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published in
Long Range Planning
2019

DOI (link to publisher)
10.1016/j.lrp.2018.11.004

document version
Publisher's PDF, also known as Version of record

citation for published version (APA)
Weng, D. H., & Cheng, H. L. (2019). The More, The Merrier? How a subsidiary's Organizational Identification with the MNE Influences Its Initiative. *Long Range Planning*, *52*(4), 1-16. Article 101860. https://doi.org/10.1016/j.lrp.2018.11.004

Long Range Planning 52 (2019) 101860

Contents lists available at ScienceDirect

Long Range Planning

journal homepage: www.elsevier.com/locate/lrp

The more, the merrier? How a subsidiary's organizational identification with the MNE affects its initiative☆

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ARTICLE INFO

Keywords:
Subsidiary initiative
Organizational identification
Subsidiary motivation
Headquarters screening
Headquarters-subsidiary relations

ABSTRACT

How does a subsidiary's organizational identification influence its tendency to demonstrate initiative? In this study, we argue that a subsidiary's organizational identification with the MNE may affect its initiative via two mechanisms: subsidiary motivation and headquarters screening. On the one hand, subsidiary motivation mechanism suggests that a subsidiary's organizational identification with an MNE may affect its tendency to demonstrate initiative. On the other hand, the headquarters screening mechanism maintains that headquarters may rely on organizational identification to support or dismiss the subsidiary's projects. In light of the two mechanisms, we propose that a subsidiary's organizational identification may first increase its initiative, but after a certain point, the effect will diminish, ultimately leading to an inverted U-shaped relation. Building on this central argument, we also examine the boundary conditions at the subsidiary and MNE levels that may shape the proposed effect. Findings based on a sample of Taiwanese MNEs support these arguments. Our findings contribute to the literature by highlighting the role that a subsidiary's organizational identification plays in its initiative.

Introduction

The issue of subsidiary initiative has received growing attention in the strategy and international business (IB) literature. Defined as "the proactive, deliberate pursuit of a new business opportunity by a subsidiary company undertaken to expand the subsidiary's scope of responsibility" (Birkinshaw and Fry, 1998: 52), subsidiary initiative provides a useful perspective to understand the actions taken by subunits in a contemporary organization. In contrast with prior theories that emphasize the role of headquarters in developing and transferring resources to subsidiaries (Hymer, 1960), research on subsidiary initiative suggests that subsidiaries may well be capable of initiating projects that create value for the multinational enterprise (MNE). As these projects can greatly strengthen the MNE's resources and capabilities (Birkinshaw et al., 1998; Rugman and Verbeke, 2001), subsidiary initiative has been noted as a manifestation of corporate entrepreneurship.

Given the importance of subsidiary initiative, researchers have examined its influencing factors. Prior studies have suggested that structural factors such as subsidiary size and host country conditions are conducive to subsidiary initiative (Birkinshaw, 1999; Delany, 2000; for recent reviews, please see Schmid et al., 2014; Strutzenberger and Ambos, 2014). Despite these insights, our understanding of subsidiary initiative has remained incomplete for two reasons. First, most studies on subsidiary initiative focus on

☆ We would like to thank the Associate Editor and anonymous reviewers for their helpful feedback and guidance. This project was supported, in part, by a grant awarded to the second author (MOST 104-2410-H-194-094). The views developed in this study are those of the authors only.

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https://doi.org/10.1016/j.lrp.2018.11.004
Received 7 October 2017; Received in revised form 3 November 2018; Accepted 26 November 2018
Available online 27 November 2018
0024-6301/

subsidiaries, while paying less attention to headquarters. However, recent research suggested that headquarters may have a crucial impact on subsidiaries (Bouquet et al., 2016; Schotter and Beamish, 2011).

Second, research on subsidiary initiative has not fully delineated headquarters-subsidiary relations by considering a subsidiary's organizational identification. Organizational identification refers to a subsidiary's sense of belonging to the MNE (Mael and Ashforth, 1992). Earlier research has suggested that organizational identification is a method for MNEs to guide subsidiary behaviors (Nohria and Ghoshal, 1994; Ouchi, 1979). Recent studies have also contended that given the complexity of MNE contexts, organizational control methods such as identification may have certain limitations (Hoenen and Kostova, 2015; Kostova et al., 2018). Yet, these insights have not been incorporated into the examination of subsidiary initiative.

The purpose of this study is to address these issues. Specifically, we ask: How does a subsidiary's organizational identification with the MNE affect its initiative? What boundary conditions would strengthen or weaken the proposed relationship? To study these questions, we highlight two mechanisms: subsidiary motivation and headquarters screening. The subsidiary motivation mechanism suggests that subsidiaries may have varying levels of motivation to undertake entrepreneurial projects. Meanwhile, the headquarters screening mechanism suggests that headquarters has the ultimate say about which subsidiary projects can go ahead. Importantly, a subsidiary's organizational identification with the MNE may influence these two mechanisms. Although an increase of organizational identification may prompt a subsidiary to show more initiative and increase the likelihood that the headquarters approve subsidiary projects, this effect may diminish as organizational identification continues to increase and eventually becomes negative when the subsidiary's identification exceeds a certain level. We thus propose that a subsidiary's organizational identification with the MNE has an inverted U-shaped relationship with its initiative. Building on this baseline argument, our study also examines boundary conditions that may strengthen or weaken the proposed effect. Analyzing a sample of Taiwanese MNEs, we find support to these arguments.

The contributions of this study are twofold. First, our project contributes to the literature on subsidiary initiative. Understanding the determinants of subsidiary initiative is of crucial importance in the literature (Birkinshaw et al., 1998; Delany, 2000), but no known studies specifically examine a subsidiary's organizational identification with the MNE. In this project, we endeavor to show that organizational identification can be a novel determinant of subsidiary initiative. This contributes to the literature on subsidiary initiative by noting that organizational identification can influence not only subsidiaries' motivation to demonstrate initiative, but also the headquarters' tendency to dismiss subsidiary projects.

Second, our study also advances the literature on headquarters-subsidiary relations. The study of headquarters-subsidiary relations has suggested that headquarters must use appropriate methods to manage subsidiaries (Kim et al., 2005; Roth & O'Donnell, 1996; for a review, see Kostova et al., 2016). Prior research has studied important questions such as when organizational control methods should be adopted (Hoenen and Kostova, 2015; O'Donnell, 2000). In this project, we suggest that a subsidiary's organizational identification with the MNE may both promote and hinder its tendency to demonstrate initiative. This argument contributes to the literature on headquarters-subsidiary relations by showing that the effect of organizational identification on subsidiary initiative could be more complex than one may have assumed.

