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Unravelling agency relations inside the MNC: The roles of socialization, goal conflicts and second principals in headquarters-subsidary relationships

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ABSTRACT

Prior research has advanced classical agency theory to account for various characteristics of headquarters (HQ)-subsidary relations in the multinational corporation (MNC). In an attempt to contribute to this line of research, in this paper, we propose and test an agency model for HQ-subsidary relations inside the MNC. Drawing on classical agency assumptions, we develop a baseline hypothesis that links informal controls (i.e., socialization), HQ-subsidary goal conflicts, and the HQ's use of formal controls (i.e., behavioral controls). We subsequently introduce an important boundary condition, which reflects subsidiaries' internal agency relations with subsidiary CEOs as second principals. More specifically, we argue that the baseline relationship only holds under low levels of second principal power. To test our model, we employed a unique study design with three parallel surveys addressing the agents and the two principals involved in 131 agency relations within one MNC.

1. Introduction

The relations between headquarters (HQ) and subsidiaries are crucial for the success of multinational corporations (MNCs) (Kostova, Marano, & Tallman, 2016; Martinez & Jarillo, 1989; Menz, Kunisch, & Collis, 2015). The extant literature suggests that HQ-subsidary relations are mixed-motive dyads in which the parties have both interdependent and independent interests (e.g., Ambos & Schlegelmilch, 2007; Ghoshal & Nohria, 1989; Tippmann, Scott, Reilly, & O'Brien, 2018). Persistent concerns in this area of research include the means through which an HQ can align its subsidiaries' behaviors with the interests of the overall firm and the need to select an adequate control strategy (O'Donnell, 2000; Roth & O'Donnell, 1996). A useful lens for studying these conflicting interests and control strategies is agency theory, which focuses on how a principal (i.e., the HQ) can ensure that its agents (i.e., subsidiaries) behave in a way that maximizes the principal's welfare (e.g., Jensen & Meckling, 1976; Kostova et al., 2016; Kostova, Nell, & Hoenen, 2018; Nohria & Ghoshal, 1994; Roth & O'Donnell, 1996; Schepers, Falk, de Ruyter, de Jong, & Hammerschmidt, 2012; Yu, Subramaniam, & Cannella, 2009).

Despite its appeal for research into HQ-subsidary relations, classical agency theory has come under siege, as the internal (and external)

complexities of MNCs render some of the theory's assumptions overly restrictive. For example, many scholars have argued that MNCs' internal structures more closely resemble networks rather than clear-cut hierarchies, in which *one principal* delegates decision-making authority to *one agent* (e.g., Bartlett & Ghoshal, 1989; Hoenen & Kostova, 2014; Kostova et al., 2018; Mudambi & Navarra, 2004). Furthermore, classical agency theory rests on the assumption that decision rights are merely "loaned, not owned" by the subsidiaries (Baker, Gibbons, & Murphy, 2002; Foss, Foss, & Vazquez, 2006). In other words, it is assumed that HQs (principals) retain the power to veto and overrule subsidiary decisions. However, various studies have demonstrated that subsidiary managers possess and often exercise power (e.g., Ambos & Schlegelmilch, 2007; Conroy, Collings, & Clancy, in press; Medcof, 2001; Mudambi & Navarra, 2004). Therefore, scholars have started to broaden the agency view to accommodate the complexities of modern MNCs (Conroy, Collings, & Clancy, 2017; Hoenen & Kostova, 2014; Kostova et al., 2018). Despite these efforts, however, we know little about whether subsidiary-internal agency relations affect the agency relations between HQ and subsidiaries.

In this paper, we treat the MNC's internal network as multiple agency relations that exist between HQ units and subsidiary subunits (rather than between HQs and subsidiaries as monolithic entities),

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which better reflects the reality in most MNCs. Even though subsidiary subunits report to the HQ, the HQ does not exclusively manage them, as they are also coordinated through a local hierarchy. Consequently, subsidiary units become agents to two principals—the HQ as the first principal and an actor inside the subsidiary (i.e., the subsidiary's CEO) as the second principal. This *nestedness* can create dysfunctionalities, especially when the second principals seek their own rents and do not act in the first principal's best interests (e.g., Scharfstein & Stein, 2000).

Based on these premises, we develop and test a model that shows how principal-agent relations between the HQ and subsidiaries influence the HQ's use of behavioral controls in the context of MNCs' nested agency relations. Building on arguments from classical agency theory, we develop a baseline model that uses socialization (i.e., the organization's attempt to align individuals' core values and norms across the firm) and HQ-subsidary goal conflict to predict the HQ's control choices. We then extend this model by arguing that the relation between HQ-subsidary goal conflict and the HQ's control choices is contingent upon the subsidiaries' CEOs (i.e., the second principals), who can block the indirect effects of socialization on the HQ's control.

To test our model, we employ a multilevel design with three parallel surveys (including responses from HQs, subsidiaries' CEOs, and subsidiaries' units) undertaken in one European MNC. This study design provides a complete overview of the agency relations between the MNC's HQ and its subsidiaries. Our analysis of 131 dyadic HQ-subsidary relations provides empirical support for our hypothesis that second principals (i.e., subsidiaries' CEOs) can block the HQ's intended control strategy. More specifically, our findings show that despite the HQ's attempts to socialize subsidiaries' units (agents), the influence of powerful second principals can deflect the HQ's attempts to build on these shared values to apply its desired control strategy.

Our study makes several vital contributions to the extant literature, especially with regard to the broader agency perspective on HQ-subsidary relations in the MNC and the control literature. With respect to the broader agency perspective (Conroy et al., 2017; Doz & Prahalad, 1991; Hoenen & Kostova, 2014; Kostova et al., 2018), our study provides a better understanding of agency relations between HQs and subsidiaries because it shows that in multiple principal settings (e.g., when agents report to multiple principals or superiors), the first principal's HQ's control choices depend on the characteristics of the second principal. More precisely, by incorporating arguments about the subsidiary CEO's power, our study accounts for subsidiaries' internal agency relations as a key contingency in the agency relations between HQs and subsidiaries. While the importance of second principals has been investigated in studies of agency relations between owners and managers (Hoskisson, Hitt, Johnson, & Grossman, 2002; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008), our study helps account for such complexities in the HQ-subsidary context of the MNC.

With respect to the control literature, while prior research has emphasized that MNCs utilize several types of controls (e.g., Brenner & Ambos, 2013; Cardinal, 2001; Cardinal, Kreutzer, & Miller, 2017; Cardinal, Sitkin, & Long, 2004; Gomez & Sanchez, 2005; Kreutzer, Walter, & Cardinal, 2015; Sitkin et al., 2010; Tiwana, 2010), there is still some ambiguity regarding how these control strategies interact. The multilevel agency model tested here adds to the extant research on the interplay among social and behavioral controls (Brenner & Ambos, 2013) by providing additional evidence that socialization can be conceptualized as a precondition for behavioral control rather than as a substitute.

In addition to these contributions to theory, our study makes a couple of empirical contributions. In line with recent studies stressing the need to study goal conflicts in MNCs (Egelhoff, Wolf, & Adzic, 2013; Schotter & Beamish, 2011; Schotter, Mudambi, Doz, & Gaur, 2017), the quantitative approach adopted in our study advances prior exploratory and qualitative efforts. Our study provides empirical support for the relationships between goal conflicts and control choices proposed in other studies (Eisenhardt, 1989; Kaufmann & Roessing, 2005).

Moreover, the matched-samples design of our study not only allows us to test our hypotheses but also provides an example for future studies.

Our paper proceeds as follows. We first advance a baseline model that draws on traditional agency theory. This baseline model serves as the foundation for the main purpose of our study, which is to theorize on the boundary conditions of the classical predictions concerning HQ-subsidary agency relations, which stem from subsidiary-internal agency relations. We then present a contingency hypothesis, which focuses on the role of the second principal in order to account for the complexities of HQ-subsidary relations in MNCs. In the subsequent sections, we describe our sampling approach, measures, and analysis, after which we present our findings and discuss their implications in the context of the extant literature.

2. Agency relations between HQs and subsidiaries

In our study, we employ an agency perspective to examine HQ-subsidary relations in the MNC. This perspective is useful in MNCs, as geographical, cultural, and institutional distances foster information asymmetries between HQ and subsidiaries, while diverging market pressures and subsidiaries' institutional duality spur conflicting goals (for recent reviews, see Hoenen & Kostova, 2014; Kostova et al., 2016; Schulte Steinberg & Kunisch, 2016). For example, Hoenen and Kostova (2014) argue that HQ-subsidary relations can be regarded as agency relations because “(a) headquarters (principals) delegate decision-making authority to subsidiaries (agents), (b) headquarters are unable to fully observe whether the subsidiary properly exercises the delegated authority; and (c) the two parties often have divergent motivations, resulting in subsidiaries not behaving in the corporate best interest” (p. 2). As such, the agency perspective is particularly useful for studying HQs' control choices (e.g., Aulakh & Gencturk, 2000; Hoenen & Kostova, 2014; O'Donnell, 2000).

The agency perspective distinguishes among three fundamental control mechanisms that the HQ (i.e., the principal) can use to align the subsidiaries' (i.e., the agents) behaviors with the firm's overall goals: (1) behavioral controls, (2) output controls, and (3) social controls (Aulakh & Gencturk, 2000; Eisenhardt, 1989; O'Donnell, 2000). Behavioral controls refer to the extent that the principal monitors and directs the agents' behavior in order to achieve desired outcomes. In MNCs, behavioral control happens through direct orders, close supervision, or the implementation and enforcement of standard operating procedures. Output controls refer to the principal's use of objectives and goal setting to achieve desired outcomes. In MNCs, output controls manifest, for example, in annual performance objectives (e.g., market share, customer satisfaction, or business development) that are subsequently followed up by the HQ. The agent (i.e. subsidiary unit) has significant degrees of freedom to determine how to achieve these objectives. Social controls operate through normative pressures that aim to ensure a sense of social obligation and to facilitate the sharing of values among organizational members (i.e., by aligning the goals of the parties involved) (Ambos & Schlegelmilch, 2007; Brenner & Ambos, 2013; Govindarajan & Fisher, 1990; Lange, 2008; Ouchi, 1979, 1980; Zeng, Groggaard, & Steel, 2018). In MNCs, social controls can take various forms, such as training programs in which individuals learn which behaviors and perspectives are acceptable (Van Maanen, 1979), the selection of employees with a fitting mindset (O'Donnell, 2000), informal and social exchanges (Ghoshal & Nohria, 1989; Nobel & Birkinshaw, 1998), and personnel exchanges between HQs and subsidiaries (Brenner & Ambos, 2013).

Notably, the agency perspective suggests that behavioral controls and output controls are perfect alternatives (e.g., Yu, Wong, & Chiao, 2006). Agency theory thus allows us to predict a relative shift between these control choices rather than predicting them separately (Eisenhardt, 1989). As we discuss below, the HQ thus *shifts* between behavioral and output controls in an attempt to achieve an optimal mix

of control mechanisms. In other words, the more the HQ relies on one of these two control choices, the less it will rely on the other.²

Assuming the *preeminence of efficiency*, the HQ (i.e., principals) selects a control mechanism based on its relative costs. Behavioral controls are usually considered the most preferred option, as they allow the HQ to directly influence the behavior of the agent and better allocate risks among the parties. However, the effectiveness of these controls depends on the principal's ability to observe the agents' behavior (usually constrained by information asymmetries) as well as the goal conflict that exists among the parties (Eisenhardt, 1989). While goal conflicts mean that subsidiaries may behave in ways that are not in the interests of the HQ, information asymmetries largely determine the strategy that the HQ utilizes to address the resulting control problem. In a multinational environment, information asymmetries generally prevail. Subsidiaries are embedded in local contexts and, as such, are better able to understand local market demands, have better access to consumer information, and possess unique capabilities that are usually hard to evaluate from a distance (Björkman, Barner-Rasmussen, & Li, 2004; Nohria & Ghoshal, 1994). As a result, they have a knowledge advantage relative to the HQ, which leaves the HQ unable to perfectly observe and evaluate subsidiaries' behavior.

