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Foreign subsidiary performance in multinational enterprises: The role of business development capabilities and resource deployment

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ABSTRACT

The research on subsidiary capability building highlights the importance of creating new capabilities in host countries while the resource management view emphasises effective resource structuring, bundling, and deployment actions to achieve competitive advantages and value creation. Building upon these theoretical advances, we develop a conceptual framework that examines the direct and combined impacts of subsidiary-level business development capabilities encompassing both product and market development, and resource deployment on the performance of foreign subsidiaries of multinational enterprises. We empirically test this framework using survey data from manufacturing and service subsidiaries, archival data from parent firms, and host country data from public sources. The empirical results support our hypotheses. We discuss the implications of our findings for both theory and practice.

1. Introduction

Foreign subsidiaries of multinational enterprises (MNEs) operate in rapidly evolving environments of their host countries. They utilise knowledge, resources, and capabilities transferred from their parent firms. Additionally, they are committed to building new capabilities and skills, acquiring, and developing new knowledge through learning, innovation, and accessing complementary resources. This not only provides sustainable competitive advantages but also plays a critical role in driving their performance (Birkinshaw and Hood, 1998; Cantwell and Mudambi, 2005; Luo, 2002; Nguyen and Rugman, 2015; Rugman and Verbeke, 2001; Verbeke and Lee, 2022).

Research on the determinants of subsidiary performance has become a significant and recognised topic within the academic discussions of subsidiary management literature (Meyer et al., 2020). Over the past decades, this research domain has attracted considerable attention because the performance of subsidiaries contributes to the overall consolidated performance of their parent firms (Rugman et al., 2008; Nguyen et al., 2020). Empirical findings on the multi-level antecedents affecting subsidiary performance have enhanced our understanding (for a literature review, see Bai et al., 2018; Gundelach and Nielsen, 2023; Meyer et al., 2020; Nguyen, 2024). However, two notable research gaps remain.

First, extant literature has not specifically emphasised the importance of developing and managing capabilities that link upstream

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activities, such as new product and service development, with downstream activities, such as market development, including marketing, sales, and distribution (Davis and Sun, 2006; Reichstein-Scholz et al., 2022; Sheng, 2017; Williams and Plouffe, 2007). A significant body of research has focused on the innovation and research and development (R&D) competence creation of foreign subsidiaries, given their crucial role in the R&D internationalisation of MNEs (Achcaoucaou et al., 2014; Cantwell and Mudambi, 2005; for a literature review, see Liu and Li, 2022; Papanastassiou et al., 2020; Zhao et al., 2021). While substantial investments in exploratory and exploitative innovation are vital for new product and service development, they do not guarantee successful commercialisation or contribute to subsidiary performance (Mostafiz et al., 2024). Some products with immense potential fail not because of inadequate innovation or intense competition but due to poor marketing (Kalaighnanam et al., 2021; Henard and Szymanski, 2001). However, the research on the capabilities linking product development with market expansion remains scarce. This is particularly surprising because such cross-functional coordination reflects the ability of subsidiaries to expand their market coverage through new product development endeavours. Consequently, little is known about these capabilities at the subsidiary level and the impacts on subsidiary performance, even though a robust understanding of this phenomenon will provide highly relevant strategic implications for subsidiary managers and offer academic researchers an opportunity to advance theory.

Second, the effects of resources and capabilities on the performance of foreign subsidiaries highlight the need to understand how managers deploy resources (Sirmon et al., 2007; Sirmon and Hitt, 2009; Sirmon et al., 2011b). While empirical research has shown that resources and capabilities influence the performance of foreign subsidiaries, it is equally important to consider how managers strive to develop a fit between their resource management decisions and the competitive environments in which they operate (Sirmon and Hitt, 2009). Despite the well-documented influence of resources and capabilities on performance, the contingencies within managers' strategic choices—particularly in resource deployment—have not been fully explored (for a meta-analysis, see Crook et al., 2011; Crook et al., 2008; D'Oria et al., 2021). This gap in literature calls for further research to advance our understanding of how these contingencies affect subsidiary performance.

To address these gaps, we build upon the research on subsidiary capability building (Birkinshaw and Hood, 1998; Rugman and Verbeke, 2001), and the resource management view (RMV) (Sirmon and Hitt, 2003; Sirmon et al., 2007; Sirmon et al., 2008; Sirmon and Hitt, 2009) to frame our study. The tenet of the research on subsidiary capability building emphasises the importance of building new capabilities to increase competitiveness in host countries, known as subsidiary-specific advantages (Rugman and Verbeke, 2001; Verbeke and Lee, 2022). The RMV posits that synchronising decisions in investment, bundling, and deploying resources is central to effective resource management and value creation (Sirmon and Hitt, 2009).

In this study, we hypothesise that subsidiary performance is shaped directly and jointly by subsidiary-level business development capabilities and resource deployment. Subsidiary-level business development capabilities, defined as an advanced form of market-oriented capabilities locally built by the subsidiary, focus on identifying opportunities and satisfying customer needs through both product (Helm et al., 2020; Morgan et al., 2009) and market development (Estrin et al., 2008; Nguyen and Almodóvar, 2018; Nguyen et al., 2022). Business development capabilities involve foresight, planning, and execution, aligning with local and global strategic objectives. To achieve this, subsidiaries focus on combining knowledge and skills across functions for value creation, especially linking innovation with marketing, sales, and distribution (Grant, 1996; Mitrega, 2019; Sheng, 2017). They carefully conduct cost-benefit analyses specific to their operational contexts, leverage their understanding of local cultural nuances and regulatory frameworks, and implement market and non-market strategies. On the other hand, resource deployment involves managing a diverse resource portfolio (Helfat et al., 2007), which is crucial for maintaining adaptive processes that ensure optimal readiness and flexibility (Sirmon et al., 2007; Sirmon and Hitt, 2009; Sirmon et al., 2011a, 2011b). Resource deployment decisions establish the specific market segments in which subsidiaries will engage (Sirmon and Hitt, 2009). Although theory suggests the significance of business development capabilities and resource deployment, there has been no research investigating how the interaction between these two decisions impacts performance. Thus, we aim to address the following research question: “To what extent do subsidiary-level business development capabilities and resource deployment directly and jointly affect subsidiary performance?”

We empirically test our hypotheses using ordinary least squares (OLS) and ordinal probit regressions from a survey dataset of managers from 135 South-East Asian manufacturing and service subsidiaries of Western MNEs headquartered in North America and Europe, supplemented with archival data on parent firm characteristics and public data sources for host country-level variables. We focus on this specific context because of the increasing importance of South-East Asia in the “China Plus One” strategies of Western MNEs, i.e., diversifying investments beyond China into other nations, or directing investments toward manufacturing in other emerging economies, particularly reshoring to South-East Asian countries (S&P Global, 2023).

We contribute to the literature in three ways. First, our study seeks to extend the research on subsidiary capability building (Birkinshaw and Hood, 1998; Rugman and Verbeke, 2001). Specifically, our study tests a conceptual framework using a novel concept of subsidiary-level business development capabilities. The novelty relates to two aspects: (i) the conceptualisation of business development capabilities involves both product development and market expansion, distinguishing itself from the extant literature that often examines new product development only. Such a combination allows subsidiaries to take advantage of the complementarity of acquired and accumulated resources and capabilities across functions, achieving synergy that facilitates growing the business; (ii) the operationalisation of the construct is designed to fit the specificity of the subsidiary.

Second, our study explores the role of resource deployment in subsidiary performance by drawing upon the RMV (Sirmon et al., 2007; Sirmon et al., 2008; Sirmon and Hitt, 2009). The findings show that subsidiaries differ in their effectiveness and efficiency in resource deployment, and these differences matter to subsidiary performance outcomes. As such, this study enhances our understanding of the relationship between resource deployment and value creation (Sirmon and Hitt, 2003). Given the relatively limited work examining the RMV in the context of MNE foreign subsidiaries in general (Jakobsson et al., 2021) and in the subsidiary performance literature in particular, our research is among the first to demonstrate that performance outcomes depend on subsidiaries'

resources that involve effective deployment (D'Oria et al., 2021).

Third, this study extends the RMV by examining the moderating effect of resource deployment on the relationship between business development capabilities and subsidiary performance. We highlight the challenges that subsidiary managers face when exploring contingencies within the concept of organisational fit, defined as the alignment of two or more organisational elements (Donaldson, 2001). We find that the positive effect of subsidiary-level business development capabilities on subsidiary performance is amplified when combined with congruent resource deployment. Our study is the first to demonstrate this synergistic effect, showing that synchronised investment in building business development capabilities and effective resource deployment is vital to maximising the subsidiary performance outcomes. By revealing this moderating effect, we provide new insights into how subsidiaries can better leverage their capabilities and resources to achieve superior performance.

In summary, the findings provide valuable theoretical insights by (i) considering the relationship between subsidiary-level business development capabilities, resource deployment, and subsidiary performance, which have often been overlooked in previous studies (Nguyen, 2024); and (ii) focusing on foreign subsidiaries of Western MNEs operating in South-East Asia, which have been under-researched in extant literature (White III et al., 2022; White III et al., 2023). In this way, our research offers an opportunity to test theories on subsidiary capability building in a new context and also responds to increasing calls for the contextualisation in international business management research (Michailova, 2011). South-East Asia differs not only from advanced economies but also from other large emerging economies, such as China and India, which are more frequently examined. The findings provide new useful insights not only for MNE subsidiary managers aiming for a successful operational footprint in the region but also for policymakers striving to fine-tune the balance between regulations and openness in attracting foreign direct investment (FDI).

This study is structured as follows: We start with the theoretical background, then outline our theoretical development for conceptual framework and hypotheses. This is followed by a description of the research design, methodology, and presentation of empirical findings. We conclude with a discussion on the implications for theory and practice, acknowledge research limitations, and provide recommendations for future research.

2. Literature background

We review and synthesise the research on subsidiary capability building (Birkinshaw and Hood, 1998; Rugman and Verbeke, 2001), and the theoretical underpinnings of the RMV (Sirmon et al., 2007; Sirmon and Hitt, 2009), along with related empirical evidence of previous studies. We then develop a conceptual framework that explores subsidiary managers' actions in building, bundling, and deploying resources and capabilities into effective utilisation that drives their performance.

First, the research on subsidiary capability building focuses on subsidiary competence creation (Almeida and Phene, 2004; Cantwell and Mudambi, 2005; Cantwell and Piscitello, 2015; Ha and Giroud, 2015; Phene and Almeida, 2008), knowledge flows (Achcaoucaou et al., 2014), subsidiary learning (Figueiredo et al., 2020), and local technological innovation (Liu and Li, 2022). One of the most influential models developed by Birkinshaw and Hood (1998) is the subsidiary evolution framework that emphasises the mechanisms in determining changes in a subsidiary's operations and its underlying capabilities. The three determinants for subsidiary capabilities are the corporate headquarters assignment, the subsidiary choice, and the local host country environments. The corporate headquarters assignment refers to the specific roles and resources that the headquarters allocates to the subsidiary, which can, in turn, influence the subsidiary's capabilities. The subsidiary's choice demonstrates its ability to pursue new ventures through entrepreneurial actions and initiatives, enhance unique resources, and expand its original charter (Birkinshaw, 1996, 1997, 2000, 2022; Birkinshaw et al., 1998; O'Brien et al., 2019). The local host country environments affect subsidiary capability development (Bjorkman et al., 2007; Cantwell and Mudambi, 2005; Frost et al., 2002). These determinants provide a holistic understanding of subsidiary-level capabilities. Capability building through resource commitment and learning helps subsidiaries become leading actors (Birkinshaw and Hood, 1998; Hood and Young, 1982; Roth and Morrison, 1992; Ryan et al., 2018; Pananond et al., 2020; White and Poynter, 1984).