Theoretical background

Subsidiary initiative as a process involving subsidiaries and headquarters

Subsidiary initiative is a set of bottom-up actions taken by subunits with high entrepreneurial spirit within the MNE. Departing from conventional IB theories suggesting that advantages are mostly developed by headquarters, research on subsidiary initiative maintains that subunits can and do contribute to their MNE's advantages (Birkinshaw et al., 1998; Delany, 2000; Dörrenbächer and Gammelgaard, 2016). Subsidiary initiative is critical because it can enhance MNEs' operation efficiency and effectiveness (Birkinshaw and Fry, 1998). To illustrate, a new product successfully developed by a subsidiary in China can be introduced to subsidiaries in India and Thailand. A novel product design or a new production process devised by one subsidiary can be transferred to other units within the MNE (Jensen and Szulanski, 2004; Kostova, 1999). Because subsidiary initiative can "contribute to firm-specific advantage development and exploitation" (Rugman and Verbeke, 2001: 239), this endavor is crucial to MNEs.

The notion of subsidiary initiative merits elaboration. First, by demonstrating initiative, subsidiaries must go out of their way to search for possible opportunities, mobilize resources, and develop alternatives. These subsidiaries would "identify opportunities, act on them, and persevere" (Crant, 2000: 439). They do so proactively rather than being told to by headquarters. While performing the tasks assigned by headquarters is certainly important, it does not constitute subsidiary initiative because subunits that only perform assigned tasks lack the entrepreneurial spirit.

Second, headquarters actually play a critical role in subsidiary initiative. In their study of seven established MNEs, Birkinshaw and Ridderstrale (1999) showed that among a total of 26 subsidiary-level initiative, 12 either failed or were aborted halfway. One prominent reason for unsuccessful initiative is the resistance from headquarters. Despite the potential value and usefulness of projects initiated by subsidiaries, headquarters may not always give their blessings (Schotter and Beamish, 2011). This not only reflects the "headquarters knows best" syndrome (Bouquet et al., 2016), but also suggests that headquarters have their own views in seeing subsidiary activities (Monteiro, 2015).

Finally, in order to ensure that their effort is recognized, subsidiaries may engage in "issue-selling" to gain headquarters' support (Dörrenbächer and Gammelgaard, 2016; Ling et al., 2005). These actions can be particularly relevant as headquarters may not always allocate equal attention to its subsidiaries (Baaij and Slangen, 2013; Bouquet and Birkinshaw, 2008). Yet without it, subsidiaries may not be able to advance their projects.

The core argument of this study is that a subsidiary's organizational identification influences both its motivation to demonstrate initiative and the headquarters' likelihood of supporting the subsidiary's initiative. Before explaining the logic, it is useful to first review organizational identification and its role in headquarters-subsidiary relations.

Organizational identification and headquarters-subsidiary relations

According to Mael and Ashforth (1992), organizational identification denotes an organizational member's "perception of oneness with an organization" (p. 104). Following this view, we define a subsidiary's organizational identification as the subsidiary's sense of belonging to the MNE. Prior research has suggested that organizational identification is a social control method developed by an MNE (Nohria and Ghoshal, 1994; O'Donnell, 2000; Ouchi, 1979). Nohria and Ghoshal (1994) noted that by cultivating shared values and beliefs, headquarters can guide their subsidiaries toward an MNE's goals. O'Donnell (2000) also contended that organizational identification can be used to develop "shared corporate values that lead to cooperative behaviors" (p. 532).

The notion of organizational identification has long been recognized. Drawing on social identity theory (Hogg and Abrams, 1988; Tajfel and Turner, 1986), researchers have maintained that the cognitive connection between members and their organizations can influence the organizational members' behaviors profoundly. For example, highly identified employees tend to demonstrate more positive work behaviors (O'Reilly and Chatman, 1986) and exhibit lower turnover rates than less identified workers (Sung et al., 2017). Subsequent research has used the lens of organizational identification to study interorganizational relationships. To illustrate, franchisers may use organizational identification to select appropriate franchisees for collaboration (Waston et al., 2016). On the one hand, because organizational identification can reduce potential self-seeking behavior, working with an organizational member with high identification may reduce opportunism. On the other hand, the psychological attachment may prompt organizational members to share information openly with the franchiser, thus addressing the information asymmetry issue (Eisenhardt, 1989; Jensen and Meckling, 1976).

However, organizational identification may have its own limitations, as an MNE may be confronted with highly complex situations (Hoenen and Kostova, 2015). Owing to cultural and institutional differences, headquarters may not be fully aware of the issues faced by subsidiaries (O'Donnell, 2000; Yu and Cannella, 2007). Also, due to their particular situations, foreign subsidiaries may view themselves more as part of their host countries than as a part of the home country of their MNE (Kostova et al., 2018; Vora and Kostova, 2007). In this study we suggest that subsidiaries can have varying degrees of organizational identification, which may affect their tendencies to show initiative. Moreover, headquarters could also use a subsidiary's organizational identification to decide whether to support the initiative or not. The next section discusses this logic further.

Hypotheses

How a subsidiary's organizational identification with the MNE influences its initiative

Two mechanisms are pertinent for understanding how organizational identification may influence subsidiary initiative. The first is that a subsidiary's organizational identification can prompt it to demonstrate initiative, which we call the *subsidiary motivation* mechanism. A subsidiary that has low identification with the MNE is unlikely to pay close attention to possible opportunities in its vicinity. Due to this weak sense of belongingness, the subsidiary may simply perform tasks assigned by headquarters with little motivation to do anything else. Research has suggested that organizational members who have limited identification are unlikely to actively support their employers (Bhattacharya and Sen, 2003; Mael and Ashforth, 1992). Thus, subsidiaries with limited identification may have little interest in gathering information in their locations, and may overlook or even ignore potential opportunities to contribute more to the MNE. Their initiative is thus very limited.

Yet, a subsidiary with greater organizational identification may behave differently. Such a subsidiary is more willing to invest time and resources into seeking opportunities to create extra value for the MNE. Such a subsidiary is also more keen on undertaking additional projects, since a sense of oneness can prompt organizational members to perform extra tasks to contribute to their organizations (O'Reilly and Chatman, 1986; Riketta and Van Dick, 2005). Hence, organizational identification can prompt subsidiaries to treat initiative taking as an important part of their work (Birkinshaw et al., 1998; Delany, 2000). Nohria and Ghoshal (1994) contended that the cognitive linkage between subsidiaries and the MNE can "enhance their sense of mutual interdependence" (p. 493). Thus, when a subsidiary has a moderate level of identification with the MNE, its motivation to demonstrate initiative may increase.

However, as a subsidiary's organizational identification continues to increase and reaches a high level, its motivation to demonstrate initiative could diminish. Although such a subsidiary is certainly loyal, its strong attachment to the MNE may prevent it from making the best use of its talent. To illustrate, a loyal subsidiary may follow the MNE's orders and guidelines blindly and simply accept the MNE's view as its own without question. As research shows, too much identification may prompt in-group biases (Ploeger and Bisel, 2013; Zavyalova et al., 2016). Meanwhile, because proposing novel projects could offend headquarters, subsidiaries with high identification may refrain from doing so.[1] Thus, the initiative of subsidiaries with high identification may be relatively low.