In MNCs, in which information asymmetries and goal conflicts constrain the use of behavioral controls, the HQ generally has three options for dealing with the agency problem. First, the HQ can accept the difficulties associated with attempts to direct agent behavior and align strategies through output controls (Eisenhardt, 1989; Jensen & Meckling, 1976). This type of control commits the agent to outcomes that are desirable from the principal's point of view. At the same time, it transfers risk to the agent, who becomes responsible for outputs, and needs to internalize any unforeseen problems or costs that arise (Eisenhardt, 1989). Second, the HQ can invest in monitoring systems aimed at reducing information asymmetries and, thereby, re-establish behavioral control. Third, the HQ can put efforts into reducing latent goal conflicts in order to make it easier to exercise behavioral control. As we shall argue, this can be achieved through socialization.

Prior research shows that if the HQ succeeds in creating a set of shared values and beliefs that harmonizes goals among different parties, then self-interests converge (Govindarajan & Fisher, 1990; Ouchi, 1979; Rowe & Wright, 1997; Turner & Makhija, 2006). Subsidiary units may knowingly give up their own benefits for the greater good (Eisenhardt, 1989; Perrow, 1986) and become more compliant as a result of deeper insight into corporate objectives. This, in turn, facilitates an understanding of how those objectives maximize the welfare of the entire organization (Mudambi & Navarra, 2004) and, thereby, helps develop trust in the HQ's decisions (Ouchi, 1979). As a result of reduced goal conflict, the HQ can shift towards behavioral controls (Eisenhardt, 1989).

On this basis and in line with prior studies (Brenner & Ambos, 2013; Eisenhardt, 1989), we argue that socialization is indirectly related to the degree to which HQ units employ behavioral controls in their relations with subsidiaries. At low levels of socialization (i.e., when the partners' norms and values differ significantly), subsidiaries are likely to engage in (hidden) actions, thereby forcing the HQ to employ output controls. Socialization can suppress such behaviors, as increasing alignment in norms and values reduces goal conflicts and, thus, the root cause of agents' dysfunctional behaviors. Consequently, subsidiaries will behave in line with the HQ, as expectations are aligned. This makes output controls more risk inefficient and behavioral controls more appropriate (Eisenhardt, 1989).

In other words, the socialization of subsidiaries—their indoctrination into the HQ's values, interests, and goals (Chang & Taylor,

² In the interest of empirical parsimony and argumentation clarity, we follow the approach of Yu et al. (2006) in that we limit our focus to behavioral controls, which we assume are perfectly inversely correlated with output controls.

1999)—reduces goal conflicts by reducing subsidiaries' desires for autonomy. At the same time, socialization may stimulate a desire among subsidiaries to more actively contribute to the organization's overall goals. This reduces the agency problem because subsidiaries have fewer incentives to engage in shirking. Subsequently, there is less need for output controls and behavioral controls become risk optimal.

In formal terms:

H1. HQ-subsidary goal conflicts mediate the relationship between socialization and behavioral controls (i.e., behavior-based contracts between the HQ and subsidiaries). Specifically, socialization is negatively related to HQ-subsidary goal conflicts (i.e., the higher the level of socialization, the fewer the goal conflicts between the HQ and subsidiaries) and HQ-subsidary goal conflicts are negatively related to the use of behavioral controls.

3. Subsidiary-internal agency relations and the power of the subsidiary CEO

The complexity of contemporary MNCs poses considerable challenges for principals in terms of mapping agency relations and determining optimal control choices. In such settings, HQs seldom have straightforward, bilateral relations with each of their subsidiaries. Within the MNC, there are multiple levels of decision-making and organizational actors interact with various parties on lower levels, which might make them agents to more than one principal. We refer to this multi-tiered nature of the agency relationship as *nestedness*.

A fruitful way to capture the nestedness of agency relations in MNCs is to shift the level of analysis from the subsidiary as a whole to the individual agency relations that exist between HQ units and subsidiary units. In MNCs, such HQ and subsidiary subunits often take the form of permanent teams, divisions, or functional units (Ambos & Birkinshaw, 2010; Kunisch, Müller-Stewens, & Campbell, 2014; Wolf & Egelhoff, 2013). This view more closely resembles the reality in today's MNCs—even though subsidiary subunits report to the HQ, the HQ does not exclusively manage them, as they are also coordinated through a local hierarchy. Consequently, subsidiary subunits become agents to relations with at least two principals—the HQ as the first principal and the subsidiary's CEO as the second principal.³ This view also addresses the problem of control aggregation because it allows for multiple control strategies between the HQ and subsidiaries. Furthermore, this conceptualization does not run the danger of blurring relationships. As O'Donnell (2000) argues with regard to an individual-level focus, “subsidiary managers have a web of relationships with different managers [...]. Such situations are difficult to characterize as [simple] principal-agent relationships, for there will be many different principals, and perhaps multiple agents” (p. 542).

A particular concern in these multi-tier settings (i.e., those in which agents are confronted with multiple principals) is that the second principal's influence or power may constrain the first principal's attempts to control agents' behaviors. “Power” has been defined as the ability to get things done despite the will and resistance of others (see Dahl, 1957; House, 1988; Salancik & Pfeffer, 1977). Despite some subtle differences in nuances, there seems to be conceptual agreement to the extent that prior work defines power in terms of a single factor: the ability to exert influence. The absence of that ability signifies an actor's powerlessness (Fiol, 1991).

With the rise of the network-based MNC, research has revealed that subsidiary actors can influence the corporate network's overall strategic

³ MNCs can have even more complex structures including, for instance, divisional, regional, or functional HQs, leading to multiple principals for subsidiary agents. For the purposes of this paper, we speak of “first principals” when referring to the HQ and of “second principals” when referring to alternative principals with interests that diverge from those of the first principals.

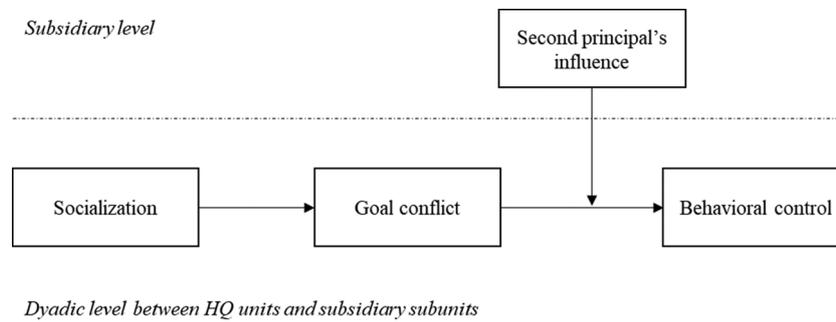


Fig. 1. Conceptual multilevel model.

development (e.g., Andersson, Forsgren, & Holm, 2007; Andersson & Pahlberg, 1997; Bartlett & Ghoshal, 1986, 1989; Birkinshaw & Hood, 1998; Forsgren, Holm, & Johanson, 2005; Forsgren & Pahlberg, 1992; Hedlund, 1986). In other words, subsidiary actors may be able to influence strategic decisions, which may affect not only their own units' affairs but also those of the MNC (Conroy et al., in press). Such network-based conceptualizations of the MNC also give rise to the notion that HQs' activities are often decentralized, thereby resulting in settings in which agents are confronted with multiple principals at the same time (Hedlund, 1986).⁴

The power perspective has long been suggested as a useful complement to the agency perspective (e.g., Eisenhardt, 1989; Mudambi & Petersen, 2008; Hambrick & Lovelace, 2018). While the agency perspective on HQ-subsidary relations assumes that the HQ "loans" decision rights to subsidiaries and can withdraw them at will, the power perspective postulates that other actors (e.g., a subsidiary or a subsidiary's CEO) "own" their decision rights (Mudambi & Petersen, 2008). This view seems sensible if we acknowledge that the HQ's ownership rights do not always translate into defensible property rights (Foss & Foss, 2005). Obviously, some subsidiaries are more powerful than others are. The more subsidiaries can draw on assets for which property rights are hard to define and enforce, such as knowledge and experience, the more difficult it becomes for the HQ to maintain control. In a similar vein, Tomassen, Benito, and Lunnan (2012) argue that subsidiary power is positively related to ex-post governance costs. In sum, we expect subsidiary power to be an important complication in the traditional principal-agent dyad.

There are various examples of this phenomenon. Consider, for example, the problems that Levandary Cafés, a Denver-based fast-food chain, experienced in China (Bartlett & Han, 2013). Despite the pressing need for the company to adhere to the US Generally Accepted Accounting Practices (GAAP), members of Levandary's US accounting team could not get their Chinese colleagues to comply with or accept directives. These problems were caused by various factors, including the power and resistance of the subsidiary's CEO, who felt that the directives interfered with his entrepreneurial freedom.

On this basis, we extend our line of argumentation to propose that the relationships between goal conflicts and the HQ's control choices are contingent on the power of the subsidiary CEO (i.e., the second principal). As subsidiary subunits report to both the HQ and their subsidiary's CEO, they have two principals who may have conflicting interests. The possibility that agents have principals with different interests has also been a topic of increasing interest in owner-manager contexts (e.g., Hoskisson et al., 2002). Indeed, principals from the HQ may have different interests than principals from subsidiaries. When subsidiaries' interests conflict with those of the HQ (Mudambi & Navarra, 2004; Nohria & Ghoshal, 1994), representatives of subsidiaries and the HQ will mirror those conflicts. In particular, subsidiary CEOs,

as the top managers in subsidiaries, might have divergent interests given their individual self-interests (Chang & Taylor, 1999). Building on this assertion, powerful subsidiary CEOs are likely to block the HQ's efforts to control agents through behavioral controls.

Power and influence have both direct and more subtle effects on actors and their relations within organizations (Ambos & Schlegelmilch, 2007; Andersson et al., 2007; Yildiz, 2014). Thus, in dual-principal settings, the presence of a powerful subsidiary CEO may be sufficient to alter the otherwise prevailing relationship. In other words, the mere awareness that a subsidiary CEO commands power, as reflected in or stemming from an acquired status, control of resources, or knowledge, may be sufficient to make HQ managers shy away from behavioral controls. In other contexts, this effect has been called contrived deterrence (Caves & Porter, 1977).

Subsidiary CEOs can also use their relations and formal authority within the subsidiary organization to more actively take a stand against unwanted HQ attempts to direct the behavior of subsidiary agents. By letting subsidiary agents know that they disapprove of HQ attempts at control or by asking subsidiary managers to re-prioritize their work, powerful subsidiary CEOs make direct behavioral controls less effective.

In summary, even in situations in which the HQ is able to reduce goal conflicts through socialization, powerful subsidiary CEOs can use their influence to block HQs' attempts to control agents' behaviors. As a result, we expect HQ managers to de-emphasize behavioral controls and to instead rely on output controls. In other words, we expect the baseline HQ-subsidary relation to be contingent upon the power of the subsidiary CEO, such that the baseline relation is stronger (or might only exist) when the relation involves a subsidiary CEO with low levels of power. Fig. 1 provides a graphical representation of the extended model.