In a related manner, Frost et al. (2002) introduce the concept of "centre of excellence", defined as "an organisational unit that embodies a set of capabilities that has been explicitly recognised by the firm as an important source of value creation, with the intention that these capabilities be leveraged by and/or disseminated to other parts of the firm" (p. 997). Cantwell and Mudambi (2005) demonstrate the competence creation of subsidiaries in R&D. Yang et al. (2008) argue that subsidiaries act as a source of knowledge, which can be disseminated and utilised within the MNE network. Furthermore, existing research shows that subsidiaries leverage their unique position of dual embeddedness to build capabilities. They are externally embedded in local networks of business partners in dynamic host country environments and internally embedded within their group's network of parent firms and other subsidiaries (Andersson et al., 2002; Meyer et al., 2011), which facilitates the development of new capabilities within subsidiaries (Achcaoucaou et al., 2014).

The literature distinguishes between knowledge and competence exploiting subsidiaries and knowledge and competence creating subsidiaries (Meyer et al., 2020). The former focuses on utilising and refining existing knowledge and resources transferred from parent firms for local operations. The latter emphasises creating new competences, predominantly in R&D and innovation (Achcaoucaou et al., 2014; Cantwell and Mudambi, 2005; Lagerstroem et al., 2019), and generating new knowledge, such as in centres of excellence (Frost et al., 2002; Adenfelt and Lagerström, 2006).

On the other hand, Rugman and Verbeke (2001) introduce the concept of subsidiary-specific advantages and highlight the development and diffusion of knowledge within the MNE network. The literature documents that foreign subsidiaries build their own unique capabilities, especially in innovation and technology and contribute to competitive advantages (Birkinshaw, 1997; Birkinshaw and Hood, 1998; Birkinshaw et al., 1998; Figueiredo et al., 2020; Hewett et al., 2003; Holm and Sharma, 2006; Scott et al., 2010; Taggart, 1998; Nguyen and Rugman, 2015; Rugman et al., 2011a; Wei and Nguyen, 2020).

Capability building is an effective strategic response to overcome the liability of foreignness, i.e., the additional costs incurred in overseas operations beyond those incurred by local firms (Luo et al., 2002; Mezas, 2002). Capability building stimulates the continuous improvement of organisational and strategic processes and the combination of resources in novel ways, enabling subsidiaries to survive and thrive in host countries (Grant, 1996; Jakobsson et al., 2021; Nguyen, 2024). Thus, subsidiaries implement their parent firms' strategy while simultaneously leveraging the benefits of exposure to new knowledge, business practices, and opportunities.

The extant literature has provided insights into the role of subsidiaries in capability building in general, and in competence creation and knowledge management in particular (Meyer et al., 2020). Yet, there is a lack of research on the capabilities of subsidiaries that integrate product development with market expansion through effective resource deployment.

Second, the RMV emphasises managers' resource-focused actions. Sirmon et al. (2007) outlined detailed, process-oriented managerial actions that involve organising a firm's resource portfolio, bundling resources to build capabilities, and utilising these capabilities to sustain and create value for both customers and shareholders. First, structuring the firm's resource portfolio, involves acquiring resources that align with external market demands (Sirmon and Hitt, 2003). Second, bundling, entails activities that combine and integrate resources to enhance or develop new capabilities (Sirmon et al., 2007). Third, leveraging, focuses on using these capabilities strategically to deliver value, aiming to exploit market opportunities and counteract competitive threats (Sirmon et al., 2007).

The RMV extends the resource-based view of the firm (RBV) by elaborating the link between the management of resources and value creation. The RBV suggests that a firm builds its sustained competitive advantages based on its unique resources and capabilities (Barney, 1991; Mahoney and Pandian, 1992; Wernerfelt, 1984; for a comprehensive discussion, see Barney et al., 2021). Resources that are valuable, rare, inimitable, and non-substitutable (VRIN) contribute to a firm's competitive advantages as they are the source of economic value and explain the heterogeneity among firms across industries (Barney, 1991; Mahoney and Pandian, 1992; Reed and DeFilippi, 1990). Capabilities are defined as a firm's ability to use its resources, typically in tandem, through organisational processes to achieve a specific goal (Amit and Schoemaker, 1993).

However, merely possessing resources does not automatically lead to competitive advantages or value creation (Barney and Arikan, 2001; Priem and Butler, 2001). To effectively generate value, firms must accumulate, combine, and utilise their resources (Grant, 1991; Sirmon and Hitt, 2003). Additionally, the RBV does not specifically address the mechanisms through which managers and firms convert resources into value (Priem and Butler, 2001). In this way, the RMV further elaborates the RBV by emphasising that the full potential of resources to generate competitive advantages is only achieved when they are effectively managed (Sirmon et al., 2007; Sirmon et al., 2011a, 2011b).

Empirical evidence highlights the importance of resource management and the actions of managers. Previous studies show how resources are bundled and deployed can profoundly impact organisational performance. For example, Kor and Leblebici (2005) found that in law firms, pairing senior partners with junior associates enhanced performance, while increasing service variety or geographic diversification may detract from it. These findings aligned with earlier research by Hitt et al. (2001). Furthermore, Sirmon et al. (2008) reported that adept management of human capital in U.S. professional baseball teams from 1997 to 1999 led to improved performance. They also noted that the importance of resource bundling and deployment grew as competitors' resource endowments became more similar. Holcomb et al. (2009) verified and provided further support to the earlier findings of Sirmon et al. (2008). Sirmon and Hitt (2009), in their analysis of banks, observed that performance suffered when investments in resources deviated significantly from industry norms, whether through over-investment or under-investment. They concluded that performance was enhanced not by maximising or minimising resource investments alone but by ensuring that resource deployment decisions aligned with the investment choices (Sirmon and Hitt, 2009).

While these studies have advanced our understanding of specific contingencies, little is known about other contingencies, particularly in the context of MNE foreign subsidiaries. To bridge this research gap, our study explores both theoretically and empirically the direct and moderating impacts of resource deployment on subsidiary performance, recognising that resource deployment involves coordinating and orchestrating resources while leveraging capability configurations to support a chosen strategy (Sirmon et al., 2007; Sirmon et al., 2011a, 2011b).

3. Theoretical development

Our study examines the impacts of subsidiary-specific capabilities that are locally developed, while acknowledging that the corporate headquarters and broader MNE strategies also influence subsidiary performance. We contend that these capabilities allow subsidiaries to adapt to local market conditions, and cultural and regulatory landscapes. We propose two key dimensions that drive subsidiary performance: subsidiary-level business development capabilities and resource deployment. These two internal factors enable subsidiaries to pursue entrepreneurial opportunities, continuously creating and upgrading subsidiary-specific advantages to sustain competitiveness in complex and volatile environments (Collinson et al., 2020; Nguyen and Rugman, 2015). Additionally, subsidiaries must respond to changes and effectively manage their resources to maintain competitiveness. We theorise that the effective and efficient utilisation of business development capabilities and resource deployment determine subsidiary performance as outlined below.

First, subsidiaries invest in resources to build *business development capabilities*. Business development stands out for its broader and more strategic orientation. Unlike marketing, which emphasises brand positioning and demand generation, business development highlights strategic pathways, uncovering new market opportunities and fostering partnerships. While sales focus on immediate customer conversion, business development takes a forward-looking perspective, emphasising long-lasting relationships and

harmonious business ties. Beyond the logistics inherent in distribution, the focus extends to tapping into new distribution channels or venturing into new sales territories and customer bases. In essence, business development capabilities at the subsidiary level are not limited to a single function but offer a broader view, harmoniously intertwined product development and introduction with marketing, sales, and distribution. Therefore, our perspective extends the extant literature which often examines new product development and market expansion in isolation, or the interaction between new product development with either marketing or sales functions separately (Lee and Wong, 2010; Konwar et al., 2017; Sakarya et al., 2007).

Subsidiaries must carefully consider the trade-off between risks and anticipated returns for each dimension of business development. Product development encompasses the activities and processes involved in understanding customer needs, generating ideas for new products, designing procedures, and bringing new products to market (Day, 1994). Specifically, subsidiaries may alter and modify existing products, services, and solutions to raise quality and performance, or extend existing products, services, and solutions with new variants, or introduce products, services, and solutions that are new to subsidiaries and/or new to markets. It should be noted that product innovation can be developed by foreign subsidiaries or by their parent firms, with subsidiaries paying licensing fees for patented technology and internal knowledge of product innovation (Cooper and Nguyen, 2020). Subsidiaries also identify new ways to diversify product, service and solution offerings or develop new uses for existing resources. Subsidiaries may acquire and accumulate new sources of knowledge through investment in research and development and innovation programmes, or by acquiring technologies from parent companies that contribute to the development of new product innovations (Sirmon et al., 2011a, 2011b). It also necessitates to combine R&D knowledge into subsidiary operations, and the bundling of resources to create capabilities that enrich existing technologies and also enable subsidiaries to bring new innovative products in new markets (Sirmon et al., 2011a, 2011b). Prior research documents that product development is a specialised capability and an important factor contributing to superior performance (Helm et al., 2020; Morgan et al., 2009; Luchs and Swan, 2011).

Market development comprises of activities and processes involved in finding new markets, building a customer base, and collaborating with business partners (e.g., distributors, retailers, wholesalers, etc.) to create value for customers (Grönroos, 2000). Subsidiaries identify demands in existing local markets and penetrate more deeply by expanding market coverage and improving sales and distribution effectiveness (Rundh, 2021). They use existing knowledge of markets and customers, along with knowledge in other areas such as production and supply chain management to recognise new opportunities (Ardichvili et al., 2003). They also identify market opportunities that are exploitable on a global scale, requiring the coordination between the headquarters and foreign subsidiaries (Lagerstroem et al., 2019). In this way, they can expand their market scope by exporting to foreign countries (Estrin et al., 2008; Nguyen and Almodóvar, 2018; Nguyen et al., 2022).

Subsidiaries build business development capabilities by adopting a customer-focused and cross-functional approach that facilitates effective access to market knowledge, thereby delivering customer value (Mitrege, 2019). They coordinate different functional units for product and market development by leveraging product-market scope and value-added activities along the value chains, including innovation, production, sales, and administration. These activities are either assigned by their parent firms or earned by the subsidiaries themselves (Rugman et al., 2011b). A high level of collaboration among functional units, particularly the integration of market knowledge from sales and marketing into new product development, is crucial for effectively responding to market conditions (Sheng, 2017). This collaboration enhances efficiency in product development and is instrumental in achieving successful new product introductions in the market (Mitrege, 2019), ultimately contributing to subsidiary performance.