The second mechanism is that a subsidiary's organizational identification can influence whether headquarters supports or opposes its projects. We call it the *headquarters screening* mechanism. When a subsidiary has weak or limited identification with the MNE,

[1] We thank an anonymous reviewer for suggesting this argument.

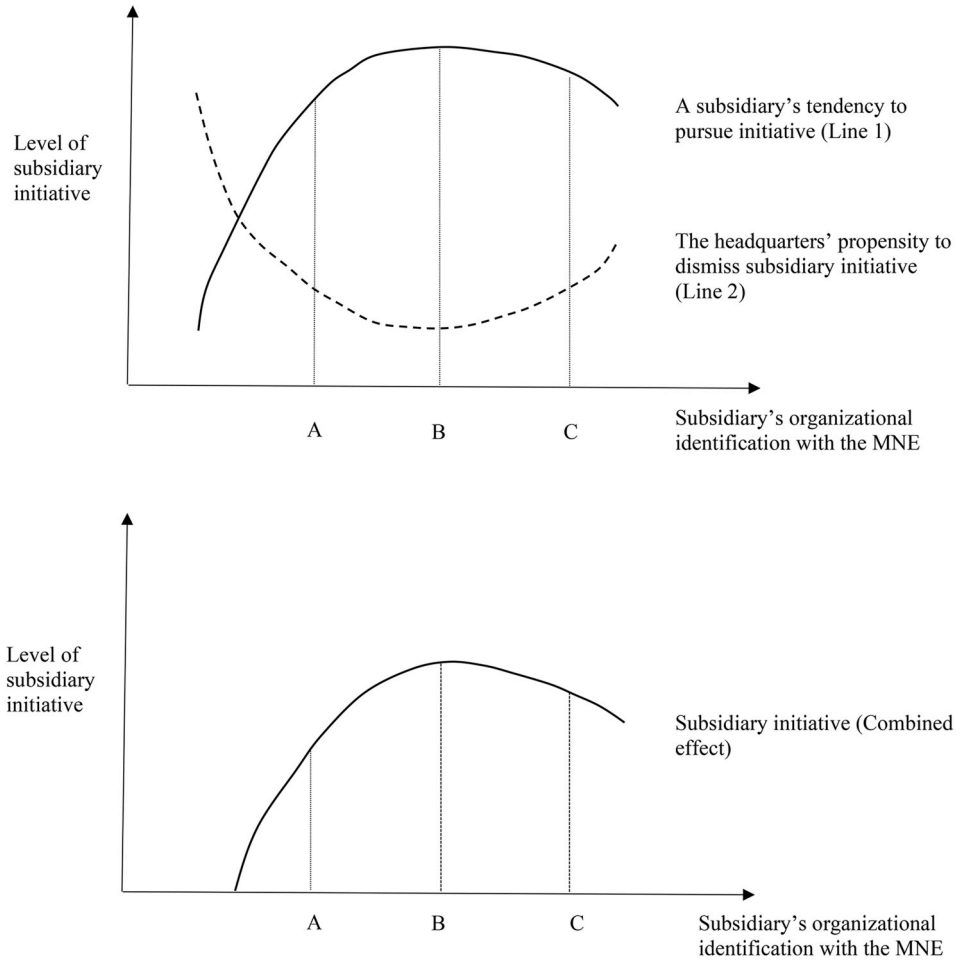

Fig. 1. Subsidiary motivation and headquarters screening mechanisms behind subsidiary initiative.

headquarters may be skeptical about the potential value of the projects that it initiates. As the potential value of these subsidiary projects is often difficult to evaluate due to information asymmetry (Eisenhardt, 1989), headquarters may not have much confidence in them. MNEs have higher monitoring costs than domestic firms (Tihanyi et al., 2000). From headquarters' perspective, the prospects for subsidiary projects are highly uncertain and the subsidiary's intent may also be unclear (Burgelman, 1983; Shimizu, 2012). These considerations may prompt headquarters to dismiss projects initiated by subsidiaries with low identification.

However, headquarters would be more supportive of projects initiated by subsidiaries with a moderate level of organizational identification. All else being equal, headquarters may deem such subsidiaries more trustworthy than subsidiaries with lower identification, thereby viewing the proposals of the former set of subsidiaries as being more credible. Thus, a moderate level of organizational identification gives headquarters more confidence in subsidiaries and their proposed projects. Ouchi (1979) contended that identification could encourage organizational members to develop "a deep level of commitment to [firm] objectives" (p. 837). Roth and O'Donnell (1996) argued that "when an agent accepts and works toward organizational goals … the agency problem is low" (p. 682). Thus, headquarters are less likely to dismiss projects developed by subsidiaries with a moderate level of organizational identification.

Finally, headquarters may have mixed feelings about projects proposed by subsidiaries with high identification. Although the intent of subsidiaries may not be an issue in this case, headquarters may also see limitations with these projects, because organizational members with high identification tend to seek conformity (Conroy et al., 2017; Michel and Jehn, 2003). While this allows them to carry out their routine duties well, it also limits their creativity (Madjar et al., 2011). Consequently, headquarters may not actively support projects put forth by subsidiaries with high identification.

We summarize these arguments in Fig. 1. As line 1 shows, a subsidiary's identification with the MNE affects its motivation to pursue initiative. A subsidiary with moderate identification (point B) would have greater motivation to contribute to the MNE than a subsidiary with weak identification (point A). However, this effect starts to diminish as organizational identification increases beyond a certain level (point C). Moreover, headquarters has the final say about which subsidiary projects can proceed, which may depend on a subsidiary's organizational identification (line 2). Given these arguments, we suggest that a subsidiary's organizational identification may have a curvilinear relation with its initiative (Combined effect).

Hypothesis 1. *A subsidiary's organizational identification with the MNE has an inverted U-shaped relationship with its initiative.*

Boundary conditions

Our first hypothesis proposes that a subsidiary's identification with the MNE influences its initiative via subsidiary motivation and headquarters screening mechanisms, ultimately leading to a curvilinear effect. In developing this hypothesis, we focus on subsidiaries' organizational identification while assuming all subsidiaries and MNEs are similar or even identical. To better understand how organizational identification operates, it is useful to relax this assumption by examining certain boundary conditions. As these factors vary, the effect of organizational identification may be strengthened or weakened. We begin by discussing subsidiary age.