Based on this line of argumentation, we submit the following formal hypotheses:

H2a. The relationship between HQ-subsidary goal conflicts and behavioral controls is moderated by the subsidiary CEO's influence on corporate decisions, such that this relationship is more pronounced when the subsidiary CEO has a low level of influence.

H2b. The indirect effect of socialization on behavioral controls via goal conflicts between the HQ and subsidiary is moderated by the subsidiary CEO's influence on corporate decisions.

4. Methods

In order to test our hypotheses, we needed to capture the nested agency relations inside an MNC, and measure goal conflicts between the first principal and the agent. To do so, we focused on the dyads between HQ units and subsidiary units as the unit of analysis. A focus on this unit of analysis has two fundamental advantages. First, it allows us to examine HQ controls that target specific action groups rather than overly aggregated groups, as would be the case when viewing the entire subsidiary as the agent. Our study's design thereby incorporates the

⁴ We thank one of the anonymous reviewers for helping us to strengthen this argument.

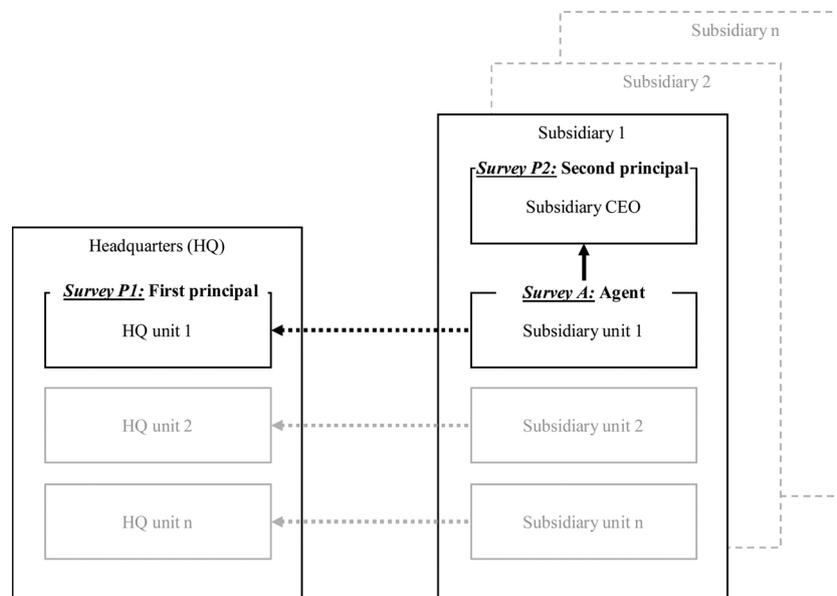


Fig. 2. Study design.

Note: Subsidiary units reported directly to HQ units (dotted reporting lines) and to their respective subsidiary CEOs (solid reporting lines). Therefore, subsidiary units are agents to HQ units (first principal) and to the subsidiary CEO (second principal).

critique found in recent work (da Silva Lopes, Casson, & Jones, *in press*; Kunisch, Menz, & Birkinshaw, 2019; Nell, Kappen, & Laamanen, 2017) and in seminal studies (Nohria & Ghoshal, 1994) that treating HQs and subsidiaries as monolithic, homogenous entities is a reductive fallacy in HQ-subsidary research, as this approach does not account for the realities of these relations. Second, it gives us the opportunity to study a clear multiple-principal situation. Our preliminary interviews confirmed that shifting the level of analysis to the relations between HQ units and subsidiary units was more appropriate.

It is important to note that the subsidiary units reported directly to HQ units (dotted reporting line) and to their respective subsidiary CEOs (solid reporting line).⁵ Therefore, subsidiary units are agents to HQ units (first principal) and to the subsidiary CEO (second principal). In line with this logic, we considered three types of respondents—subsidiary units (agents), HQ units (first principals), and subsidiary CEOs (second principals)—through three parallel surveys, as illustrated in Fig. 2.

4.1. Sample and data collection

We chose a large European insurance MNC (revenue of USD 7.7bn in 2012) as our empirical setting. At the time of our data collection, the firm had six subsidiaries in six European countries (Austria, France, Germany, Italy, Spain, and Switzerland). In line with our argumentation in the development of our hypotheses, the level of analysis in our study is the dyadic relations between HQ units and subsidiary subunits. In the focal firm, these dyads were as follows. The firm's HQ was organized into 24 units along six functional areas (Strategy & Operations, Finance, Investments, Strategic Initiatives, Group Topics, and HR International). Typically, six subsidiary subunits reported to each HQ unit. However, some HQ units did not have a counterpart in one or two of subsidiaries. Hence, on average, five subunits ($SD = 1$; range of four to six) reported to each HQ unit.

As indicated above, we collected data from three groups of respondents—HQ unit managers (first principals), subsidiary subunit managers (agents), and subsidiary CEOs (second principals)—through

⁵ We thank one of the anonymous reviewers for suggesting that we explicitly refer to the reporting lines.

three parallel online surveys, which we labeled survey P1, survey P2, and survey A, respectively. Surveys P1 and A were used to capture the dyadic relations.

Data collection took place in April and May 2013. Access to the company was negotiated through the corporate CEO, who acted as the internal sponsor of our research. Initial interviews with four managers in various positions helped ensure that the survey design and the questionnaires matched the given company. To help encourage a high response rate, the corporate CEO announced the survey internally. We reminded non-respondents of the survey in two waves, first via email and then via a phone call. To avoid social-desirability bias, all participants were assured that their responses would remain confidential.

We received matched responses from subsidiary subunit managers and HQ unit managers in all but three cases (97.8%), leaving us with a 131 dyadic relations between HQ units and subsidiary subunits ($N = 131$). On average, each subsidiary had 21.83 of these subunits ($SD = 3.43$) (Switzerland: 24, Italy: 24, Germany: 23, Spain: 23, Austria: 22, France: 15). For 24 subsidiary subunits, we identified at least two respondents. The answers of multiple respondents from the same subsidiary subunit were averaged before they were entered into the regressions.⁶ Each HQ units had, on average, dyadic relations with 5.63 subunits per subsidiary ($SD = 7.99$) (Strategy & Operations: $M = 6.83$, $SD = 0.41$, $mi. = 6$, $max = 7$; Finance: $M = 6.67$, $SD = 0.82$, $min = 6$, $max = 7$; Investments: $M = 3.33$, $SD = 1.21$, $min = 1$, $max = 4$; Strategic Initiatives: $M = 1.67$, $SD = 0.52$, $min = 1$, $max = 2$; Group Topics: $M = 1.67$, $SD = 0.52$, $min = 1$, $max = 2$; HR International: $M = 1.67$, $SD = 0.53$, $min = 1$, $max = 2$).

In addition, we received answers from all subsidiary CEOs (100%). All of the subsidiary CEOs had long tenures in the company and, given the firm's governance structure, had been appointed with little HQ involvement. This reduces potential endogeneity concerns (i.e., subsidiary CEOs acting as agents of HQ's control strategy themselves).

In addition to the surveys, we gathered data on unit and relationship characteristics from company documentation. Our reliance on multiple data sources (i.e., multiple surveys and secondary sources) helped reduce the potential for common-method bias.

⁶ For robustness purposes, we also ran our analyses using only the responses from the first respondents. The results were similar.

4.2. Variables and measurement

The measures we used largely built on existing scales.

4.2.1. Behavioral control

Similar to Cardinal (2001), we asked HQ unit managers to indicate the degree of formalization they felt was appropriate for controlling the local agent using a four-item, seven-point Likert scale (Cronbach's alpha = 0.86, average variance extracted (AVE): 0.31). As the first principals, HQ unit managers decide on the extent to which behavioral control should be employed. This helped ensure objectivity, as HQ unit managers are better able to assess the level of behavioral control across all subsidiary units. As explained in footnote 2, we followed scholarly practice (Yu et al., 2006) and focused on the degree of behavioral control, building on the notion that any change in the control mix will also lead to a change in behavioral control.

4.2.2. Socialization

We used the measure developed by Nell and Ambos (2013), which was originally introduced by Nohria and Ghoshal (1994). We asked HQ unit managers (first principals) about socialization because they decide whether to employ socialization and they can compare degrees of socialization in subunits across different subsidiaries. The Cronbach's alpha for our three-item, seven-point Likert scale was 0.73. The AVE was 0.29.

4.2.3. Goal conflict

Capturing goal conflicts in HQ-subsidiary relations is a key challenge. There are two interrelated considerations: how to capture goal conflicts and what to capture. In line with previous literature (e.g., Luo, Shenkar, & Nyaw, 2001), rather than focus on only one party, we considered both parties and captured goal conflicts as a difference score. While focusing on one party (e.g., subsidiary units) may have allowed us to more directly capture that party's goals, a conflict involves two parties. The decision to consider both parties required us to focus on a common source of conflict between the two parties.⁷

While there are various sources of conflict between an MNC's HQ and its subsidiaries, probably the most salient manifestation of conflict relates to the level of autonomy granted to subsidiaries (e.g., Asakawa, 2001b; Chini, Ambos, & Wehle, 2005; Mudambi & Navarra, 2004; Nohria & Ghoshal, 1994; Schulte Steinberg & Kunisch, 2016). On the one hand, subsidiaries typically desire autonomy because the HQ cannot precisely understand local actions or the rationales behind them (Kim, Prescott, & Kim, 2005). Autonomy creates opportunities for subsidiaries to pursue their own interests. On the other hand, the HQ typically tries to limit its subsidiaries' autonomy. Although a certain degree of subsidiary autonomy is desirable because it helps the MNC leverage local knowledge and other resources on a firm-wide basis, thereby generating HQ-optimal outcomes (Birkinshaw & Morrison, 1995; Jarillo & Martínez, 1990; Kawai & Strange, 2014; Nohria & Ghoshal, 1994), too much autonomy provides subsidiaries with too many opportunities to shirk, which could lead to suboptimal firm-level outcomes. Based on this logic, we focused on autonomy to capture goal conflicts between HQs and subsidiaries.

We used an established autonomy measure to capture potential goal conflicts between HQs and subsidiaries (Cardinal, 2001). We asked both HQ unit managers and subsidiary unit managers to assess the degree of autonomy of the focal subsidiary unit using an eight-item, seven-point

⁷ As one of the anonymous reviewers pointed out, it is noteworthy that our approach focused on ways of achieving goals rather than on the goals themselves. While our approach is in line with the approach taken in related research on international joint ventures (e.g., Luo et al., 2001), future research may focus on the goals themselves. Moreover, while we focus on one important dimension, future research may advance our approach by incorporating multiple dimensions.

Likert scale. The scales were highly reliable for both sets of responses (Cronbach's alphas of 0.97 and 0.98, respectively). To obtain the goal-conflict score, we calculated the absolute difference between the HQ's values and the subsidiary's values (i.e., positive values).⁸ Larger values indicate diverging opinions on the optimal level of decision-making discretion to be granted to the subsidiary units and imply a difference in the desired degree of autonomy. The AVE value of this combined scale was 0.35. As the distribution was skewed, we used the square roots to adjust for non-normality.

4.2.4. Influence of the second principal

Influence has traditionally been used as the measure of choice when assessing subunit power (Emerson, 1962). To measure the influence of the subsidiaries' CEOs, we used a nine-item, seven-point Likert scale similar to those found in Hinings, Hickson, Pennings, and Schneck (1974) and Tannenbaum (1968). We asked the CEO of each subsidiary to assess his or her own influence on corporate decisions (Cronbach's alpha = 0.96; AVE: 0.72). Upon inspection, we found the variable to be extremely bi-polar. Consequently, we performed a mean split and entered the second principal's influence as 1 for high and 0 for low.

