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RESEARCH ARTICLE

MNCs' Intermediate Units and Their Choice of Control Mechanisms

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Abstract
This paper analyzes how MNCs' intermediate units—those that exercise authority over other subsidiaries—apply specific control mechanisms: centralization, formalization, outcome control, and socialization. We combine agency and network theory to explain how intermediate units' dual agency role—as both principal and agent—and their network embeddedness form the choice of control mechanisms. More specifically, we propose hypotheses on how the intermediate units' internal and external relationships determine their choice of control mechanism. We study this issue in the context of Spanish intermediate units —owned by European MNCs— that exercise authority over subsidiaries in Latin America.

Keywords Intermediate unit · Multilayered MNC · Control mechanism · Agency theory · Network theory

1 Introduction

The international business (IB) literature conceptualizes multinational corporations (MNCs) as inter-organizational networks consisting of units at multiple levels with several roles and, as such, a variety of relationships (Ghoshal & Bartlett, 1990; Ghoshal & Nohria, 1989). This perspective highlights the multilayered and nested structure of modern MNCs in which authority and control are distributed across units (for instance, Corporate Headquarters, Divisional Headquarters, Regional Headquarters, etc.) and levels. It thus entails that some subsidiaries exercise control over other subsidiaries and, thereby, become intermediary units between the Corporate Headquarters (CHQ) and the local subsidiaries (Goold & Campbell, 2002; Hoenen et al., 2014; Nell et al., 2017).

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The common view of the MNC focuses on the dyadic corporate headquarters (CHQ)-subsidiary relationship and the control mechanisms applied by CHQ (Ghoshal & Nohria, 1989; O'Donnell, 2000). However, capturing better the complexities of MNCs calls for a deeper understanding of the implications of their more distributed authority and control, as has been recently highlighted in a review article on control and coordination in the MNE (Zeng et al., 2023). In a perspective paper, Hoenen and Kostova (2015, p. 106) identify some open issues in HQ-subsidiary research: (a) the impact of the nestedness of the multilayered control and coordination relationships, that is, "the existence of multiple layers of control relationships, whereby some units simultaneously participate in more than one hierarchical dyad possibly taking different roles"; and (b) the influence of the social-contextual embeddedness of the units, as they face different local environments. We address these issues by investigating how intermediate units exercise their authority and control over other subsidiaries. More specifically, we explore how the role of the intermediate unit forms its choice of control mechanism (i.e. centralization, formalization, output control, or socialization) when exercising authority over other subsidiaries.

An intermediate unit is an organizational unit between CHQ and other subsidiaries (here denoted supervised subsidiaries) that exercises control over the latter on behalf of the former (Alfoldi et al., 2012; Goold & Campbell, 2002). Due to their nested position in the multilayered structure of MNCs, intermediate units participate simultaneously in more than one hierarchical dyad, likely displaying a dual role (Conroy et al., 2017). Intermediate units are themselves controlled by the CHQ while they control other subsidiaries. As such, they are an agent for the CHQ, and a principal for the supervised subsidiaries (Hoenen et al., 2014).

Agency theory offers an insightful perspective for understanding the application of control mechanisms to the context of CHQ-subsidiary relationships, as information asymmetries and goal conflicts are salient and introduce uncertainty about subsidiary behavior (Kostova et al., 2018). Agency theory understands that information gathering can minimize these problems and focuses on the efficient selection of control mechanisms that can reduce information asymmetries and increase interest alignment without being too costly (Eisenhardt, 1989). To reduce complexity, agency theory is based on several stylized assumptions (Lubatkin et al., 2007; Wiseman et al., 2012) as it presumes relationships to be dyadic, static, and acontextual (Shapiro, 2005). However, such assumptions are questionable in multi-layered organizations where units' relationships are embedded in different internal and external networks. We agree with Wiseman et al. (2012) that economic behavior is shaped by social mechanisms, such as networks, that influence the extent of information asymmetries and potential goal conflict. Information is contained in and shaped by social relations among the involved actors and needs context to be fully understood (Lubatkin et al., 2007). Therefore, we combine agency theory with the logic of network theory, which assumes that information is partially tacit and context-specific and that the embedded relationships help to make sense of it (Andersson et al., 2007; Uzzi, 1996).

Our theoretical framework is illustrated in Fig. 1. The core argument of the theoretical framework is, as will be outlined in the following, that the internal and external relationships are mitigating the source conditions of agency problems of

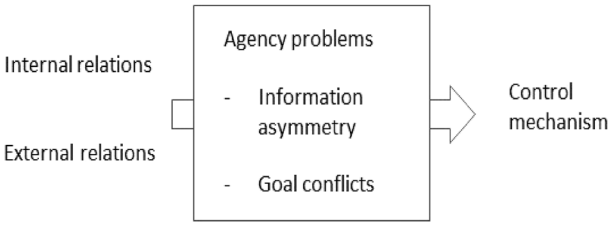

Fig. 1 Illustration of the theoretical framework

information asymmetry and goal conflict in the multilayered MNC which according to the agency theory determine the choice of control mechanism.

We examine these issues in the context of 194 Spanish subsidiaries of European MNCs, where 68 of the Spanish subsidiaries are intermediate units supervising other subsidiaries in Latin America. Our findings indicate that the internal embeddedness—with the CHQ and other MNC units—and external embeddedness—with the Latin America environment—of intermediate units relate to their choice of control mechanism applied to the supervised units. More specifically, our study shows that the more embedded the intermediate unit is in the external environment of the supervised subsidiary, the more it uses centralization and formal control, while weak external relationships are associated with outcome control and socialization. Having strong relationships with other MNC units is related to the application of centralization by the intermediate unit, while weak internal relationships are linked to the use of formal control. Hence, by focusing attention on how control is applied at the second layer of MNCs, and by combining agency and network theoretical approaches, our study contributes to the understanding of distributed authority and control in complex MNCs.

2 Theoretical Framework

2.1 Dual Role of Intermediate Units

Intermediate unit is an *umbrella* concept that refers to structural solutions applied by MNCs to manage CHQ-subsidiary relationships. A recent literature review (Pla-Barber et al., 2021) compiles the different types of roles that can be united under such umbrella -for example, Divisional Headquarters, Regional Headquarters, or Regional Management Centers- as well as the antecedents, theoretical underpinnings, and empirical evidence. The rationale for the existence of intermediate units relates to the bounded rationality of the CHQ, which leads to the delegation of decisions to lower levels to overcome information problems (Goold & Campbell, 2002; Verbeke & Asmussen, 2016). Intermediate units connect CHQs with other subsidiaries and exercise supervisory responsibilities (Zhou, 2015). They are positioned to take on this supervisory role as they typically have better knowledge than the CHQ about the context of the supervised units (Lunnan & Zhao, 2014) because they are

closer geographically, functionally, or culturally. The delegated authority might be granted top-down from the CHQ or earned bottom-up exactly because the intermediate unit has unique resources that make it better positioned to control the supervised units (Birkinshaw & Hood, 1998; Cuervo-Cazurra et al., 2019).

Although there are important differences in the specific tasks among these types of intermediate units, they share some characteristics, namely the supervisory role and delegated authority (Zhou, 2015), and the dual position between the CHQ and the supervised subsidiaries (Alfoldi et al., 2012; Hoenen et al., 2014), which raise the issue of how they exercise control over the supervised subsidiaries.

The distribution of supervisory responsibility to this second layer modifies the power balance among the MNC's units (Alfoldi et al., 2017; Cuervo-Cazurra et al., 2019) and leads to "cascading agency relationships" (Hoenen & Kostova, 2015, p. 110). Thus, a common trait is the simultaneous exercise of different agency roles or dual agency, which "involves two sets of control relationships, reflecting the presence of agents at two main levels" (Child & Rodrigues, 2003, p.339).

Dual agency has shed light on the delegation of control in fields like corporate governance (Arthurs et al., 2008; Deutsch et al., 2010) or supply-chain management (Wilhelm et al., 2016). Within the IB literature, this approach has been applied to analyze the existence of multiple principals (Ambos et al., 2019) or the balance between interest alignment and self-interest in the CHQ-RHQ dyad (Conroy et al., 2017). In our study, we focus on how the behavior of the intermediate unit is shaped by a) its dual position as principal and agent, and b) its embeddedness in internal networks (with the CHQ and other subsidiaries) and external networks (with agents in the local environment of the supervised subsidiary). Such embeddedness affects the access to and understanding of internal and external information, encourages knowledge exchange in relationships, and increases the costs of defection and opportunism for the parts (Wiseman et al., 2012), so it will influence both potential goal conflicts and information asymmetries.

2.2 Goal Conflicts and Agency Perspective

As an agent, the intermediate unit integrates dispersed sources of knowledge, assists in information processing and communication, and takes over headquarters' activities in a specific area (Conroy et al., 2017; Zhou, 2015). As a principal, the intermediate unit plays a supervisory role (Alfoldi et al, 2012), supported by its better understanding of the local context of the supervised subsidiaries. For instance, the intermediate unit may possess specialized knowledge about the culture, activities, products, or local market conditions that relate to the business of the supervised subsidiary (Hoenen et al., 2014; Villar et al., 2018).