Subsidiary age

Subsidiary age has been noted as a crucial factor in the literature. Older subsidiaries are generally more established and less likely to be dissolved than younger subsidiaries (Delios and Beamish, 2001; Li, 1995). We suggest that a subsidiary's age may shape the subsidiary motivation mechanism, thus moderating the effect of organizational identification. One reason is that older subsidiaries may not have a strong motivation to be entrepreneurial. As research suggested, organizational age can breed an inertia force (Hannan and Freeman, 1984; Kelly and Amburgey, 1991). Older firms are "susceptible to embedded rules, routines, and bureaucratic processes" (Shimizu and Hitt, 2005: 53). As this inertia force emerges and grows, a subsidiary's entrepreneurial spirit may diminish. Also, although age may make one appear credible, older subsidiaries may be more risk-averse. They may accept things and do not bother with finding new alternatives (Yiu et al., 2007). Hence, while organizational identification may prompt subsidiaries to show initiative, older subsidiaries may not do it actively.

In contrast, younger subsidiaries may be less constrained. With their shorter histories, younger organizations are less affected by long-standing internal arrangements of the MNE and can be more active (Guillén, 2002; Henderson, 1999). This enables them to seize opportunities in their locations. At the same time, younger subsidiaries may be more willing to respond to the MNE's potential needs than older ones. As headquarters' support is crucial for these subsidiaries in addressing challenges in host countries (Eden and Miller, 2004; Zaheer, 1995), younger subsidiaries may have a stronger motivation to support the MNE. Since the subsidiary motivation mechanism is likely to be strengthened in younger subsidiaries, we argue that the positive effect of organizational identification may be stronger for younger subsidiaries than for older ones.

Hypothesis 2. *The positive relationship between a subsidiary's organizational identification and its initiative is weaker for older subsidiaries.*

Subsidiary capability

Aside from age, subsidiary capability is another boundary condition that may alter the subsidiary motivation mechanism. Subsidiaries of an MNE may have different capabilities (Birkinshaw et al., 1998; Delios and Beamish, 2001). Some subsidiaries may be good at developing technologies (Phene and Almeida, 2008), while others may be skilled in managing customers (Hewett et al., 2003). Here we suggest that the subsidiary motivation mechanism may differ depending on the level of subsidiary capability. Specifically, subsidiaries with relatively weak capabilities may not respond actively to the MNE's needs. Operating in a foreign country can be challenging, and limited capabilities can make this even more difficult. Without sufficient capabilities, subsidiaries may need to rely on headquarters' support all the time. These subsidiaries would not have the time and resources to go entrepreneurial. Thus, subsidiaries with relatively weak capabilities are unlikely to demonstrate much initiative, even if they do feel a sense of belonging to the MNE.

Alternatively, subsidiaries with stronger capabilities would be in a better position to contribute to the MNE. With their expertise and strength, these subsidiaries can make good use of the opportunities available to them (Kafouros and Aliyev, 2016; Michailova and Zhan, 2015). In addition, strong capabilities enables these subsidiaries to address potential challenges effectively in advancing their projects. As capability may strengthen the subsidiary motivation mechanism, the positive effect of organizational identification is likely to be intensified for subsidiaries with greater capabilities.

Hypothesis 3. *The positive relationship between a subsidiary's organizational identification and its initiative is stronger for subsidiaries with more capabilities.*

MNE international experience

Certain MNE characteristics can be crucial boundary conditions that change the headquarters screening mechanism. One is MNE international experience. MNEs may have different levels of international experience. Some MNEs have extensive international experience, while others are new to the game. The degree of international experience can make a difference in changing a headquarters' tendency to dismiss subsidiary projects. Specifically, as MNEs accumulate international experience, they will understand the global environment better, which is useful for evaluating subsidiary projects. Experienced MNEs differ greatly from less experienced ones. For example, experienced MNEs are less susceptible to the influence of policy uncertainty in foreign countries (Delios and Henisz, 2003). Slangen and Hennart (2008) argued that experienced MNEs "incur fewer costs in managing subsidiaries" (p. 474).

Thus, MNEs with rich international experience can more effectively assess whether a particular subsidiary project has potential or not. Moreover, MNEs with more international experience can do a better job of nurturing and coaching subsidiaries. As international experience allows MNEs to "engage in more sophisticated thought patterns that enrich the attention they pay to the international marketplace" (Bouquet et al., 2009: 114), the MNEs with more international experience are less likely to dismiss most projects proposed by subsidiaries.

However, MNEs with less international experience may not be able to evaluate subsidiary projects effectively. With limited experience, these MNEs can be far too cautious in their decisions. The fast-changing dynamics of the global business environment creates tremendous challenges in evaluating subsidiary projects. MNEs with limited international experience may not be able to do so effectively and efficiently, and thus may opt to turn down all subsidiary projects. Moreover, headquarters without much international experience could simply assume that all subsidiary projects are risky (Hennart, 1991). In addition, the inexperienced MNEs may hesitate to invest in high-risk but potentially high-reward projects (Carpenter et al., 2003). As MNEs with limited international experience may not differentiate high quality projects from low quality ones effectively, they may opt to dismiss these subsidiary projects. We thus posit that the positive effect of a subsidiary's organizational identification would be more pronounced for MNEs with more international experience.

Hypothesis 4. *The positive relationship between a subsidiary's organizational identification and its initiative is stronger for MNEs with more international experience.*

MNE scope

Lastly, MNE scope can also be a boundary condition that shapes the headquarters screening mechanism. MNE scope denotes the extent that an MNE has subsidiaries located in different host countries (Asmussen, 2009; Zhou and Wu, 2014). In the global market, some MNEs have extensive operations in many different host countries, while others operate in a few countries only. Whether an MNE has a broad or narrow scope can shape the headquarters screening mechanism. Specifically, as an MNE operates in a wide range of different host countries, it will come across diverse and perhaps inconsistent information (Lu and Beamish, 2001). To the extent that each host country has its own peculiarities, MNEs that have broader scopes would find it more difficult to assess the potential value of subsidiary projects reliably. Studies have found that country diversity adversely influences MNE performance (Goerzen and Beamish, 2003). This is because MNEs operating in a wide range of host countries may apply the experience gained in one country to another country (Zeng et al., 2013). Under this circumstance, fewer subsidiary projects may be approved.

In contrast, MNEs with narrower scopes may behave differently, because having operations in relatively few host countries allows these MNEs to develop a deeper understanding of each country. Since this can reduce the potential information asymmetry between headquarters and subsidiaries (O'Donnell, 2000; Roth & O'Donnell, 1996), these MNEs may be able to identify suitable projects with greater confidence. Meanwhile, a relatively narrow scope would allow the MNEs to allocate more attention to each of their subsidiaries (Bouquet et al., 2009), so that they can evaluate subsidiary projects effectively. We thus contend that the positive effect of a subsidiary's organizational identification would be attenuated when MNEs have broader scopes.