4.2.5. Control variables

To safeguard against possible spurious relationships among the dependent and independent variables, we controlled for various factors. First, to account for effects stemming from relative importance inside the MNC, we included *subsidiary subunit size* (i.e., the number of employees working in the subsidiary's subunit) because size is linked to relative importance and independence (Bouquet & Birkinshaw, 2008; Nell & Ambos, 2013). As the distribution was skewed, we used the natural logarithm to adjust for non-normality.

Second, the length of agency relations may influence the principal-agent relation, as longer-term relations may reduce information asymmetries and, thereby, foster behavioral controls (Eisenhardt, 1989; Lambert, 1983). This is in line with prior research on corporate HQs, which suggests that the characteristics of HQ units change over time (e.g., Kunisch et al., 2014). Thus, we controlled for the subsidiaries' *subunit age*, which we measured as the number of years that had passed since the unit was established. We used the natural logarithm to adjust for non-normality.

Third, agency theory (Eisenhardt, 1989) and the control literature (e.g., Kreutzer, Cardinal, Walter, & Lechner, 2016) suggest that task characteristics can influence control choices. Specifically, more routine, highly programmable tasks are associated with more behavioral controls (Eisenhardt, 1989). Therefore, we controlled for the level of *task programmability*. To capture task programmability, we used a measure common in HQ-subsidiary research that approximates the degree to which the HQ subunit is engaged in entrepreneurial or administrative tasks (Collis, Young, & Goold, 2012; Chandler, 1991; Collis, Young, & Goold, 2007; Goold & Campbell, 1987). To do so, we asked respondents to indicate the degree of engagement in activities aimed at creating parenting value, and in tasks aimed at loss minimization and compliance (on a scale from 0% to 100%). The scale was reversed in order to reflect task programmability.⁹

Fourth, the risk attitudes of agents and principals matter in control

⁸ Based on a suggestion made by one of the anonymous reviewers, in a robustness check, we considered the directionality of the goal conflicts between HQ units and subsidiary subunits. Notably, although the results were even stronger when subsidiary subunits wanted more autonomy than the HQ units were granting (see Appendix C), the overall findings were consistent with our initial analyses. While this approach is in line with Eisenhardt (1989) as well as our theory, the directionality of goal conflicts remains an interesting avenue for future research.

⁹ While the distinction between entrepreneurial and administrative tasks is probably the most established notion in the literature, in a robustness check, we used alternative measures to account for task programmability. For example, we distinguished between front-end-focused and back-end-focused tasks. These robustness checks led to similar results.

Table 1
Means, standard deviations, and correlations.

Variables	Mean	S.D.	Min	Max	1	2	3	4	5	6	7	8	9
1 Behavioral control	4.10	1.50	1.00	6.75	1.00								
2 Subsidiary unit age	1.75	0.91	.00	3.09	.12	1.00							
3 Subsidiary unit size	2.31	1.71	.00	6.91	-.02	-.28**	1.00						
4 Task programmability	.72	.22	.22	1.00	-.17†	.20*	-.09	1.00					
5 Agent's risk aversion	4.62	1.07	1.75	7.00	.15†	.14	.10	.00	1.00				
6 Principal's risk aversion	4.27	1.24	.00	7.00	.14	.35***	-.06	.25**	.11	1.00			
7 Second principal's influence	.53	.50	.00	1.00	.12	.02	-.02	.01	.11	.02	1.00		
8 Goal conflict	1.24	.64	.00	2.42	-.12	.02	.15†	-.19*	.20*	-.13	.02	1.00	
9 Socialization	4.21	1.33	1.00	7.00	.38***	-.28**	.02	.19*	.11	.21*	-.01	.22*	1.00

N = 131; † p < .10, * p < .05, ** p < .01, *** p < .001 (two-tailed).

choices (Eisenhardt, 1989). As we investigated units rather than individuals within the HQ and subsidiaries, we approximated risk attitudes using the value added by the HQ unit based on the following reasoning. Prior HQ research suggests that HQs perform two basic roles: loss prevention and the addition of value (Chandler, 1991; Foss, 1997). While the former is mandatory, the latter is more discretionary. Moreover, various studies have demonstrated that adding value is a risky endeavor (Menz et al., 2015). On this basis, we reasoned that as HQ units' (i.e., the principal's) risk aversion decreases, they want to add more value, while as subsidiary units' (i.e., the agent's) risk aversion increases, they become less opposed to HQ's efforts to add more value. We used the same four-item, seven-point Likert scale (Nell & Ambos, 2013) for units in the HQ (Cronbach's alpha = 0.66) and subunits in the subsidiaries (Cronbach's alpha = 0.71).

4.3. Validity and reliability

We took various steps to ensure validity and reliability. To ensure construct differentiation (discriminant validity) among the four latent variables in our research model (i.e., behavioral control, socialization, goal conflict, and influence of the second principal), we conducted confirmatory factor analyses using Amos 23. The detailed results are reported in Appendix B. The results suggest that the four latent constructs are empirically distinct.

We conducted several robustness checks. First, we estimated our models with additional controls. For example, we considered the possibility that the performance of subsidiary subunits may influence HQ's control choice (e.g., better-performing units may be granted more autonomy). Given the heterogeneity in subsidiary subunits, it was not feasible to use an objective measure. We therefore utilized a measure developed by Kostova and Roth (2002), which focused on the degree to which units implemented the processes mandated by HQ. The results remained the same. Third, we repeated our analysis after removing insignificant control variables and using simple OLS regression. Neither of these analyses changed our conclusions concerning our hypotheses. Other robustness checks are reported in the footnotes.

5. Analysis and results

Table 1 provides the descriptive statistics and the correlation matrix. All range values and variances in our variables were sufficient for the purposes of our analyses. We found no absolute correlations higher than 0.38, which indicates that our data do not suffer from problems with multicollinearity.

Given the nested nature of the data, we tested our hypotheses using multilevel modeling with maximum-likelihood estimation. Multilevel analyses were conducted using Stata 14. Following our theoretical multilevel model, we set random intercepts at the subsidiary subunit (level 1) and subsidiary levels (level 2a). The intra-class correlations at level 2a were relatively low (goal conflict: 2.98e–26; behavioral control: 1.09e–21), suggesting that differences between subsidiaries

account for much less than 1% of the overall variance in goal conflict and behavioral control. Despite these relatively low levels of explained variance, we retained the random intercept at level 2a to keep our analytical approach closely aligned with our theoretically proposed multilevel model.

Moreover, we added another random intercept at the HQ unit level (i.e., level 2b) because the answers of the HQ unit managers were nested at this level. The intra-class correlations at the HQ unit level (level 2b) were 5.95e–19 for goal conflict and 0.09 for behavioral control, indicating that differences among the HQ's units account for much less than 1% of the overall variance in goal conflict and 9% of the overall variance in behavioral control. The HQ units were not nested within subsidiaries and subsidiaries were not nested within the HQ units. Hence, we applied a random intercept model with crossed random effects in which random intercepts for the subsidiary level (level 2a) and the HQ unit level (level 2b) were independent of each other.

To ease interpretation of the coefficients and to reduce potential problems of multicollinearity (Aiken & West, 1991), all variables were grand mean centered. To uncover issues of multicollinearity, we examined the variance inflation factors (VIF) of the independent variables. All VIF values were less than 1.7, which is well below the cutoff of 10 and indicates that multicollinearity is not a serious problem in our analysis (Aiken & West, 1991).

5.1. Baseline hypothesis: the mediating role of goal conflict

Hypothesis 1 predicts that goal conflict mediates the relationship between socialization and behavioral control. To test this hypothesis, we examined the direct links between (1) socialization and behavioral control, (2) socialization and goal conflict, and (3) goal conflict and behavioral control. First, to test the link between socialization and behavioral control, we entered the control variables into a regression of behavioral control (Table 2, Model 1), followed by socialization (Model 2). As shown in Table 2 (Model 2), the coefficient of socialization ($\gamma = 0.62, SE = .10, p < .001$) is significant. Second, to test the link between socialization and goal conflict, we entered the control variables into a regression of goal conflict (Model 5), followed by socialization (Model 6). As shown in Table 2 (Model 6), the coefficient of socialization ($\gamma = -0.09, SE = .04, p < .05$) is significant. Third, to test the link between goal conflict and behavioral control, we entered the control variables into a regression of behavioral control (Model 1), followed by goal conflict (Model 3). As shown in Table 2 (Model 3), the coefficient of goal conflict ($\gamma = -.45, SE = .20, p < .05$) is also significant. Finally, when entering both socialization and goal conflict into a regression on behavioral control (Model 4), the coefficient of socialization ($\gamma = -.45, SE = .20, p < .05$) is significant but the coefficient of goal conflict becomes insignificant ($\gamma = -.23, SE = .18, ns$), indicating that goal conflict does not mediate the relationship between socialization and behavioral control.

To explore this finding, we assessed the indirect effect between

Table 2
Multilevel regression results for relationships among socialization, goal conflict, and behavioral control.

Variable	DV: Behavioral control					DV: Goal conflict		
	Null model	Model 1	Model 2	Model 3	Model 4	Null model	Model 5	Model 6
<i>Level 1: Subunit</i>								
Intercept	4.20*** (.23)	4.10*** (.12)	4.12*** (.14)	4.65*** (.28)	4.40*** (.26)	1.24*** (.06)	1.24*** (.05)	1.24*** (.05)
Subunit age		.14 (.16)	.59*** (.16)	.18 (.15)	.58*** (.15)		.09 (.06)	.02 (.07)
Subunit size		-.02 (.08)	.02 (.07)	.00 (.08)	.03 (.07)		.05 (.03)	.05 (.03)
Task programmability		-1.54** (.59)	-1.97*** (.57)	-1.75** (.59)	-2.16*** (.55)		-.48 (.25)	-.36 (.25)
Principal's risk aversion		.17 (.12)	.06 (.10)	.22 (.12)	.09 (.11)		.11* (.05)	.13* (.05)
Agent's risk aversion		.18 (.11)	-.05 (.10)	.15 (.11)	-.05 (.10)		-.07 (.05)	-.04 (.05)
Socialization			0.62*** (.10)		.59*** (.10)			-.09* (.04)
Goal conflict				-.45* (.20)	-.23 (.18)			
Mediation effect ^a					.03 (.03)			
<i>Variance estimates</i>								
Level 1 residual variance (σ ²)	2.04	2.03	1.53	1.96	1.28	.40	.36	.34
Level 2a residual intercept variance (τa10)	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Level 2b residual intercept variance (τb10)	.20	.0000	.03	.0000	.14	.0000	.0000	.0000
Pseudo-R ^{2b}		.01	.26	.04	.26		.02	.03
Model deviance	471.62	464.36	428.53	459.73	426.97	251.84	236.33	232.03

Note: Entries corresponding to the predictor variables are estimations of the random effects, gamma (γ); numbers in parentheses represent standard errors.

N = 131; *p < .05, **p < .01, ***p < .001 (two-sided).

^a Preacher & Hayes. Based on 10,000 bootstrap resamples.

^b Pseudo-R² values were calculated on the basis of the formula in Kreft and De Leeuw (1998). Model deviance, which is an indicator of model fit, is based on 2 × log likelihood. As per the smaller-is-better criterion, a smaller value indicates a better overall fit (Burnham & Anderson, 2002).