Agency theory (Fama & Jensen, 1983; Jensen & Meckling, 1976) has been used to analyze CHQs' applications of control mechanisms that are designed to avoid potential agency problems linked to the principal's delegation of authority (Ambos et al., 2019; Cavanagh et al., 2017; Steinberg & Kunisch, 2016). Agency theory departs from basic premises about the actors involved in the relationship, specifically their different risk attitudes and derived goal incongruence, the search

for self-interest and opportunistic behavior, and the principal's bounded rationality that in conjunction with information asymmetries make it difficult to observe and monitor the agent. Under these premises, two main problems can arise. First, the "moral hazard" that is related to the lack of observability of the agent's behavior and the risk of opportunism. Second, the "adverse selection" as agents might misrepresent their skills and objectives (Eisenhardt, 1989). In the case of dyadic CHQ-subsidiary relationships, several features exacerbate these two problems (Kostova et al., 2018; Steinberg & Kunisch, 2016). First, different types of distance create information asymmetries between CHQs and subsidiaries that limit CHQs' knowledge about subsidiaries' activities and their contexts (Asmussen & Goerzen, 2013; Kostova et al., 2018). These information asymmetries together with the CHQ's bounded rationality increase the potential moral hazard as they limit the CHQ's ability to specify objectives and observe and validate the subsidiary's activities. Second, the likelihood of adverse selection also increases as subsidiaries might have motivations that deviate from those of the CHQ (Ambos et al., 2019; Cavanagh et al., 2017; Hoenen & Kostova, 2015). For instance, they might act opportunistically in their own self-interest instead of prioritizing the interests of the MNC, or they may engage in such behaviors because of incompetence problems (Kostova et al., 2018).

The extension of the dyadic agency view of the MNC to a three-layered structure implies that information becomes diluted as it passes the levels and that the intermediate units become the nexus of the informed parties (Tirole, 1986). It becomes more difficult to obtain and verify information from intermediate levels due to the difficulty of observing the secondary agent's behavior and/or the potential for collusion between the intermediate unit (in its principal role) and the supervised subsidiaries (Child & Rodrigues, 2003; Wilhelm et al., 2016).

2.3 Information Asymmetry and Network Perspective

Classical agency theory views information as a commodity that is acontextual, ahistorical, and that can be acquired at a cost (Eisenhardt, 1989; Shapiro, 2005). This implies that, when faced with information asymmetries, the principal applies the most cost-efficient control mechanism that allows for the necessary information about the agent's behavior or the outcome to be obtained. However, as previously stated this assumption does not hold in the context of complex MNCs, as information is scattered, dispersed, and context-dependent (Kostova et al., 2018). It is not only a matter of collecting and processing the information but also a matter of interpreting and making sense of it. By relaxing the discrete view of exchanges and considering the relational elements of agency different authors have extended agency theory. Specifically, they ascertain that the embeddedness of agents in different networks has an influence on the nature and potential for adverse selection and moral hazard (Lubatkin et al., 2007; Shapiro, 2005; Wiseman et al., 2012).

According to the network perspective of the MNC (Andersson et al., 2007; Ghoshal & Bartlett, 1990), the potential agency problems are dealt with through embedded relationship-building. Embedded relationships are characterized by trust, understanding, and knowledge accumulation (Uzzi, 1996), and through different

mechanisms, they might attenuate the causes of agency problems rather than contain them. First, embedded relationships introduce a social view in which individuals form their understandings and mitigate ambiguity through ongoing communication and adaptations in relationships (Lubatkin et al., 2007; Shapiro, 2005). In addition, the intensity of relationships within a network, and the diversity of networks introduce criteria for an agent's decision-making that transcend self-interest -as could be reputation, satisfaction, honor, or trust; and increase the cost of opportunistic behavior (Wiseman et al., 2012). Thus, networks have the potential to mitigate adverse selection and moral hazard problems by embedding agency in ongoing relationships (Shapiro, 2005). For intermediate units, intense relationships provide them with contextual clues that help them make sense of the information (Alfoldi et al., 2017). Such network embeddedness can serve as a source of profound understanding and knowledge that helps in reducing information asymmetries, improves interest alignment (Shapiro, 2005), and consequently influences the choice of control mechanism.

We summarize the key ideas and assumptions of the agency and network approaches in Table 1.

2.4 Control Mechanisms

For agency theory, the main objective of control mechanisms is to increase the agents' alignment with the principal's interest (Eisenhardt, 1985; O'Donnell, 2000). Extant literature on CHQ-subsidiary control[1] points to four main mechanisms (Ambos et al., 2019; Collis et al., 2007; O'Donnell, 2000): (1) centralization, (2) formalization, (3) outcome control, and (4) socialization. Centralization as a control mechanism has been mostly studied at the corporate level (Gates & Egelhoff, 1986). It entails applying hierarchical power and concentrating decision-making at a higher level, so no major decision is conducted at lower levels. In the context of our study, where intermediate units exercise supervisory roles, centralization means that intermediate units do not delegate but retain the bulk of decision-making that affects the supervised subsidiaries. Formalization pursues behavioral control through the establishment of common norms and standard procedures for behavior across the MNC's units. Formalization reduces ambiguity and provides behavioral guidelines for the MNC's units. However, the effectiveness of formalization relies on the principal's

[1] In the context of MNCs the monitoring and control of units have been treated within the broader topic of integration. Along these lines, Martínez and Jarillo (1989) followed the organizational literature tradition and grouped the different mechanisms into two categories depending on their structural and formal versus their more informal or subtle character. In their categorization, centralization, formalization, and outcome control are formal mechanisms while socialization is an informal one. A complementary approach, combining the organizational and international management literature is Harzing's (1999) framework that distinguishes four mechanisms: direct personal control (centralized control), indirect personal control (socialization and networks), direct impersonal control (bureaucratic formalized control), and indirect impersonal control (output control). Our choice of these four mechanisms is consistent with our theoretical approach as these are the basic mechanisms for Agency Theory (Eisenhardt, 1989) and have been applied in previous studies on MNC control (Ambos et al., 2019; Kim et al., 2003; O'Donnell, 2000). This is also shown in a metanalysis study on the use of integration mechanisms in MNCs (Zeng et al., 2018) and a recent review paper on MNE control and coordination (Zeng et al., 2023).

Table 1 Overview of agency and network approaches

	Agency approach	Network approach
Key idea	The control mechanism should reflect the efficient organization of agency costs	The MNC is a nexus of network relationships that provide strategic resources
Unit of analysis	Contract between principal and agent Discrete	Relationship between parties Continuous
Organizational assumption	Information asymmetries and goal conflicts	Mutual trust and understanding are formed in embedded relationships
Information assumption	Information as a purchasable commodity	Information is partially tacit and context-specific
Decision-makers assumption	Opportunism as behavior Economically rational behavior: self-interest, utility maximizers	Opportunism as attitude contingent on the situation Social behavior: trust, cooperation
Role of time and context	Static Acontextual	Dynamic evolution of context Context matters for making sense of information

The characterization of the agency approach is based on Eisenhardt (1989, p. 59), Shapiro (2005), and Lubatkin et al. (2007), while the characterization of the network approach is based on Forsgren (2013, p. 146)

capability to observe the agent's behavior (Eisenhardt, 1989). Outcome controls focus on specifying the expected results and less on the means of achieving those results. Their effectiveness is contingent upon the knowledge the principal has about the task and conditions related to the outcome (Eisenhardt, 1989). Finally, socialization aims to integrate the MNC's units through the development of shared goals and values as well as a shared sense of identity. The objective is to reduce the goal incongruence between the principal and agent by harmonizing the agent's self-interest with the principal's (Eisenhardt, 1989).

We agree with Ambos et al. (2019) in that information asymmetries are the main determinants of the strategy the principal follows to address control, but those asymmetries are contingent on the intermediate unit's embeddedness within different networks at internal and external levels. In the following, we reflect on how the intermediate unit's internal and external embeddedness affect the use of the four control mechanisms.[2] We present three different scenarios corresponding to the potential combinations of internal and external embeddedness and specifically develop hypotheses regarding the extent to which the intermediate unit's internal relationships (with the CHQ and other MNC units) and external relationships (with counterparts in the country of the supervised subsidiary) relate to the choice of control mechanisms. Thus, we outline three situations that may follow from the dual relationships: (1) intermediate units with strong internal and external relationships, (2) intermediate units with weak internal relationships but strong external relationships, and (3) intermediate units with strong internal relationships and weak external relationships.[3]

2.5 Intermediate Units with Strong External and Internal Relationships

In this case, the intermediate unit is closely connected both internally with the CHQ and other MNC units and externally with network partners in the supervised subsidiaries' local network. It enjoys a central position characterized by lower levels of information asymmetries that shape its dual role as both principal and agent, and that mitigates the agency problems.

First, in terms of the intermediate unit's principal role, the strong connections with the supervised subsidiaries' (agents') local network increase the observability of the agents' conditions and performance. Strong direct ties with network partners

[2] The literature indicates that the control mechanism might vary with the function and activities where, for instance, R&D activities are more exposed to centralization (Andersson & Pedersen, 2010), while the implementation of marketing activities is more decentralized (Schmid et al.,., 2016). Similarly, previous literature outlines the evolutionary paths and roles that subsidiaries go through to become an intermediate unit (Dzikowska et al., 2023). However, we are focusing on the control mechanism applied at the subsidiary level and not on its different functions or the evolutionary paths through which it has evolved.

[3] External relationships can refer to both the intermediate unit's local context and the supervised subsidiaries' local context. In our arguments, we refer to the latter, but we do control for the former in the empirical study. Moreover, we do not consider the situation of weak relations on both levels because the focus of this paper is on how the internal and external relationships mitigate the sources of agency problems (i.e., asymmetric information and divergent interests). In the case of low internal and external relationships there is no mitigation of the agency problems by means of the intermediate units' relationships.

such as suppliers or competitors imply recurrent interactions, which increase opportunities to gather knowledge from different sources including unintended leakages that can be used to infer the supervised unit's (agent's) conditions and reduce information asymmetry. In addition, the recurrent interactions make fine-grained information exchange possible, which increases the amount of knowledge that the partners share (Uzzi, 1996). Therefore, less asymmetries and more goal alignment between the intermediate unit and the supervised subsidiary are expected.