Hypothesis 5. *The positive relationship between a subsidiary's organizational identification and its initiative is weaker for MNEs with broader scopes.*

Methods

Sample

We used a sample of Taiwanese MNEs to test our hypotheses. First, we sought support from Taiwan Electrical and Electronic Manufacturers' Association (TEEMA), which accounts for more than half of all Taiwanese manufacturing firms. From TEEMA we requested a list of all members with at least one foreign subsidiary ($n = 1530$). We sent out invitations to these firms, among which 40% agreed to participate in our research. We then mailed the survey to them. After two rounds of phone calls and emails, 151 firms completed and returned their questionnaires. The response rate is 9.8%, which is consistent with the range reported in prior research (Harzing, 2000). We assessed the non-response bias by examining the differences in characteristics between our sample firms and the rest of the population. As the differences are statistically insignificant in terms of MNE size, subsidiary age and subsidiary size (all $p > 0.1$), the non-response bias is not a major issue. Table 1 provides an overview of our sample.

One challenge in using surveys for hypothesis testing is the common method variance (CMV) (Podsakoff et al., 2003). To the extent that the independent and dependent variables are obtained from the same source, the findings may be biased. We attempted to address this potential issue by gathering the key independent and outcome variables from different sources. Chang, van Witteloostuijn, and Eden (2010) noted that this is perhaps "the best way to avoid or minimize any potential CMV bias" (p. 179). To do so, we asked subsidiaries to answer the questions related to organizational identification (i.e. the subsidiary section) and headquarters to answer those related to initiative (i.e. the headquarters section). In our cover letter, we asked the headquarters executive who was in charge of managing foreign operations to answer the headquarters section of the survey and to forward the subsidiary section to the subsidiary that was of most strategic importance to the MNE. We requested these headquarters executives to select the subsidiary because they were the key informants (Kumar et al., 1993). Combining the headquarters and subsidiary sections of the survey leads to one observation in our data. This approach has been used in prior research (Hansen and Løvås, 2004; Wang et al.,

Table 1
Sample characteristics.

MNE	
A: Publicly listed	(*Percentage*)
Yes	71
No	29
B: Industry background	
Computer components	23
Information technology	30
Electronics	38
Others	9
C: Total number of subsidiaries	
1 subsidiary	57
2 to 5 subsidiaries	26
More than 5 subsidiaries	17
Subsidiary	
A: Host countries	
China	54
Indonesia	9
Philippines	4
Thailand	8
Vietnam	25
B: Status (able to generate profits independently)	
Yes	53
No	47

2014).

While we have attempted to address the CMV issue by gathering our independent and dependent variables from different sources, it is useful to perform additional checks. First, we utilized multi-item scales to measure our variables and scattered questions pertaining to these variables. Second, we sought to minimize social desirability bias by putting serial numbers on the mail survey to protect respondents' identities. Third, we ran Harman's single-factor test as recommended by Podsakoff et al. (2003). That is, all of the survey items were entered simultaneously into an exploratory factor analysis. Unrotated factor analysis extracted factors with eigenvalues greater than one corresponding to our theoretical variables. No single factor emerged, nor did any one general factor account for more than 17.31% of the variance, further reducing concerns about CMV.

Measures

The Appendix summarizes all Cronbach's αs, factor loadings, variances, and related studies for developing survey items in this study. In developing the items, we used the back-translation procedure (Brislin, 1970). The authors first developed the items in English and then translated them into Chinese. A professor in the management field whose first language was Chinese and who had lived in the U.S. for decades then back-translated the items to English. To ensure the appropriateness and consistency of the items, the professor and the authors jointly refined the wording of each item. Both the exploratory and confirmatory factor analyses suggest that loading patterns clearly differ across variables and factor solutions are consistent with our propositions. Unless otherwise specified, the items were measured on a five-point Likert scale (1 = strongly disagree and 5 = strongly agree).

As the dependent variable, *subsidiary initiative* was measured by the extent to which a subsidiary showed initiative in contributing to the MNE. We measure this construct by considering a subsidiary's internal and external initiative that add value to the MNE. The activities include the development of new production processes, new product designs, and new marketing channels, in line with earlier studies (Ambos et al., 2010; Birkinshaw et al., 1998). For example, Birkinshaw et al. (1998: 239) used the frequency of new product development by a subsidiary to measure the subsidiary's initiative. The items for this variable were measured on a five-point scale (1 = never to 5 = frequently). The final measure of subsidiary initiative is the average response of these items, which has acceptable validity and reliability (Cronbach's $\alpha = 0.83$, convergent factor loadings ranging from 0.80 to 0.85, and communality estimates ranging from 0.64 to 0.78).

A subsidiary's *organizational identification* with the MNE is the independent variable. As shown in the Appendix, the items capture the extent to which subsidiaries identify themselves with the MNE, whether they are proud to be a part of the MNE, and whether they would place the MNE's interests above their own (Cooper and Thatcher, 2010; Kostova and Roth, 2002). The measure of this construct has satisfactory reliability and validity (Cronbach's $\alpha = 0.89$, convergent factor loadings ranging from 0.89 to 0.92, and communality estimates ranging from 0.77 to 0.87). We used the average of the items to measure a subsidiary's organizational identification with the MNE.

As discussed, several boundary conditions may change the subsidiary motivation and headquarters screening mechanisms, thus

shaping the effect of a subsidiary's organizational identification. As for the subsidiary motivation mechanism, subsidiary age and capability are two such factors. *Subsidiary age* was measured by the number of years after a subsidiary's establishment, following prior studies (Gaur et al., 2007; Tang and Rowe, 2012). Meanwhile, *subsidiary capability* was measured by a subsidiary's R&D and marketing capabilities, because these two investments can generate crucial capabilities for MNEs (Delios and Beamish, 2001; Fang and Zou, 2009). To measure this variable, we asked headquarters to indicate the strength of its subsidiary's capabilities using a two-item scale, which has acceptable reliability and validity (Cronbach's $\alpha = 0.89$, convergent factor loadings are 0.89 and 0.92, and communality estimates are 0.77 and 0.78, respectively). Averaging the items led to the measure of subsidiary capability.

Separately, MNE international experience and MNE scope may also affect the headquarters screening mechanism. *MNE international experience* was measured by the number of years since the MNE's first foreign investment, consistent with prior studies (Gaur and Lu, 2007; Zeng et al., 2013). This variable was log-transformed to reduce the skewness. On the other hand, *MNE scope* was measured by the number of unique foreign countries in which an MNE had subsidiaries (Lu and Beamish, 2001; Tihanyi et al., 2000). This variable aims to capture the breadth of an MNE's operating scope in terms of host countries (Hashai, 2011; Kim, 2013).

