 2002; Michailova & Minbaeva, 2012). Hence, a clear link exists between subsidiary strategy and subsidiary performance, which can be established through an understanding of the subsidiary management framework (Birkinshaw & Pedersen, 2009; Dörrenbächer & Gammelgaard, 2006; Wooldridge et al., 2008; O'Brien, 2014).

2.3 Subsidiary Management Framework and Performance

The Subsidiary Management Framework, also referred to as the MNE Middle Management Framework (O'Brien, 2014), conceptualises the relationship between subsidiary managers—who function as the middle managers within the MNE—their involvement in strategy, and organisational performance through their activities (Burgelman, 1983a, 1983c; Floyd & Wooldridge, 1990; Mintzberg, 1978; Mintzberg & Waters, 1985).

Middle managers' activities are a synthesis of cognition and action (Floyd & Wooldridge, 1990), shaped by continuous and interactive learning processes, built on their experiences (Bower, 1970; Burgelman, 1988; Floyd & Wooldridge, 1997; Mintzberg, 1990). These activities may involve adapting or reinterpreting strategic directives to enhance organisational flexibility and responsiveness (Bower, 1970; Burgelman, 1983a; Kanter, 1982) or coordinating and aligning efforts across units to ensure a coherent strategic direction within the corporation (Floyd & Wooldridge, 1992). Through these activities, middle managers link strategic intent with operational reality, facilitating innovation and integration within the organisation (Wooldridge & Floyd, 1990).

Such activities play a crucial role in subsidiary performance (e.g., O'Brien, 2014; O'Brien et al., 2019; Memar et al., 2022) by influencing the balance between MNE alignment (Buckley, 2009) and local responsiveness (Luo, 2001). As MNE middle managers, Subsidiary managers communicate environmental insights and market developments to HQ and sister subsidiaries, thereby contributing to strategy formation, knowledge flow, and internal strategic coherence. They also interact with external counterparts to pursue entrepreneurial opportunities in their local contexts (Birkinshaw, 1997). While many such initiatives align with corporate goals, others may favour subsidiary-specific benefits (Mudambi, 2011; Mudambi & Navarra, 2004), reflecting the inherent tension and complexity of the subsidiary manager's role.

Like other middle managers (Floyd & Wooldridge, 1992, 1997), subsidiary managers operate in various directions. In the MNE, they function *upward*,

directing efforts toward HQ, and *horizontally*, both *internally* with sister subsidiaries and *externally* with local stakeholders (O'Brien, 2014), impacting strategy development and overall firm performance (Mintzberg, 1978) while facilitating knowledge-sharing and opportunity recognition networks (Bartlett & Ghoshal, 1993; Nonaka, 1994; Rouleau & Balogun, 2011).

In upward activities, subsidiary managers shape top management's perceptions of organisational realities, ensuring strategic alignment with HQ (Burgelman, 1983b; Dutton et al., 1997; Nonaka, 1988). They manage their relationship with HQ by navigating its formal authority over resource allocation and role assignment (Birkinshaw & Hood, 1998; Ghoshal & Bartlett, 1988). By leveraging HQ's interest in subsidiary knowledge and resources, subsidiary managers gain strategic bargaining power, enabling them to highlight critical local market issues, champion and lobby for new initiatives, and negotiate their portfolio positioning within the MNE (Dutton & Ashford, 1993). Through these strategic efforts, subsidiary managers reinforce their political influence within the MNE environment (Dörrenbächer & Gammelgaard, 2011) while synthesising information with HQ to understand and influence the firm's strategic direction. This engagement allows subsidiaries to shape strategy from below, influencing HQ's perception of their capabilities and value within the MNE network (Floyd & Wooldridge, 1992).

Furthermore, to address various market uncertainties effectively (Hymer, 1976), subsidiaries must coordinate with one another. In horizontal internal activities, subsidiary managers engage with sister subsidiaries, which consist of internal customers, internal suppliers, and internal competitors (Mudambi, 1999).

By establishing coordination mechanisms through socialisation, subsidiary managers facilitate problem-solving, knowledge exchange, and training (Ambos & Schlegelmilch, 2007; Gupta & Govindarajan, 1991; Harzing & Noorderhaven, 2006; O'Brien, 2014). These engagements strengthen interdependencies between subsidiaries across various markets (Mudambi, 1999), enabling them to build inter-MNE collaborations that enhance overall firm efficiency and operations (Birkinshaw et al., 2005; Garcia-Pont et al., 2009; O'Brien, 2014).

Through internal collaborations, subsidiaries gain access to sister subsidiaries' resources and develop joint programs that enhance their influence and productivity within the MNE (Garcia-Pont et al., 2009). Additionally, these collaborations enable adaptation to other subsidiaries' operations (Ciabuschi et al., 2011) that reinforce and deepen internal networks, allowing subsidiaries to identify opportunities for innovation (Ciabuschi et al., 2011) and expand their strategic influence (Bouquet & Birkinshaw, 2008). Subsidiary managers' networking practices (Balogun, 2006; Rouleau & Balogun, 2011) help them build strategic resources (Garcia-Pont et al., 2009), enhancing their visibility and importance within the MNE. This increased recognition attracts greater

attention from HQ, leading to potential access to more resources and strategic mandates (Ambos & Birkinshaw, 2010; Bouquet & Birkinshaw, 2008).

Furthermore, subsidiary managers interact with external customers, suppliers, local governmental bodies, and research institutes. In general, businesses are connected to their external environments through social and economic relationships. For these relationships to become influential, they must involve mutual adaptation and trust (Andersson et al., 2002, 2007; Andersson & Forsgren, 1996; Dyer & Singh, 1998), fostering social interaction (Granovetter, 1985) and enabling subsidiary managers to build resource linkages (Balogun et al., 2011; O'Brien, 2014).

Within this environment, subsidiary managers are responsible for developing strategies to manage and coordinate cross-boundary collaboration with external and local actors (Andersson et al., 2002; Andersson & Forsgren, 2000; Ghoshal & Bartlett, 1990; Nohria & Ghoshal, 1997). Developing local collaborations provides significant advantages to subsidiaries (Andersson & Forsgren, 1996), particularly by facilitating knowledge-sharing and enhancing cross-boundary learning (Mu, Gnyawali & Hatfield, 2007; O'Brien, 2014). It also exposes subsidiaries to unique resources that support the creation and development of novel knowledge, strengthening their performance and competitiveness (Andersson et al., 2002; Cantwell & Mudambi, 2005; Criscuolo & Narula, 2008; Figueiredo, 2011; Granovetter, 1985; Malnight, 1996; Monaghan et al., 2014; Uzzi, 1997).

Building on this discussion, the framework adopted in this dissertation draws on the Middle Management Framework (Floyd & Wooldridge, 1992, 1997) and the MNE Middle Management and Activities of Subsidiary Managers Framework (O'Brien, 2014), visualised in Figure 3. The model integrates insights from three directions of subsidiary managers' activities: upward toward HQ, horizontal internal with sister subsidiaries, and horizontal external activities with external counterparts. Together, these activities capture the mechanisms through which subsidiary managers' actions influence subsidiary performance. The framework incorporates literature on internal network exploitation (e.g., Garcia-Pont et al., 2009; Yamin & Andersson, 2011), external network utilisation (e.g., Andersson et al., 2002, 2007; Nell & Andersson, 2012), and HQ-subsidiary relationships (e.g., Dutton & Ashford, 1993; Dörrenbächer & Gammelgaard, 2011), providing a theoretical foundation for understanding subsidiary performance (Gundelach, 2021; Gundelach & Nielsen, 2023; Meyer et al., 2020).