Similarly, strong internal ties reduce the information asymmetries between the CHQ and the intermediate units because such interactions not only allow CHQs to identify and define the interdependencies with the intermediate unit but also reduce potential ambiguities and goal conflicts (Holm et al., 1995). This internal embeddedness has positive effects on the CHQ's involvement in subsidiaries' development activities (Ciabuschi et al., 2011) and on the CHQ's attention (Bouquet & Birkinshaw, 2008). Additionally, CHQs can be sufficiently informed about intermediate units' operations, thereby increasing their trustworthiness (Asakawa & Aoki, 2016). Moreover, intermediate units are better informed about strategic issues, and they can get more support and resources due to the strength of their internal ties (Ciabuschi et al., 2011).

Given the intermediate unit has adequate information on the local conditions and performance of the supervised subsidiaries it can tightly manage the agent. Moreover, tight control of the supervised subsidiary makes other MNC units—including the CHQ—more dependent on the intermediate unit, as it possesses a brokerage position with the supervised subsidiary. The increased dependency by the CHQ and other MNC units will provide the intermediate unit with a stronger position within the MNC, where it can attract more internal resources (Cuervo-Cazurra et al., 2019).

As such, the strong internal embeddedness shapes the way the intermediate unit balances the two roles and drives its preference to exert control mechanisms that grant influence and discretion, even though it requires resources for continuous monitoring and decision-making. First, as an agent of CHQ, the intermediate unit might be prone to retaining centralized decision-making authority, as doing so indicates commitment and trustworthiness to the CHQ (principal). Second, centralized control of the supervised subsidiary provides the intermediate unit with a position of centrality in the internal network (Ghoshal & Bartlett, 1990) which given its strong internal embeddedness enables the intermediate unit to attract valuable resources (Andersson et al., 2007).

Hence, we propose:

H1: High intensity in an intermediate unit's external and internal relationships is positively related to the intermediate unit's application of centralization to supervised subsidiaries.

2.6 Intermediate Units with Weak Internal Relationships and Strong External Relationships

Cases in which the intermediate unit is closely linked to a supervised subsidiary's network but maintains weak relationships with the CHQ entail agency problems for the latter. The risk of a coalition between the second and third layer is higher when the

first principal (i.e., the CHQ) struggles to obtain information from the intermediate layer because it can neither observe the circumstances nor properly verify the accuracy of provided information, increasing the risks of moral hazard and adverse selection.

In this scenario, unbalanced network embeddedness induces goal misalignment and creates scope for the intermediate unit to ally itself with the supervised subsidiaries to pursue their own interests rather than those of the CHQ (Ambos et al., 2019; Hoenen & Kostova, 2015). This potential collusion problem originates from the fact that intermediate units with strong external ties that are relatively isolated from the CHQ might be closer to their supervised subsidiaries' environments and identify more with their objectives (Hoenen & Kostova, 2015). Also, collusion might arise from the intermediate unit's perception of being at a disadvantage when compared to the other MNC units, such that it begins to develop its own strategies for overcoming that disadvantage (Conroy et al., 2017).

As a principal, the intermediate unit is well positioned to follow both the subsidiary's behavior and its results, as it has a great deal of information on the supervised subsidiary's activities, its local conditions, and its task interdependencies with customers or suppliers. In addition, the intermediate unit might feel that its own performance is closely connected to the success of the supervised subsidiaries, so it will be interested in providing them with more discretion.

However, as an agent of the CHQ and given its relative isolation, the intermediate unit is also interested in keeping the supervisory role by proving alignment with CHQs (Conroy et al., 2017). This drives it to collect and provide objective and verifiable information to justify its supervisory function thereby adding parental value to the supervised subsidiary and limiting the moral hazard problem in the first layer (Hoenen & Kostova, 2015).

To balance these weak internal relationships and strong external relationships the intermediate units will apply formal controls as a way of monitoring the supervised subsidiaries' behavior. Because of the strong ties with the local networks, the intermediate unit has information about the environmental conditions of the subsidiaries and is, therefore, able to formulate explicit and stable rules and procedures in collaboration with the supervised subsidiaries regarding what to do under certain conditions. Such explicit formal controls reduce the potential for goal divergence and variability in behavior and make monitoring less costly as there are fewer administrative resources and energy involved for the intermediate unit (Ghoshal & Nohria, 1989). They also make it clearer for the intermediate unit to inform CHQ about its activities in this regard (Asakawa & Aoki, 2016). Therefore, we hypothesize:

H2: High intensity in an intermediate unit's external relationships and low intensity in its internal relationships are positively related to the intermediate unit's application of formal control to supervised subsidiaries.

2.7 Intermediate Units with Strong Internal Relationships and Weak External Relationships

In this case, intermediate units might be geographically or culturally close to the supervised subsidiaries, but they are not embedded in their local networks. For

instance, Zhou (2015), and Valentino et al. (2019) study the relocation of supervisory power from CHQs to trustworthy intermediary units when subsidiaries' institutional environments are weak. In such cases, the information asymmetries between the CHQ and the supervised subsidiaries are greater than those between the intermediate unit and the supervised subsidiaries. For this reason, the CHQ might prefer to delegate authority to a unit that can act on its behalf. The intermediate unit then becomes predominantly a second principal for supervised subsidiaries and, in the case of non-alignment with the CHQ, a multiple principal problem might arise (Hoenen & Kostova, 2015). However, strong internal relationships can prevent such problems, as they offer the possibility for both principals to align their interests.

As a principal for the supervised units, the intermediate unit's lack of knowledge of local conditions restricts the efficiency of centralizing decision-making, as centralization can lead to mistakes and delays. This scenario also limits the intermediate unit's ability to observe and understand the subsidiaries' behavior as well as its ability to program the tasks, thereby restricting the application of behavioral controls as formalization (Eisenhardt, 1985).

Despite these limitations, there is still room for the intermediate unit to play a supervisory role, as it may be able to apply outcome-based controls. This is due to the internal network position of the intermediate unit, which endows it with strong business and technical knowledge. Therefore, the intermediate unit should be able to measure the outcomes (Eisenhardt, 1985). However, the lack of understanding of local conditions might drive risk-sharing between the intermediate unit and the supervised subsidiary as well as induce goal divergences if the agent is risk-averse (Eisenhardt, 1985). Under these conditions, the agency perspective suggests applying socialization as a control mechanism, as socialization helps mitigate goal divergences and adverse selection (Eisenhardt, 1985).

From a network perspective, socialization helps increase interactions among actors in the network. Socialization mechanisms "build interpersonal familiarity, personal affinity, and convergence in cognitive maps among personnel from different subsidiaries" (Gupta & Govindarajan, 2000, p. 479). Therefore, they allow for the MNC's internal network to be managed, as they facilitate a sense of a shared corporate culture, inducing goal alignment (Nohria & Ghoshal, 1994). In addition, socialization mechanisms that include personal networking and common training practices (e.g., through visits to the intermediate unit) can enhance reverse knowledge transfers from the supervised subsidiaries to the intermediate unit (Conroy et al., 2017). Thus, we contend that both socialization and outcome controls are potential mechanisms for intermediate units wishing to control subsidiaries under conditions of external information asymmetries.

Thus, we propose:

H3: High intensity in an intermediate unit's internal relationships and low intensity in its external relationships are positively related to the intermediate unit's application of outcome controls and socialization to supervised subsidiaries.

Figure 2 summarizes our model.

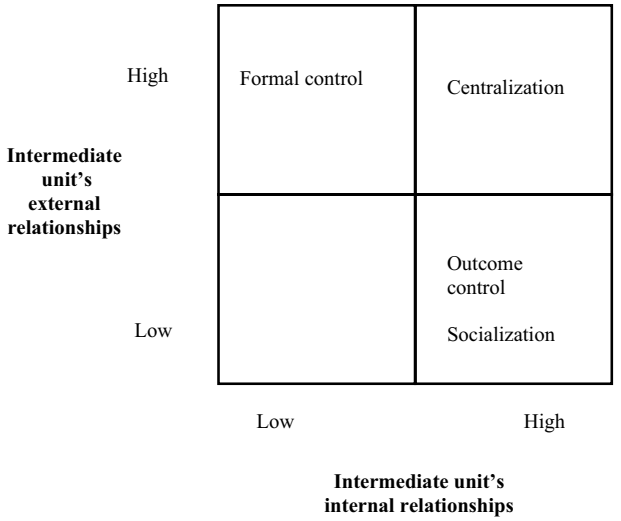

Fig. 2 Intermediate units' internal and external embeddedness and control mechanisms

3 Research Design

The context of our study is Spanish intermediate units that control subsidiaries in Latin America, where both the Spanish unit and the subsidiaries are owned by a European MNC (see Fig. 1 for an illustration of the multilayered empirical context). This setting is particularly appropriate for studying the behavior of intermediate units, as the Spanish intermediate units are located outside the region of the supervised subsidiaries (Latin America) and, as such, they are separated from the supervised subsidiaries. This implies that issues related to information asymmetries and goal incongruence arising from complexity and distance between the three hierarchical layers might be latent in this setting. At the same time, this setting is characterized by low communication and cultural barriers between the intermediate units (Spain) and the supervised subsidiaries (Latin America). The language distance is zero or minimal,[4] as these countries share history and the same language. Moreover, owing to the existence of colonial ties, cultural and institutional distances are relatively low.

[4] The language distance between Spain and Brazil is very low, as Spanish and Portuguese are closely related. Moreover, Spanish is the second language in Brazil and it is an option course in the Brazilian school system.