Second, business development capabilities are contingent upon the effectiveness of *resource deployment*. The ability of subsidiaries to create value for customers is only realised through the successful resource deployment (Sirmon et al., 2007). Subsidiaries acquire, accumulate, and utilise internal resources, knowledge, and information transferred from parent firms and the MNE intra-firm network, as well as resources accumulated from their local operations, together with knowledge and skills developed locally by subsidiaries themselves (Luo, 2002; Wei and Nguyen, 2020). Furthermore, they access complementary resources from local networks of business partners in host countries for their operation, adaptation, and expansion (Verbeke and Lee, 2022).

As foreign subsidiaries operate in dynamic host country environments, they must seek new ways of doing business, often requiring effective resource configurations to capitalise on new opportunities (Teece et al., 1997). They learn how to combine internal resources with complementary resources from external actors more effectively, whereby the combination may involve existing resources, new resources, or a mix of both (Collinson et al., 2020). The combination of resources in novel ways, along with resource modification (if required), gives subsidiaries stronger competitive advantages to enhance their performance (Collinson et al., 2020).

Furthermore, when subsidiaries effectively use these resources in the marketplace, they can extract superior returns (Lichtenstein and Brush, 2001). Prior research shows that the newness, i.e., new products and new markets that reflect the entrepreneurial processes, is likely to create value for customers (Hamel and Valikangas, 2003). Additionally, the learning process (Luo, 2022) helps subsidiaries to develop a deep understanding of customers' needs and contributes to the ability to match their resources and capabilities in satisfying customers (Slater and Narver, 1999).

Previous empirical research has demonstrated the importance of effective resource deployment in enhancing subsidiary performance, whether utilising internal or external resources. For example, Nguyen and Rugman (2015) find that subsidiaries rely on internal equity financing—defined as profits generated by subsidiaries that are retained and reinvested in their business—to achieve superior financial performance. Internal equity financing is a crucial financial resource for subsidiaries operating in emerging economies because external financial markets in host countries are often underdeveloped, with limited credit opportunities, scant availability of capital, and high borrowing costs (Nguyen and Rugman, 2015). Additionally, subsidiaries often face the liability of foreignness when accessing external debt from local banks (Bell et al., 2012; Gu et al., 2019). Additionally, Nguyen and Almodóvar (2018) find that subsidiaries use internal debt financing (intra-firm loans) secured from the group's corporate treasury and external debt financing from local banks (bank loans) to support their export activities.

4. Hypotheses development

4.1. Business development capabilities and subsidiary performance

In line with the research on subsidiary capability building and subsidiary-specific advantages (Birkinshaw and Hood, 1998; Rugman and Verbeke, 2001) and the RMV (Sirmon et al., 2007), internal capabilities are particularly important in enhancing overall subsidiary performance. Business development capabilities enable subsidiaries to effectively identify and exploit new market opportunities, essential for sustaining performance in highly competitive environments (Barney, 1991; Peteraf, 1993). This aligns with the RMV's assertion that firms effectively deploying resources can achieve superior performance.

Subsidiaries engage in strategic actions to manage their product and market portfolios (Kwon, 2010; Sarkees et al., 2014). In new product development, subsidiaries collect and utilise market information to meet customer needs (Troy et al., 2008). New product development is critical for longer-term revenues, profits, and survival (Almodóvar and Nguyen, 2022; Cohen and Klepper, 1996). Prior research documents that firms typically generate >25 % of their revenues from products, services, and solutions introduced in the past five years (McKinsey, 2017). Extant literature reports that new product development positively correlates with factors such as product profitability relative to competitors, a company's market presence, and revenues (Song and Parry, 1992; Zhang et al., 2015). New product development is also positively associated with general market success (Li and Calantone, 1998) and financial performance (Rubera et al., 2016).

In market development, subsidiaries engage in the expansion of markets and customer bases to boost performance. Subsidiaries penetrate deeper into existing local markets and expand market coverage by building and reinforcing customer loyalty in host countries. This helps increase sales of their products, services, and solutions to external customers. They actively develop new markets by entering into foreign countries with exporting activities. Prior research shows that subsidiaries sell their products to external third-party customers through arm's length exports (Birkinshaw, 1996; Estrin et al., 2008; Nguyen and Almodóvar, 2018; Nguyen et al., 2022; Nguyen, 2022). Additionally, they also provide intermediate inputs or finished products to internal customers within the group's corporate networks through intra-firm exports (Nguyen and Almodóvar, 2018; Nguyen et al., 2022). For example, Nguyen et al. (2022) found that local sales constituted 74 %, arm's length exports for 17 %, and intra-firm exports for 9 % of total sales for South-East Asian subsidiaries of British MNEs. Similarly, using a sample of foreign subsidiaries in Hungary, Poland, India, South Africa, Egypt, and Vietnam, Estrin et al. (2008) reported that export sales accounted for 31.76 %, while local sales accounted for 68.24 %.

Additionally, manufacturing plants of foreign subsidiaries are established to support exports beyond local sales because exporting is crucial for absorbing fixed costs (Seal et al., 2011; Drury, 2009). This approach allows subsidiaries to allocate resources to marketing, sales, customer management, and distribution activities, thereby creating demand within local markets. This helps offset infrastructure costs and achieve greater efficiency. In other words, exporting, together with local sales, is key to growth, ultimately contributing to subsidiary performance (Nguyen and Rugman, 2015).

It might generally be assumed that strong business development capabilities of foreign subsidiaries will straightforwardly translate into enhanced performance; however, this relationship can be complicated by factors such as cultural and structural incompatibilities between parent firms and foreign subsidiaries (Kostova and Roth, 2002). For instance, strategies and business practices that are highly effective in parent firms' home markets might clash with local business norms, consumer preferences, or regulatory conditions in the host countries (Wei and Nguyen, 2017). This discrepancy might make some aspects of business development capabilities less effective or even counterproductive, resulting in unforeseen costs and delays (Yankelevitch, 2016), misaligned collaborations with local stakeholders (Zhao and Stiles, 2023), or regulatory compliance issues (Durdan and Pech, 2006) that negatively affect subsidiary performance. Therefore, it is important that subsidiaries must consider both internal and external factors when developing products and markets—two interrelated dimensions of business development—and ensure they have a clear goal of contributing to performance outcomes. Based on these considerations, we predict:

Hypothesis 1. Subsidiary-level business development capabilities have a positive effect on subsidiary performance.

4.2. Resource deployment and subsidiary performance

According to the RMV, the effective deployment of resources is critical to maximising the value of capabilities of a subsidiary. As noted by Sirmon et al. (2007), resource deployment involves not only the allocation but also the strategic management of resources to exploit market opportunities more effectively than competitors. Firms capable of deploying their resources to align with market conditions are better positioned to achieve and sustain competitive advantages (Barney, 1991). Therefore, in line with the RMV, resource deployment is a key mechanism for converting resources and capabilities into superior performance, ensuring resources and capabilities are optimally utilised (Makadok, 2001). Similarly, Schoonhoven et al. (1990) maintain that it is important to know not only how much is spent on resources but also how effectively and efficiently resources are allocated, managed, and deployed. Matching the right set of resources and capabilities with the opportunities emerging in the markets to support the chosen product and market strategy in order to compete effectively and perform well will create sustained competitive advantages (Sirmon et al., 2011a, 2011b; Helfat et al., 2007; Makadok, 2001).

Resource deployment decisions involve selecting specific market segments where subsidiaries focus their resources. Consequently, these decisions require managers to thoroughly understand the various market segments where their subsidiaries can compete, along with the needs of customers within these segments. To enhance performance, managers formulate strategies that augment customer benefits, thereby boosting value for customers (Priem, 2007). However, markets for most manufacturing and service subsidiaries have

experienced significant changes due to the introduction of new technologies, shorter product life cycles, a shifting competitive landscape, the entry of new competitors, and geopolitical disruptions, among other factors. Thus, it is critical that subsidiaries focus on the effectiveness in resource deployment, which is crucial for creating value and acts in tandem with other resource management initiatives.

Subsidiaries deploy both internal and external resources. Internal resources from the group's network enable subsidiaries to compete against local competitors who might have established strong relationships with other local actors (Birkinshaw, 1997; Luo, 2002; Nguyen et al., 2022). Internal resources increase the competitive advantages of subsidiaries and enhance subsidiary performance because they can reap the benefits of economies of scale, scope, and global integration (Bartlett and Ghoshal, 1989; Delios and Henisz, 2000; Luo, 2002). On the other hand, external resources that subsidiaries access from host countries complement internal resources (Kostova et al., 2016; Verbeke and Lee, 2022). Subsidiaries acquire new knowledge through interactions with their business partners, such as suppliers, customers, distributors, etc. This knowledge helps them identify new opportunities, test innovative ideas, and lower the risks and uncertainties of innovation during commercialisation, and market creation (Luo et al., 2002; Mezas, 2002).

Although resource deployment is essential, it does not directly ensure improved performance. The potential presence of agency problems in the headquarters-subsidiary relationships may impede the efficient allocation of resources and the development of capabilities (Kor and Mahoney, 2000). There is a risk of resources being misallocated, and the quality of decision-making regarding resource deployment might be compromised (Kor and Mahoney, 2005).

Furthermore, the complexities of internal and external environments might negatively affect resource deployment. Challenges within the MNE's internal network, such as strategy shifts (Taggart, 1998), corporate restructuring (Enderwick, 1989), downsizing (Chen, 2022), redundancies (Johnstone, 2023), mass layoffs (Silva et al., 2019), cost-cutting and re-engineering programmes (Birkinshaw, 2022), divestment (Arte and Larimo, 2019), etc., can lead to resource shifts and competition among subsidiaries (Procher and Engel, 2018). Additionally, subsidiaries encounter external obstacles that can impact the effectiveness in resource deployment. These challenges include but are not limited to bureaucracy and red tape, which can result in delays in obtaining permits and licences (Kuncoro, 2006; Quah, 2003). Delays in value-added tax (VAT) or goods and services tax (GST) returns can negatively affect cash flows and increases in business costs (Vietnam Law Magazine, 2023). Unpredictable changes in regulations, such as sudden shifts in trade policies, tax laws, or environmental standards, can disrupt normal operations by creating regulatory compliance challenges and increasing operational costs. Geopolitical sensitivities can further complicate business activities affecting supply chains, and overall business stability (Hamilton-Hart, 2023). Therefore, subsidiaries must prioritise the effectiveness in resource deployment to achieve strong performance. Based on this reasoning, we predict:

Hypothesis 2. The level of effectiveness of resource deployment of a subsidiary has a positive effect on its performance.

4.3. Moderation of resource deployment on the relationship between business development capabilities and subsidiary performance

The RMV emphasises that simply having strategic capabilities, such as business development capabilities, is not enough; these capabilities must be effectively managed and deployed to fully realise their potential (Sirmon et al., 2007; Sirmon and Hitt, 2009). Resource deployment serves a vital enabler that strengthens the link between business development capabilities and subsidiary performance. The value of business development capabilities is maximised when complemented by strategic resource deployment that enhances its impact. This approach highlights the importance of not only having unique resources but also deploying them in a manner that aligns strategically with market conditions and opportunities (Sirmon et al., 2008; Teece et al., 1997).