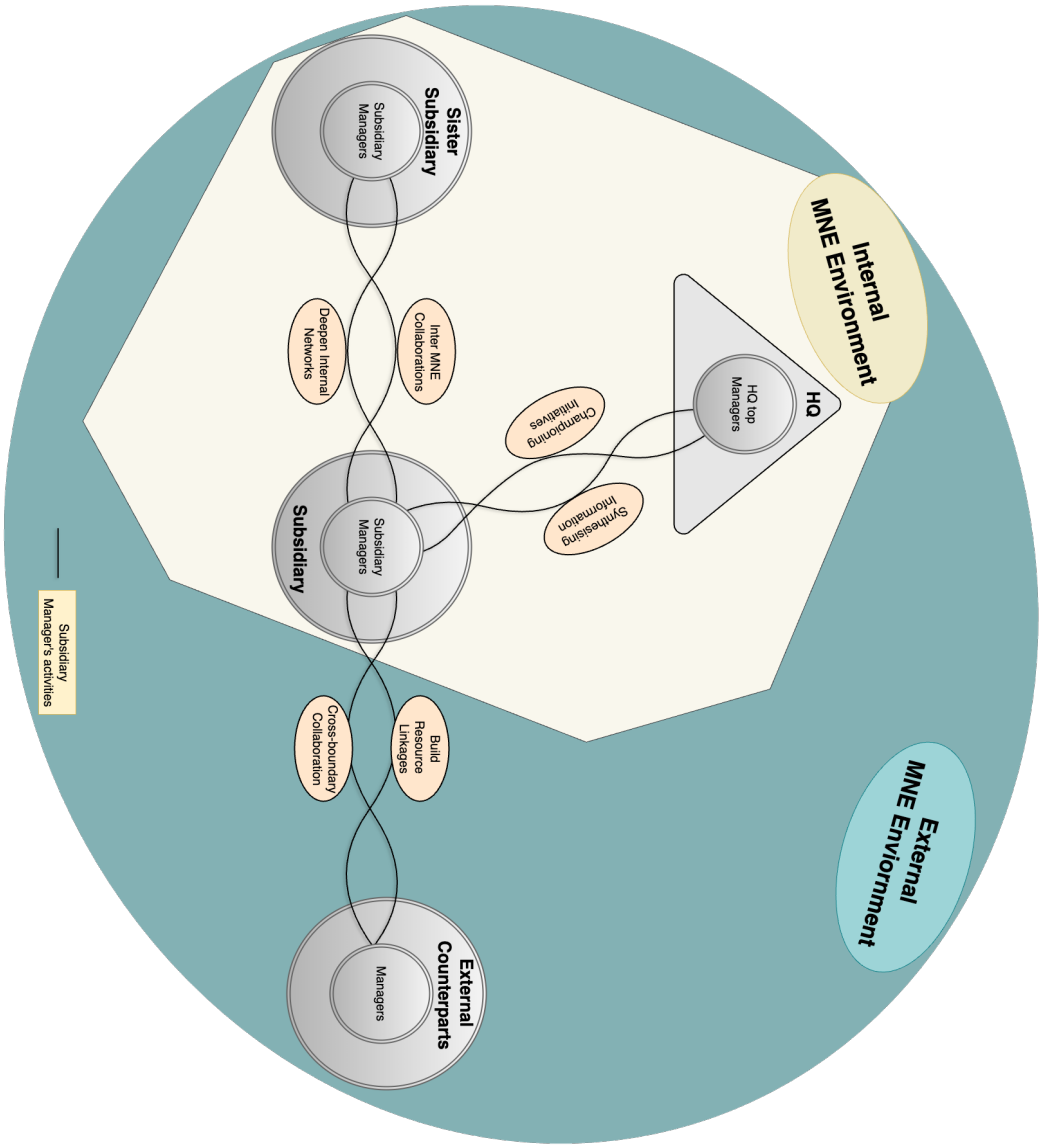

Figure 3 – Theoretical framework of this dissertation

3. Data and Method

This chapter explains the overall methodology of this doctoral dissertation, providing an overview of the research procedures. Before presenting the methodological details, it is necessary to highlight that this dissertation is part of a larger research project titled "Economic Aspects of Software Development in Industrial Networks"[8]. The project belongs to the *Re-framing Globalisation*[9] research track at Mälardalen University and provides valuable insights into how MNEs navigate the complexities of globalisation. This project examines the dynamics of software development in industrial networks, focusing on subsidiaries of Swedish engineering MNEs. Specifically, it investigates the implications of disaggregating value chain activities, particularly R&D, for MNEs and their subsidiaries.

This broader project analyses the mechanisms and consequences of industrial network orchestration for firms and industries. The project also establishes an analytical basis to assess the potential effects of fine-slicing R&D activities on Swedish MNEs, ultimately offering strategic recommendations for companies and policymakers. By analysing these dynamics, the project contributes to shaping strategies that enhance innovation in both goods and services within globalised industrial markets.

This dissertation represents the final contribution to a series of doctoral studies conducted within this research project. Building on the broader insights of the project, and particularly through the collaborative development of Paper I and the use of qualitative data collected for the preceding dissertation by Gillmore (2017), this study focuses on subsidiary performance of Swedish engineering firms.

While earlier dissertations in the project primarily employed qualitative methods, this dissertation complements them by adopting a quantitative approach to uncover the causal mechanisms behind subsidiary performance from a micro-level perspective.

[8]https://www.mdu.se/forskning/forskningsprojekt/industriell-ekonomi-och-organisation/computer-software-development-in-industrial-networks

[9]https://www.mdu.se/en/malardalen-university/research/research-specialisations/industrial-economics-and-organization/re-framing-globalization

3.1 Research Philosophy

All research methods are grounded in philosophical assumptions that shape how knowledge is generated and interpreted. This dissertation adopts a positivist research paradigm to examine the causal relationships between managers' attributes, their activities, and subsidiary-level performance outcomes. Positivism, rooted in realist traditions, emphasises systematic observation and measurement to provide an explanation of causality (Mackenzie & Knipe, 2006).

While traditional positivism is well-suited for hypothesis testing and identifying empirical regularities and patterns, it places less emphasis on providing detailed accounts of the underlying causal mechanisms that generate these patterns. To address this limitation, this dissertation integrates mechanistic explanation principles, which offer a deeper understanding of how specific outcomes are generated by identifying the components, processes, and organisational structures that underlie them (Glennan, 2002). Mechanistic explanations break down a system into its components and causal relationships. This approach is particularly valuable in scientific research for understanding complex systems, as it reveals the inner workings and interactions within a system, providing insights into the causality of observed phenomena.

By combining mechanistic explanation principles with the positivist paradigm, this study takes a structured yet nuanced approach to examining the mechanisms underlying subsidiary performance. This integrated approach ensures a comprehensive analysis that accounts for observable causal relationships and their underlying drives.

Guided by Coleman (1990), Felin, Foss, & Ployhart (2015), and Ambos et al (2025), this dissertation defines levels of analysis within MNEs by focusing on the micro-level explanans (i.e., subsidiary managers' activities and attributes) in relation to the meso-level phenomenon (i.e., subsidiary performance). This perspective enables a mechanistic explanation of causality across levels, bridging micro-level managers' attributes and actions with subsidiary-level outcomes to provide a holistic understanding of subsidiary performance and, ultimately, MNE-level performance.