Table 3
Multilevel regression results for the moderating effect of the second principal on the relationship between goal conflict and behavioral control.

Variable	DV: Behavioral control			
	Null model	Model 7	Model 8	Model 9
<i>Level 1: Subunit</i>				
Intercept	4.20*** (.23)	4.12*** (.14)	4.39*** (.25)	4.46*** (.25)
Subsidiary's subunit age		.59*** (.16)	.59*** (.15)	.51*** (.15)
Subsidiary's subunit size		.02 (.07)	.03 (.07)	.02 (.07)
Task programmability		-1.97*** (.57)	-2.20*** (.55)	-2.36*** (.52)
Principal's risk aversion		.06 (.10)	.07 (.11)	.07 (.10)
Agent's risk aversion		-.05 (.10)	-.05 (.10)	-.01 (.10)
Socialization		.62*** (.10)	.59*** (.10)	.57*** (.09)
Goal conflict			-.23 (.18)	-.30 (.18)
<i>Level 2a: Subsidiary</i>				
Second principal's influence			.18 (.11)	.18 (.11)
<i>Cross-level interaction</i>				
Goal conflict × second principal's influence				.39* (.17)
<i>Variance estimates</i>				
Level 1 residual variance (σ ²)	2.04	1.52	1.22	1.20
Level 2a residual intercept variance (τa10)	.0000	.0000	.0000	.0000
Level 2b residual intercept variance (τb10)	.20	.03	.13	.09
Pseudo-R ^{2a}		.26	.26	.26
Model deviance	471.62	428.53	424.33	419.39

Note: Entries corresponding to the predictor variables are estimations of the random effects, gamma (γ); numbers in parentheses represent standard errors.

N = 131; *p < .05, **p < .01, ***p < .001 (two-sided).

^a Pseudo-R² values were calculated on the basis of the formula in Kreft and De Leeuw (1998). Model deviance, which is an indicator of model fit, is based on 2 × log likelihood. As per the smaller-is-better criterion, a smaller value indicates a better overall fit (Burnham & Anderson, 2002).

socialization and behavioral control through goal conflict. We used the PROCESS program (Hayes, 2012), which provided 95% bias-corrected confidence intervals (CIs) with 10,000 bootstrapping re-samples of this indirect effect. We tested the indirect effect using SPSS 24. An indirect effect ($a \times b$) is significant at the 0.05 level when the 95% bias-corrected CIs exclude zero. Bootstrapping approaches are superior to the Sobel test for assessing an indirect effect because they are non-parametric and, therefore, do not rely on the assumption of normality, which is generally violated when testing indirect effects (Preacher & Hayes, 2008). Table 2 (Model 4) shows the results of the bootstrapped indirect effect between socialization and behavioral control through goal conflict (i.e., the mediation effect; Preacher & Hayes, 2008). The results are not significant ($a \times b = .03$, CI $[-0.01, .11]$). Hence, Hypothesis 1 is not supported.

In line with our second set of hypotheses, we then focused on the role of the subsidiaries' internal agency relations as an important boundary condition of the baseline hypothesis (i.e., the baseline hypothesis only works if the second principal does not interfere in the HQ-subsubsidiary agency relations). To do so, we analyzed the moderation effects to examine whether an indirect effect is contingent upon the second principal's characteristics.

5.2. The moderating role of the second principal

Hypothesis 2a predicts that the power of the second principal (i.e., the subsidiary's CEO) moderates the relationship between goal conflict and behavioral control, such that the negative relationship is more pronounced when the second principal is characterized by low levels of power. To test this hypothesis, we first entered the control variables into a regression of behavioral control (Table 3, Model 7), followed by goal conflict and the second principal's influence (Model 8), as well as the interaction between goal conflict and the second principal's influence (Model 9). As shown in Table 3 (Model 9), the coefficient for the interaction between goal conflict and the influence of the second principal is significant ($\gamma = .38$, $SE = 0.18$, $p < 0.05$).

Fig. 3 illustrates the moderating effect of the second principal's influence on the relationship between HQ-subsubsidiary goal conflict and behavioral control. We used a procedure recommended by Aiken and West (1991) to plot the relationship between goal conflict and behavioral control under the conditions of low and high influence of the second principal, and then tested the significance of the simple slopes. These simple-slope analyses revealed that the slope is negative and significant when the second principal's influence is low ($\gamma = -.68$, $SE = .27$, $p < 0.05$), while it is not significant when the second principal's influence is high ($\gamma = .08$, $SE = .23$, ns). Thus, Hypothesis 2a

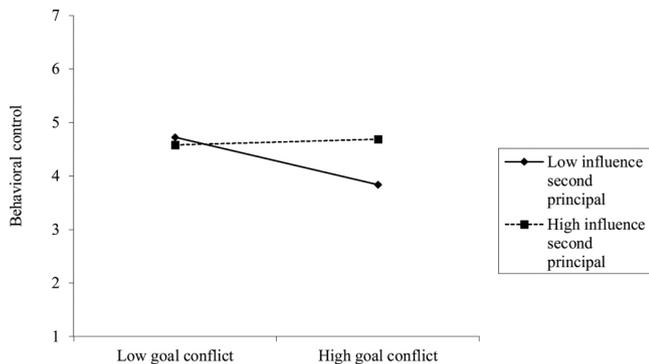


Fig. 3. Moderating effect of second principal on the relationship between goal conflict and behavioral control.

Table 4

Bootstrapping results for test of conditional indirect effects on behavioral control.

Independent variable	Moderator	Moderator value	Conditional indirect effect	SE	95% CI	
					Lower	Upper
Socialization	Influence of the second principal	Low	.07*	.04	.01	.18
		High	-.01	.03	-.07	.05

Note. Results are based on 10,000 bootstrap resamples. Controlled for subsidiary unit age (log), subsidiary unit size (log), task programmability, agent risk aversion, and principal risk aversion.

$p < .05$ (two-tailed).

is supported.

Hypothesis 2b predicts that the second principal's influence moderates the indirect effect of socialization on behavioral control through goal conflict, such that the positive relationship is more pronounced when the second principal has low levels of influence. To test this hypothesis, we applied the bootstrapping procedure described above (Hayes, 2012). Table 4 presents the results of the tests of the conditional indirect effects. When the influence of the second principal is low, socialization has a positive, indirect effect on behavioral control through goal conflict ($a \times b = .07$, CI $[.01, .18]$). In contrast, when the influence of the second principal is high, the indirect effect through goal conflict is not significant ($a \times b = -.01$, CI $[-.07, .05]$). Thus, Hypothesis 2b is supported.

6. Discussion

This study set out to advance our understanding of agency relations between HQs and subsidiaries in MNCs, which are complicated by the divergent goals of principals and agents, and by the multi-tiered, nested character of these relations (e.g., Hoenen & Kostova, 2014; Kostova et al., 2016; Schulte Steinberg & Kunisch, 2016). More specifically, our arguments and empirical findings suggest that agency theory's predictive ability and, thus, its usefulness can be improved by considering the nestedness of agency relations in the MNC and the potential effects of the presence of second principals. These insights make important contributions to the extant literature. In the following, we discuss these contributions and point out several limitations, which also offer potential for future research.

6.1. Theoretical contributions

Our findings advance the agency perspective on HQ-subsubsidiary relations. Primarily, our paper reveals that subsidiary-internal agency relations are an important boundary condition in the agency relations between HQs and subsidiaries. Kostova et al. (2018) enhance the classical agency perspective by allowing for various levels of self-interest and rationality, which lead to different manifestations of the agency problem. In another recent study, Conroy et al. (2017) shed light on the "dual agency" role of regional HQs in HQ-subsubsidiary relations. Our study complements these efforts by accounting for subsidiary-internal agency relations, and by shedding light on the roles of subsidiary CEOs as powerful actors in the subsidiary and as second principals. More specifically, our study reveals that the link between HQ-subsubsidiary goal conflict and the HQ's control choice is contingent

upon the influence of the subsidiary CEO (i.e., the second principal) on the HQ's decisions. In other words, the second principal can block the indirect effect of socialization on the HQ's control choice. Thereby, our study takes an important step in opening the “black box” of HQ-sub-sidiary relations and, as such, illustrates the need for additional studies in this area.

The incorporation of second principals represents an important advancement of classical agency predictions (Hoenen & Kostova, 2014; Schulte Steinberg & Kunisch, 2016). In modeling nested (multi-tier) relationships in which individual agents report to a subsidiary head (the second principal) as well as the HQ (the first principal), our study highlights the need to think beyond dyadic-level control choices. These findings have interesting parallels to research within the governance-related branch of agency theory (Scharfstein & Stein, 2000), which shows that rent-seeking behavior on the part of division managers can result in the dysfunctional allocation of capital. Moreover, extant studies have focused on multiple agency concepts in investor-manager contexts (Arthurs, Hoskisson, Busenitz, & Johnson, 2008; Hoskisson et al., 2002). In contrast, we demonstrate the importance of considering nested relationships inside the MNC in order to minimize conflicts as well as design effective relationships between central and subsidiary units (Hoenen & Kostova, 2014). Overall, our findings imply that when socialization is used with the intention of reducing goal conflict as a determinant of other controls, organizations should be aware of other organizational actors and their influence. These arguments are in line with the organizational-power perspective (Astley & Sachdeva, 1984; Astley & Zajac, 1990; Hickson, Hinings, Lee, Schneck, & Pennings, 1971). If powerful second principals use their influence, behavioral controls become difficult for the first principal to implement.

Finally, our study makes an empirical contribution related to one of the key organizational assumptions found in the agency perspective and the HQ-sub-sidiary literature in general. Scholars have repeatedly relied on the assumption that goal conflicts exist between the agent and the principal (Kostova et al., 2016), but explicit empirical testing of this assumption has thus far been restricted to explorative and qualitative studies (Schotter & Beamish, 2011; Wolf & Egelhoff, 2013). Despite recent calls to place more emphasis on conflicts in HQ-sub-sidiary relations (Schulte Steinberg & Kunisch, 2016; Wolf & Egelhoff, 2013), capturing goal conflicts has been difficult due to the need for matched samples of the actors involved in each conflict. This study, which is focused on HQ-sub-sidiary relations, is among the first to empirically test the classical agency predictions related to goal conflicts between principals and agents. While we considered autonomy as a key source of conflict, future studies could explore other sources of conflict in HQ-sub-sidiary relations. Our “matched samples” study design can serve as an example of how to conduct these types of studies.

In addition to the aforementioned contributions related to the agency perspective on HQ-sub-sidiary relations, our findings regarding socialization complement prior research on HQ-sub-sidiary relations in general (Kostova et al., 2016; Menz et al., 2015). For example, as Andersson et al. (2007) suggest when conceptualizing the MNC as a federative organization, power is not only about resistance to controls but also about strategic influence. Our study extends this line of argumentation. In a sense, the influence of the second principal—when exploited for that agent's purposes (i.e., in the interests of the subsidiary unit and contrary to the interests of the HQ unit)—leads to what Mudambi and Navarra (2004) refer to as “agent bargaining power.”

Our study also sheds light on the role of socialization in agency

theory and beyond. Our analysis reveals a strong, direct effect of socialization on behavioral control. In line with classical agency premises (see Eisenhardt, 1989), we hypothesized that socialization helps reduce goal conflicts between principals and agents. While our empirical findings fit this line of reasoning, the indirect effect of socialization on the HQ's control choice only seems to work when the second principal has little influence. This finding supports recent calls for a broadened agency view that considers notions of power of different actors (Hoenen & Kostova, 2014; Schulte Steinberg & Kunisch, 2016).