In this study, we observe that subsidiaries make strategic decisions in allocating, managing, and deploying resources for specific product and market development initiatives. They must actively explore market changes and customer needs by focusing on the unique characteristics of markets, while mitigating uncertainties and risks associated with new product development (Holm and Sharma, 2006; Le Meunier-FitzHugh et al., 2021; Priem, 2007). This approach gives subsidiaries greater flexibility in enhancing their competitive advantages (Nguyen and Rugman, 2015; Nguyen et al., 2022).

Resource deployment and business development capabilities are not simply additive capabilities that independently affect subsidiary performance. Rather, they interact in a more nuanced manner, with the level of resource deployment potentially amplifying the impact of business development capabilities on performance. Effective resource deployment can unlock the full potential of business development capabilities (Sirmon and Hitt, 2009; Sirmon et al., 2008; Kor and Mahoney, 2005).

Understanding how resource deployment influences the effect of business development capabilities on subsidiary performance is essential (Sirmon and Hitt, 2009; Sirmon et al., 2008; Kor and Mahoney, 2005). The concept of "fit" in the contingency theory proposes that optimal alignment between various organisational elements leads to superior outcomes (Drazin and Van de Ven, 1985; Donaldson, 1987). Fit and misfit are important considerations because each has distinct performance implications (Sirmon and Hitt, 2009). Fit has positive implications for performance, whereas misfit is likely to have a negative impact on performance.

For foreign subsidiaries, the key factor is not merely controlling resource deployment and business development capabilities, but how effectively resources are utilised to maximize the benefits of business development efforts. When resource deployment is well-aligned with the subsidiary's business development capabilities, it can enhance the positive impact on performance. This synergy unlocks the full potential of business development capabilities, leading to more efficient and effective operations. Conversely, if resource deployment is not optimally aligned with business development needs, it may reduce or negate the potential benefits, resulting in suboptimal performance. Given this dynamic interaction, where the level of resource deployment can either strengthen or weaken the influence of business development capabilities on performance, we predict:

Hypothesis 3. The relationship between subsidiary-level business development capabilities and subsidiary performance is positively

moderated by the level of effectiveness of resource deployment.

5. Research design and methodology

5.1. Contextual background of the study

Our study examines foreign subsidiaries operating in the Association of South-East Asian Nations (ASEAN), a region deeply integrated into the global economy through extensive international trade and foreign direct investment (FDI). The numerous free trade agreements with major global partners highlight ASEAN's strategic importance (Cheok and Chen, 2019). This region provides a compelling context for studying Western MNEs from Europe and the U.S., which are heavily involved in various value-adding activities, including innovation and production to sales and administration (Gagliani, 2020; Giroud, 2014; Witt and Redding, 2014). The choice of ASEAN allows us to explore a unique economic landscape characterised by diverse market maturity levels, varied regulatory frameworks, and distinct cultural norms. This diversity adds complexity to subsidiary operations, presenting both opportunities and significant challenges.

The selection of large Western MNEs is strategic due to their historical influence on global trade patterns. Their business practices in ASEAN are crucial for comparative analysis (Lim and McAleer, 2004; Djalante et al., 2020; Laique et al., 2019). The focus on these firms enhances the relevance and generalisability of our findings, allowing for meaningful comparisons with existing literature and providing insights into the adaptation of Western business models in diverse regulatory and cultural settings.

On the other hand, while acknowledging the significant role of Japanese MNEs in South-East Asia, we exclude them due to their distinctive cultural and managerial practices, such as "Kaizen" (continuous improvement process through lean methodology and principles) (Otsuka, 2018), "Ringi" (consensual decision-making) (Haghirian et al., 2008), and "Lifetime Employment" (Gilson and Roe, 1999), which differ markedly from the performance-driven management approach of Western firms. Thus, the decision to study Western MNEs aims to maintain a consistent analytical framework by focusing on cultural and managerial similarities among Western MNEs, thereby avoiding confounding variables that could obscure our findings. Additionally, challenges in data collection and comparability due to language barriers and different disclosure practices further justify our focus on Western MNEs.

5.2. Data sources, instrument design, and collection procedures

To compile our sample of foreign subsidiaries in South-East Asia, we manually collected data from several sources. We began by consulting the Dun & Bradstreet (D&B) Database, provided by the leading US-based firm D&B, which offers commercial data, analytics, and insights for businesses. This database provides basic information about subsidiaries, such as names, addresses, industries, and parent firms. This database includes private subsidiaries which are wholly owned by their parent firms and are not required to publicly disclose financial information. Consequently, we relied on our survey to gather detailed information.

We examined the Fortune Global 500 list (2016) to identify large Western MNEs and scrutinised the list of subsidiaries in their annual reports to find subsidiaries in South-East Asia. Additionally, we reviewed the corporate memberships of the U.S., the UK, and European Union Chambers of Commerce in South-East Asian countries and used online local directories to collect the names of subsidiaries of Western MNEs. Our intensive search revealed a few firms with subsidiaries in Brunei Darussalam, Cambodia, and Laos. We decided to focus our time and efforts on subsidiaries in Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. This resulted in a list of 1350 foreign subsidiaries operating in the manufacturing and service sectors.

We designed a 40-question survey tailored to the South-East Asian context to collect information on subsidiary background, resources and capabilities, strategy, reporting structure, operations, management (e.g., financial management, financing sources, revenues by geographic segments, exporting, etc.), performance, and perceptions about host country conditions and the ASEAN Economic Community (AEC). The survey was based on concepts and theoretical frameworks of international business, finance, marketing, and international accounting standards. A pilot test with five subsidiary managers resulted in revisions based on their feedback, thereby ensuring the clarity, validity, and appropriateness of the questionnaire. The survey was administered in plain English, which is widely used as a business language in these subsidiaries.

We targeted the top management teams of these subsidiaries and conducted the survey from March 2017 to March 2018, securing 135 usable responses. By 'usable,' we mean that these questionnaires were fully completed and met our inclusion criteria. Some responses were excluded for several reasons: incomplete responses leading to missing key variables, and non-responses to critical questions related to our main variables of interest. The response rate aligned with norms in the study by Harzing (2000) regarding the differences in response rates to questionnaire surveys in South-East Asia. Previous studies on subsidiary management highlight the challenges in collecting survey data due to subsidiaries' reluctance to share information and concerns about confidentiality (Nguyen and Rugman, 2015).

The distribution of responses across host countries was as follows: Indonesia with 19 responses (14 %), Malaysia with 18 responses (13 %), Singapore with 28 responses (21 %), Thailand with 23 responses (17 %), the Philippines with 11 responses (8 %), and Vietnam with 36 responses (27 %). This distribution ensures that our findings are not duly influenced by data from any single country, enhancing the generalisability of our results across the ASEAN region. Of the sample, 46 % were manufacturing subsidiaries (including those in the energy, petroleum, and refining industries), while service subsidiaries made up 54 %. The average subsidiary age was 29 years (pre-logarithm transformation) at the time of the survey, and the average invested capital was US\$74 million (pre-logarithm transformation).

Home-country and third-country expatriates, and local host country managers responded to the survey. The position titles they held

included managing director, deputy managing director, business development director, finance director, marketing and sales director, and supply chain director, with an average of 16 years of experience working in South-East Asia at the time of the survey.

5.3. Addressing non-response bias

We sent two rounds of e-mail invitations and five rounds of friendly reminders to encourage subsidiaries to participate in the survey. This approach helped us collect sufficient responses for our final sample. We followed the well-established and widely used method advanced by [Armstrong and Overton \(1977\)](#), which posits that late responses are more like non-responses than early responses. We conducted a comparison of the attributes (host country locations and subsidiary age) of initial responses (those received after the first two waves of invitations) and subsequent responses (those procured after the final two waves of reminders). The independent two-tailed *t*-test results were insignificant at a 5 % significance level, suggesting there were no significant differences in the characteristics between the two groups. The test confirmed that non-response bias was not an issue for our dataset.

5.4. Mitigating common method variance

Common method variance could be an issue when the dependent and independent variables come from the same source of survey data. We carefully implemented all the procedural and statistical approaches recommended by [Podsakoff et al. \(2003\)](#) and [Chang et al. \(2010\)](#) to mitigate the risks of common method variance. In the ex-ante phase of questionnaire design, we used multi-item and single-item constructs, aiming to vary the format of various questions. We also employed a variety of scales (3-point, 5-point, 7-point Likert scale), percentages, etc., to minimise potential consistency biases. We asked subsidiary managers to provide information on the average performance over the past five years (2012–2016) to ensure that respondents referred to different periods of time. Additionally, we collected information on host country characteristics from public data sources and archival data of parent firms. Specifically, we used the World Bank's Development Indicators database for host-country domestic credit to private sectors over GDP ([World Bank, 2023](#)), the Fraser Institute for the economic freedom of the world index of host countries ([Fraser Institute, 2024](#)), [Berry et al. \(2010\)](#) data for cultural distance between home and host countries, and the D&B database for data on parent firm size.

In the post hoc phase, we checked the risk of common method variance. We asked participating subsidiaries to provide information on their “background and work history” ([Ng and Feldman, 2012](#)). These included “subsidiary age,” “relatedness to parent firm activities by the industries” and “sectors.” We compared survey data with the objective data extracted from the D&B database on this specific information. We found that there was no bias in the data obtained from the two sources. Finally, we performed Harman's single-factor analysis and found that no single factor emerged, and there was not a dominant factor accounting for the majority of the covariance among these variables. The systematic implementation of ex-ante design and post hoc checks indicated the absence of severe common method variance.

6. Variable conceptualisation and measurements

In the following subsections, we explain the variables that have been chosen for hypothesis testing and outline how we have measured them. Additionally, a summary table including an overview of these variables, their respective measurements, and data sources is provided in [Appendix 1](#).

6.1. Dependent variable

6.1.1. Subsidiary performance (Subsidiary performance)

In line with previous studies on subsidiary performance, we used financial and non-financial measurements, which were actual performance against the budget for return on capital employed (ROCE), financial results, and market share ([Brouthers, 2002](#); [Kim and Gray, 2008](#); [Nguyen and Rugman, 2015](#)). These subjective performance indicators were self-assessed by subsidiary managers using a 7-point Likert scale. The multiple dimensions of performance measurement helped us understand the relationship between subsidiary business development capabilities, resource deployment, and performance. ROCE measures the ability of the subsidiary to efficiently use both debt and equity capital to generate profits. Financial result (net profit after tax) is a 3-point Likert scale where 1 = loss, 2 = break even, and 3 = profit, following the format used in the Japanese Toyo Keizai database ([Woodcock et al., 1994](#); [Nitsch et al., 1996](#)). Market share measures the portion of the market controlled by the subsidiary. Specifically, subsidiary managers were asked to assess the performance of their subsidiaries: “How were your subsidiary's actual average performance results relative to your budget expectations for a set of key performance indicators (KPIs) in the past five years (2012–2016)? (1 = very unsatisfactory, 7 = very satisfactory)”. We used ROCE for the main regression, and financial results and market share for robustness tests.

Subsidiary managers' perceptions in self-evaluating actual performance against budgeted KPIs are commonly used technique in the management accounting literature to evaluate subsidiary performance, as this technique assures goal alignment between parent firms and their subsidiaries. Subsidiaries are required to follow their parent firms' corporate policies, manage businesses in their host countries, and deliver performance targets set by their parent firms in the annual budgeting ([Nguyen and Rugman, 2015](#); [Rugman and Collinson, 2012](#)).