3.2 Research Design

This dissertation employs a quantitative survey research design, which is appropriate for examining causal relationships and generalising findings across a population. Quantitative research enhances theoretical inquiry through systematic measurement, statistical generalisability, and hypothesis testing, enabling the identification of patterns and relationships between variables. This approach is particularly effective in analysing multi-level

structures, offering stronger arguments for causality and ensuring replicability of results (Bryman & Bell, 2007).

A key advantage of quantitative research is its ability to detect subtle and significant relationships between variables, enabling researchers to test, validate, or challenge existing theoretical assumptions. Unlike qualitative methods, which focus on in-depth exploration, quantitative empirics can rigorously test relationships and reduce subjective biases (Jick, 1979; Eisenhardt, 1989). Additionally, survey research is particularly useful for studying human behaviours, as it employs statistical and mathematical techniques to systematically analyse phenomena through empirical investigation (Creswell & Creswell, 2022).

This dissertation's survey design is structured to collect quantitative data, enabling an examination of patterns and relationships between two or more variables within the given research framework using a questionnaire instrument with closed-ended questions (Bryman & Bell, 2007).

This methodological approach ensures that the findings are both statistically valid and generalisable, contributing to a more structured understanding of subsidiary performance post-R&D mandate gain.

3.2 Survey design

The empirical foundation of this dissertation rests on a structured questionnaire. The direct involvement in its design and execution allowed for precise shaping of the investigated areas and facilitated deeper insights into subsidiary operations. Given the multilevel nature of this research, the survey was developed by drawing on different established literature to formulate and adapt measurement scales that align with the study's theoretical framework. The questionnaire used pre-tested questions to eliminate ambiguous phrasing and to enhance the applicability of indicators.

The questionnaire is divided into sections, each corresponding to a specific theoretical foundation (see Table 2), with questions covering the attributes of the subsidiary manager and the characteristics of the subsidiary itself. The questionnaire captures key R&D mandate characteristics, including the year the mandate was gained, the scope of responsibility, and the types of mandates assigned. The survey also focused on the changes in subsidiary managers' activities following the gain of an R&D mandate. Managers were asked to name and focus on an R&D mandate assigned three to five years prior to data collection and respond to questions about changes in their activities following the mandate gain. The survey also investigated the impact of the assigned mandate on various relationship characteristics, including trust, adaptation, and collaboration with internal and external counterparts. Moreover, it assessed the performance outcomes associated with the named R&D mandate, including important patented innovations, appropriation linked to innovation, and

the overall effect of relationships. This design ensures that the collected data systematically captures patterns in managers' activities and subsidiary performance post-mandate gain, enabling a structured and statistically valid analysis.

Table 2 – Theoretical foundations of the questionnaire for investigating the mechanisms driving subsidiary performance following an R&D mandate gain.

Section	Main Theoretical Foundation	Emphasis	Guiding Literature
Attributes of subsidiary managers	- Upper echelon theory - Subsidiary managers' experience - Host country language and cultural norm	Role of managerial aptness in shaping subsidiary outcomes	Hambrick & Mason, 1984; Hambrick, 2007; Nuruzzaman et al., 2019; Klueter & Monteiro, 2017; Schotter et al., 2017; Choi & Johanson, 2012; Fang et al., 2010; Tippmann et al., 2017; Singh et al., 2019
R&D mandate characteristics	- Mandating a subsidiary - Organisational change	The extent of change in subsidiaries' portfolios	Birkinshaw, 1996; Birkinshaw & Hood, 1998; By, 2005; Burnes, 2004; Rieley & Clarkson, 2001
Change in subsidiary managers' activities	- MNE middle management - Boundary-spanning	How managers navigate intra- and inter-organisational networks post-mandate gain	Floyd & Wooldridge, 1992, 1997; O'Brien, 2014; O'Brien et al., 2019; Ancona & Caldwell, 1992
Change in subsidiary relationships	- Subsidiary relational embeddedness	How subsidiaries develop internal and external ties that influence performance	Andersson et al., 2002; Čater & Čater, 2010; Fynes et al., 2008; Obadia & Vida, 2011; Sjoerdsma & van Weele, 2015; Su et al., 2008; Qian et al., 2021
Subsidiary Performance	- Subsidiary innovation - Profit from innovation (value appropriation) - Subsidiary strategic performance	How R&D mandate impacts subsidiaries' performance	Booz & Hamilton, 1982; Un, 2010, 2016; Teece, 1986; Andersson et al., 2002; Burgelman, 1983; Gorgijevski et al, 2022

3.3 Sample Characteristics

The population targeted by this study consists of subsidiaries of eight large Swedish multinational engineering manufacturing firms operating globally. The subsidiaries are geographically dispersed across 17 countries spanning five continents (see Table 3). Data collection began in June 2016 and was completed in December 2018.

Table 3 – Locations of subsidiaries

Country	Frequency	Percentage
Australia	1	1.0
Belgium	1	1.0
Brazil	3	3.1
Canada	1	1.0
China	19	19.4
Germany	9	9.2
Finland	2	2.0
France	5	5.1
Greece	1	1.0
India	19	19.4
Italy	3	3.1
Myanmar	1	1.0
The Netherlands	2	2.0
Norway	1	1.0
Sweden	7	7.1
United Kingdom	1	1.0
United States of America	22	22.4

The survey sample consisted of subsidiaries with R&D and production in their portfolios, each with defined scopes of responsibility (see Table 4), and each having gained at least one R&D mandate between 2009 and 2013 (see Tables 5 and 6).

Table 4 – Responsibility scope among subsidiaries

Responsibility	Scope	Frequency	Percentage
Production	Local	19	19.4
	Regional	21	21.4
	Global	58	59.2
R&D	Local	6	6.2
	Regional	10	10.3
	Global	81	83.5

Table 5 – Gained R&D mandate characteristics

Characteristics	Frequency	Percentage
Product and Production R&D	51	52
Software R&D	47	48

Table 6 – Gained R&D mandate scope of responsibility

Responsibility scope	Frequency	Percentage
Local	8	8.1
Regional	14	14.3
Global	76	77.6

These subsidiaries are engaged in innovation-driven activities across various industries (see Table 7).

Table 7 – Subsidiaries' industries

Industry	Frequency	Percentage
Automotive	8	8.1
Industrial Automation	14	15.3
Power and Energy	12	12.2
Home Appliance Manufacturing	11	11.2
Mining and Construction Equipment	33	33.6
Industrial Tools	17	17.2
Personal Care Products	3	3.1

In total, 98 subsidiaries were observed, of which 92 were established as greenfield subsidiaries, reflecting a strategic expansion approach by their parent firms. Approximately 51% of these subsidiaries reported directly to the corporate HQ, indicating close structural ties, while the others reported to regional or divisional HQ, suggesting a moderate level of autonomy within the sample (see Table 8).

Table 8 – Reporting structure of subsidiaries to HQ

HQ	Frequency	Percentage
Corporate HQ	50	51.1
Regional HQ	2	2.0
Divisional HQ	41	41.8
Missing information	5	5.1

To gain access to these subsidiaries, pre-existing relationships within the broader research project were leveraged, and interviews were arranged with the CEOs or directors of the subsidiaries. These managers were chosen as key informants due to their in-depth knowledge of subsidiary operations and their critical role in managing relationships, allocating resources, and influencing subsidiary-level decisions that impact subsidiary performance and outcomes.

To enhance data validity and reduce respondent interpretation bias, interviews were used as the mode of data collection. Approximately 70% of these interviews were conducted in person or via online video calls, while the remaining 30% were conducted via phone due to logistical constraints (see Table 9). This approach enabled interactive discussions, ensuring clarity in interpreting the survey questions.