We required that the owner of the intermediate unit be a European MNC because Spain is a natural springboard from Europe to Latin America, while this might not be the case for MNCs from, for instance, North America (Pla-Barber et al., 2018). In practice, a variety of multinationals have recognized the advantages of using Spain as a springboard for Latin American operations. The practitioner literature highlights how several European MNCs are using their Spanish subsidiaries to manage operations in Latin America.[5] This is the case for such well-known companies as Germany's Thyssen, Bertelsmann, and BASF; France's AXA, Saint-Gobain, and Cap Gemini; Sweden's Securitas; and Denmark's Vestas and Bestseller (ICEX, 2020). Consider, for instance, the Spanish subsidiary of a Danish MNC interested in entering Latin America. As Denmark and Spain are both in Europe and members of the EU, the effects of cultural, institutional, and geographical distance between the two are limited relative to what would be the case otherwise. For historical reasons, the cultural and institutional distance between Spain and Latin America is much lower than between Denmark and Latin America. Moreover, Spain is a party to various institutional agreements within the Hispano-Iberian sphere. In addition, there are intense commercial flows and business relationships between Spain and Latin America that the Danish MNC could leverage through an intermediate unit in Spain.

To identify our total population, we conducted a systematic search in the Orbis database[6] to sort out all European MNCs with subsidiaries in both Spain and Latin America. A total of 1,674 Spanish subsidiaries were identified that had parents in Europe (majority-owned) and siblings in Latin America.

We distributed surveys to these 1674 Spanish subsidiaries between December 2014 and October 2015 with extensive follow-up by e-mail and phone due to the complexity of the study and the need to confirm the accuracy of the responses. The survey was directed to the top manager of each Spanish subsidiary.[7] As we knew

[5] For instance, the CEO of the LATAM division of the AXA group, whose operations are managed from Madrid (Spain) explained: "Spain is the perfect platform to organize our expansion in Latin America by culture, geography, and equipment capacity. The last project led from this region is the purchase of 51% of the Colombian Colpatria (259 million euros). It is also planned to start selling insurance to SMEs in Brazil" (Cinco Dias, 2015). Similarly, the CEO of the Spanish subsidiary of Bestseller stated in an interview with Modaes.es (2012): "The Latin American markets were initially managed by the Spanish subsidiary of Bestseller. We developed the entry strategy in Latin America in two phases. In the first, our subsidiary signed distribution agreements with large retail groups in different markets (Ripley, Falabella, Palacio de Hierro). In the second, we opened single-brand stores and created a new structure in Latin America".

[6] Orbis offers information about more than 180 million private companies. It includes data from other sources, such as Amadeus, Bankscope, Isis, and Osiris. It provides financial and ownership data, which allow users to place restrictions on firms' domestic ultimate owners and global ultimate owners as well as their dependencies and subsidiaries.

[7] Ideally one should have surveyed all three levels (i.e., the CHQ, intermediate unit, and the supervised unit) as there might be different perceptions on, for instance, the strength of the relationships (Birkinshaw et al., 2000).

that all the targeted Spanish subsidiaries had at least one sibling in Latin America, we included some questions on the relationship between the Spanish and Latin American subsidiaries. In particular, we included a question to identify whether the Spanish subsidiary had managerial responsibilities over the Latin American subsidiaries, which allowed us to divide our sample into a group of intermediate units with a supervisory role over a Latin American subsidiary and a group of Spanish subsidiaries with no such role. The questionnaire was customized to fit the profiles of intermediate and non-intermediate units, respectively, to address the relevant questions in each case. The questionnaires were based on previous research and pre-tested with business professionals and academics.

Our final sample included 194 usable responses, 68 of which were received from intermediate units and 126 received from non-intermediate units.[8] Given our population of 1,674 subsidiaries in Spain, this represents a response rate of 12%.

All intermediate units referred to different CHQ units (European MNCs). For this study, they were asked to focus on the Latin American subsidiary with which they had the strongest relationship (if they were supervising more than one subsidiary), so each intermediate unit was only linked to one subsidiary in Latin America.[9] As such, each observation contains one unique vertical string: CHQ—intermediate unit—Latin American subsidiary, seen from the perspective of the intermediate unit.

We tested for non-response bias by comparing respondents and non-respondents. This test showed no significant differences in terms of structural variables (e.g., size and industry) or performance variables (e.g., ROA). Similarly, we found no statistically significant differences between early and late respondents for our dependent variable (i.e., control mechanisms).

Finally, we implemented several procedures to reduce common method bias (Podsakoff et al., 2003), especially in terms of anticipating this bias ex-ante (i.e., in the design stage; Chang et al., 2010). While designing our research, we identified our population from Orbis and complemented that data with customized information from subsidiaries' web pages and other reliable sources, such as the business press. The questionnaires included Likert-type scales based on the extant literature with rankings ranging from five to seven points for most variables to avoid automatic responses. Furthermore, after the data was collected, each set of responses was carefully double-checked against secondary data to ensure the coherence of the responses with our classifications. Moreover, we obtained additional secondary data from the firms in the sample at different points in time. The additional data covered corporate governance structures, ownership, level of internationalization, and financial performance. In addition, for the statistical analysis, we ran a Heckman selection model in which the selection equation

[8] As our main objective was to illustrate a recent phenomenon, we did not place any restrictions on the industries or sizes of the subsidiaries. As a result, our sample is varied. While no industry is prevalent, there are slightly higher proportions of units active in the services industry and larger subsidiaries.

[9] The supervised subsidiaries were located across 13 countries in Latin America. The distribution was Mexico (35.3%), Brazil (22.06%), Chile (17.65%), and Colombia (4.4%). The rest of the countries were Argentina, Bolivia, Costa Rica, the Dominican Rep., Ecuador, Guatemala, Panama, Peru, and Uruguay.

was based on structural variables obtained as secondary data (from the Orbis database), while the variables applied in the control mechanism equation were obtained from the survey. This combination of primary and secondary data makes it unlikely that the results were driven by common method bias (Podsakoff et al., 2003).

Furthermore, we undertook Harman's single-factor test for all dependent and independent variables (Podsakoff et al., 2003). This test showed no indication of common method bias, as the 16 variables generated no less than 6 factors with an eigenvalue of more than 1 and the two first factors explained 0.20% and 0.13% of the variance, respectively. In line with Podsakoff et al. (2003), we also ran a partial least squares (PLS) model, which included a common method factor with items that encompassed all of the constructs' items. This PLS model provided information on each item's variances that were substantively explained by the constructs and by the common method factor. The average substantively explained variance of the items was between 0.56 and 0.68 for the different models, while the average method-based variance was around 0.01. Therefore, the ratio of substantive variance to method variance is very high, which indicates that the potential for common method bias is limited.

4 Measurement of Variables

The dependent variable in this study is the control mechanism(s) applied by the Spanish intermediate unit to control the supervised subsidiary in Latin America. In this regard, we distinguish among the four control mechanisms of centralization, formal control, outcome control, and socialization (Collis et al., 2007).

We followed Nell and Ambos (2013) in the operationalization of the four control mechanisms, although we adapted those operationalizations to the context of Spanish intermediate units controlling supervised subsidiaries in Latin America. Specifically, the respondents were asked: "Using the Latin American subsidiary with which you have the strongest relationship as a reference, please assess your agreement with the following statements, with 1 = not applicable or completely disagree and 7 = completely applicable or completely agree." The exact wording of each item forming the four constructs and Cronbach's alpha for commonality among the items are provided in Table 2. All items forming the control-mechanism constructs were measured on the same seven-point Likert scale.

We measured *central control* as the degree of centralization of decision-making in the Spanish intermediate unit. In other words, we examined the extent to which key decisions (e.g., major investments and budget approvals) were made by the Spanish intermediate unit rather than the Latin American subsidiary. The construct was formed by averaging the three items listed in Table 2. The average value of the construct was 3.6 on the 7-point scale.

Outcome control was formed as an average of three items (see Table 2) that reflect the extent to which the Spanish intermediate unit focused on performance measures in its relationship with the Latin American subsidiary. The average value was 4.3.

Table 2 Items for the dependent variables and Cronbach's alpha for each construct

	Cronbach's alpha
Centralization	
Decisions related to investments in plants or equipment in Latin America are made by the Spanish subsidiary	0.95
Formulation and approval of the Latin America subsidiary's annual budget is handled by the Spanish subsidiary	
Increases in expenditures in Latin America beyond the budgeted amount need approval	
Outcome controls	
Numerical records are used as the main measure of the Latin American subsidiary's effectiveness	0.77
Performance goals are set by the Spanish subsidiary	
Primary weight on results in subsidiary performance is established by the Spanish subsidiary	
Formal controls	
Detailed rules and procedures are usually developed by the Spanish subsidiary	0.75
Written rules and processes describe how to perform daily business activities	
Socialization	
The Spanish subsidiary is committed to training and developing skilled managers in the Latin American subsidiaries	0.82
The Spanish subsidiary puts a lot of effort into establishing a common corporate culture	
The executives of the Latin American subsidiaries participate in extensive international training initiated by the Spanish subsidiaries	
The managers of the Latin American subsidiaries share the MNC's values with the Spanish subsidiary	

All items are inspired by Nell and Ambos (2013) and adapted to our context

Formal control consisted of two items (see Table 2) that captured the extent to which the relationship was regulated by detailed rules and processes developed by the Spanish intermediate unit. Its average value was 4.1.

Socialization captured the extent to which the Spanish subsidiary infused common values and a common culture into the Latin American subsidiary (e.g., through training of local managers). The construct was an average of four items (see Table 2). The average value was 4.6.

4.1 Independent Variables

We used two independent variables to express the strength of the intermediate unit's linkages with the other MNC units and with external counterparts in Latin America. The *internal relationship* was measured using two items. Respondents were asked to assess the intensity of relations with "headquarters" and "other subsidiaries," with 1 = very low and 7 = "very high" (adapted from Holm & Pedersen, 2000). The more intense the relations, the more the intermediate unit is internally embedded with its CHQ and other MNC units. The average value was 5.9, but with substantial variation on the scale from 1 to 7 (Cronbach's alpha = 0.71). In robustness checks, we

have also conducted separate analyses where we have split the two items into two separate variables. We also acknowledge that we do not have distinct information on the intensity of the relationship with the supervised subsidiary.