This approach mitigates concerns about evaluating subsidiary performance with objective financial data, which can be susceptible to manipulation through tax planning and profit shifting. Specifically, parent firms may employ various mechanisms to extract profits from subsidiaries beyond the traditional dividend payments. MNEs optimise their tax planning by exploiting tax differences in tax

rates, tax regimes, and tax incentives across countries, and by shifting profits from high-tax jurisdictions to low-tax ones. For example, parent firms may manipulate transfer pricing on related party transactions of intra-firm trade, interest charges on intra-firm loans, royalties and licensing fees on trademarks and patented technologies, and charges for shared services. (for a literature review on the MNE and tax planning, see [Cooper and Nguyen, 2020](#)).

Prior research shows that performance measurements from the perceptions of managers are highly correlated with objective accounting-based ones ([Geringer and Herbert, 1991](#)). [Dess and Robinson \(1984\)](#) find that the perceptions of the top management team regarding subjective and relative performance are strongly correlated with actual performance, namely, return on sales and growth in sales.

6.2. Independent variables

6.2.1. Subsidiary-level business development capabilities (*Business_development*)

To develop the construct, we built upon prior empirical research on product development ([Helm et al., 2020](#); [Morgan et al., 2009](#)) and market development in the marketing and international business literature ([Estrin et al., 2008](#); [Nguyen and Almodóvar, 2018](#); [Nguyen et al., 2022](#)). The construct was computed as the average of multiple survey items on a 7-point Likert scale. Subsidiaries were asked, “To what extent do you agree with the following statements about your subsidiary’s business development capabilities (1 = highly disagree, 7 = highly agree)?” The subsidiary has the ability and skills:

1. For product development: (1) Identify business opportunities; (2) Orchestrate product development or product introduction with marketing, sales, and distribution functions; (3) Extend existing products, services, or solutions (e.g., with new variants); (4) Develop or introduce products, services, and solutions that are new to markets or new to subsidiaries.
2. For market development: (5) Address customer needs; (6) Increase the coverage of existing markets; (7) Enter new local and/or international and/or internal markets; (8) Build relationships with business partners; and (9) Guide the allocation of resources for value-creating activities.

We performed a thorough assessment of the validity and reliability of this construct, using various statistical tests. First, the validation process started with confirmatory factor analysis, a component of the structural equation modelling approach, to establish convergent construct validity. The analysis showed statistically significant standardised factor loadings for all items (p-values < 0.001). This result validates the relationships between the nine observed variables and the construct. To further ensure convergent validity, we computed the average variance extracted, which stood at 0.632. This value exceeds the recommended threshold of 0.50 as per [Fornell and Larcker \(1981\)](#), indicating that the variables are effectively measuring the same underlying concept. Second, for assessing the internal consistency reliability, we calculated Cronbach’s alpha ([Cronbach, 1951](#)) and McDonald’s omega ([McDonald, 1999](#)) coefficients. Both coefficients surpassed the universally accepted threshold of 0.70 ([Cheung et al., 2024](#)), with respective values of 0.926 and 0.935. In conclusion, the combination of these tests provides compelling evidence that the Subsidiary-level business development capabilities construct is a valid and reliable measure for our research purposes.

6.2.2. Resource deployment (*Resource_deployment*)

We draw upon the RMV ([Sirmon et al., 2007](#); [Sirmon et al., 2008](#); [Sirmon and Hitt, 2003, 2009](#); [D’Oria et al., 2021](#)) to develop this construct. Subsidiaries were asked, “Considering internal resources (e.g., technological, financial, marketing, etc. resources) transferred from the parent firm, local resources acquired and accumulated by the subsidiary, and complementary resources from external actors in the host country (e.g., suppliers, distributors, customers, government, etc.), please rate the effectiveness of your subsidiary’s resource deployment, using a 7-point Likert scale (1 = very low, 7 = very high).” We employed a single-item scale to vary the question formats in the survey, aiming to reduce potential common method bias. [Bergkvist and Rossiter \(2007, 2009\)](#) show that single-item constructs demonstrate equally high predictive validity as multi-item constructs.

6.3. Control variables

We included control variables for the characteristics of the subsidiary, the parent firm, the host country, and sectors that may affect subsidiary performance.

6.3.1. Subsidiary age (*Subsidiary_age*)

The age of the subsidiary was calculated by counting the years it has been operating in the host country since its establishment. This variable indirectly captures the subsidiary’s accumulation of knowledge and experience of the host country ([Nguyen and Almodóvar, 2018](#)). We compared the subsidiary incorporation data collected from the survey with information extracted from the D&B database. We used the logarithm (log) transformation of the variable for our empirical tests. Older subsidiaries are likely to have more established processes, a better understanding of the market, and stronger local networks, all of which can positively impact their performance.

6.3.2. Subsidiary size (*Subsidiary_size*)

The size of the subsidiary can significantly influence its performance. Larger subsidiaries typically have greater resources, which can enhance their ability to implement strategies and adapt to local market conditions. They can also benefit from economies of scale

and have a higher capacity to absorb external shocks, which is particularly relevant in the volatile markets of ASEAN (Chiao et al., 2008). Therefore, controlling subsidiary size is crucial to isolate the specific effects of business development capabilities and resource deployment on subsidiary performance. The variable was based on total employee count, using the following scale: 1 = Fewer than 100 employees; 2 = 100 to <500 employees; 3 = 500 to <1000 employees; 4 = 1000 to <1500 employees; 5 = 1500 to <2000 employees; 6 = 2000 to <5000 employees; 7 = 5000 or more employees.

6.3.3. *Subsidiary invested capital (Subsidiary_capital)*

Detailed information regarding the invested capital of subsidiaries was provided by the subsidiary managers. This information was then transformed using a logarithmic (log) function for the purposes of this analysis. The amount of invested capital indicates the level of financial resources available for the subsidiary to pursue growth opportunities and invest in innovative technologies and capability building, which can affect performance (Nguyen and Almodóvar, 2018).

6.3.4. *Mode of ownership (Ownership_mode)*

Following Nguyen et al. (2022), we used a dummy variable. The value of 1 was assigned to wholly owned foreign subsidiaries, and the value of 0 to joint ventures. This variable accounts for differences in strategic control and resource allocation between wholly owned subsidiaries and joint ventures. Wholly owned subsidiaries typically have more control and can implement parent firms' strategies more effectively.

6.3.5. *Sectors (Sector)*

We used a dummy variable to account for potential sector impacts on subsidiary performance, assigning 1 to the manufacturing sector and 0 to the service sector (Pereira and Esperança, 2015; Dias et al., 2020). Different sectors face unique operational challenges and market conditions, which can influence performance outcomes. The sector classification helps account for these differences.

6.3.6. *Parent firm size (Parent_size)*

The size of the parent firm was quantified using the logarithm (log) of the parent firm's employee count (Nguyen and Almodóvar, 2018; Nguyen et al., 2022). Larger parent firms can provide more support in terms of financial resources, managerial expertise, and technological capabilities, which can positively affect subsidiary performance. The parent firm's size can be a significant determinant of the subsidiary's strategic and operational support.

6.3.7. *Relatedness to parent firm's activities (Relatedness)*

Following Slangen and Hennart (2008), to assess the degree of industry relatedness between parent firms and their subsidiaries, we used a dummy variable. The value of 1 was attributed to subsidiaries operating within the same industry as their parent firms, while a 0 signified otherwise (Nguyen and Almodóvar, 2018; Nguyen et al., 2022). This variable controls strategic alignment and potential resource-sharing advantages. Related subsidiaries might benefit from synergies and shared resources, enhancing performance. The data provided by subsidiary managers was verified with the data extracted from the D&B database.

6.3.8. *Cultural distance (Cultural_distance)*

This variable captures cultural differences that can influence business operations and subsidiary performance. It measures dimensions such as Power Distance, Uncertainty Avoidance, Individualism, and Masculinity, which are crucial for understanding how cultural factors impact managerial practices and business outcomes in different host countries. The data was sourced from the World Value System.¹ Cultural distance can affect communication, management practices, and operational efficiency.

6.3.9. *Host country domestic credit to private sectors over GDP (HostCountry_credit)*

Following Fang et al. (2021), we extracted data from the World Bank's Development Indicators database for six host countries (World Bank, 2023). A supportive financial environment can facilitate better resource deployment, thereby positively impacting subsidiary performance.

6.3.10. *Host country economic freedom (HostCountry_freedom)*

This variable reflects the level of economic freedom in the host country, which includes multiple components covering four areas (size of government, sound money, regulations, legal system and property rights, and freedom to engage in international trade). These aspects are critical for understanding the regulatory and economic environment in which subsidiaries operate. Following Xu (2019) and Nguyen (2022), the data was sourced from the Fraser Institute's Economic Freedom of the World Index. Higher economic freedom can create a more favourable business environment, thereby enhancing subsidiary performance.

6.4. *Addressing multicollinearity concerns*

A central objective of statistical analyses is to examine the relationship between various independent/control variables and the

¹ The data is sourced from Berry et al. (2010) and is available for download at <https://mgmt.wharton.upenn.edu/distance-data-downloads-guillen/>.

dependent variable. This typically involves interpreting coefficients as the change in the dependent variable due to alterations in one independent/control variable while assuming all other variables remain constant, following the *ceteris paribus* principle. However, the inclusion of a moderating effect in a statistical model inherently creates a correlation with the independent variables constituting it. This condition disrupts the *ceteris paribus* principle, as modifications in one main-effect variable are paired with alterations in the interaction variable. Termed structural multicollinearity may influence the coefficients and p-values of highly correlated variables, though it does not affect the model's fit or predictive capacity (Frost, 2020).

It is essential, therefore, to evaluate structural multicollinearity to determine if remedial measures are needed. We assessed the severity of structural multicollinearity by checking the variance inflation factor (VIF) values. Before centring the variables, the VIFs for the interaction term were high, with a value of 57.44, indicating severe multicollinearity, as values above 10 suggest significant multicollinearity that could diminish the statistical significance of variables (Wooldridge, 2014). To address this issue, we mean-centred the variables (Frost, 2020). After this adjustment, we reassessed the VIFs, finding the highest value to be 1.85, well below the suggested upper limit of 10, with an average VIF of 1.33.

After addressing structural multicollinearity, we examined data multicollinearity. Table 1 illustrates the descriptive statistics and the correlation matrix for all variables. Following the guideline from Hair et al. (2010), which advises that correlations between variables should be <0.5 , the pair-wise correlation table confirms that all variables fall below this threshold (Wooldridge, 2014). These diagnostic tests collectively affirm that multicollinearity does not pose a problem for our research.