Table 9 – Mode of interview

Type of interview	Frequency	Percentage
Face to face	54	55.1
Online video calls	15	15.3
Phone	29	29.6

Each interview lasted between 90 and 120 minutes, and in some cases, visits included facility tours and practical demonstrations of the relevant R&D activities. This data collection method enhanced the validity of the responses by ensuring the information came from knowledgeable sources within the subsidiaries. Moreover, by engaging directly with respondents and observing their operational settings, the study reduced potential interpretation biases, strengthening the overall robustness of the data (Webster, 1997).

3.4 Strengths and Weaknesses of the Data

The dataset used in this dissertation provides a solid empirical basis for analysing subsidiaries and their managers. Its scope is a key strength; it includes all identifiable subsidiaries with both R&D and production profiles across several large Swedish engineering MNEs worldwide, offering a broad yet coherent view of subsidiary activities and contexts. Swedish MNEs provide a powerful empirical setting, as they are global innovation leaders whose competitive advantage relies heavily on foreign R&D mandates and the international dispersion of knowledge-intensive activities[10]. These factors make them particularly suitable for examining how subsidiaries translate structural changes, such as R&D mandate gains, into realised performance outcomes.

While the dataset is robust, it is not without limitations. First, the survey relies on a single-informant design, with data collected exclusively from subsidiary CEOs or directors. This approach ensures that responses capture the perspectives of those most directly involved in and responsible for the

[10] According to the Swedish Agency for Growth Policy Analysis (2022), the 20 Swedish MNEs that spend the most on R&D conduct approximately 50% of their R&D abroad, and in recent years an increasing share of this activity has shifted toward middle- and low-income countries.

subsidiary's operations and strategy. CEOs are generally the most knowledgeable respondents regarding resource use and network positioning. However, as with all self-reported data, there is potential for self-report and recall bias, particularly because the survey required respondents to reflect retrospectively on past activities and relationships. Moreover, because CEOs provided self-assessments of their subsidiaries' positioning and network behaviours, the results may partly reflect perceptual evaluations rather than objective conditions.

Nonetheless, self-reported data are not inherently problematic when the constructs of interest are perceptual in nature. As noted by Donaldson and Grant-Vallone (2002), self-reports are susceptible to motivational and situational biases, but these influences are meaningful reflections of how individuals interpret and respond to their environments. In studies of managers' cognition and actions, such as this one, these perceptions represent the very mechanisms through which action is channelled. Following Simon's (1947) notion of bounded rationality, managers' subjective interpretations of their environment serve as stimuli that guide their attention allocation and decision-making, which ultimately drives behaviour (Ocasio, 1997). From this perspective, what managers perceive as reality directly influences their choices and actions. Thus, even if these self-reported responses reflect perception rather than objective fact, they remain analytically valuable as they capture the cognitive and attentional framing through which subsidiary managers interpret and respond to their environment.

Second, the dataset represents a one-sided perspective within the MNE network. It does not include matched responses from HQ or sister subsidiaries, which limits the ability to cross-validate relational assessments. However, this limitation is partially offset by the dataset's exceptional scope. The dataset is considered unique because it captures subsidiary managers' activities and performance outcomes in a quasi-natural setting in which subsidiaries experience a quasi-exogenous organisational change – namely, the gain of an R&D mandate. This design provides a consistent and comprehensive view of subsidiary managerial behaviour across multiple international contexts under a shared home-country condition during an identifiable structural shift.

This dissertation compensates for the absence of multiple data sources through analytical and contextual triangulation (Nielsen et al., 2020). Analytical triangulation is achieved through structural equation modelling to assess the stability of estimated relationships, and contextual triangulation is achieved through the inclusion of all subsidiaries with a specific portfolio globally in a specific change setting. Together, these strategies enhance methodological rigour and interpretive validity despite the mono-method design.

That said, the focus on Swedish MNEs may introduce a home-country bias. As IB research has long emphasised, national culture conditions internationalisation choices, governance methods in alliances and affiliates, knowledge transfer, and performance outcomes (López-Duarte et al., 2016; Wright &

Ricks, 1994). These factors may influence how managers interpret and respond to R&D mandates; therefore, caution should be exercised when generalising the findings to subsidiaries originating from other MNEs' institutional contexts.

In summary, while the dataset's design has some weaknesses, its coverage of the full population of Swedish engineering subsidiaries with R&D and production profiles across several MNEs globally offers a rich, system-level view of subsidiary behaviour. These data capture reported managers' actions and the perceptions that shape them, yielding insight into how managers interpret and respond to structural changes within the MNE.

3.5 Data Analysis

To analyse the survey data, this dissertation employed confirmatory factor analysis (CFA) and structural equation modelling (SEM) using IBM SPSS Amos 28. These techniques are well suited for testing theoretical models that involve multiple latent constructs and complex relationships.

CFA was conducted in each study of this dissertation. CFA verifies that the measurement model accurately represents the underlying theoretical constructs. This procedure provides evidence of reliability and validity by confirming that the measurement structure fits the data (Schreiber et al., 2006).

SEM was then used to examine the structural relationships among the constructs. SEM is a statistical technique that examines relationships between multiple variables simultaneously (Hair et al., 2014). It builds upon traditional factor analysis and multiple regression (Ullman, 2001) but extends their capabilities by enabling the simultaneous estimation of several dependent relationships within a single model (Hair et al., 2014). This makes it particularly appropriate for testing the hypothesised mechanisms linking R&D mandates, relational embeddedness, and subsidiary-level outcomes. Another strength of SEM is its ability to estimate relationships between latent constructs by utilising multiple observed indicators. This technique minimises measurement error by leveraging multiple observed variables to define each construct, enhancing the validity and reliability of the analysis. Unlike multiple regression, where measurement error can lead to understated relationships between variables, SEM accounts for such errors and adjusts coefficients accordingly. This adjustment reduces the likelihood of Type II errors, where actual relationships may go undetected due to unaccounted measurement inaccuracies (Hair et al., 2014).

The two-step modelling approach for estimation was followed in the studies of this dissertation (Anderson & Gerbing, 1988), as there were only 98 observations, an insufficient total for estimating the measurement and structural models simultaneously. The first step involves assessing a measurement model, which evaluates the validity of latent constructs through their

associated indicators. This step ensures convergent and discriminant validity before proceeding to the next phase. Once the measurement model is validated, the second step estimates the structural model, which specifies the hypothesised relationships between latent constructs (Schreiber et al., 2006).

A powerful aspect of SEM analysis is evaluating model fit, which determines how well the proposed theoretical framework aligns with the observed data. Fit indices, the chi-square (χ^2), the goodness-of-fit index (GFI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA), are used to assess whether the measurement and structural models provide a reasonable representation of the data before interpreting specific relationships. A well-fitting model suggests that the theoretical framework effectively captures the data, thereby enhancing the predictive accuracy of the analysis (Byrne, 1998; Hair et al., 2014; Jöreskog & Sörbom, 1996).

4. Summary of papers

Paper I: How subsidiaries influence innovation in the MNE value chain.

Published in the *Transnational Corporations*, 25(1), 73-100, 2018.
Authors: Edward Gillmore, Ulf Andersson, and Noushan Memar
Mälardalen University

This study focuses on the role of subsidiary managers and examines how their resource management activities shape their strategic influence within local and global contexts after receiving an R&D mandate. The study provides insights into how subsidiaries leverage resource connectivity to enhance their strategic influence within the broader MNE structure. By linking context (such as the R&D mandate gain) to individual managerial activities and subsidiary-level outcomes, this study provides an *abridged modular microfoundations* explanation (Ambos et al., 2025) of how subsidiary strategic performance emerges.