In addition, the presence of a partial mediation suggests that there might be another way in which socialization interacts with behavioral control strategies. In our view, the most likely explanation for this effect is that the HQ reduces information asymmetries when it invests in socialization. For example, the alignment of the long-term vision between the HQ and its subsidiaries may lead to increased knowledge sharing through an enhanced willingness to exchange complementary knowledge, thereby resulting in better information flows (Björkman et al., 2004). In other words, socialization can be employed to build an *informal social information system* that provides the HQ with access to knowledge that helps alleviate information asymmetries. Other research in the knowledge-based stream also points to the knowledge-sharing benefits of socialization (Ambos & Reitsperger, 2004) and highlights the fact that tensions hinder such knowledge sharing (2001b, Asakawa, 2001a; Chini et al., 2005). If socialization enhances information flows and reduces tensions, as our findings suggest, then it serves as a link between the arguments found in these interrelated streams. While our study focuses on goal conflict, future studies may explicitly test this line of thinking in relation to information asymmetries.

On a broader level, our insights contribute to the control literature. An important theme in the extant literature is whether and how different types of controls complement and interact with each other (e.g., Aulakh & Gencturk, 2000; Cardinal, 2001; Cardinal et al., 2017, 2004; Cardinal, Sitkin, & Long, 2010; Gomez & Sanchez, 2005; Kreutzer et al., 2015; Schepers et al., 2012; Sitkin et al., 2010; Tiwana, 2010). Our study complements such research. Specifically, our empirical findings lend support to the notion that socialization is a control mechanism of a different nature than behavioral and output controls, as socialization is a determinant of behavioral and output controls rather than a control strategy in its own right (Brenner & Ambos, 2013). Although Brenner and Ambos (2013) adopt an institutional lens to explain the sequential, intermediary, and indirect effects of socialization, our agency predictions produce a similar outcome in that we show that socialization leads to an increase in behavioral controls. Thus, the question of whether socialization primarily adds legitimacy as argued by Brenner and Ambos (2013), or reduces information asymmetries and goal conflicts could be an interesting avenue for future research.

Similarly, our research helps bridge the gap between the agency literature and the literature on organizational controls—two streams that are related but not integrated. In this regard, our study offers an explanation for the existence of multiple control strategies. It seems reasonable to expect socialization, behavioral, and output controls to exist simultaneously within HQ-sub-sidiary relations. This is because control strategies are idiosyncratic to specific internal unit dyads and because socialization is a determinant of behavioral control. This fits other recent control research that points to the persistence of central controls (Ambos & Schlegelmilch, 2007), and research that stresses the existence and effectiveness of control configurations (Cardinal, Sitkin,

& Long, 2003; Kreutzer et al., 2015). The contribution of agency theory and our paper in this respect lies in showing that socialization can be conceptualized as an efficient way to enable central or behavioral controls within the MNC.

6.2. Limitations and future research

As with all studies, this paper has several limitations, which serve to highlight promising avenues for future research. First, we utilized a single-firm design. While this is appropriate for studying the complete configuration of a firm, including multiple and nested agency relationships that are otherwise hard to capture, it limits the generalizability of our findings. For example, a focus on different firms in the same industry or firms in different industries might lead to different results. Also, as we have only studied one firm, we cannot make inferences about potential firm-level effects, such as the roles that different organizational cultures, resource-allocation strategies, and diversification levels may play in the socialization process. We therefore encourage scholars to replicate our study in different industries and, if possible, to explore potential firm and industry effects using large samples of firms. For instance, none of the subsidiary CEOs in our sample were expatriates (i.e., none of them were delegated from the HQ). Therefore, building on the work of Harzing (1999) and others, it might be interesting to test whether the presence of expatriates as subsidiary CEOs changes the observed relationships. Similar, we only tested our hypotheses on a sample of wholly owned subsidiaries. Lyles and Reger (1993) suggest that the means to influence parents are even more manifold in international joint ventures (IJVs), which makes the IJV context a particular interesting setting for extending our line of research.

Second, our overall assumption was that the HQ is benign and acts in the company's best interests. This assumption may not always hold true, as the HQ may engage in empire building (e.g., Mulherin & Boone, 2000; Xuan, 2009), over-investments (e.g., Scharfstein & Stein, 2000), or myopic behavior (e.g., Stein, 1989). While our pre-interviews with managers on all levels provided reassurance that the benign HQ assumption held in the focal firm, additional research may explicitly take this assumption into account. Relatedly, as our model is based on the assumption that firms actually maintain a "working" HQ (see Kostova et al., 2016; Menz et al., 2015), our findings may not apply to all firms, such as "pure financial holding" firms or other firms with very small or even virtual HQs (e.g., Birkinshaw, Ambos, & Bouquet, 2017). Future research may explore agency relations in such settings.

Third, although we extend the notion of simple HQ-subsidary relations by considering the role of a second principal within the subsidiary, more work can be done to account for complexities in the MNC. For example, agents, such as subsidiary units, may have various principals, such as a regional or divisional HQs in addition to the corporate HQ and a local hierarchical superior. As we find that the presence of a second principal has significant effects, future research centered on multiple principals in HQ-subsidary relations should investigate advanced conceptualizations. An equally valid perspective may treat the subsidiary CEO (or second principal) as an HQ agent itself. As a result,

the agency relation in the principal-(agent/principal)-agent relationship becomes an important point of investigation. In this setting, it might be particularly interesting to examine how subsidiary CEOs deal with their dual roles as principals and agents.

Fourth, although our study serves as a first step toward developing an understanding of the role of socialization in agency relations between HQs and subsidiaries, much more work is needed. For example, our findings suggest that socialization can help reduce goal conflicts between the HQ and subsidiaries and, thereby, influence the HQ's control choices (i.e., more behavioral control). However, increasing socialization requires the building of a shared understanding and a common set of values, which takes time. In contrast, output or behavioral controls can be implemented quickly. These differences raise some interesting questions regarding the normative implications of our study. To provide a better assessment of these dynamic effects, we propose that researchers undertake longitudinal studies to investigate such questions as: How long does it take for these effects to unfold? What moderates the time span? We believe there are numerous opportunities for studies along these lines.

Fifth, we focused on HQ-initiated socialization, as our intention was to understand the impact of socialization on the HQ's control choices. However, we acknowledge that in small, modern, open economies, socialization can be initiated at other levels. Although we feel that allowing for such bottom-up processes does not change the postulated causal relationship (i.e., high socialization leads to fewer goal conflicts and more behavioral controls), we wonder why subsidiaries would engage in socialization if doing so eventually leads to the introduction of more behavioral controls. We suggest two possible explanations. First, subsidiaries may be unaware of the consequences of their actions and, therefore, unintentionally engage in this behavior. Second, subsidiaries may willingly engage in socialization in the belief that the ensuing behavioral controls will direct behavior in a way that is more favorable for the subsidiary. This second line of reasoning, which may be more interesting for future research, builds on the distinction between the means of control (i.e., behavior/output, which is the focus of this study) and the content of that control (i.e., the requested behavior or required outputs).

Finally, like most survey research, we relied on a various scales and self-reported measures to assess our key constructs. Although we perceive the multi-tier questionnaires as a key factor in limiting potential bias from common method variance and social desirability effects, future studies could strengthen this line of research by incorporating alternative measures to triangulate our findings.

7. Conclusion

The HQ's control choices are a key concern in MNC research. While agency theory has the potential to inform us about appropriate control choices in general, it has been a somewhat underutilized perspective in the multinational setting due to its restrictive assumptions. This study advances our knowledge of agency problems in HQ-subsidary relations by shedding light on the role of socialization in HQ's control choices given the nestedness of these relations.

Appendix A. Overview of measures

Variables	Source	Cronbach's alpha	Data source: respondents
Behavioral control	Cardinal (2001) and cited references; slightly adapted to the focal empirical context	$\alpha = .86$	Survey P1: HQ units (first principals)
Socialization	Nell and Ambos (2013); Nohria and Ghoshal (1994); slightly adapted to the focal empirical context	$\alpha = .73$	Survey P1: HQ units (first principals)
Subsidiary subunit size	Various, e.g., Bouquet and Birkinshaw (2008); Nell and Ambos (2013)	n/a	Secondary data: company documentation
Subsidiary subunit age	Various	n/a	Secondary data: company documentation
Subsidiary subunit performance	Kostova and Roth (2002)	$\alpha = .92$	Survey A: subsidiary subunits (agents)
Task programmability	Collis et al. (2007, 2012) and cited references	n/a	Secondary data: company documentation
Agent's risk aversion	Nell and Ambos (2013); slightly adapted to the focal empirical context	$\alpha = .71$	Survey A: subsidiary subunits (agents)
Principal's risk aversion	Nell and Ambos (2013); slightly adapted to the focal empirical context	$\alpha = .66$	Survey P1: HQ units (first principals)
Subsidiary unit's influence	Hinings et al. (1974); Tannenbaum (1968)	$\alpha = .95$	Survey P1: HQ units (first principals)
Second principal's influence on corporate decisions	Hinings et al. (1974); Tannenbaum (1968)	$\alpha = .93$	Survey P2: Subsidiary CEO (second principals)
Goal conflict (based on autonomy)	See below	n/a	See below
Degree of autonomy as viewed by agents	Cardinal (2001) and cited references; slightly adapted to the focal empirical context	$\alpha = .97$	Survey A: subsidiary subunits (agents)
Degree of autonomy as viewed by principals	Cardinal (2001) and cited references; slightly adapted to the focal empirical context	$\alpha = .98$	Survey P1: HQ units (first principals)

Appendix B. Confirmatory factor analyses

To ensure construct differentiation among the four latent variables in our research model (i.e., behavioral control, socialization, goal conflict, and influence of the second principal), we conducted confirmatory factor analyses using Amos 23. The baseline model with the four-factor solution ($\chi^2 [99] = 246.48$, CFI = 0.93, TLI = 0.91, IFI = 0.93, SRMR = 0.05) fits the data well. A nested set of three alternative models was compared to the baseline four-factor model. Model 1 was a three-factor model in which variables rated by headquarters' internal units were set to correlate at 1.0 (i.e., socialization and behavioral control). Model 2 was a two-factor model in which socialization, behavioral control, and the influence of the second principal were set to correlate at 1.0. In Model 3, all latent variables were set to correlate at 1.0. The table below provides an overview of these alternative measurement models.

The baseline model with the four-factor solution fit the data better than Model 1 with a three-factor solution ($\chi^2 [102] = 317.42$, CFI = 0.87, TLI = 0.89, IFI = 0.87, SRMR = 0.11, $\Delta\chi^2 = 70.94$, $\Delta df = 3$, $p < 0.001$), Model 2 with a two-factor solution ($\chi^2 [103] = 317.42$, CFI = 0.89, TLI = 0.87, IFI = 0.89, SRMR = 0.11, $\Delta\chi^2 = 70.94$, $\Delta df = 4$, $p < 0.001$), and Model 3 with a one-factor solution ($\chi^2 [104] = 623.46$, CFI = 0.74, TLI = 0.69, IFI = 0.74, SRMR = 0.18, $\Delta\chi^2 = 376.98$, $\Delta df = 5$, $p < 0.001$). This suggests that the four latent constructs were empirically distinct.