Three items measured the *relationship with external counterparts in Latin America*. More specifically, the respondents were asked to "assess the intensity of relations with the following counterparts in Latin America" (with 1 = very low and 7 = very high): "customers," "suppliers," and "other local firms in related industries" (Gammelgaard et al., 2012). The construct was then formed as the average of these three items (Cronbach's alpha = 0.83). As such, the construct reflects the business relationships that the Spanish intermediate unit had in Latin America outside of its relationship with the focal Latin American subsidiary. The average value of the construct was 4.6.

4.2 Control Variables

We included control variables at three levels to avoid the potential conflating of results from other sources. These variables capture (1) the capabilities of the intermediate unit, (2) its relationships with other MNC units, and (3) certain aspects of Latin American activities.

First, we accounted for effects originating from the relative importance of the intermediate unit that could affect the agency relationship by being a source of power for the unit. Cuervo-Cazurra et al. (2019) introduce the strategic importance of the subsidiary as an important determinant of the choice of control mechanism. In this regard, we controlled for three variables. *Entrepreneurial capabilities* were captured using three items (Hoenen et al., 2014): searching for new business opportunities, initiating new ventures, and entering new markets (Cronbach's alpha = 0.94). The *relationship with Spanish counterparts* was measured as the intensity of relations with customers, suppliers, and other local firms in related industries in Spain (Cronbach's alpha = 0.70) (Gammelgaard et al., 2012).

Second, we accounted for variables reflecting the intermediate unit's relationship with the MNC that could affect risk attitudes and goal divergence. First, we controlled whether the intermediate unit's *entry mode* was an acquisition or greenfield, as this can affect control choices (Schotter et al., 2017). The *usefulness of knowledge* for other MNC units was captured by asking respondents to assess the extent to which the unit's "technological expertise is demanded by other MNC units" (Palmié et al., 2014). This variable controls for the strategic importance of the intermediate unit for other MNC units (i.e., the extent to which other units depend on knowledge from the intermediate unit). In line with Ambos et al. (2019), we used these variables to approximate risk attitudes for the intermediate units performing parental roles, as adding value is a risky activity.

Finally, we controlled for variables reflecting other dimensions of the relationship between the Spanish intermediate unit and Latin America that might affect the choice of control mechanisms. First, experiential knowledge about Latin America is a source of power and reduces information asymmetries. Our measure of *experiential knowledge* was based on the scale by Eriksson et al. (1997), which we adapted

to the focal context. Respondents were asked to assess the extent of "Our unique knowledge and competencies on how to do business in Latin America" on a seven-point scale. We controlled for the *scope of activities* in Latin American units as a proxy for task programmability (front-end-focused and back-end-focused tasks). The *number of units* in Latin America that were supervised by the focal intermediary unit is also controlled for as formalization might be less relevant if the intermediate unit only supervises one or few subsidiaries and similarly socialization becomes more difficult the more subsidiaries that are supervised. Lastly, we controlled for whether the main Latin American unit under control was in Brazil, Mexico, or Chile (three dummy variables), as these countries represent three slightly different blocks in cultural and institutional terms.

We examined whether the continuous variables were approximately normally distributed. Table 3, which depicts the means, standard deviations, and bivariate correlations for all independent variables, does not suggest that collinearity is an issue, as the highest pairwise correlation is found between external relations in Latin America and experiential knowledge about Latin America (0.41). This correlation is expected, as a key mechanism for obtaining experiential knowledge in Latin America is relationships with counterparts in that location. However, we ran a robustness check of the models with and without these two variables.

5 Statistical Analysis and Results

The data in this study are based on a non-randomly selected sample, which might entail some biases (e.g., sample selection bias). In our context, this implies that the intermediate unit's choice of control mechanism is not independent of whether the unit becomes an intermediate unit in the first place. If we only look at the intermediate units and ignore this interdependence (or omitted variables that affect both becoming an intermediate unit and the choice of control mechanism), we will derive misleading and biased estimates. To obtain unbiased coefficients, we need to model the choice of control mechanism conditional on the focal subsidiary being an intermediate unit. This implies, that we need to simultaneously control for this interdependence (or omitted variables) in the first stage, which includes both intermediate and non-intermediate units. This can be done in a two-step Heckman model, which tests and corrects for potential sample-selection bias.

We were able to do so by including the group of non-intermediate units in the first stage (i.e. including all 194 responses). In other words, we ran a probit model that estimated the probability of becoming an intermediate unit in the first stage (the sample selection model) as a selection parameter (rho). In the second stage, we ran our hypothesized model with the determinants of the applied control mechanism and including the inverse Mills ratio (rho), which corrects for potential sample-size bias. More specifically, the rho value is the correlation coefficient of the error terms from the selection equation (first stage) and the regression equation (second stage).

When choosing the explanatory variables in the first stage (the sample-selection model), we followed empirical studies by Schotter et al. (2017) and Villar et al. (2018) that show which factors promote intermediary units. We include the factors

Table 3 Descriptive statistics and correlations among all independent variables (N = 68)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
1) Internal relationships	1.00															
2) External relationships with LA	0.24	1.00														
3) Entrepreneurial capabilities	0.17	0.39	1.00													
4) Relationships with Spanish counterparts	0.19	0.23	0.17	1.00												
5) Knowledge useful for MNC units	0.25	0.35	0.38	0.21	1.00											
6) Acquisition	0.08	0.20	0.27	0.03	0.22	1.00										
7) Experiential knowledge of LA	0.07	0.41	0.37	0.33	0.30	0.21	1.00									
8) Scope of units in LA	0.08	0.28	0.28	0.19	0.31	0.22	0.27	1.00								
9) Number of units in LA	0.06	0.24	0.15	0.13	0.20	0.15	0.19	0.21	1.00							
10) Main LA unit in Brazil	−0.25	−0.11	−0.26	0.01	−0.18	−0.13	−0.14	−0.03	−0.10	1.00						
11) Main LA unit in Chile	0.06	−0.03	−0.08	−0.08	−0.03	0.03	−0.02	−0.13	−0.03	−0.25	1.00					
12) Main LA unit in Mexico	0.02	−0.02	0.12	0.08	0.02	−0.01	0.14	0.13	0.15	−0.39	−0.34	1.00				
13) Centralization	0.22	0.39	0.37	−0.35	0.15	−0.05	0.14	0.17	0.09	−0.21	0.21	−0.15	1.00			
14) Formal controls	−0.28	0.42	0.13	0.12	0.25	−0.14	0.13	0.09	0.05	−0.19	0.22	−0.07	0.39	1.00		
15) Outcome controls	−0.05	−0.25	0.16	−0.28	0.24	−0.09	0.16	0.14	0.06	−0.27	0.22	−0.08	0.36	0.40	1.00	
16) Socialization	0.02	−0.19	0.29	0.19	0.26	−0.12	0.07	0.27	0.06	−0.22	0.02	0.03	0.19	0.20	0.34	1.00
Mean	5.92	3.81	4.72	5.49	4.32	0.38	4.21	0.29	4.96	0.22	0.18	0.35	3.64	4.14	4.24	4.57
Standard deviation	1.21	2.08	1.50	1.40	2.19	0.49	2.40	0.46	6.04	0.42	0.38	0.48	2.40	2.18	1.99	1.90
Min. value	1.5	1	1	1	1	0	1	0	1	0	0	0	1	1	1	1
Max. value	7	7	7	7	7	1	7	1	29	1	1	1	7	7	7	7

Coefficients greater than |0.25| are significant at the 0.05% level

they point at as determinants of intermediate units to control out the interdependence there might be between being an intermediate unit and the choice of control mechanism applied by the intermediate unit (our potential sample selection bias). More specifically, the structural variables included in this stage were: the size of the Spanish subsidiary (i.e., the number of employees), the number of countries in which it operated, the scope of its activities, the export ratio, and the managerial resources (i.e., the number of top managers in the Spanish subsidiary). We also ran the models while including MNC variables (e.g., home country, industry, size), but these variables had only a limited impact on whether the Spanish subsidiary became an intermediate unit. This is in line with the studies by Schotter et al. (2017) and Villar et al. (2018), which also point to subsidiary characteristics as the key determinants of subsidiaries becoming intermediate units.

This first stage (sample selection) model provided a rho value that indicates whether we have a sample selection problem. The rho values were significant in all four models, which indicated a real problem of sample self-selection that needed to be addressed. This implies that a normal OLS model would provide biased results and, without our correction for the interdependence between becoming an intermediate unit and the choice of control mechanism, our results would be biased.[10] This bias is adjusted for in the two-step Heckman model where the rho value from the first stage is a correction factor in the second stage that corresponds to our hypothesized model.

In the second stage, we estimated the determinants of the four control mechanisms while including the rho value to correct the sample selection problem. As such, we ran separate Heckman models for each of the four control mechanisms and obtained the results shown in Table 4. The table provides the results for both the first-stage and the second-stage equations (where the hypothesized relationships are tested), and with the rho value included. The bold coefficients in the Table are the hypothesized relationships for internal and external relationships.