7. Empirical analysis and findings

7.1. Methodological approach

Our dependent variable (Subsidiary_performance) is operationalised by a Likert scale that ranges from 1 to 7. The treatment of such variables as either ordinal or interval, has been a topic of scholarly debate, with no definitive conclusion (Stevens, 1946; Wu and Leung, 2017). On one end of the spectrum, Likert-type variables are viewed as fundamentally ordinal, as the responses are rank-ordered. This perspective recommends the use of ordered probit or logit regressions in constructing empirical models (Ki et al., 2022; Winship and Mare, 1984). On the other end, it is customary to treat Likert-scale data as equidistant, allowing us to consider them as interval scales, thereby treating them as continuous data amenable to arithmetic operations (Wu and Leung, 2017). Knapp (1990) observed that expanding the range of responses on the Likert scale lends a more “continuous” character to the data. Given that our dependent variable is based on a 7-point scale, and we posit equidistance between its values, it would seem fitting to consider it as an interval or continuous variable, making OLS regression an appropriate choice. To ensure thorough exploration, we employ both OLS regressions and ordered probit models to examine the robustness and sensitivity of the results.

7.2. Addressing sensitivity concerns

To check the sensitivity of the results, Table 2 encapsulates ten distinct models. Robust OLS regressions are employed in Models 1 to 5, while robust ordered probit regressions are used in Models 6 to 10. Models 1 and 6 exclusively encompass control variables. The behaviour of the independent variables is displayed in Models 2 and 7. The interaction among the independent variables is introduced in Models 4 and 9. Models 3 and 8 comprise both the independent and control variables, yet they do not consider any moderating effect. Lastly, Models 5 and 10 represent the comprehensive models. Upon examining Table 2, we observe consistency in the magnitude of the coefficients, the sign of their effect on the dependent variable, and the significance of the results. This stability in the findings remains unaffected regardless of the statistical technique used, be it OLS or ordinal probit models. Therefore, given this observed consistency and for the sake of simplicity and ease of interpretation, we will proceed to articulate the results based on the OLS models.

7.3. Addressing endogeneity concerns

We conduct a series of checks to address potential endogeneity concerns, arising from omitted variables and simultaneity causality (Hill et al., 2021). First, we evaluate the specification of our models to ascertain whether they might be influenced by omitted variables. Our regressions incorporate 10 control variables, which surpasses the average of 4.48 control variables typically used in micro-organisational research (Atinc et al., 2012). These control variables account for the multi-level characteristics of the subsidiary, the parent firm, and the host country, consistent with subsidiary management research (Meyer et al., 2020; Nguyen et al., 2022). It should be noted that there is no standard rule concerning the number of control variables to be included in statistical models. Consequently, the inclusion of 10 control variables in our analyses is considered rational, enabling us to curb any potential endogeneity bias arising from omitted variables (Reeb et al., 2012). Moreover, our findings, as depicted in Table 2, demonstrate a steady consistency, regardless of the inclusion or exclusion of specific variables.

Second, we check endogeneity simultaneity. We build upon the research on subsidiary capability building and the RMV, which indicates that the direction of causality flows from subsidiary-level business development capabilities and resource deployment to subsidiary performance. However, the counterargument is that superior performance enables subsidiaries to build business development capabilities and to effectively deploy resources. This could potentially cause concerns on the simultaneity causality of dependent and independent variables (Hill et al., 2021).

To validate the exogeneity of the variables Business_development and Resource_deployment, we performed a rigorous series of

Table 1

Descriptive statistics, correlation matrix and variance inflation factor (values before and after centering).

		Mean(beforecentering)	Mean(aftercentering)	Standarddeviation	1	2	3	4	5	6	7	8	9	10	11	12	13	VIF(beforecentering)	VIF(aftercentering)
1	Business_development	4.95	0.00	0.89	1													27.1	1.21
2	Resource_deployment	5.92	0.00	1.14	0.03	1												28.64	1.22
3	Business_development * Resource_deployment	29.31	0.02	1.11	−0.02	−0.26	1											57.44	1.2
4	Subsidiary_age	3.15	0.00	0.64	0.18	0.18	0.13	1										1.35	1.35
5	Subsidiary_size	1.79	0.00	1.22	0.16	−0.03	0.14	0.16	1									1.45	1.45
6	Subsidiary_capital	15.83	0.00	2.67	−0.09	0.00	0.09	0.16	0.36	1								1.3	1.3
7	Ownership_mode	0.98	0.98	0.12	0.09	−0.01	−0.10	−0.04	0.08	−0.05	1							1.05	1.05
8	Sector	0.46	0.46	0.50	−0.13	0.05	−0.06	−0.02	0.06	0.16	−0.01	1						1.06	1.06
9	Parent_size	9.96	0.00	1.62	0.25	−0.07	0.13	0.12	0.42	0.23	0.00	0.06	1					1.47	1.47
10	Relatedness	0.97	0.97	0.15	−0.07	−0.01	0.00	−0.03	0.06	0.11	−0.02	0.04	0.11	1				1.06	1.06
11	Cultural_distance	14.14	0.00	7.15	0.02	0.01	−0.08	0.01	−0.09	−0.13	0.01	−0.03	0.13	0.06	1			1.57	1.57
12	HostCountry_credit	4.36	0.00	0.37	0.04	−0.19	0.09	−0.12	0.17	0.04	−0.06	0.07	0.14	−0.03	−0.31	1		1.46	1.46
13	HostCountry_Freedom	7.16	0.00	0.82	−0.12	0.01	−0.09	0.23	−0.25	−0.10	−0.08	−0.04	−0.36	−0.16	−0.33	−0.27	1	1.85	1.85
															Mean VIF			9.75	1.33

Variables are centered at their means, except in the case of dichotomous variables.

We use Pearson, Point-biserial and Phi correlations.

Table 2

Results for ordinary least square (OLS) and ordinal probit regressions.

	OLS Models										Ordinal Probit Models									
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8		Model 9		Model 10	
Business_development			0.412	0.004	0.336	0.028	0.420	0.001	0.369	0.005			0.343	0.002	0.295	0.015	0.356	0.000	0.331	0.002
			(0.139)		(0.151)		(0.122)		(0.130)				(0.112)		(0.122)		(0.100)		(0.109)	
Resource_deployment			0.278	0.020	0.221	0.038	0.335	0.003	0.297	0.008			0.240	0.017	0.212	0.019	0.297	0.003	0.285	0.004
			(0.118)		(0.105)		(0.111)		(0.109)				(0.100)		(0.091)		(0.100)		(0.099)	
Business_development *							0.233	0.012	0.259	0.010							0.196	0.007	0.226	0.006
Resource_deployment							(0.092)		(0.099)								(0.073)		(0.082)	
Subsidiary_age	0.648	0.003			0.467	0.009			0.363	0.042	0.522	0.003			0.399	0.011			0.323	0.040
	(0.211)				(0.175)				(0.177)		(0.177)				(0.156)				(0.157)	
Subsidiary_size	0.021	0.848			0.011	0.927			−0.004	0.977	0.031	0.728			0.025	0.797			0.012	0.909
	(0.112)				(0.114)				(0.119)		(0.090)				(0.096)				(0.102)	
Subsidiary_capital	−0.065	0.078			−0.040	0.271			−0.037	0.298	−0.049	0.094			−0.028	0.343			−0.027	0.375
	(0.036)				(0.036)				(0.036)		(0.029)				(0.030)				(0.030)	
Ownership_mode	1.517	0.000			1.398	0.000			1.646	0.000	1.103	0.000			1.056	0.000			1.305	0.000
	(0.392)				(0.223)				(0.222)		(0.288)				(0.192)				(0.200)	
Sector	0.135	0.558			0.170	0.441			0.208	0.339	0.117	0.521			0.152	0.404			0.187	0.307
	(0.230)				(0.220)				(0.216)		(0.183)				(0.182)				(0.183)	
Parent_size	−0.048	0.547			−0.074	0.364			−0.083	0.301	−0.037	0.563			−0.061	0.365			−0.069	0.309
	(0.079)				(0.081)				(0.080)		(0.064)				(0.068)				(0.068)	
Relatedness	−1.212	0.062			−1.012	0.105			−0.944	0.122	−1.269	0.124			−1.123	0.170			−1.078	0.185
	(0.645)				(0.620)				(0.607)		(0.825)				(0.818)				(0.814)	
Cultural_distance	0.014	0.483			0.022	0.235			0.029	0.109	0.014	0.379			0.021	0.161			0.027	0.064
	(0.020)				(0.018)				(0.018)		(0.015)				(0.015)				(0.015)	
HostCountry_credit	−0.226	0.541			−0.034	0.925			0.019	0.956	−0.161	0.593			0.004	0.990			0.045	0.883
	(0.369)				(0.361)				(0.353)		(0.301)				(0.303)				(0.302)	
HostCountry_Freedom	−0.212	0.217			−0.100	0.544			−0.027	0.872	−0.177	0.173			−0.084	0.512			−0.021	0.871
	(0.171)				(0.165)				(0.165)		(0.130)				(0.128)				(0.129)	
Constant	4.755	0.000	5.133	0.000	4.662	0.000	5.129	0.000	4.327	0.000										
	(0.766)		(0.111)		(0.658)		(0.109)		(0.650)											
F test // Wald test	5.26	0.000	6.33	0.002	23.04	0.000	6.8	0.000	20.93	0.000	45.77	0.000	12.7	0.002	104.73	0.000	19.02	0.000	116.93	0.000

Robust standard errors appear in parentheses ().

p-Values appear in *italics* on the right side of the cell. In order to facilitate the reading, we show in bold the results for which the p-value are lower than 0.05.

analytical steps. First, pertinent instrumental variables were chosen (Bascle, 2008; Semadeni et al., 2014). For Business_development, we utilised Subsidiary_autonomy, defined as the extent to which a subsidiary has the authority and decision-making power to operate independently without any interference from the parent firm (Cavanagh et al., 2017; Young and Tavares, 2004). This variable is relevant from a theoretical perspective because it is a critical factor in determining subsidiary-level business development capabilities. By exercising their autonomy, subsidiaries can effectively build and utilise their business development capabilities (Birkinshaw and Hood, 1998). The measurement of Subsidiary_autonomy was operationalised using a 5-point Likert scale, where subsidiary managers self-rated the degree of autonomy in various key functions, such as R&D (if any), manufacturing, sales, marketing, human resources management, accounting, and management of relationships with host country governments (Birkinshaw and Hood, 1998; Roth and Morrison, 1992; Slangen and Hennart, 2008).

For Resource_deployment, we used Subsidiary_reporting, which refers to the reporting structure within the organisation, specifically reporting directly to the headquarters versus intermediate regional offices. Subsidiaries reporting directly to the headquarters are likely to be subject to more centralised resource allocation and decision-making processes, providing them with access to a broader range of resources and strategic guidance from their parent firms. However, this centralised reporting structure may limit their ability to adapt and effectively deploy resources at the subsidiary level (Gates and Egelhoff, 1986). On the other hand, subsidiaries reporting to regional offices operate in more decentralised structures, which gives them greater autonomy and decision-making authority, allowing them to tailor their resource deployment strategies to fit local market conditions. Hence, by using Subsidiary_reporting as an instrumental variable, we aim to capture the influence of the reporting structure on Resource_deployment, recognising the contrasting effects of centralised and decentralised reporting structures on the subsidiary's resource deployment. In our study, Subsidiary_reporting was measured as a dummy variable, distinguishing between subsidiaries reporting directly to the headquarters (coded as 1) and those reporting to regional offices (coded as 0) (Rugman and Verbeke, 2008).