Building upon resource dependence theory and subsidiary evolution literature, this research emphasises the importance of subsidiary connectivity in inter- and intra-MNE relationships in driving innovation. It challenges traditional views of categorising subsidiary mandates into rigid roles such as contributors, strategic leaders, or implementers (Bartlett & Ghoshal, 1989; Rugman et al., 2011). Instead, the study reveals that subsidiaries often hold modular mandates, simultaneously fulfilling distinct strategic functions across various activities.

Using a qualitative, longitudinal case study approach, the study investigates how subsidiary managers orchestrate mandate resources by evaluating, acquiring, and leveraging them within the MNE value chain. The findings suggest that subsidiary managers play a critical role in managing local and intra-MNE resources, thereby enhancing their strategic influence. Their ability to create, integrate, and transfer knowledge significantly impacts their standing within the MNE network. Mandate resource management is a dynamic process in which subsidiaries must continuously assess their resource stock, identify complementarities within the MNE, and build strong inter-subsidiary linkages to increase their strategic importance. Furthermore, the study highlights that subsidiaries can gain control over technological and knowledge

assets through their connectivity activities, making it difficult for HQ to easily reallocate these resources. Table 10 presents the three theoretical propositions derived from the study's findings.

Table 10 – Paper I's propositions

Propositions	
1	Internal and external subsidiary managers' linking activities are positively related to the development and utility of subsidiary resource dependencies in intra-MNE value chains.
2	There is a recursive relationship between subsidiary managers' mandate resource management activities in intra-MNE projects, and the degree of integration responsibility conferred on a subsidiary.
3	Subsidiary managers' activities to leverage mandate resources are positively related to the subsidiary's degree of strategic influence over HQ's decisions about mandates and resource allocation.

This study offers a refined perspective on the vital role of subsidiary managers in managing and integrating value chain activities. It highlights that a subsidiary's strategic performance is highly contingent upon its ability to effectively manage and leverage its resource portfolio, positioning itself as a key actor in the MNE's innovation and strategic decision-making processes.

This research contributes to the fields of international business and global strategy. It advances the understanding of subsidiary evolution by challenging the notion of aggregated mandate roles and instead demonstrating the modularity and complexity of subsidiary responsibilities. It highlights the critical role of subsidiary managers in promoting innovation through local resource management and by integrating and leveraging resources within intra-MNE collaborations. For practitioners, the findings highlight the importance of recognising the strategic autonomy of subsidiaries and optimising mandate configurations to enhance their innovative potential. Policymakers can also benefit from these insights by designing FDI policies that promote stronger linkages between foreign subsidiaries and local firms, thereby stimulating national and regional innovation ecosystems.

One-sentence conclusion: The activities of subsidiary managers are pivotal in establishing and maintaining the subsidiary's strategic performance.

Paper II: What Happens when Subsidiaries Go through a Change? Impact of Gaining an R&D Mandate on Subsidiary Managers' Activities and Subsidiary Innovation

Published in: Batas, S., Kuivalainen, O., Sinkovics, R.R. (eds). (2022). Megatrends in International Business. The Academy of International Business. (pp. 159–181). Palgrave Macmillan, Cham.

Authors: Noushan Memar[1], Ulf Andersson[1], and Edward Gillmore[2]
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Grounded in the microfoundations perspective, this study builds on the subsidiary evolution literature (Birkinshaw & Hood, 1998) and the innovation-enhancing activities of subsidiary managers (Floyd & Wooldridge, 1997; O'Brien et al., 2019). It examines how the quasi-exogenous change of gaining an R&D mandate affects subsidiaries' innovation performance. By linking contextual change (the gaining of an R&D mandate), managers' activities, and innovation outcomes, the study provides an *abridged modular microfoundations* explanation (Ambos et al., 2025) of subsidiary innovation performance.

Additionally, it analyses how subsidiary managers interact with internal (HQ and sister subsidiaries) and external MNE environments (customers, suppliers, and research institutions). This research aims to understand the mechanisms by which managers' activities contribute to, or hinder, innovation outcomes.

The study hypothesises that an increase in innovation-enhancing activities toward internal MNE actors positively influences subsidiary innovation (H1), as does an increase in innovation-enhancing activities with external counterparts (H2). Additionally, it examines whether the degree of newness of an R&D mandate (whether new or an extension of an existing mandate) impacts the magnitude of changes in subsidiary managers' innovation-enhancing activities following the R&D mandate gain (H3).

Using data from a sample of 98 subsidiaries globally, H1 and H2 were tested using SEM, while an independent T-test was conducted to test H3. The results provide several key insights. While subsidiary managers' activities within the internal MNE network are typically seen as facilitators of innovation, this study found that increased engagement with HQ and sister subsidiaries negatively impacts innovation after gaining an R&D mandate, contradicting H1. These results suggest that interactions with HQ and sister subsidiaries may create inefficiencies, slowing the subsidiary's ability to innovate.

Similarly, H2 was not supported. A possible explanation is that subsidiaries often experiment with the external environment to take initiatives before communicating their success to HQ and lobbying for formal recognition (i.e.,

a mandate). Thus, the innovation-enhancing activities of subsidiaries toward external counterparts may be lowered following the gain of an R&D mandate.

H3 was also rejected, indicating that the degree of newness of the technological shift – that is, gaining a new or an extension to the R&D mandate – has no bearing on the mechanism that prompts subsidiary managers' innovation-enhancing activities. This result suggests that other factors beyond mandate newness influence these activities.

These findings suggest that while subsidiary managers play a crucial role in shaping innovation performance, their engagement with internal MNE actors may sometimes create inefficiencies rather than facilitating innovation. The study also highlights the complexity of external interactions, suggesting that engagement with the external environment does not always yield *immediate* innovation.

Overall, this study advances the literature on subsidiary management and innovation by analysing how managers' activities shape innovation performance following changes in the subsidiary's portfolio. Additionally, it accounts for the paradoxical findings in two streams of research on boundary-spanning activities and innovation performance. One stream argues that organisations actively engaging with external environments to absorb knowledge are more innovative (Ancona & Caldwell, 1992; Hansen, 1999; Tushman & Katz, 1980), while another suggests that external knowledge acquisition can hinder internal MNE knowledge transfer and negatively impact innovation performance (Cross et al., 2002; Gould & Fernandez, 1989; Khan et al., 2015).

Paper II suggests that these inconclusive results are not due to activities conducted beyond the subsidiary's boundaries but derive from the direction of managers' innovation-enhancing activities, which ultimately shape innovation outcomes.

One-sentence conclusion: The direction of subsidiary managers' activities is critical to the subsidiary's innovation performance.

Paper III: Is it a Mirage? Rethinking the Link Between R&D Mandates and Profit from Innovation

Authors: Noushan Memar and Harun Emre Yildiz
Mälardalen University

This study focuses on profit from innovation in subsidiaries and challenges the assumption that gaining an R&D mandate inherently leads to greater innovation-related value capture due to increased resource availability and deeper network embeddedness. Instead, it examines how changes in relational embeddedness, both internal (within the MNE network) and external (with customers, suppliers, and research institutions), influence subsidiaries' ability to convert innovation into economic gains.