We focus on the two variables of internal (with CHQ and other MNC units) and external (in Latin America) relationships. For external relationships in Latin America (i.e., relations with external counterparts other than the focal subsidiary), we find that the more embedded the Spanish intermediate unit is in Latin America, the more it uses centralization ((β=0.34, p=0.008) and formal controls (β=0.41, p=0.002), while weak relationships are associated with the use of outcome control (β=−0.41, p=0.001) and socialization (β= −0.31, p=0.008). These results are in line with our hypotheses. They seem to confirm that the more a Spanish intermediate unit is embedded in Latin America, the lower the information asymmetries. This, in turn, decreases the likelihood of the Latin American subsidiary feeding false or imprecise information to the Spanish intermediate unit. In addition, the more embedded and knowledgeable the intermediate unit is, the better it can make decisions on behalf of the Latin American subsidiary. Thus, it will be inclined to apply centralization and formal controls in cases of strong external relationships. In cases of weak external relationships and, consequently, the availability of less knowledge about the Latin American subsidiary's

[10] As we could not run the variance inflation factor (VIF) in the equation system, we ran the four second-stage equations as separate OLS models. The VIF values did not exceed 2 in any of these models.

Table 4 First and second equations of the Heckman model for each of the four control mechanisms (N = 194 in the first equation and 68 in the second equation)

	Centralization		Outcome control		Formal control		Socialization	
	First equation	Second equation	First equation	Second equation	First equation	Second equation	First equation	Second equation
Intercept	−0.69** (0.003)	1.90 (0.25)	−0.63** (0.002)	3.27* (0.02)	−0.69** (0.002)	2.49 (0.17)	−0.62** (0.005)	2.75 (0.07)
Internal relationships		**0.43*** (0.05)		**0.08** (p = 0.25)		**−0.44*** (0.05)		**0.06** (0.77)
External relationship in LA		**0.34**** (0.008)		**−0.41***** (p = 0.001)		**0.41**** (0.002)		**−0.31**** (0.008)
Own capabilities								
Entrepreneurial capabilities		0.29* (0.02)		0.17 (0.11)		0.22 (0.08)		0.25* (0.03)
Relationships with Spanish counterparts		−0.48** (0.007)		−0.44** (0.003)		−0.31 (0.08)		−0.27 (0.08)
MNC relationship								
Useful knowledge for MNC units		0.06 (0.62)		0.15 (0.12)		0.18 (0.12)		0.14 (0.15)
Acquisition		−0.76 (0.14)		−0.43 (0.28)		−0.89* (0.05)		−0.96* (0.02)
Relationship in Latin America (LA)								
Experiential knowledge of LA		0.13 (0.21)		0.08 (0.36)		0.06 (0.58)		−0.01 (0.98)
Scope of activities in LA unit(s)		0.97 (0.09)		0.46 (0.32)		0.33 (0.61)		0.87* (0.04)
Number of units in LA		0.01 (0.18)		0.01 (0.49)		0.01 (0.54)		0.01 (0.59)
Main LA unit in Brazil		−0.33 (0.64)		−0.79 (0.16)		−0.31 (0.65)		−0.85 (0.15)

Table 4 (continued)

	Centralization		Outcome control		Formal control		Socialization	
	First equation	Second equation	First equation	Second equation	First equation	Second equation	First equation	Second equation
Main LA unit in Chile		0.78 (0.11)		0.73 (0.20)		0.91 (0.06)		−0.19 (0.75)
Main LA unit in Mexico		−0.83 (0.06)		−0.64 (0.19)		−0.21 (0.71)		−0.49 (0.33)
First-stage variables								
# of employees	−0.01 (0.43)		−0.01 (0.38)		−0.01 (0.31)		−0.01 (0.32)	
# of countries with operations	−0.01 (0.15)		−0.01 (0.52)		−0.01 (0.28)		−0.01 (0.26)	
Export	0.01*** (0.001)		0.01** (0.002)		0.01*** (0.001)		0.01** (0.002)	
Scope of activities	0.64*** (0.001)		0.70*** (0.001)		0.61** (0.004)		0.70*** (0.001)	
Managerial resources	−0.04* (0.05)		−0.06** (0.01)		−0.05* (0.02)		−0.06* (0.02)	
Sigma		2.50*** (0.001)		1.83*** (0.001)		1.99***(0.001)		1.67*** (0.001)
Rho	0.91***(0.001)		0.83***(0.001)		0.75** (0.004)		0.65** (0.01)	
Log-likelihood	−242.4	−226.0	−232.6	−231.0				
AIC	532.8	502.1	513.2	509.9				

*, **, *** indicate 5%, 1%, and 0.1% level of significance, respectively

activities, outcome control and socialization seem more prevalent. The aims in such situations are to set performance goals that can be tracked and to overcome goal incongruence between the Spanish intermediate unit and the Latin American subsidiary.

As expected, strong internal relationships are significantly and positively related to the use of centralization ($\beta = 0.43$, $p = 0.05$), while they are significantly and negatively related to the use of formal control ($\beta = -0.44$, $p = 0.05$). This suggests that the more a Spanish intermediate unit is internally embedded with the CHQ and other MNC units, the more information asymmetries and goal incongruencies between the CHQ and the intermediate unit are reduced. This confirms that strong internal relationships pave the way for alignment with the CHQ and the use of centralization, while weak internal relationships create scope for formal control. The relationship with other MNC units is insignificant in relation both to outcome controls and socialization.

All in all, our results confirm Hypothesis 1 on centralization and Hypothesis 2 on formal controls. Hypothesis 3 on outcome controls and socialization is consistent with our findings for the role of external relationships but not for internal MNC relationships, so it is only partly confirmed. Notably, external relations in Latin America seem to be much stronger in determining the control mechanism (highly significant in all four cases) than internal MNC relations (only significant at 5% in two cases).

Of the control variables, the two variables capturing the capabilities of the Spanish intermediate unit are significant, as entrepreneurial capabilities are positively associated with the control mechanisms of centralization and socialization, while strong embeddedness with Spanish counterparts is negatively related to the use of centralization and outcome controls. We also note that the variable on the usefulness of knowledge and strategic importance for other MNC units is insignificant in all four models. Therefore, although previous research has shown that the strategic importance of the intermediate unit determines the control mechanisms applied by the HQ (Cuervo-Cazurra et al., 2019), strategic importance seems to have less of an impact on the control mechanisms applied by the intermediate unit itself.

We conducted several robustness checks to establish the validity of our results. We ran the Heckman models with fewer variables as well as OLS models and models that included different specifications of our key variables like the internal relations. When separating the internal relationships into its two items we find that it is mainly the internal relationship with the CHQ that is driving the result for centralization and formal control (Hypotheses 1 and 2) and less so the internal relationships with other subsidiaries. Otherwise, the results were qualitatively similar to our main models. In addition, we included variables reflecting the individual characteristics of the respondents (e.g., age and position) as well as variables capturing characteristics of the corporate MNC (e.g., industry, size, and home country). None of these variables were significant or had an impact on other coefficients.

6 Discussion

This study applies agency theory and network theory to examine how MNCs' intermediate units control the subsidiaries for which they are responsible. As such, our study positions itself in the IB literature that views the MNC as a multilayered and

inter-organizational network (Ghoshal & Bartlett, 1990; Kostova et al., 2018; Nell et al., 2017). We add to this literature by going beyond a view that focuses just on the dyad of CHQ-subsidiary relationship and by theoretically reflecting on the specific agency problems related to the dual role of subsidiaries acting as intermediate units. Moreover, we empirically test how the internal and external embeddedness relate to the use of control mechanisms by the intermediate units. More specifically, we analyze a unique set of intermediate units in Spain that supervise Latin American subsidiaries. As such, we are responding to the recent call for more research that acknowledges the complexity of the MNC and the implications it has for control and coordination (Zeng et al., 2023).

In line with our predictions, the results allow us to conclude that intermediate units that are closely linked both internally (with CHQ and other MNC units) and externally (with the local environments of the supervised subsidiaries) tend to apply centralization as a control mechanism. Strong links at both levels reduce information asymmetries and increase opportunities for goal alignment, thereby minimizing potential agency problems arising from the intermediate unit's dual role. While from an agency perspective, decentralization to the supervised subsidiaries would be the most efficient choice, the network theory justifies the retention of authority at the intermediate level. As an agent for CHQs, the superior information that the intermediate unit has on the local conditions in which the supervised subsidiary operates allows it to centralize key decisions and combine its business knowledge with knowledge of local market conditions. Additionally, intermediate units will be interested in retaining authority as a source of influence in the MNC. Close internal relationships confer centrality to the intermediate units and might allow them to obtain valuable resources and attention from the HQ and other MNC units (Andersson et al., 2007).

Conversely, the relative isolation of the intermediate unit from the CHQ and the rest of the MNC that comes with weak internal relationships changes the embeddedness balance and introduces information asymmetries that can lead the intermediate unit to make different control choices (Hoenen & Kostova, 2015; Steinberg & Kunisch, 2016). This case presents a higher risk of moral hazard for the CHQ as the intermediate unit is more distant (Kostova et al., 2018; O'Donnell, 2000), and modifies how an intermediate unit behaves in its dual role. As principal for the supervised subsidiaries, the intermediate unit is still able to observe the subsidiary's local conditions and behavior, and it can apply several mechanisms. However, as an agent for the CHQ, the potential for collusion is higher in this case, and, unlike the previous case, the intermediate unit does not benefit from centralization due to its relative isolation. Centralized decision-making has costs in terms of time and managerial attention and, in this case, it is less likely to lead to a return in terms of CHQ's attention and resource allocations. Therefore, the intermediate unit will provide verifiable information to the CHQ on its supervisory role as a way of showing compliance and increasing transparency (Conroy et al., 2017) and reduce the potential for collusion by monitoring the subsidiary through an explicit, pre-established set of rules and procedures.