Second, pairwise correlations were examined to ascertain the relevance of the relationship between the variables and their respective instruments. The partial correlation between Business_development and Subsidiary_autonomy was 0.17 (p -value < 0.05), indicating a statistically significant correlation. The correlation between Resource_deployment and Subsidiary_reporting was -0.4105 (p -value < 0.001), also denoting a significant correlation.

Third, we employed instrumental variable regression models, using the two-stage least squares estimation technique to evaluate the relationship between the dependent variable (Subsidiary_performance) and the potentially endogenous regressors. We then conducted endogeneity tests, with the null hypothesis positing the exogeneity of the investigated variables. The robust score chi-squared test and F-test yielded p -values higher than 0.3. These results provided empirical support for the exogeneity of the variables, and therefore, we found no threat of endogeneity bias undermining our results.

7.4. Hypothesis testing

The results of [Hypothesis 1](#), as outlined in [Table 2](#), demonstrate the positive impact of subsidiary-level business development capabilities on subsidiary performance. This is observable in Models 2 and 3, where Business_development is positive and statistically significant (p -value = 0.004 and p -value = 0.028, respectively). This supports our hypothesis that the ability of a subsidiary to build business development capabilities, especially in highly competitive markets like South-East Asia, is crucial in determining its performance. The significance of business development capabilities persists even when the interaction term is included in Models 4 and 5 (p -value = 0.001 and p -value = 0.005, respectively), confirming that this effect is independent of the moderating role of resource deployment. This finding aligns with theoretical arguments that business development capabilities can be viewed as a valuable subsidiary-specific advantage that positively contributes to subsidiary performance, thereby supporting [Hypothesis 1](#).

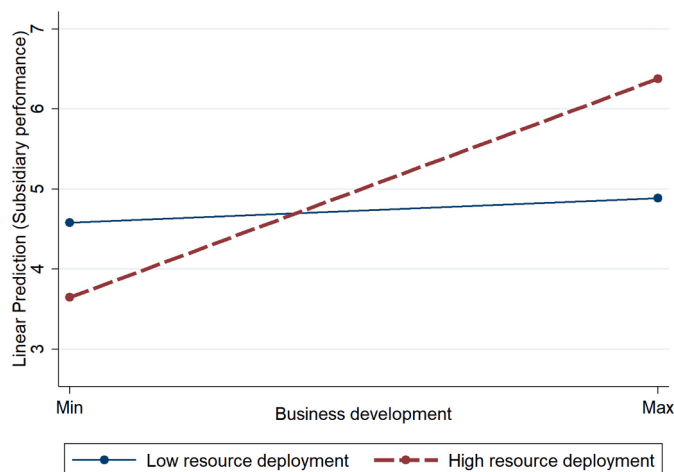


Fig. 1. Linear predicted subsidiary performance on subsidiary-level business development capabilities moderated by resource deployment. Note: Subsidiary-level business development capability and resource deployment variables are centered at their mean.

Similarly, [Hypothesis 2](#) posits a positive impact of resource deployment on subsidiary performance. The results in Models 2 and 3 support this, showing that Resource_deployment is positive and statistically significant (p -value = 0.020 and p -value = 0.038, respectively). This result aligns with the theoretical perspective that effectively deploying resources within a subsidiary, especially in competitive and diverse markets of South-East Asia, positively impacts performance. The significance of resource deployment persists even when the interaction term is included in Models 4 and 5 (p -value = 0.003 and p -value = 0.008, respectively), suggesting that a part of the effect of resource deployment on subsidiary performance is not dependent on the interaction. This gives further support to [Hypothesis 2](#).

With [Hypothesis 3](#), we delve into the moderating effect of resource deployment on the relationship between business development capabilities and subsidiary performance. The positive and significant interaction term in Models 4 and 5 (p -value = 0.012 and p -value = 0.010, respectively) supports this hypothesis. Theoretical perspectives would argue that the effective deployment of resources can enhance the impact of business development capabilities on subsidiary performance. When we combine resource deployment with the business development capabilities of the subsidiary, particularly in a resource-dependent setting such as the South-East Asian markets, the performance effect can be amplified. This aligns with our results, thus lending support for [Hypothesis 3](#).

Finally, to delve deeper into [Hypothesis 3](#), we present a visual representation in [Fig. 1](#). This figure highlights how resource deployment moderates the effect of business development capabilities on subsidiary performance, enriching the theoretical perspectives of the interplay between these two key variables in the context of the South-East Asian markets.

Our findings reveal that when business development capabilities are at their minimum value and resource deployment is at a low level (one standard deviation below the mean), the predictive margin stands at 4.58, with a standard error of 0.42. This prediction is significantly different from zero (p -value < 0.001).

Conversely, when business development capabilities are at their minimum and resource deployment stands at a high level (one standard deviation above the mean), the predictive margin decreases to 3.65, with a standard error of 0.49. This prediction is also significantly different from zero (p -value < 0.001). This indicates that high resource deployment alone does not compensate for the lack of business development capabilities, leading to lower performance. It suggests that without fundamental business development capabilities, simply increasing resources might be ineffective and potentially inefficient. When business development capabilities are at their maximum value and resource deployment is at a low level (one standard deviation below the mean), the predictive margin increases to 4.88, with a standard error of 0.29. This prediction is significantly different from zero (p -value < 0.001). This shows that strong business development capabilities can significantly boost performance even with minimal resource deployment, highlighting the intrinsic value of business development capabilities in enhancing subsidiary performance outcomes. Finally, when business development capabilities are at their maximum and resource deployment is at a high level (one standard deviation above the mean), the predictive margin further increases to 6.38, with a standard error of 0.35. This prediction is also significantly different from zero (p -value < 0.001). This demonstrates that when both business development capabilities and resource deployment are maximised, subsidiary performance reaches its peak, illustrating the powerful synergistic effect between these two factors. Thus, at high levels of business development capabilities, increasing resource deployment from a low level to a high level raises the predicted subsidiary performance from 4.88 to 6.38, an improvement of approximately 31 %. The statistical significance of these predictive margins (p -value < 0.001) indicates that these results are unlikely to have occurred by chance. This compelling evidence provides robust support for [Hypothesis 3](#).

Regarding control variables, we observe that two of them demonstrate statistical significance—the age of the subsidiary (Subsidiary_age) and the nature of subsidiary ownership (Ownership_mode). Subsidiary_age exhibits a positive and statistically significant impact on Subsidiary_performance. This suggests that, as these subsidiaries mature, they become more effective due to their accumulated experience, deeper understanding of South-East Asian markets, and other advantages associated with longevity in specific cultural, institutional, and business contexts. The nature of subsidiary ownership (Ownership_mode) also shows a positive and statistically significant association with Subsidiary_performance. Our findings suggest that wholly owned subsidiaries outperform their joint-venture counterparts in South-East Asia. This observation may be attributed to the operational and strategic benefits of having a single, unified ownership structure with Western management practices when operating in host country environments. These advantages may stem from streamlined decision-making, enhanced operational control, and the ability to fully utilise proprietary knowledge and practices without the dilution or compromise often found in joint-venture partnerships.

7.5. Conducting robustness checks

In addition to replicating all models using an ordinal probit specification and conducting various checks to assess the sensitivity and robustness of our data, as detailed throughout the empirical study, we performed a series of additional robustness checks to further validate our results and eliminate any potential alternative explanations.

Firstly, we substituted the initial measure of Subsidiary_Performance, originally assessed by Return on Capital Employed (ROCE), with alternate performance measures, including financial outcomes (net profit after tax) and market share. Secondly, we introduced additional control variables to our analysis. These included a dummy variable indicating the regional origin of parent firms (Europe versus North America). Thirdly, despite the country-effects control variables proving insignificant, we acknowledged the possibility that unobservable characteristics related to the six host countries might introduce correlation in the error terms. Thus, we also checked the cluster effects in our analysis. The outcomes of these robustness checks aligned consistently with our initial findings as reported in [Table 2](#), and the newly incorporated control variables did not produce significant results. The results further substantiate the support for the hypotheses. They have not been reported here due to space constraints.

Finally, we replicated the analyses excluding Singapore from the sample to address concerns about its potential outlier status. The

results of these analyses remained consistent with our initial findings, further validating the robustness of our conclusions. Specifically, the exclusion of Singapore did not significantly alter the relationships between business development capabilities, resource deployment, and subsidiary performance, supporting the reliability of our results. The results are not reported due to space constraints.

8. Discussion and conclusions

8.1. Theoretical implications

Drawing upon the research of subsidiary capability building and the RMV, we develop a conceptual framework that examines the impacts of subsidiary-level business development capabilities and resource deployment and the boundary condition of resource deployment on the relationship between subsidiary-level business development capabilities and performance. Whetten (1989) posits that investigating boundary conditions holds particular significance for theory development since these conditions delineate the extent of a theory's applicability. Busse, Kach & Wagner (2017, p. 574) emphasise that research on boundary conditions "fosters theory development, strengthens research validity, and mitigates the research-practice gaps".

First, we extend the research on subsidiary capability building and highlight the importance of subsidiary-specific advantages (Birkinshaw and Hood, 1998; Rugman and Verbeke, 2001). Specifically, our study focuses on developing a new construct of business development capabilities in the context of the subsidiary and introduces the construct in the empirical research setting of South-East Asia. We conceptualise and operationalise the construct by considering how the subsidiary builds unique business development capabilities, and we also develop a research model and design a survey instrument for empirical testing. We conceptualise the construct of business development capabilities as the ability and skills of foreign subsidiaries in orchestrating a cross-functional process that involves the collaboration of various functions in transforming resources and capabilities used in upstream activities (innovation and R&D for product development) and downstream activities (marketing, sales, and distribution for market development) into performance outcomes. In this way, we show that business development capabilities are a higher-order capability that is critical for the superior performance of foreign subsidiaries.

The novelty of our study extends the existing subsidiary capability building research, which primarily focuses on competence creation in upstream activities of R&D and product innovation initiatives (Andrews et al., 2022; Achcaoucaou et al., 2017; Andersson et al., 2016; Cantwell and Mudambi, 2005; Ciabuschi et al., 2014; Zhao et al., 2021). It is noted that R&D and innovation programmes are resource-intensive, costly, and risky, whereas the return on investment is uncertain. Additionally, only subsidiaries located in strategic locations are assigned specialised roles in R&D. Thus, the construct of subsidiary-level business development capabilities, emphasising both product development (arising from the innovation developed either by parent firms or by foreign subsidiaries) and market expansion (targeting both existing and new markets, and local, internal, and international markets), is highly relevant. Such capabilities enable subsidiaries to ultimately bolster the subsidiary's performance in the South-East Asian countries.

Second, this study advances our understanding of the importance of resource deployment for subsidiary performance. The findings suggest that possession of resources alone is insufficient, but effective resource deployment is critical to superior performance (Sirmon et al., 2007). Specifically, subsidiaries must effectively deploy resources by bundling and exploiting internal resources and knowledge transferred from parent firms with external complementary resources from host countries, as well as locally developed knowledge and capabilities, to align with internal needs and dynamic external environments. The resource deployment decision focuses on the market segments and product portfolios in which subsidiaries engage resources. The robust performance outcome confirms that the effective deployment of distinctive resources (Sirmon et al., 2007; Sirmon and Hitt, 2009) is more important than the resources themselves (Barney, 1991; Wernerfelt, 1984). In this way, our study responds to the call of Sirmon et al. (2011a, 2011b) for an expanded research agenda for the RMV by extending it to the MNE foreign subsidiary performance literature. Specifically, we theorise and empirically test the direct effect of resource deployment on subsidiary performance. Consequently, our study is among the first to conceptualise and provide direct empirical evidence on resource deployment at the subsidiary level.