Some control variables also merit explanation. First, we considered the MNE's internationalization as a control variable, because subsidiaries of highly internationalized MNEs may have more information and resources, which could influence their tendency to show initiative. *MNE internationalization* was measured by the ratio of the MNE's foreign sales to total employees (logarithm). This indicator measures an MNE's ability to generate overseas sales, thus capturing firm internationalization (Sullivan, 1994). Also, MNE size was included since large MNEs may be more resourceful in encouraging their subsidiaries to show initiative. *MNE size* was measured by the employment of the MNE (Makino et al., 2002), with a log-transformation.

Second, several variables at the subsidiary level are also considered, one of which is subsidiary size. As larger subsidiaries may be more established and have more resources, they may show more initiative. *Subsidiary size* was measured by the number of subsidiary employees (logarithm). At the same time, autonomy can be relevant because without it, subsidiaries may not have any discretion to pursue independent projects (Birkinshaw et al., 1998; Wang et al., 2014). We measured this variable using the following item: "our subsidiary has high autonomy in managing its operations" (1 = strongly disagree, 5 = strongly agree). This item was assessed by headquarters managers. Moreover, *subsidiary's dependence on the MNE* was included as a control variable, as a high dependence on headquarters may reduce a subsidiary's tendency to demonstrate initiative. This variable was measured by asking subsidiaries to reflect on their dependence on headquarters for technology, marketing, and financing, following earlier studies (Hewett and Bearden, 2001; Kostova and Roth, 2002). The items have satisfactory reliability and validity (Cronbach's $\alpha = 0.91$, convergent factor loadings ranging from 0.89 to 0.94, and communality estimates ranging from 0.70 to 0.85).

Third, the host country context may affect subsidiary initiative. For instance, MNEs may not pay enough attention to subsidiaries operating in institutionally remote countries, because the difference between host and home countries can "hinder the collection and interpretation of information" regarding the subsidiaries (Yu and Cannella, 2007: 668). We thus included *institutional distance* that measured the regulative and normative difference between the MNE's home country and a given host country (Xu et al., 2004). Moreover, since the subsidiaries of our sample MNEs operate in emerging economies where changes may occur frequently (Hoskisson et al., 2000), our models included *host country institutional challenge*. This variable was measured by items that capture the degree to which a subsidiary perceives the formal institutions—in terms of legal system, economic policy and regulations—in the host environment to be challenging. The items were developed following prior research (Cheng and Yu, 2008; Xu and Shenkar, 2002). The items have good reliability and validity (Cronbach's $\alpha = 0.82$, convergent factor loadings ranging from 0.79 to 0.95, and communality estimates ranging from 0.74 to 0.93).

Finally, because our sample firms were from four sectors in the broad electronics industry including computer components, information technology, electronics, and other manufacturing areas, we used three dummy variables to control for the industry effect, with the baseline category being the other manufacturing areas.

Results

Table 2 shows the means, standard deviations, and correlations of all variables. The interactions were created using the mean-centered approach. We used hierarchical ordinary least squares (OLS) regression to test our hypotheses. The estimation results are summarized in Table 3. Model 1 has the control and moderating variables; Models 2 and 3 examine the main effect of organizational identification; from Models 4 to 7 we examine the interactions, while Model 8 includes all of the explanatory variables. All variance inflation factor (VIF) values are below the recommended threshold of 10, suggesting that multicollinearity is not a major issue.

Hypothesis 1 argues that a subsidiary's organizational identification with the MNE has a curvilinear relation with subsidiary initiative. According to Model 3, the first-order term of *organizational identification* is positive ($\beta = 0.46, p < 0.01$) while the second-order term is negative ($\beta = -0.18, p < 0.05$). We graphed the effect in Fig. 2. As can be seen, subsidiary initiative is enhanced as organizational identification increases from a low level. But as organizational identification continues to rise and go beyond a certain level, subsidiary initiative begins to drop. This pattern supports Hypothesis 1.

Hypotheses 2 and 3 examine the boundary conditions at the subsidiary level that may affect the subsidiary motivation mechanism, thus influencing the effect of organizational identification. In particular, Hypothesis 2 contends that subsidiary age may weaken the positive effect of organizational identification. This hypothesis is examined in Model 4. Given that the interaction of *organizational identification* and *subsidiary age* is negative ($\beta = -0.33, p < 0.05$), Hypothesis 2 is supported. On the other hand, Hypothesis 3 posits that subsidiary capability may amplify the positive effect of organizational identification. As shown in Model 5, the interaction of *organizational identification* and *subsidiary capability* is positive and significant ($\beta = 0.54, p < 0.01$). Thus Hypothesis 3 is supported.

Table 2
Means, standard deviations, and correlations.

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
1. Subsidiary initiative	3.28	0.81												
2. Organizational identification	3.81	1.07	0.21											
3. Subsidiary age[a]	1.05	0.21	−0.15	−0.22										
4. Subsidiary capability	2.24	0.43	0.42	−0.09	−0.40									
5. MNE international experience[a]	1.38	0.14	0.26	0.13	−0.01	−0.11								
6. MNE scope	2.11	0.54	−0.20	−0.15	0.13	0.17	0.18							
7. MNE internationalization[a]	7.30	0.27	0.30	0.07	−0.04	0.19	0.48	0.09						
8. MNE size[a]	2.57	0.50	−0.04	0.02	0.30	0.06	0.14	0.14	0.06					
9. Subsidiary size[a]	2.31	0.60	0.03	0.05	0.07	0.29	0.14	0.08	−0.03	0.20				
10. Subsidiary autonomy	1.61	0.21	0.33	0.21	0.09	0.65	0.08	0.12	0.16	0.11	0.08			
11. Subsidiary dependence on headquarters	3.82	1.21	−0.43	0.41	−0.25	−0.15	0.24	−0.20	0.04	0.08	0.06	−0.42		
12. Institutional distance	0.14	0.05	−0.10	−0.12	−0.01	0.07	0.02	0.08	0.13	0.21	0.24	0.14	−0.15	
13. Host country institutional challenge	3.53	0.89	0.16	0.20	−0.21	−0.12	0.13	−0.16	0.04	0.09	0.05	0.12	0.29	0.18

Note: n = 151. [a]: Log-transformed. Correlations with absolute values greater than 0.20 are significant at $p < 0.05$. Industry dummies were included but are not shown here.

Hypotheses 4 and 5 examine the factors at the MNE level that may shape the headquarters screening mechanism, thereby affecting the effect of a subsidiary's organizational identification. Specifically, Hypothesis 4 suggests that MNE international experience may strengthen the positive effect of organizational identification on subsidiary initiative. According to Model 6, the interaction of *organizational identification* and *MNE international experience* is positive ($\beta = 0.41, p < 0.05$). This provides support for Hypothesis 4. Finally, Hypothesis 5 posits that MNE scope could weaken the positive effect of organizational identification on subsidiary initiative. As shown in Model 7, the interaction of *organizational identification* and *MNE scope* is negative ($\beta = -0.35, p < 0.01$), which supports Hypothesis 5.