Building on relational embeddedness literature (Ciabuschi et al., 2014; Michailova & Minbaeva, 2012; Reilly et al., 2012) and the seminal concept of "profit from innovation" (Teece, 1986), the study argues that while generating innovation is essential for strengthening a subsidiary's position within the MNE network (e.g., Gillmore et al., 2018), it is insufficient for ensuring long-term viability within the MNE or the host market. Like any business entity, subsidiaries must derive economic value from their innovations to sustain operations (Venkatraman & Ramanujam, 1986). For R&D-mandated subsidiaries, the ability to appropriate value from innovations is as critical as generating them (Lee et al., 2023). Since value capture from innovation depends on network support, collaboration, and access to complementary resources (Teece, 1986), the study conceptualises relational embeddedness as the mechanism through which R&D mandate-driven changes can translate into economic value.

The study hypothesises that gaining an R&D mandate leads to increased external relational embeddedness (H1) and internal relational embeddedness (H2), and that greater external (H3) and internal (H4) embeddedness improve subsidiaries' profit from innovation. Using survey data from 98 subsidiaries of eight Swedish engineering MNEs operating across 17 countries, SEM was employed to test these hypotheses, utilising items as indicators for the constructs.

First, the paper establishes the positive link between gaining resources through an R&D mandate and the subsidiary's value appropriation from innovation via relational embeddedness. The study shows that once subsidiaries gain an R&D mandate and additional resources, they tap into their internal and external relationships to capture value from newly developed innovations. This finding suggests that mandating a subsidiary to conduct R&D enhances its value appropriation from innovations when relational embeddedness is strengthened.

Second, the study tests the proposed hypotheses. The findings reveal a nuanced reality. H1 is supported, confirming that subsidiaries increase their external embeddedness after gaining an R&D mandate, leveraging local market knowledge and collaborative opportunities. However, H2 is not supported, indicating that gaining a mandate does not necessarily strengthen internal ties within the MNE network. This finding suggests that while subsidiaries expand external ties, they do not strengthen and deepen intra-corporation relationships.

Furthermore, embeddedness exhibits asymmetric effects on profit from innovation. H3 is rejected, indicating that external embeddedness does not significantly improve profit from innovation, suggesting that subsidiaries predominantly use external ties for knowledge sourcing and experimentation, as previous research has shown, rather than for capturing economic value from innovations. In contrast, H4 is supported, demonstrating that internal embeddedness plays a critical role in converting innovation into value appropriation, underscoring the importance of intra-MNE coordination and integration.

These findings contribute to the literature on subsidiary management and performance by refining the understanding of relational embeddedness and its role in the pathway from R&D mandates to financial benefits. The paper sides with previous research that external embeddedness is valuable for knowledge sourcing and exploration, and demonstrates that internal embeddedness is essential for appropriating value from innovation. From a managerial perspective, the study emphasises the importance of subsidiaries strategically managing their embeddedness, striking a balance between external collaboration for idea generation and internal alignment for financial gain. Overall, this study suggests that gaining an R&D mandate does not guarantee financial benefits—successful appropriation of innovation depends on how subsidiaries configure and mobilise their relational embeddedness.

One-sentence conclusion: Profit from innovation performance in a subsidiary relies on internal relational embeddedness than external embeddedness.

Paper IV: The Linchpin of Subsidiary Strategic Performance: Unpacking the Role of Managerial Aptness

Author: Noushan Memar
Mälardalen University

This study investigates how subsidiary managers' experiences and attributes shape their influential activities and inform the strategic performance of subsidiaries within MNEs. Building on literature emphasising managerial experience as a key driver of organisational outcomes (Hambrick, 2007; Hambrick & Mason, 1984) and challenging the notion that subsidiary managers' experience and attributes (conceptualised in this study as managerial aptness) directly determine subsidiary development (Nuruzzaman et al., 2019), this paper argues that managerial aptness is an enabling conditions rather than a direct determinant of subsidiary performance. Managerial aptness facilitates engagement across internal and external MNE networks through strategic and relational activities, which ultimately shape the subsidiary's strategic role and influence (e.g., Gillmore et al., 2018; O'Brien et al., 2019; Memar et al., 2021).

The study conceptualises two core dimensions of managerial aptness: global aptness which refers to the extent of international, industry, and intra-MNE experience that equips managers to navigate cross-border and corporate-level contexts; and local aptness which refers to the extent of local-based experience and conditions—such as host-country experience, local tenure, and language fluency—that enable subsidiary managers to navigate and engage effectively within the local environment. The study then hypothesises how these dimensions shape subsidiary managers' influential activities and, in turn, the strategic performance of subsidiaries.

Using survey data from 98 subsidiaries of Swedish engineering MNEs and SEM analysis, the study examines three hypothesised relationships. It hypothesises that the subsidiary managers' global aptness positively influences their influential activities directed toward HQ, sister subsidiaries, and external MNE actors (H1). Likewise, the study hypothesises that local aptness positively influences managers' influential activities with these internal and external actors (H2). The paper also proposes that such influential activities have a positive impact on subsidiary strategic performance (H3).

The results reveal the contrasting effects of managerial aptness. Local aptness significantly enhances managers' influential activities with external MNE actors, underscoring the importance of local knowledge and contextual understanding in driving outward strategic activities. However, local aptness shows no significant effect on internal engagement with HQ or sister

subsidiaries. In contrast, global aptness does not significantly influence managers' activities with internal or external actors and even shows a negative relationship with internal engagement. This finding suggests that while a global mindset enhances strategic alignment, it may simultaneously suppress initiative-taking by encouraging compliance with global practices or sensitivity to HQ's control (Andersson et al., 2007; Pudelko & Harzing, 2008; Rosenzweig, 2006).

The study finds strong support for (H3), demonstrating that subsidiary managers' influential activities, particularly those directed toward external actors, significantly enhance subsidiary strategic performance. Activities toward internal MNE actors also have a positive impact, albeit with slightly lower significance. These findings reinforce the argument that boundary-spanning and relational activities are critical micro-level processes (Ambos et al., 2025) through which subsidiaries shape their strategic position and influence within the MNE network (Georgakakis et al., 2023; Gillmore et al., 2018).

Overall, this study advances understanding of subsidiary strategic performance by unpacking how individual-level managerial characteristics influence subsidiary-level outcomes. The paper demonstrates that managerial aptness primarily operates as an enabler for performance-related activities rather than a direct driver of performance.

By integrating managerial aptness into a microfoundations framework (Felin et al., 2015), this study reinforces the theoretical explanation of how subsidiaries influence and perform within the MNE structure. In doing so, it conducts *a partial modular microfoundations explanation* (Ambos et al., 2025), connecting individual-level characteristics and activities to subsidiary-level strategic outcomes.

One-sentence conclusion: Subsidiary managers' aptness matters; local aptness fosters external engagement that enhances strategic performance, while global aptness may constrain internal collaboration.

5. Main Findings and Conclusion

This dissertation examines how subsidiary managers influence subsidiary performance through meso-level relational mechanisms and micro-level managers' activity mechanisms following the gain of an R&D mandate (Figure 1). Acknowledging that no single study can fully capture the microfoundations of subsidiary performance (Ambos et al., 2025; Meyer et al., 2020), the study's four papers adopt a modular microfoundations framework to analyse how the causal sequence from antecedents to mechanisms to outcomes unfolds across levels. Collectively, these papers provide a mechanism-centred explanation of subsidiary performance across three dimensions: (i) strategic performance within the MNE, (ii) innovation outcomes, and (iii) financial outcomes derived from innovation.