Third, our study reveals the moderating effect of resource deployment, which enhances the understanding of the relationship between subsidiary-level business development capabilities and performance. The results demonstrate that the positive impact of business development capabilities on subsidiary performance is reinforced and strengthened with stronger resource deployment. This finding has significant theoretical implications, as few studies have explored such a synergistic effect. It provides a holistic perspective on how business development capabilities function and interact with resource deployment. By empirically testing the building of business development capabilities and resource deployment contingencies as implied by Helfat and Peteraf (2003), Helfat et al. (2007) and suggested by Sirmon et al. (2007), Sirmon et al. (2008) in the RMV, this study highlights the critical role of subsidiary management within the theoretical framework of the RMV. It confirms the significant joint effect between business development capabilities and resource deployment in achieving superior subsidiary performance. The empirical finding of this study in the research context of the MNE foreign subsidiary, together with empirical evidence from prior research from various research settings (Sirmon and Hitt, 2009; Kor and Leblebici, 2005; Kor and Mahoney, 2005), demonstrates the contingencies that managers must consider in achieving resource-based advantage. Specifically, making idiosyncratic development, bundling, and deployment decisions that optimise the use of subsidiaries' resources and capabilities for specific product-market contexts and competitive engagement will significantly affect the performance outcomes (Sirmon and Hitt, 2009; Sirmon et al., 2008).

8.2. Managerial implications

The findings of the study provide strategic implications for subsidiary managers on how to enhance their subsidiary performance,

given that the success of many parent firms has been increasingly associated with the contributions of foreign subsidiaries. We recommend that subsidiary managers commit to building business development capabilities and effectively deploying resources.

First, business development capabilities need to be integrated into the broader organisational norms. By fostering and reinforcing shared vision, values and beliefs, aligned goals, communication, and trust in all employees across functions, subsidiaries will build intrinsic capabilities in product and market development, which are two interrelated aspects of business development. We will illustrate the importance of subsidiary-level business development capabilities with the example of Nestle Malaysia Berhad, a publicly listed subsidiary of the Nestle Group (Switzerland). The subsidiary has been listed on the Kuala Lumpur Stock Exchange (KLSE), Malaysia, now known as Malaysia Bursa ([Nestle Malaysia Berhad, Malaysia Bursa, 2023](#)). Nestle Malaysia has built strong business development capabilities by developing Halal-certified food products (product development) that can be sold not only in Malaysian local markets but also in international markets (market development). Halal products are developed and manufactured in accordance with Islamic principles, with Islam accounting for 61.3 % of Malaysia's population ([CIA World Fact Book, 2023](#)). Nestle Malaysia combines local knowledge and expertise in Halal food with the knowledge and expertise in nutrition, food, health, and wellness of the Swiss parent firm for product innovation. Nestle Malaysia has actively expanded their coverage in local markets and has exported Halal food products to >50 countries worldwide ([Food Navigator Asia, 2023](#)).

Secondly, subsidiaries must deploy resources effectively and efficiently. Although they may face resource constraints, these challenges can be overcome by continually seeking innovative solutions and alternatives. Implementing organisational changes, adjusting functions, and revising tasks can improve the effectiveness of resource allocation, orchestration, and management, which directly influences the performance outcomes of subsidiaries.

Third, while prior research highlights the individual impacts of new product development and interaction with marketing and sales, and resource deployment in isolation, we show that the level of effectiveness in resource deployment strengthens and reinforces the impact of business development capabilities on performance and successful operations in demanding and heterogeneous foreign markets. Subsidiaries are suggested to leverage the synergistic, combined effect of resource deployment and business development capabilities.

8.3. Implications for policymakers

The findings of our study have profound implications for policymakers. As the business development capabilities of subsidiaries emerge as a key driver of performance, policymakers are encouraged to develop frameworks that enhance this area. Initiatives promoting both local and global collaboration, such as establishing business development centres that integrate local market insights with global standards, could be highly effective.

Moreover, given the pronounced impact of resource deployment on subsidiaries' performance, it is imperative that policymakers devise strategies that favour the seamless transfer and efficient deployment of resources. This can be achieved by strengthening intellectual property regulations, supporting transparency of commercial dealings, and paving the way for partnerships between indigenous entities and foreign subsidiaries. This ensures that the value for both tangible and intangible resources is maximised.

Our research demonstrates that success is significantly enhanced when business development capabilities are effectively aligned with resource deployment. Thus, policymakers should not simply leverage these elements in isolation but foster an environment that stimulates their collective synergy. This could be achieved by offering incentives to subsidiaries that demonstrate proficiency in both areas, and by introducing public-private partnerships that reflect these combined objectives.

8.4. Limitations and avenues for future research

Our study is subject to several limitations which we hope future research will address. First, the results of our empirical tests are based on a sample of mature subsidiaries of Western MNEs operating in six South-East Asian countries. The findings are specific to this region, one of the most significant recipients of FDI worldwide. Further research in other contexts will be needed to evaluate the generalisability of the findings by using different datasets of subsidiaries of Western MNEs or subsidiaries of emerging economy MNEs operating in other regions.

Second, our findings are based on perceptual information and data collected from a single informant of each subsidiary, together with archival data of parent firms from the D&B database, and host country data from public data sources. This approach minimises the risks of common method variance. Future research could consider gathering data from multiple informants at both the subsidiary and parent firm levels when researchers have financial resources to implement such a data collection approach.

Third, we suggest that future research could explore further the constructs of business development capabilities and resource deployment. In developing our survey instrument, we vary the construct format with business development capabilities as a multi-item construct and resource deployment as a single-item construct to mitigate any potential issue of common method variance. While the single-item construct has the benefits of being parsimonious, unidimensional, and clearly defined which make participants find it easier to respond, its scope may be narrow compared to the multi-item construct ([Allen et al., 2022](#)). We suggest that future research could consider refining the resource development construct by accounting for the specificity of empirical research contexts. Furthermore, another direction for future research is to conduct interviews with subsidiary managers to gain detailed insights into their strategies and decision-making processes in building business development capabilities and resource deployment.

Fourth, our sample size of 135 usable questionnaires, while aligned with norms for survey-based research in this context, is relatively small. This limitation arises from the challenges inherent in collecting detailed and sensitive information from subsidiaries operating in diverse and geographically dispersed countries. Future research could benefit from increasing the sample sizes to enhance

the robustness and extend the generalisability of the results.

Fifth, although our study utilises cross-sectional data, we asked subsidiary managers to provide information on the average performance over the past five years. This approach helps mitigate the limitation of capturing a single point in time by encompassing multiple periods. However, it still does not allow us to observe changes and evolution in business development capabilities and resource deployment strategies of subsidiaries over time. Future research could employ longitudinal studies to track these variables and their impact on performance over extended periods, providing a more dynamic understanding of these relationships.

Summing up, our study is among the first to highlight the critical role of business development capabilities and resource deployment in examining the performance of MNE foreign subsidiaries. We find that subsidiary-level capabilities in business development are a vital subsidiary-specific advantage contributing to subsidiary performance. Furthermore, resource deployment is instrumental in boosting subsidiary performance and reinforces the contribution of business development capabilities to superior subsidiary performance. We elucidate this phenomenon by combining research on subsidiary capability building and the RMV. These novel findings offer fresh and applicable implications for theory and practice, deepening our understanding of how specific capabilities and strategic resource deployment influence subsidiary performance.

CRedit authorship contribution statement

Quyen T.K. Nguyen: Writing – review & editing, Writing – original draft, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Paloma Almodóvar:** Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

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Appendix 1. Summary of variables

Variables	Variable code	Description	Data sources
Dependent variables			
Return on capital employed: actual versus budget	Subsidiary_performance	Single item, 7-point Likert scale: 1 = unsatisfactory; 7 = satisfactory.	Survey
Independent variables			
Business development capabilities	Business_development	Average of the summated rating scale of nine survey items, 7-point Likert scale: 1 = strongly disagree, 7 = strongly agree.	Survey
Resource deployment	Resource_deployment	Single item, 7-point Likert scale: 1 = very weak, 7 = very strong.	Survey
Control variables			
Subsidiary age	Subsidiary_age	Log transformation of the time duration (years) that the subsidiary has been operating since its incorporation	Survey and D&B database
Subsidiary size	Subsidiary_size	Number of employees (coded): 1 if the subsidiary had fewer than 500 employees; 2 = 500 up to <800; 3 = 800 to <1000; 4 = 1000 to <1300; 5 = 1300 to <1600; 6 = 1600 to <2000; 7 = >2000 employees.	Survey
Subsidiary invested capital	Subsidiary_capital	Log transformation of the invested capital of the subsidiary.	Survey
Mode of ownership	Ownership_mode	Dummy variable: 1 for wholly-owned foreign subsidiaries and 0 for joint ventures.	Survey
Sectors	Sectors	Dummy variable: 1 for manufacturing and 0 for service.	Survey and D&B database
Parent firm size	Parent_size	Log transformation of the number of employees of the parent firm to measure the parent firm's size.	D&B database
Related to parent firms' activities	Relatedness	Dummy variable following the approach of Slangen and Hennart (2008) .	Survey and D&B database
Cultural distance	Cultural_distance	Measured as the average from 2012 to 2016, capturing: Power Distance (obedience and respect for authority), Uncertainty Avoidance (trusting people), Individualism (independence and the government's role), and Masculinity (importance of family and work).	World Values Survey (WVS) https://mgmt.wharton.upenn.edu/distance-data-downloads-guillen/
Host country domestic credit to private sectors over GDP	HostCountry_credit	Log transformation of domestic credit to private sectors over the gross domestic product (GDP).	World Bank's Development Indicators database
Host country economic freedom	HostCountry_freedom	The average economic freedom of the world index for the period 2012–2016 for the six host countries	Fraser Institute, Canada

(continued on next page)

(continued)

Variables	Variable code	Description	Data sources
Instrumental variables			
Business development capabilities	Subsidiary autonomy	5-point Likert scale: 1 = decisions exclusively made by the headquarters; 5 = decisions made solely by the subsidiary	Survey
Resource deployment	Subsidiary reporting line	Dummy variable: 1 for reporting directly to the headquarters and 0 for reporting to the regional office.	Survey

Appendix 2. Sample structure by host countries and sectors

Host countries	Service		Manufacturing		Total	
	Count	Percentage	Count	Percentage	Count	Percentage
Indonesia	12	16	7	11	19	14
Malaysia	9	12	9	15	18	13
Singapore	17	23	11	18	28	21
Thailand	11	15	12	19	23	17
The Philippines	5	7	6	10	11	8
Vietnam	19	26	17	27	36	27
Total	73		62		135	

Notes: n = 135. Service and manufacturing subsidiaries account for 54 % and 46 % of total sampled subsidiaries.

Data availability

The authors do not have permission to share data.

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