To better understand how the boundary conditions operate, we plotted the interaction effects in Figs. 3–6. As can be seen, the effect of organizational identification greatly changes depending on whether these boundary conditions are at a low or a high level. Overall, these graphs suggest that it is crucial to consider the factors that may alter the effect of organizational identification.

Robustness checks

Aside from the main results, we also conducted three additional analyses to ensure the robustness of our findings. These analyses examined (1) MNE industry and host country effects, (2) the potential effect of formal assignment, and (3) the potential endogeneity issue.

MNE industry and host country effects. While our main findings were obtained with the inclusion of control variables, one may wonder whether the results would vary across different industries and host countries. To explore the industry issue, we split our data into three subsamples: MNEs in the (1) computer components, (2) information technology, and (3) electronics sectors. Using these subsamples, we re-ran the models. Findings based on these subsamples are consistent with the main findings. Moreover, as more than half of our subsidiaries are located in China, we tested whether the findings are sensitive to this particular host country. To do so, we categorized our data into two subsamples: (1) subsidiaries in China and (2) subsidiaries in other countries. Again, we find consistent results, which are not shown here in the interest of space.

The potential effect of formal assignment. Our core argument is that organizational identification may affect a subsidiary's motivation to show initiative and the headquarters' tendency to dismiss subsidiary projects. Although organizational identification can be a tool for MNEs to guide subsidiary behaviors, MNEs may also formally request their subsidiaries to show initiative. Here we performed two tests to address this issue. First, we examined whether the findings vary between publicly traded MNEs and privately owned MNEs. Our rationale is that public firms may establish more extensive control procedures to induce their subsidiaries to demonstrate initiative. In light of this, we split our sample into public MNEs and private MNEs and repeated the analysis. Second, we also checked whether subsidiaries that generated profits independently behave differently from those that did not. Subsidiaries that generated their own profits may be more important to MNEs and thus may be expected to show initiative. We further divided our sample into subsidiaries that generated profits independently and those that did not. In results not shown here to conserve space, we find consistent results.

Potential endogeneity issue. A subsidiary's organizational identification with the MNE may be endogenous. If certain variables affect the subsidiary's identification but the endogeneity issue is not adequately controlled for, then the conclusions could be biased (Bascle, 2008). Here we addressed this issue by following Chatterjee and Hambrick (2007, pp. 370–371). Specifically, we regressed the observed subsidiary organizational identification on our control variables. In this regression, we added cultural distance (Kogut and Singh, 1988) as an additional predictor. Based on this model, we calculated the estimated organizational identification and included it as a control in estimating subsidiary initiative. The results are presented in Table 4. As shown in Model 9, *institutional distance* is negatively related to *organizational identification* ($\beta = -0.23, p < 0.05$). In Model 10, we also find that our theoretical predictors remain significant after controlling for the potential endogeneity. In sum, these analyses support our thesis that a subsidiary's organizational identification is a crucial determinant of its initiative.

Table 3
OLS estimates of subsidiary initiative.

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Constant	4.10**	2.99**	2.88**	2.68**	2.94**	2.80**	2.93**	2.69**
	(0.52)	(0.44)	(0.44)	(0.41)	(0.44)	(0.43)	(0.44)	(0.40)
Computer components industry	−0.48*	−0.55**	−0.53**	−0.58**	−0.51**	−0.52**	−0.51**	−0.49**
	(0.19)	(0.16)	(0.16)	(0.15)	(0.16)	(0.16)	(0.16)	(0.15)
Information technology industry	0.52	0.54	0.55	0.57	0.59	0.59	0.59	0.53
	(0.45)	(0.43)	(0.42)	(0.40)	(0.43)	(0.42)	(0.42)	(0.39)
Electronics industry	0.12	0.15	0.03	0.00	0.02	0.05	0.01	−0.01
	(0.22)	(0.24)	(0.24)	(0.22)	(0.24)	(0.24)	(0.24)	(0.21)
MNE internationalization	0.52+	0.59+	0.51	0.44	0.44	0.42	0.47	0.52+
	(0.30)	(0.32)	(0.33)	(0.32)	(0.31)	(0.31)	(0.31)	(0.30)
MNE size	0.37	−0.40	−0.44	−0.58	−0.44	−0.40	0.40	0.42
	(0.51)	(0.51)	(0.51)	(0.47)	(0.50)	(0.41)	(0.41)	(0.36)
Subsidiary size	0.12**	0.11**	0.12**	0.13**	0.11**	0.10**	0.11**	0.12**
	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)
Subsidiary autonomy	0.07	0.05	0.12	0.09	0.10	0.18	0.03	0.02
	(0.14)	(0.17)	(0.17)	(0.16)	(0.17)	(0.17)	(0.18)	(0.16)
Subsidiary dependence on headquarters	−0.05	−0.34*	−0.42*	−0.24	−0.45*	−0.39*	−0.44*	−0.21
	(0.13)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)	(0.16)
Institutional distance	−0.11	−0.12	−0.11	−0.13	−0.12	−0.11	−0.14	−0.12
	(0.13)	(0.13)	(0.13)	(0.12)	(0.13)	(0.13)	(0.13)	(0.12)
Host country institutional challenge	0.24+	0.18	0.20	0.16	0.22	0.23	0.19	0.26*
	(0.13)	(0.14)	(0.14)	(0.13)	(0.14)	(0.14)	(0.14)	(0.13)
Predictors								
Subsidiary age (*M1*)	−0.15	−0.17	−0.32	−0.34	−0.21	−0.16	−0.21	−0.07
	(0.19)	(0.19)	(0.19)	(0.18)	(0.37)	(0.37)	(0.37)	(0.34)
Subsidiary capability (*M2*)	0.56**	0.57**	0.51**	0.49**	0.45**	0.44**	0.47**	0.47**
	(0.18)	(0.15)	(0.15)	(0.12)	(0.17)	(0.16)	(0.17)	(0.15)
MNE international experience (*M3*)	0.30	0.23	0.26	0.26	0.32	0.33	0.35	0.44
	(0.39)	(0.37)	(0.37)	(0.34)	(0.29)	(0.29)	(0.30)	(0.28)
MNE scope (*M4*)	−0.07	−0.11	−0.13	−0.14	−0.14	−0.12	−0.16*	−0.18*
	(0.09)	(0.08)	(0.08)	(0.09)	(0.08)	(0.08)	(0.08)	(0.09)
Organizational identification (*X1*)		0.49**	0.46**	0.49**	0.53**	0.42*	0.56**	0.59**
		(0.17)	(0.17)	(0.16)	(0.17)	(0.17)	(0.17)	(0.20)
Interactions								
$X1^2$			−0.18*	−0.19**	−0.18*	−0.18*	−0.21**	−0.18*
			(0.07)	(0.07)	(0.07)	(0.07)	(0.08)	(0.07)
X1 × *M1*				−0.33*				−0.29*
				(0.14)				(0.14)
X1 × *M2*					0.54**			0.62**
					(0.13)			(0.13)
X1 × *M3*						0.41*		1.21**
						(0.18)		(0.38)
X1 × *M4*							−0.35**	−0.39*
							(0.05)	(0.17)
F value	5.15**	5.99**	6.26**	7.68**	5.93**	6.20**	6.07**	7.92**
Adjusted R^2	0.28	0.33	0.36	0.43	0.39	0.37	0.37	0.48

Note: Unstandardized coefficients are shown, with standard errors in parentheses.
$+p < 0.1$, $*p < 0.05$, $**p < 0.01$; two-tailed tests.