Our third hypothesis introduced a scenario with strong internal relationships and weak external relationships. As an agent for the CHQ, there is less risk of collusion

with the supervised subsidiaries. However, the weak external relationships leave the intermediate unit less able to observe the supervised subsidiary as a principal. In this case, the risks of moral hazard and adverse selection translate to the second tier (intermediate unit-supervised subsidiary). Our results show that under these conditions it implements outcome and socialization controls. From an agency viewpoint, outcome controls seem to be a reasonable mechanism. However, due to its weak external relationships, the risk of adverse selection still exists, as the intermediate unit has limitations for observing and verifying the conditions the subsidiary faces. Thus, similar to Ambos et al.'s (2019) arguments, socialization mechanisms become a powerful instrument for the intermediate unit's principal role, as they improve observability, reduce information asymmetries, and increase the unit's legitimacy. According to the economic rationale of agency theory (Eisenhardt, 1989), socialization mechanisms are the last resort—they are only used when other performance controls cannot be applied. However, from a network perspective, socialization is an inherent part of embedded relationships and a way of creating shared values (Nohria & Ghoshal, 1994). For the intermediate unit as a principal, socialization practices, such as visiting the subsidiaries, sending personnel to subsidiaries, or training subsidiary employees in the corporate values, are ways of aligning goals.

From a more theoretical level, our paper contributes to the understanding of complex MNCs by combining two theoretical approaches that have different rationales. The literature has repeatedly pointed to the need to provide greater realism to purely economic explanations of management problems (Ghoshal & Moran, 1996; Wiseman et al., 2012), as well as highlighted the opportunity that the combination of theoretical approaches provides to enrich our knowledge (Cuervo-Cazurra et al., 2019; Eisenhardt, 1989; Nohria & Ghoshal, 1994). As Ghoshal and Bartlett (1990, p. 611) emphasize, economic-based approaches "ignore the important and ongoing effects that surrounding social structures have on economic behaviors of organizations." Some recent findings in the IB literature question a purely economic explanation of control mechanisms like agency theory. Kostova et al. (2018) theorized about the role that embeddedness, and specifically the national culture and institutions, has for the manifestations of the agency problem. In a similar vein, Chatzopoulou et al. (2022) point to subsidiaries' structural embeddedness within their social context as a variable that limits the potential of control mechanisms for curtailing their opportunistic behavior. While being aware of the different assumptions sustaining these two approaches, moving away from isolated dyads and accounting for actors' network embeddedness is a rich avenue for understanding the intermediate units' control function. Considering the role of context and networks' relationships (Lubatkin et al, 2007; Shapiro, 2005; Wiseman et al., 2012) allows us to theorize how the intermediate unit's embeddedness in its internal and external networks has the potential to mitigate the basic agency problems by reducing the information asymmetries and goal incongruences and to predict the choice of control mechanisms.

This study extends our current understanding of the management of MNCs at lower levels. Intermediate units are a structural solution for managing complexity in MNCs. Forsgren and Pedersen's (1998)' study on centers of excellence highlighted the dual position of subsidiaries because of the internal and external embeddedness and claimed that such dual role does not necessarily coincide.

Since this early study, subsequent works on units that fit under the umbrella of intermediate units have focused on why these units exist and their characteristics (Pla-Barber et al., 2021), but have failed to acknowledge the consequences of their network position for the application of control mechanisms (Alfoldi et al., 2012; Hoenen et al., 2014; Zhou, 2015). We contribute to the extant literature by analyzing the specific boundary conditions for the application of control mechanisms by the second layer of the MNC. Specifically, this study extends previous insights highlighted by Conroy et al. (2017) who illustrated the specific complexities intermediate units (in this case RHQs) face when balancing a dual role and it shows control behaviors that differ from what agency theory would predict.

Our empirical study reflects the case of Spanish intermediate units managing activities in Latin America. Latin America is one of the emergent geographic areas that combines promising future opportunities with challenging cultural and institutional environments. In line with the works of Lasserre (1996) and Lunnan and Zhao (2014), our study sheds light on the challenges that managing operations in a distant geographic context has. On a practical level, our study guides MNC managers in understanding the consequences of disaggregation and dispersion of authority through the multilayered MNC. Units at the intermediate levels are nested in different organizational levels and embedded within different internal and external networks. Such social and structural conditions become critical to comprehend why monitoring at intermediate levels does not follow a purely economic rationale. Therefore, when exercising control over delegated activities, managers at intermediate levels will need to consider their specificities regarding these two boundary conditions and choose mechanisms in a way that curtails a potential opportunistic behavior while giving room for tapping into local knowledge and resources.

Our study suffers from several limitations. First, we acknowledge that we lack more detailed information on the intermediate unit's internal relationships that are key to understanding the choice of control mechanism. Future research along these lines should obtain more information on the relationships with the supervised subsidiary as well as more information on the content of the relationship with CHQ and other sister subsidiaries. Such kind of information would provide insights into which of these internal relationships matter most for the choice of control mechanism. Another extension of this research could explore the evolutionary paths and changing roles of intermediate units in the MNC and their implications for control (Dzikowska et al., 2023; Zeng et al, 2023), as these insights might vary with the different functions and the roles of the intermediate unit (Schmid et al., 2016).

Second, as our data are cross-sectional, we cannot derive causality but only associations. Moreover, although we implemented several procedures to minimize potential biases linked to our data and conducted tests for potential common method bias, we cannot completely rule out those biases. In addition, even though we used some secondary data on the HQs and the supervised subsidiaries, we relied on responses from the managers of the intermediate units for the dependent and (most) independent variables, which might have introduced some biases (Steinberg & Kunisch, 2016). An additional limitation is that our data do not allow us to predict which mechanisms are more adequate or suitable, as we do not capture their performance

consequences. Future studies that capture longitudinal data could illuminate causal relationships as well as the dynamics in the implementation of control mechanisms.

Third, while our study is an important step in understanding the delegation of authority to the second level and how control is exercised, it cannot cover the whole complexity of MNCs. A promising research avenue is to zoom deeper into the specificities of the supervised subsidiaries that can affect the choice of the control mechanism, for example, the scope of supervised subsidiaries, the specific function they perform, or other entry modes different from foreign direct investment. Additionally, our group of intermediate units is relatively small, and larger samples would be better to have more variability, for instance in terms of the subsidiary mandates or the specific type of intermediate unit. The complexity of obtaining data at the intermediate level is a challenge and even though we have controlled for different variables at the different levels, we acknowledge this as a limitation that spurs our interest in future studies.

Relatedly, this study is the first to analyze how the dual role of intermediate units and their network positions are related to their control strategies. As such, we have assumed that the intermediary unit is the appropriate level of analysis, as it is the least investigated in the extant research. However, to capture the entire picture of information asymmetries, goal conflicts, and control mechanisms, data should preferably be collected on all levels to avoid potential perception gaps (Ambos et al., 2019; Birkinshaw et al., 2000). Data collected at different levels not only allow for measuring the asymmetries in goals and information but also to understand to what extent the agent perceives a multiple principals' problem or the actual fear of collusion of the first principal.

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References

Alfoldi, E. A., Clegg, L. J., & McGaughey, S. L. (2012). Coordination at the edge of the empire: The delegation of headquarters functions through regional management mandates. *Journal of International Management, 18*(3), 276–292.

Alfoldi, E. A., McGaughey, S. L., & Clegg, L. J. (2017). Firm bosses or helpful neighbours? The ambiguity and co-construction of MNE regional management mandates. *Journal of Management Studies, 54*(8), 1170–1205.

Ambos, B., Kunisch, S., Leicht-Deobald, U., & Steinberg, A. S. (2019). Unravelling agency inside the MNC: The roles of socialization, goal conflicts and second principals in headquarters-subsidiary relationships. *Journal of World Business, 54*(2), 67–81.

Andersson, U., Forsgren, M., & Holm, U. (2007). Balancing subsidiary influence in the federative MNC: A business network view. *Journal of International Business Studies, 38*(5), 802–818.

Andersson, U., & Pedersen, T. (2010). Organizational design mechanisms for the R&D function in a world of offshoring. *Scandinavian Journal of Management, 26*(4), 431–438.

Arthurs, J. D., Hoskisson, R. E., Busenitz, L. W., & Johnson, R. A. (2008). Managerial agents watching other agents: Multiple agency conflicts regarding underpricing in IPO firms. *Academy of Management Journal, 51*(2), 277–294.

Asakawa, K., & Aoki, T. (2016). Informed headquarters, legitimized subsidiary, and reduced level of subsidiary control in international R&D management. *Research in Global Strategic Management, 17*, 191–213.

Asmussen, C. G., & Goerzen, A. (2013). Unpacking dimensions of foreignness: Firm-specific capabilities and international dispersion in regional, cultural and institutional space. *Global Strategy Journal, 3*(2), 127–149.

Birkinshaw, J., Holm, U., Thilenius, P., & Arvidsson, N. (2000). Consequences of perception gaps in the headquarters–subsidiary relationship. *International Business Review, 9*(3), 321–344.

Birkinshaw, J., & Hood, N. (1998). Multinational subsidiary evolution: Capability and charter change in foreign-owned subsidiary companies. *Academy of Management Review, 23*(4), 773–795.

Bouquet, C., & Birkinshaw, J. (2008). Weight versus voice: How foreign subsidiaries gain attention from corporate headquarters. *Academy of Management Journal, 51*(3), 577–601.

Cavanagh, A., Freeman, S., Kalfadellis, P., & Cavusgil, S. T. (2017). How do subsidiaries assume autonomy? A refined application of agency theory within the subsidiary-headquarters context. *Global Strategy Journal, 7*(2), 173–192.

Chang, S. J., Van Witteloostuijn, A., & Eden, L. (2010). From the editors: Common method variance in international business research. *Journal of International Business Studies, 41*(2), 178–184.

Chatzopoulou, E. C., Spanos, Y. S., & Lioukas, S. (2022). Headquarters' monitoring mechanisms, subsidiaries' financial slack, and the contingent role of subsidiaries' external embeddedness. *Long Range Planning, 55*(1), 102044. https://doi.org/10.1016/j.lrp.2020.102044

Child, J., & Rodrigues, S. B. (2003). Corporate governance and new organizational forms: Issues of double and multiple agency. *Journal of Management and Governance, 7*(4), 337–360.