5.1 Summary of Key Findings Across Levels

This dissertation shows, at the *macro level*, where the disaggregation of value-adding activities drives the assignment of R&D mandates to the *meso level* (Contractor et al., 2010; Lewin et al., 2009), demonstrating that subsidiaries are not passive recipients of these mandates. Instead, subsidiary managers actively shape how mandates are integrated into the MNE's value chain. When HQ delegates an R&D mandate and its resources, it also transfers control over the use and development of knowledge resources to the subsidiary. Hence, as subsidiaries create new knowledge, they become primary holders of relevant expertise and understanding of these resources, while the HQ retains only formal ownership. Through internal and external relationships, managers embed this new knowledge in the broader innovation network of the MNE, thereby increasing the firm's dependence on the subsidiary. Consequently, subsidiaries extend their reach within the MNE, gaining strategic influence over corporate resource-allocation strategies and their own positioning within the MNE's global network. This enhanced influence represents the subsidiary's strategic performance, achieved through managers' orchestration of resources and relationships. Thus, the study's findings suggest that subsidiary managers' ability to orchestrate resources, embed knowledge, and reposition the subsidiary within the MNE network determines whether structural change translates into strategic or innovation performance. Hence, subsidiary

management acts as the critical lever through which quasi-exogenous change becomes organisational outcome (addressing RQ1).

Furthermore, at the *meso level*, innovation performance does not automatically increase after an R&D mandate. Although subsidiaries receive new resources (Birkinshaw, 1997; Egelhoff et al., 1998), the effectiveness of those resources in driving innovation are contingent on the *micro-level* mechanisms through which subsidiary managers allocate their attention and engage with their internal and external networks (Ahearne et al., 2014; O'Brien et al., 2019; Pappas & Wooldridge, 2007). The study's findings suggest that activities toward HQ and sister units can sometimes hinder innovation, challenging the prevailing assumption that stronger internal ties enhance performance through intra-MNE collaboration (Birkinshaw et al., 2005; Garcia-Pont et al., 2009) or that internal scouting is always fruitful (Ciabuschi et al., 2011). This result aligns with O'Brien et al. (2019), who showed that subsidiary managers' activities toward HQ may negatively affect initiative realisation, and this dissertation extends that logic to all internal actors, including sister subsidiaries. Moreover, external activities, traditionally viewed as primary channels for knowledge inflow (e.g., Andersson et al., 2005; Giroud & Scott-Kennel, 2009; Mu et al., 2007), exhibit weaker and non-significant effects on innovation performance in the period immediately after gaining the R&D mandate. This insight explains the paradox in the literature between the benefits of boundary-spanning (e.g., Ancona & Caldwell, 1992; Hansen, 1999) and its potential coordination inefficiencies or knowledge-sharing frictions (e.g., Cross et al., 2002; Gould & Fernandez, 1989; Khan et al., 2015). Thus, the findings reveal that the direction of subsidiary managers' activities determines innovation outcomes, rather than engagement beyond the subsidiary's boundaries (addressing RQ2).

Extending the analysis to the financial dimension of subsidiary performance, after gaining an R&D mandate – and the consequent increase in the subsidiary's resources (Birkinshaw, 1997; Egelhoff, Gorman, & McCormick, 1998) – relational embeddedness (Ciabuschi et al., 2011; Yamin & Andersson, 2011; Pereira et al., 2021) acts as the meso-level mechanism that is converting innovation into economic value. While prior studies often assume a direct association between innovation-related resources and financial performance, this dissertation explains how this relationship unfolds. The findings demonstrate that the causal mechanism involves managing relational embeddedness across the subsidiary networks. External embeddedness facilitates experimentation but does not guarantee value capture. In contrast, internal embeddedness (namely, the subsidiary's adaptation and collaboration within its portfolio of activities with HQ and sister units) is crucial for transforming innovation into economic value. These findings refine the network-based view of the MNE by distinguishing between the exploratory role of external ties and the exploitative role of internal ones. The internal and external relational embeddedness mechanisms represent separate yet complementary components that, when

effectively aligned, generate superior subsidiary performance across innovation and financial outcomes. The study's results clarify that subsidiaries must adjust the focus of their internal and external embeddedness over time, strengthening internal ties when transiting from an innovation to a value appropriation strategy to sustain alignment between innovation and financial outcomes.

Therefore, the findings reveal that subsidiary management's efforts to align collaboration and adaptation (by reconfiguring internal and external embeddedness) determine the R&D subsidiary's value appropriation from innovation and financial gain, thus responding to RQ2.

At the *micro level*, subsidiary managers' individual attributes, in the form of managerial aptness, shape the activities they pursue and, in turn, impact subsidiary strategic performance. Drawing on the upper echelons perspective (e.g., Hambrick, 2007; Hambrick & Mason, 1984), the study conceptualises two dimensions of managerial aptness: global aptness and local aptness. Global aptness reflects the ability of subsidiary managers to operate across internal and external MNE environments, whereas local aptness captures their capacity to understand and engage with the local context.

The findings show that these dimensions have distinct effects on the direction of subsidiary managers' activities in their networks. Local aptness significantly enhances their engagement with external actors, highlighting the importance of local knowledge and contextual awareness for effective outward strategic initiatives. In contrast, global aptness has no significant effect on internal or external engagement, and is even negatively associated with internal engagement, suggesting that while a global orientation generally promotes alignment with corporate strategy, it may simultaneously suppress initiative-taking within the internal MNE network. This effect may stem from the incremental nature of international experience, which can, in the short run, give rise to overconfidence or learning biases that undermine effective managerial action (Le & Kroll, 2017; Piaskowska et al., 2022).

Importantly, the study shows that it is the activities themselves—rather than the underlying attributes—that have a positive and significant impact on subsidiary strategic performance. Both internal and external engagement strengthen the subsidiary's strategic position, reinforcing the view that boundary-spanning and relational activities are critical micro processes through which subsidiaries shape their strategic influence within the MNE network (Georgakakis et al., 2023; Gillmore et al., 2018; O'Brien et al., 2019). Consistent with the *modular microfoundation*s perspective of Ambos et al. (2025), managerial aptness operates not as a determinant of performance but as a selective enabler of these behavioural mechanisms, linking individual-level attributes and activities to subsidiary-level outcomes. The present study thus refines existing views of managerial characteristics by showing that aptness partially conditions the behavioural mechanisms that link attributes to activities and strategic outcomes (addressing RQ3).

Collectively, these findings provide explicit answers to this dissertation's three research questions. By revealing how subsidiary managers' attributes and activities enable relational adaptation and resource orchestration following structural change, this dissertation also deepens the understanding of organisational adaptation in uncertainty. It shows how individual-level mechanisms sustain subsidiary resilience and effectiveness during transformation.

Together, the findings provide an integrated explanation of how subsidiaries translate the resource and control changes that accompany an R&D mandate into strategic, innovation, and financial outcomes. They demonstrate that subsidiary performance is not determined merely by gaining an R&D mandate. Instead, success is rooted in the meso- and micro-level mechanisms of embeddedness, the activities of its managers, and managerial aptness.

5.2 Theoretical Contributions

Despite extensive research on subsidiary evolution, embeddedness, and managerial microfoundations, current theories do not entirely explain how structural changes such as R&D mandate gains translate into realised subsidiary performance. Three core limitations in the literature motivate this dissertation. First, the mandate literature largely assumes performance gains as an automatic consequence of R&D mandate assignment, without specifying the behavioural or relational mechanisms through which such outcomes materialise. Second, the embeddedness literature conceptualises relational ties as static structural conditions rather than dynamic managerial outcomes that evolve after structural change. Third, research tends to isolate managerial characteristics from their enacted activities, failing to explain how individual aptness and behaviour interact to shape subsidiary outcomes.