Model	df	χ^2	CFI	TLI	IFI	SRMR
M0: Baseline model: four factors	99	246.48	.93	.91	.93	.05
M1: Three factors (combining S and BC)	102	317.42	.89	.87	.89	.11
M2: Two factors (combining S, BC, and ISP)	103	317.42	.89	.87	.89	.11
M3: One factor (combining all)	104	623.46	.74	.69	.74	.18

Notes: S = socialization, BC = behavioral control, ISP = influence of the second principal, GC = goal conflict, df = degree of freedom, CFI = comparative fit index, TLI = Tucker-Lewis index, IFI = incremental fit index, SRMR = standardized root mean residual

Appendix C. Multilevel regression results for relationships among socialization, goal conflict, and behavioral control

Variable	DV: Behavioral control						DV: Goal conflict	
	Null model	Model 1	Model 2	Model 3	Model 4	Null model		
<i>Level 1: Subunit</i>								
Intercept	4.35*** (.34)	3.72*** (.20)	4.12*** (.14)	3.76*** (.22)	4.02*** (.22)	1.25*** (.14)		
Subunit age		.65* (.29)	.75** (.27)	.75** (.26)	.80** (.26)			
Subunit size		-.03 (.10)	-.07 (.10)	.03 (.10)	-.01 (.10)			
Task programmability		-2.77** (.87)	-3.09*** (.82)	-2.78** (.81)	-3.02*** (.78)			
Principal risk aversion		.04 (.18)	-.01 (.17)	.23 (.18)	.14 (.18)			
Agent risk aversion		.26 (.20)	-.08 (.22)	.05 (.20)	-.16 (.21)			
Socialization			.57** (.20)		.45*** (.20)			
Goal conflict				-.76** (.26)	-.59* (.26)			
Mediation effect ^d					.11* (.10)			
<i>Level 2a: Subsidiary</i>								
<i>Second principal's influence</i>								
<i>Cross-level interaction</i>								
Goal conflict × second principal's influence								
<i>Variance estimates</i>								
Level 1 residual variance (σ ²)	1.83	1.48	1.28	1.27	1.17	.48		
Level 2a residual intercept variance (ra10)	.0000	.0000	.0000	.0000	.0000	.0000		
Level 2b residual intercept variance (rb10)	.40	.0000	.03	.0000	.0000	.04		
Pseudo-R ^{2b}		.19	.30	.30	.36			
Model deviance	181.15	164.77	157.24	157.20	152.97	110.02		

Variable	DV: Goal conflict		DV: Behavioral control			
	Model 5	Model 6	Null model	Model 7	Model 8	Model 9
<i>Level 1: Subunit</i>						
Intercept	1.36*** (.10)	1.23*** (.11)	4.35*** (.34)	4.12*** (.14)	4.75*** (.39)	4.96*** (.38)
Subunit age	.13 (.14)	.09 (.14)		.75** (.27)	-.84** (.26)	.47 (.28)
Subunit size	.08 (.05)	.10 (.05)		-.07 (.10)	-.01 (.10)	.09 (.09)
Task programmability	-.01 (.43)	.12 (.41)		-3.09** (.82)	-3.00*** (.78)	-3.34*** (.74)
Principal risk aversion	.24** (.09)	.26** (.09)		-.01 (.17)	-.10 (.19)	.24 (.18)
Agent risk aversion	-.27** (.10)	-.14 (.11)		-.08 (.22)	-.16 (.21)	-.06 (.20)
Socialization		-.22* (.10)		.57** (.20)	.44* (.20)	.48* (.19)
Goal conflict					-.57*** (.26)	-.67** (.25)
Mediation effect ^d						
<i>Level 2a: Subsidiary</i>						
<i>Second principal's influence</i>						
<i>Cross-level interaction</i>						
Goal conflict × second principal's influence						.63** (.23)
<i>Variance estimates</i>						
Level 1 residual variance (σ ²)	.36	0.32	1.83	1.28	1.07	1.00
Level 2a residual intercept variance (ra10)	.0000	0.0000	.0000	.0000	.0000	.0000
Level 2b residual intercept variance (rb10)	.0000	0.0000	.40	.03	.0000	.0000
Pseudo-R ^{2b}	.07	0.08	.30	.30	.37	.45
Model deviance	92.16	87.72	181.15	157.24	152.08	145.22

Note: n = 51. Entries corresponding to the predicting variables are estimations of the random effects, gamma (γ); numbers in parentheses represent standard errors.

^aPreacher & Hayes. Based on 10,000 bootstrap resamples.

^bPseudo-R2 values were calculated on the basis of the formula from Kreft and De Leeuw (1998). Model deviance, which is an indicator of model fit, is based on 2 × log likelihood; as per the smaller-is-better criterion, the model with the smaller value indicates a better overall fit (Burnham & Anderson, 2002).

*p < .05, ** p < .01, *** p < .001 (two-sided).

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions sage: Newbury Park, CA.*

Ambos, B., & Reitsperger, W. (2004). Offshore centers of excellence: Social control and success. *Management International Review*, 44(2), 51–65.

Ambos, B., & Schlegelmilch, B. B. (2007). Innovation and control in the multinational firm: A comparison of political and contingency approaches. *Strategic Management Journal*, 28(5), 473–486.

Ambos, T. C., & Birkinshaw, J. (2010). Headquarters' attention and its effect on subsidiary performance. *Management International Review*, 50(4), 449–469.

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., & Pahlberg, C. (1997). Subsidiary influence on strategic behaviour in MNCs: An empirical study. *International Business Review*, 6(3), 319–334.

Arthur, 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. (2001a). Evolving headquarters-subsidiary dynamics in International R&D: The case of Japanese multinationals. *R & D Management*, 31(1), 1–14.

Asakawa, K. (2001b). Organizational tension in International R&D management: The case of Japanese firms. *Research Policy*, 30(5), 735–757.

Astley, W. G., & Sachdeva, P. S. (1984). Structural sources of intraorganizational power: A theoretical synthesis. *Academy of Management Review*, 9(1), 104–113.

Astley, W. G., & Zajac, E. J. (1990). Beyond dyadic exchange: Functional interdependence & sub-unit power. *Organization Studies (Walter de Gruyter GmbH & Co. KG.)*, 11(4), 481.

Aulakh, P. S., & Gencturk, E. F. (2000). International principal-agent relationships - control, governance and performance. *Industrial Marketing Management*, 29(6),