Ciabuschi, F., Dellestrand, H., & Martin, O. M. (2011). Internal embeddedness, headquarters involvement, and innovation importance in multinational enterprises. *Journal of Management Studies, 48*(7), 1612–1639.

Cinco Días. (2015). *España, puerta de entrada del gran seguro europeo en Latinoamérica*. https://cincodias.elpais.com/cincodias/2014/03/20/mercados/1395337035_157093.html. Accessed 29 July 2020.

Collis, D., Young, D., & Goold, M. (2007). The size, structure, and performance of corporate headquarters. *Strategic Management Journal, 28*(4), 383–405.

Conroy, K. M., Collings, D. G., & Clancy, J. (2017). Regional headquarter's dual agency role: Micropolitical strategies of alignment and self-interest. *British Journal of Management, 28*(3), 390–406.

Cuervo-Cazurra, A., Mudambi, R., & Pedersen, T. (2019). Subsidiary power: Loaned or owned? The lenses of agency theory and resource dependence theory. *Global Strategy Journal, 9*(4), 491–501.

Deutsch, Y., Keil, T., & Laamanen, T. (2010). A dual agency view of board compensation: The joint effects of outside director and CEO stock options on firm risk. *Strategic Management Journal, 32*(2), 212–227.

Dzikowska, M., Gammelgaard, J., & Andersson, U. (2023). Subsidiary capability and charter change: Making Birkinshaw and Hood's framework actionable. *Global Strategy Journal., 13*(3), 647–672.

Eriksson, K., Johanson, J., Majkgård, A., & Sharma, D. D. (1997). Experiential knowledge and costs in the internationalization process. *Journal of International Business Studies, 28*(2), 337–360.

Eisenhardt, K. M. (1985). Control: Organizational and economic approaches. *Management Science, 31*(2), 134–149.

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review, 14*(1), 57–74.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics, 26*(2), 301–325.

Forsgren, M. (2013). *Theories of the multinational firm. A multidimensional creature in the global economy* (2nd ed.). Edward Elgar.

Forsgren, M., & Pedersen, T. (1998). Centres of excellence in multinational companies: The case of Denmark. *Multinational corporate evolution and subsidiary development* (pp. 141–161). Palgrave Macmillan UK.

Gammelgaard, J., McDonald, F., Stephan, A., Tüselmann, H., & Dörrenbächer, C. (2012). The impact of increases in subsidiary autonomy and network relationships on performance. *International Business Review, 21*(6), 1158–1172.

Gates, S. R., & Egelhoff, W. G. (1986). Centralization in headquarters–subsidiary relationships. *Journal of International Business Studies, 17*, 71–92.

Ghoshal, S., & Bartlett, C. (1990). The multinational corporation as an interorganizational network. *Academy of Management Review, 15*(4), 603–625.

Ghoshal, S., & Moran, P. (1996). Bad for practice: A critique of the transaction cost theory. *Academy of Management Review, 21*(1), 13–47.

Ghoshal, S., & Nohria, N. (1989). Internal differentiation within multinational corporations. *Strategic Management Journal, 10*(4), 323–337.

Goold, M., & Campbell, A. (2002). Parenting in complex structures. *Long Range Planning, 35*(3), 219–243.

Gupta, A. K., & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal, 21*(4), 473–496.

Harzing, A. W. (1999). *Managing the multinationals: An international study of control mechanisms*. Edward Elgar.

Hoenen, A. K., & Kostova, T. (2015). Utilizing the broader agency perspective for studying headquarters-subsidiary relations in multinational companies. *Journal of International Business Studies, 46*(1), 104–113.

Hoenen, A. K., Nell, P. C., & Ambos, B. (2014). MNE entrepreneurial capabilities at intermediate levels: The roles of external embeddedness and heterogeneous environments. *Long Range Planning, 47*(1), 76–86.

Holm, U., Johanson, J., & Thilenius, P. (1995). Headquarters' knowledge of subsidiary network context in the multinational corporation. *International Studies of Management & Organization, 25*(1–2), 97–119.

Holm, U., & Pedersen, T. (2000). The centres of excellence project—Methods and some empirical findings. In U. Holm & T. Pedersen (Eds.), *The emergence and impact of MNC centres of excellence* (pp. 23–41). McMillan.

ICEX. (2020). *Spain: your partner in Europe. Business Opportunities*. http://www.investinspain.org/invest/wcm/idc/groups/public/documents/documento/mda0/nje1/~edisp/4615779.pdf. Accessed 3 April 2020.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*, 305–360.

Kim, K., Park, J. H., & Prescott, J. E. (2003). The global integration of business functions: A study of multinational businesses in integrated global industries. *Journal of International Business Studies, 34*, 327–344.

Kostova, T., Nell, P. C., & Hoenen, A. K. (2018). Understanding agency problems in headquarters-subsidiary relationships in multinational corporations: A contextualized model. *Journal of Management, 44*(7), 2611–2637.

Lubatkin, M., Lane, P. J., Collin, S., & Very, P. (2007). An embeddedness framing of governance and opportunism: Towards a cross-nationally accommodating theory of agency. *Journal of Organizational Behavior, 28*(1), 43–58.

Lasserre, P. (1996). Regional headquarters: The spearhead for Asia Pacific markets. *Long Range Planning, 29*(1), 30–37.

Lunnan, R., & Zhao, Y. (2014). Regional headquarters in China: Role in MNE knowledge transfer. *Asia Pacific Journal of Management, 31*, 397–422.

Martinez, J. I., & Jarillo, J. C. (1989). The evolution of research on coordination mechanisms in multinational corporations. *Journal of International Business Studies, 20*(3), 489–514.

Modaes.es. (2012). *El dueño de Jack&Jones dará el salto a Latinoamérica a través de su filial española*. https://www.modaes.es/empresa/el-dueno-de-jackjones-desembarca-en-latinoamerica-a-traves-de-su-filial-espanola.html. Accessed 29 July 2020.

Nell, P. C., & Ambos, B. (2013). Parenting advantage in the MNC: An embeddedness perspective on the value added by headquarters. *Strategic Management Journal, 34*(9), 1086–1103.

Nell, P. C., Kappen, P., & Laamanen, T. (2017). Reconceptualising hierarchies: The disaggregation and dispersion of headquarters in multinational corporations. *Journal of Management Studies, 54*(8), 1121–1143.

Nohria, N., & Ghoshal, S. (1994). Differentiated fit and shared values: Alternatives for managing headquarters-subsidiary relations. *Strategic Management Journal, 15*(6), 491–502.

O'Donnell, S. W. (2000). Managing foreign subsidiaries: Agents of headquarters, or an interdependent network? *Strategic Management Journal, 21*(5), 525–548.

Palmié, M., Keupp, M. M., & Gassmann, O. (2014). Pull the right levers: Creating internationally 'useful' subsidiary competence by organizational architecture. *Long Range Planning, 47*(1–2), 32–48.

Pla-Barber, J., Botella-Andreu, A., & Villar, C. (2021). Intermediate units in multinational corporations: Advancing theory on their co-parenting role, dynamics and outcomes. *International Journal of Management Reviews, 23*(1), 116–147.

Pla-Barber, J., Villar, C., & Madhok, A. (2018). Co-parenting through subsidiaries: A model of value creation in the multinational firm. *Global Strategy Journal, 8*(4), 536–562.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879.

Schmid, S., Grosche, P., & Mayrhofer, U. (2016). Configuration and coordination of international marketing activities. *International Business Review, 25*(2), 535–547.

Schotter, A., Stallkamp, M., & Pinkham, B. C. (2017). MNE headquarters disaggregation: The formation antecedents of regional management centers. *Journal of Management Studies, 54*(8), 1144–1169.

Shapiro, S. (2005). Agency theory. *Annual Review of Sociology, 31*, 263–284.

Steinberg, A. S., & Kunisch, S. (2016). The agency perspective for studying headquarters-subsidiary relations: An assessment and considerations for future research. *Research in Global Strategic Management, 17*, 87–118.

Tirole, J. (1986). Hierarchies and bureaucracies: On the role of collusion in organizations. *Journal of Law, Economics, and Organization, 2*(2), 181–214.

Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review, 61*(4), 674–698.

Valentino, A., Schmitt, J., Koch, B., & Nell, P. C. (2019). Leaving home: An institutional perspective on intermediary HQ relocations. *Journal of World Business, 54*(4), 273–284.

Verbeke, A., & Asmussen, C. G. (2016). Global, local, or regional? The locus of MNE strategies. *Journal of Management Studies, 53*(6), 1051–1075.

Villar, C., Dasí, À., & Botella-Andreu, A. (2018). Subsidiary specific advantages for inter-regional expansion: The role of intermediate units. *International Business Review, 27*(2), 328–338.

Wilhelm, M. M., Blome, C., Bhakoo, V., & Paulraj, A. (2016). Sustainability in multi-tier supply chains: Understanding the double agency role of the first-tier supplier. *Journal of Operations Management, 41*, 42–60.

Wiseman, R. M., Cuevas-Rodríguez, G., & Gomez-Mejia, L. R. (2012). Towards a social theory of agency. *Journal of Management Studies, 49*(1), 202–222.

Zeng, R., Grøgaard, B., & Steel, P. (2018). Complements or substitutes? A meta-analysis of the role of integration mechanisms for knowledge transfer in the MNE network. *Journal of World Business, 53*(4), 415–432.

Zeng, R., Grøgaard, B., & Björkman, I. (2023). Navigating MNE control and coordination: A critical review and directions for future research. *Journal of International Business Studies, 54*, 1599–1622.

Zhou, Y. M. (2015). Supervising across borders: The case of multinational hierarchies. *Organization Science, 26*(1), 277–292.