In addressing these theoretical gaps, this study develops and empirically validates a mechanism-centric, modular microfoundations framework that specifies how subsidiaries convert structural reconfigurations into multidimensional performance outcomes. By organising causal explanation around antecedents, mechanisms, and outcomes, this dissertation extends the modular perspective proposed by Ambos et al. (2025) beyond additive causal chains. This modular approach departs from traditional hierarchical causal models by allowing mechanisms to be theorised as self-contained yet interrelated building blocks across levels. By adopting this approach, the study bridges research on subsidiary evolution, relational embeddedness, boundary spanning, and managerial microfoundations, providing an integrative explanation of how managerial aptness, behavioural and relational orchestration underpin subsidiary performance and, ultimately, MNE performance.

At the *macro level,* the dissertation extends subsidiary evolution theory (Birkinshaw & Hood, 1998) and the strategic management of mandates

literature by reconceptualising the R&D mandate as a trigger of resource and control reconfiguration rather than a static assignment. Prior work largely treated mandates as quasi-exogenous upgrading events; this study shows that outcomes depend on how subsidiary managers act and embed the resulting structural changes. Incorporating managers' activities into mandate-based theorising reframes subsidiary performance as an interaction between structural opportunity and individual orchestration. This approach contributes to understanding the MNE as an adaptive and resilient system, in which subsidiaries' ability to transform structural shifts into strategic influence within global value chain networks (Sharma et al., 2020; Verbeke et al., 2018) determines overall robustness.

At the *meso level,* the study refines the relational embeddedness (Andersson et al., 2002; Yamin & Andersson, 2011) and innovation value appropriation literature by demonstrating the complementary yet distinct role of relational embeddedness as a meso-level mechanism. The dissertation further shows that subsidiary performance depends not on the static presence of ties but on their temporal reconfiguration following structural change. This insight refines existing network logic by demonstrating that the alignment and timing of internal and external collaboration determine whether innovation translates into value capture. Hence, embeddedness is reframed as a dynamic, managerial capability rather than a relational attribute. In adopting this approach, the study advances a dynamic, actor-centred view of embeddedness, consistent with recent meta-analysis insights (Galizzi et al., 2025) that call for processual explanations of how embeddedness evolves to generate differentiated innovation and financial outcomes.

At the *micro level*, the dissertation extends the upper echelons literature (Hambrick & Mason, 1984) and the microfoundations agenda in IB (Felin et al., 2015; Meyer et al., 2020) by introducing managerial aptness as a condition and antecedents linking individual experience to subsidiary-level results. The results show that managerial attributes influence performance indirectly by enabling or constraining these activities, thereby recasting managerial characteristics from static predictors to contextual enablers of subsidiary behaviour. By applying this lens, the study bridges upper echelons logic with microfoundations reasoning, contributing to a more nuanced understanding of the human foundations of subsidiary performance. Additionally, distinguishing between global and local aptness clarifies how different competence configurations guide managers' activities and their strategic leadership (Georgakakis et al., 2023).

The dissertation also contributes to broader discussions of organisational adaptation and resilience in the face of global uncertainty (Fisher et al., 2019; Gölgeci et al., 2020). By revealing how subsidiary managers' attributes and activities orchestrate resources and relationships after structural change, this study elucidates the micro- and meso-level mechanisms that preserve performance continuity during disruption. These insights clarify how subsidiaries

function as adaptive nodes within the MNE network, translating external shocks, whether geopolitical, political, economic, or technological, into renewed organisational effectiveness. The findings also extend to contemporary transformations such as the integration of emerging technologies and artificial intelligence into organisational routines (Sun et al., 2025), offering a human-centred explanation of how firms sustain competitiveness during technological and institutional turbulence.

5.3 Methodological Contributions

This dissertation makes a unique methodological contribution. Unlike conventional IB research, which typically relies on cross-sectional or correlational data that cannot capture causal mechanisms or post-change behavioural and relational dynamics, this study leverages a rare dataset of R&D mandate assignments across Swedish MNEs, consisting of quasi-exogenous events that constitute a natural experiment. This setting enables the examination of how managerial attributes influence subsidiary managers' activities and how these activities shape relational patterns, subsidiary behaviour, and performance following structural change. By utilising this organisational event, the dissertation establishes an internally valid framework for assessing how subsidiaries translate quasi-exogenous reconfigurations into realised performance outcomes. This approach enhances the explanatory power and methodological precision of research on organisational change in MNEs.

5.4 Managerial Implications

Subsidiary managers are not merely implementers of R&D mandates but active architects of subsidiary performance. Their activities, strategic direction, and relational embeddedness are crucial in determining the success of innovation and financial viability. To fully capitalise on the strategic disaggregation of core competencies, MNEs must proactively support and empower subsidiary managers by providing them with strategic autonomy, establishing unambiguous role expectations, and implementing competency-driven leadership selection. Subsidiary managers' expertise and decision-making directly shape the performance trajectory within the global MNE network, reinforcing their critical role in driving competitive advantage. Hence, clear strategic guidance should be provided to subsidiary managers regarding when and how to allocate their attention, depending on the subsidiary's stage of mandate development and on its long-term and short-term strategic goals, without imposing excessive monitoring or control. Additionally, managerial training and structural support should be offered to help subsidiaries extract maximum

value from their assigned mandates while HQ maintains a balance between subsidiary autonomy and structured oversight.

5.5 Limitations and Future Research

This study has limitations that present opportunities for future research.

From a micro-level perspective, future studies could further investigate how subsidiary managers' cognitive processes shape subsidiary performance. While this dissertation introduces the concepts of global aptness and local aptness, future studies could further explore these concepts. Additionally, research could examine how managers interact and mediate organisational shifts, particularly in navigating the tensions between subsidiary autonomy and HQ control.

Future research should adopt a longitudinal approach to examine how the present study's findings unfold over time and whether the impact of subsidiary relational embeddedness on performance evolves in specific patterns. Furthermore, longitudinal studies could track managers' evolving behaviours and activity patterns, providing deeper insights into the causal mechanisms driving subsidiary performance.

Additionally, this study's dataset is limited to Swedish MNE subsidiaries, which restricts the generalisability of the results. Expanding the dataset to include subsidiaries from non-European MNEs would enhance the external validity of the findings and provide a broader perspective across different institutional contexts. Furthermore, future studies could investigate how industry-specific factors moderate the relationship between subsidiary relational embeddedness and performance, offering more profound insights into how subsidiaries in different sectors leverage internal and external networks for innovation and profitability.

Moreover, as global business environments continue to evolve, future research could explore the impact of digitalisation and remote management on subsidiary managers' ability to develop relational embeddedness. With the increasing reliance on virtual communication and data-driven decision-making, it would be beneficial to investigate how digital tools and AI-driven insights are reshaping management activities in multinational subsidiaries.

Declarations

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The author of this manuscript declares that at the last stage of this work, generative artificial intelligence (OpenAI, Grammarly) was utilised for the purpose of enhancing readability and refining language. These applications were used under conditions of strict human oversight, judgment, and control. Subsequently, following the utilisation of these technologies, the author meticulously reviewed and edited the manuscript to ensure its scientific accuracy and coherence.

The front-cover illustration, created in Adobe Illustrator, is the creative work of © Moujan Memar, 2016. It was made using an open-source world vector map as a reference.

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