- 521–538.
- Baker, G., Gibbons, R., & Murphy, K. J. (2002). Relational contracts and the theory of the firm. *Quarterly Journal of Economics*, 117(1), 39–84.
- Bartlett, C. A., & Ghoshal, S. (1986). Tap your subsidiaries for global reach. *Harvard Business Review*, 64(6), 87–94.
- Bartlett, C. A., & Ghoshal, S. (1989). *Managing across borders: The transnational solution*. Boston, MA: Harvard Business School Press.
- Bartlett, C. A., & Han, A. (2013). *Levendary café: The China challenge*.
- Birkinshaw, J., Ambos, T. C., & Bouquet, C. (2017). Boundary spanning activities of corporate HQ executives insights from a longitudinal study. *Journal of Management Studies*, 54(4), 422–454.
- 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.
- Birkinshaw, J. M., & Morrison, A. J. (1995). Configurations of strategy and structure in subsidiaries of multinational corporations. *Journal of International Business Studies*, 26(4), 729–753.
- Björkman, I., Barner-Rasmussen, W., & Li, L. (2004). Managing knowledge transfer in MNCs: The impact of headquarters control mechanisms. *Journal of International Business Studies*, 35(5), 443–455.
- Bouquet, C., & Birkinshaw, J. (2008). Weight versus voice: How foreign subsidiaries gain attention from corporate headquarters. *Academy of Management Journal*, 51(3), 577–601.
- Brenner, B., & Ambos, B. (2013). A question of legitimacy? A dynamic perspective on multinational firm control. *Organization Science*, 24(3), 773–795.
- Burnham, K. P., & Anderson, D. R. (2002). *Model selection and multimodel inference: A practical information-theoretic approach*. New York: Springer.
- Cardinal, L. B. (2001). Technological innovation in the pharmaceutical industry: The use of organizational control in managing research and development. *Organization Science*, 12(1), 19–36.
- Cardinal, L. B., Kreutzer, M., & Miller, C. C. (2017). An aspirational view of organizational control research: Re-invigorating empirical work to better meet the challenges of 21st century organizations. *Academy of Management Annals*, 11(2), 559–592.
- Cardinal, L. B., Sitkin, S. B., & Long, C. P. (2003). *Creating control configurations during organizational founding*. *Academy of Management Proceedings* D1–D6.
- Cardinal, L. B., Sitkin, S. B., & Long, C. P. (2004). Balancing and rebalancing in the creation and evolution of organizational control. *Organization Science*, 15(4), 411–431.
- Cardinal, L. B., Sitkin, S. B., & Long, C. P. (2010). In S. B. Sitkin, L. B. Cardinal, & K. M. Bijlsma-Frankema (Eds.), *A configurational theory of control*. In *organizational control*. Cambridge: Cambridge University Press.
- Caves, R. E., & Porter, M. E. (1977). Entry barriers to mobility barriers - Conjectural decisions and contrived deterrence to New competition. *Quarterly Journal of Economics*, 91(2), 241–261.
- Chandler, A. D. (1991). The functions of the HQ unit in the multibusiness firm. *Strategic Management Journal*, 12, 31–50.
- Chang, E., & Taylor, M. S. (1999). Control in multinational corporations (MNCs): The case of Korean manufacturing subsidiaries. *Journal of Management*, 25(4), 541–565.
- Chini, T., Ambos, B., & Wehke, K. (2005). The headquarters-subsidiaries trench: Tracing perception gaps within the multinational corporation. *European Management Journal*, 23(2), 145–153.
- Collis, D., Young, D., & Goold, M. (2007). The size, structure, and performance of corporate headquarters. *Strategic Management Journal*, 28(4), 383–405.
- Collis, D., Young, D., & Goold, M. (2012). The size and composition of corporate headquarters in multinational companies: Empirical evidence. *Journal of International Management*, 18(3), 260–275.
- Conroy, K. M., Collings, D. G., & Clancy, J. (2017). Regional headquarter's dual agency role: Micro-political strategies of alignment and self-interest. *British Journal of Management*, 28(3), 390–406.
- Conroy, K. M., Collings, D. G., & Clancy, J. (2018). Sowing the seeds of subsidiary influence: Social navigating and political manoeuvring of subsidiary actors. in press *Global Strategy Journal*. <https://doi.org/10.1002/gsj.1323>.
- da Silva Lopes, T., Casson, M., & Jones, G. (2018). Organizational innovation in the multinational enterprise: Internalization theory and business history. in press *Journal of International Business Studies*. <https://doi.org/10.1057/s41267-018-0156-6>.
- Dahl, R. A. (1957). The concept of power. *Behavioral Science*, 2(3), 201–215.
- Doz, Y. L., & Prahalad, C. K. (1991). Managing DMNCs: A search for a new paradigm. *Strategic Management Journal*, 12, 145–164.
- Egelhoff, W. G., Wolf, J., & Adzic, M. (2013). Designing matrix structures to fit MNC strategy. *Global Strategy Journal*, 3(3), 205–226.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57–74.
- Emerson, R. M. (1962). Power-dependence relations. *American Sociological Review*, 27(1), 31–41.
- Fiol, C. M. (1991). Managing culture as a competitive resource - An identity-based view of sustainable competitive advantage. *Journal of Management*, 17(1), 191–211.
- Forsgren, M., Holm, U., & Johanson, J. (2005). *Managing the embedded multinational*. Northampton, MA: Edward Elgar.
- Forsgren, M., & Pahlberg, C. (1992). Subsidiary influence and autonomy in international firms. *Scandinavian International Business Review*, 1(3), 41–51.
- Foss, K., & Foss, N. J. (2005). Resources and transaction costs: How property rights economics furthers the resource-based view. *Strategic Management Journal*, 26(6), 541–553.
- Foss, K., Foss, N. J., & Vazquez, X. H. (2006). "Tying the manager's Hands": Constraining opportunistic managerial intervention. *Cambridge Journal of Economics*, 30(5), 797–818.
- Foss, N. J. (1997). On the rationales of corporate headquarters. *Industrial & Corporate Change*, 6(2), 313–338.
- Ghoshal, S., & Nohria, N. (1989). Internal differentiation within multinational corporations. *Strategic Management Journal*, 10(4), 323–337.
- Gomez, C., & Sanchez, J. I. (2005). Human resource control in MNCs: A study of the factors influencing the use of formal and informal control mechanisms. *International Journal of Human Resource Management*, 16(10), 1847–1861.
- Goold, M., & Campbell, A. (1987). *Strategies and styles: The role of the Centre in managing diversified corporations*. Oxford: Blackwell.
- Govindarajan, V., & Fisher, J. (1990). Strategy, control-systems, and resource sharing - effects on business-unit performance. *Academy of Management Journal*, 33(2), 259–285.
- Hambrick, D. C., & Lovelace, J. B. (2018). The role of executive symbolism in advancing new strategic themes in organizations: A social influence perspective. *Academy of Management Review*, 43(1), 110–131.
- Harzing, A.-W. K. (1999). *Managing the multinationals: An International study of control mechanisms*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing Limited.
- Hayes, A. F. (2012). *Process: A versatile computational tool for observed variable moderation, mediation, and conditional process modeling*.
- Hedlund, G. (1986). The hypermodern MNC - A heterarchy. *Human Resource Management*, 25(1), 9–35.
- Hickson, D. J., Hinings, C. R., Lee, C. A., Schneck, R. E., & Pennings, J. M. (1971). A strategic contingencies' theory of intraorganizational power. *Administrative Science Quarterly*, 16(2), 216–229.
- Hinings, C. R., Hickson, D. J., Pennings, J. M., & Schneck, R. E. (1974). Structural conditions of intraorganizational power. *Administrative Science Quarterly*, 19(1), 22–44.
- Hoene, A. K., & Kostova, T. (2014). Utilizing the broader agency perspective for studying headquarters-subsidiary relations in multinational companies. *Journal of International Business Studies*, 46, 104–113.
- Hoskisson, R. E., Hitt, M. A., Johnson, R. A., & Grossman, W. (2002). Conflicting voices: The effects of institutional ownership heterogeneity and internal governance on corporate innovation strategies. *Academy of Management Journal*, 45(4), 697–716.
- House, R. J. (1988). Power and personality in complex organizations. *Research in Organizational Behavior*, 10, 305–357.
- Jarillo, J. C., & Martínez, J. I. (1990). Different roles for subsidiaries: The case of multinational corporations in Spain. *Strategic Management Journal*, 11(7), 501–512.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kaufmann, L., & Roessing, S. (2005). Managing conflict of interests between headquarters and their subsidiaries regarding technology transfer to emerging markets—a framework. *Journal of World Business*, 40(3), 235–253.
- Kawai, N., & Strange, R. (2014). Subsidiary autonomy and performance in Japanese multinationals in Europe. *International Business Review*, 23(3), 504–515.
- Kim, B., Prescott, J. E., & Kim, S. M. (2005). Differentiated governance of foreign subsidiaries in transnational corporations: An agency theory perspective. *Journal of International Management*, 11(1), 43–66.
- Kostova, T., Marano, V., & Tallman, S. (2016). Headquarters-subsidiary relationships in MNCs: Fifty years of evolving research. *Journal of World Business*, 51(1), 176–184.
- Kostova, T., Nell, P. C., & Hoene, A. K. (2018). Understanding agency problems in headquarters-subsidiary relationships in multinational corporations: A contextualized model. *Journal of Management*, 44(7), 2611–2637.
- Kostova, T., & Roth, K. (2002). Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects. *Academy of Management Journal*, 45(1), 215–233.
- Kreft, I., & De Leeuw, J. (1998). *Introducing multilevel modeling*. London, UK: Sage.
- Kreutzer, M., Cardinal, L. B., Walter, J., & Lechner, C. (2016). Formal and informal control as complement or substitute? The role of the task environment. *Strategy Science*, 1(4), 235–255.
- Kreutzer, M., Walter, J., & Cardinal, L. B. (2015). Organizational control as antidote to politics in the pursuit of strategic initiatives. *Strategic Management Journal*, 36(9), 1317–1337.
- Kunisch, S., Menz, M., & Birkinshaw, J. (2019). Spatially dispersed corporate headquarters: A historical analysis of their prevalence, antecedents, and consequences. *International Business Review*, 28(1), 148–161.
- Kunisch, S., Müller-Stewens, G., & Campbell, A. (2014). Why corporate functions stumble. *Harvard Business Review*, 92(10), 110–117.
- Lambert, R. A. (1983). Long-term contracts and moral hazard. *Bell Journal of Economics*, 14(2), 441–452.
- Lange, D. (2008). A multidimensional conceptualization of organizational corruption control. *Academy of Management Review*, 33(3), 710–729.
- Luo, Y. D., Shenkar, O., & Nyaw, M. K. (2001). A dual parent perspective on control and performance in International joint ventures: Lessons from a developing economy. *Journal of International Business Studies*, 32(1), 41–58.
- Lyles, M. A., & Reger, R. K. (1993). Managing for autonomy in joint ventures - A longitudinal-study of upward influence. *Journal of Management Studies*, 30(3), 383–404.
- Martínez, 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.
- Medcof, J. W. (2001). Resource-based strategy and managerial power in networks of inter-nationally dispersed technology units. *Strategic Management Journal*, 22(11), 999–1012.
- Menz, M., Kunisch, S., & Collis, D. J. (2015). The corporate headquarters in the contemporary corporation: Advancing a multimarket firm perspective. *Academy of Management Annals*, 9(1), 633–714.
- Mudambi, R., & Navarra, P. (2004). Is knowledge power? knowledge flows, subsidiary power and rent-seeking within MNCs. *Journal of International Business Studies*, 35(5), 385–406.
- Mudambi, R., & Petersen, T. (2008). Agency theory and Resource dependency theory:

- Complementary explanations for subsidiary power in multinational corporations. In T. Pedersen, & H. W. Volberda (Eds.). *Briding 1b theories, constructs, and methods across cultures and social sciences*. Basingstoke: Palgrave.
- Mulherin, J. H., & Boone, A. L. (2000). Comparing acquisitions and divestitures. *Journal of Corporate Finance*, 2000(6), 117–139.
- 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.
- Nobel, R., & Birkinshaw, J. (1998). Innovation in multinational corporations: Control and communication patterns in International R&D. *Strategic Management Journal*, 19(5), 479.
- 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.
- Ouchi, W. G. (1979). A conceptual framework for the design of organizational control mechanisms. *Management Science*, 25(9), 833–848.
- Ouchi, W. G. (1980). Markets, bureaucracies, and clans. *Administrative Science Quarterly*, 25(1), 129–141.
- Perrow, C. (1986). *Complex organizations*. New York: Random House.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.
- Roth, K., & O'Donnell, S. (1996). Foreign subsidiary compensation strategy: An agency theory perspective. *Academy of Management Journal*, 39(3), 678–703.
- Rowe, W. G., & Wright, P. M. (1997). Related and unrelated diversification and their effect on human Resource management controls. *Strategic Management Journal*, 18(4), 329–338.
- Salancik, G. R., & Pfeffer, J. (1977). Examination of need-satisfaction models of job attitudes. *Administrative Science Quarterly*, 22(3), 427–456.
- Scharfstein, D. S., & Stein, J. C. (2000). The dark Side of internal Capital markets: Divisional rent-seeking and inefficient investment. *Journal of Finance*, 55(6), 2537–2564.
- Schepers, J., Falk, T., de Ruyter, K., de Jong, A., & Hammerschmidt, M. (2012). Principles and principals: Do customer stewardship and agency control compete or complement when shaping frontline employee behavior? *Journal of Marketing*, 76(6), 1–20.
- Schotter, A., & Beamish, P. W. (2011). Performance effects of MNC headquarters-subsidiary conflict and the role of boundary spanners: The case of headquarter initiative rejection. *Journal of International Management*, 17(3), 243–259.
- Schotter, A. P. J., Mudambi, R., Doz, Y. L., & Gaur, A. (2017). Boundary spanning in global organizations. *Journal of Management Studies*, 54(4), 403–421.
- Schulte Steinberg, A., & Kunisch, S. (2016). The agency perspective for studying headquarters-subsidiary relations: An assessment and considerations for future research. In T. C. Ambos, B. Ambos, & J. Birkinshaw (Eds.). *Research in global strategic management*. Emerald Group Publishing Limited.
- Sitkin, S. B., Cardinal, L. B., & Bijlsma-Frankema, K. M. (Eds.). (2010). *Organizational control*. Cambridge University Press.
- Stein, J. C. (1989). Efficient capital-markets, inefficient firms - A model of myopic corporate-behavior. *Quarterly Journal of Economics*, 104(4), 655–669.
- Tannenbaum, A. S. (1968). *Control in organizations*. New York: McGraw-Hill.
- Tippmann, E., Scott, P. S., Reilly, M., & O'Brien, D. (2018). Subsidiary cooperation competence: Navigating subsidiary evolution in the multinational corporation. *Journal of World Business*, 53(4).
- Tiwana, A. (2010). Systems development ambidexterity: Explaining the complementary and substitutive roles of formal and informal controls. *Journal of Management Information Systems*, 27(2), 87–126.
- Tomassen, S., Benito, G. R. G., & Lunnan, R. (2012). Governance costs in foreign direct investments: A MNC headquarters challenge. *Journal of International Management*, 18(3), 233–246.
- Turner, K. L., & Makhija, M. V. (2006). The role of organizational controls in managing knowledge. *Academy of Management Review*, 31(1), 197–217.
- Van Maanen, J. (1979). The fact of fiction in organizational ethnography. *Administrative Science Quarterly*, 24(4), 539–550.
- Wolf, J., & Egelhoff, W. G. (2013). An empirical evaluation of conflict in MNC matrix structure firms. *International Business Review*, 22(3), 591–601.
- Xuan, Y. (2009). Empire-building or bridge-building? Evidence from New CEOs' internal Capital allocation decisions. *Review of Financial Studies*, 22(12), 4919–4948.
- Yildiz, H. E. (2014). Not all differences are the same: Dual roles of status and cultural distance in sociocultural integration in cross-border M&As. *Journal of International Management*, 20(1), 25–37.
- Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D., & Jiang, Y. (2008). Corporate governance in emerging economies: A review of the principal-principal perspective. *Journal of Management Studies*, 45(1), 196–220.
- Yu, C.-M. J., Wong, H.-C., & Chiao, Y.-C. (2006). Local linkages and their effects on headquarters' use of process controls. *Journal of Business Research*, 59(12), 1239–1247.
- Yu, T. Y., Subramaniam, M., & Cannella, A. A. (2009). Rivalry deterrence in International markets: Contingencies governing the mutual forbearance hypothesis. *Academy of Management Journal*, 52(1), 127–147.
- Zeng, R., Groggaard, 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).