Discussion

How does a subsidiary's organizational identification with an MNE influence the subsidiary's initiative? In contrast with previous research that emphasizes subsidiaries, we suggest that subsidiary initiative can be understood as a process involving both headquarters and subsidiaries. Two mechanisms are pertinent. On the one hand, the subsidiary motivation mechanism suggests that subsidiaries within an MNE may have varying motivation to undertake entrepreneurial projects, depending on its identification with the MNE. On the other hand, the headquarters screening mechanism indicates that the headquarters may use a subsidiary's identification to decide whether to support or dismiss the subsidiary projects. Given the two mechanisms, we suggest that a subsidiary's identification with the MNE has a curvilinear relation with its tendency to show initiative. Analyzing a sample of Taiwanese MNEs, we find that a subsidiary's organizational identification with the MNE has an inverted U-shaped relation with its initiative. Moreover, our results also suggest that the two mechanisms can have changing impacts depending on certain boundary conditions.

This study contributes to the literature in two ways. First, our study enriches the literature on subsidiary initiative by highlighting the role of headquarters. Existing studies have noted that subsidiaries play a critical role in strengthening an MNE's competences (Mudambi et al., 2014; Palmie et al., 2014) and that the projects undertaken by subsidiaries are important to an MNE's competitive

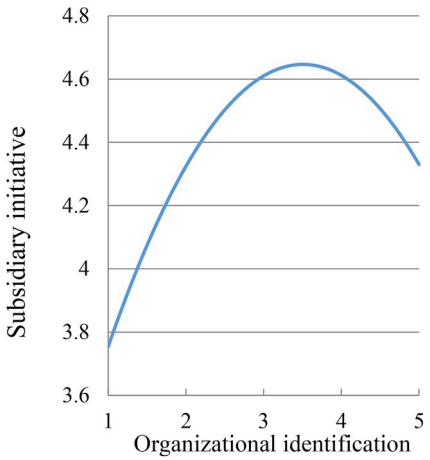

Fig. 2. The relationship between organizational identification and subsidiary initiative.

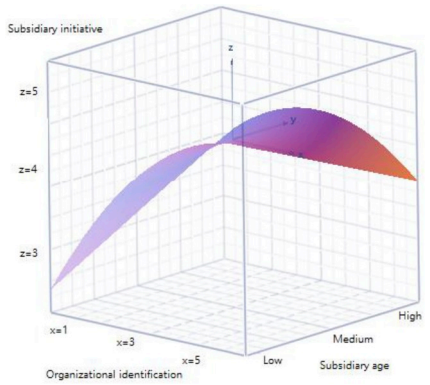

Fig. 3. Organizational identification, subsidiary age and subsidiary initiative.

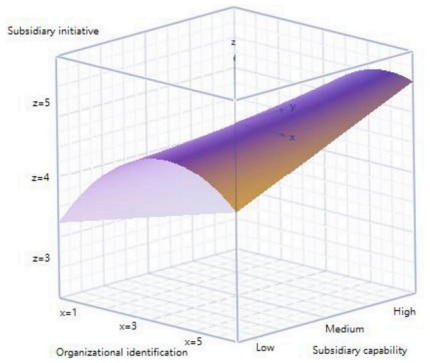

Fig. 4. Organizational identification, subsidiary capability and subsidiary initiative.

advantages (Phene and Almeida, 2008). In doing so, prior research predominantly considers the factors at the subsidiary level, while paying less attention to the role of headquarters. Yet as research shows, headquarters may not welcome all subsidiary projects (Bouquet et al., 2016; Ciabuschi et al., 2011; Schotter and Beamish, 2011). In this study, we build upon these studies to suggest that headquarters may dismiss subsidiary projects. Specifically, due to the potential information asymmetry and limited understanding of subsidiaries (Filatotchev and Wright, 2011; Hoenen and Kostova, 2015), the headquarters may decide whether to support a subsidiary's projects based on the subsidiary's organizational identification. This argument suggests that headquarters play a critical role in the subsidiary initiative process.

Second, our study also contributes to the literature on headquarters-subsidiary relations (Kostova et al., 2016; Steinberg and Kunisch, 2016). One insight of this literature is that headquarters may rely on certain mechanisms to guide subsidiary behaviors, and organizational identification has been noted as an important tool for MNEs (O'Donnell, 2000). Although one may assume that more

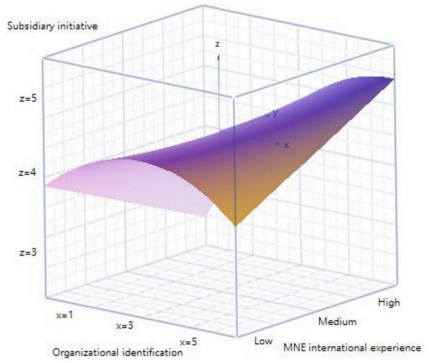

Fig. 5. Organizational identification, MNE international experience and subsidiary initiative.

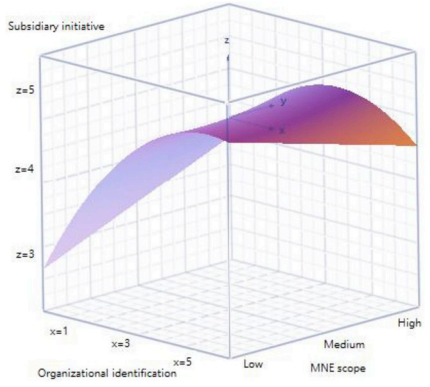

Fig. 6. Organizational identification, MNE scope and subsidiary initiative.

identification may be better, our study showed that this may not be the case. Importantly, although more identified subsidiaries are certainly loyal, they may have relatively restricted perspectives, which prevents them from making the best use of their potential.

By our findings, headquarters may not be too optimistic in using organizational identification to manage subsidiaries. When subsidiaries agree with an MNE's values, they are committed members. However, loyalty is not the only element that matters. To demonstrate initiative, subsidiaries also need inspiration, determination, and persistence, which may not be always available for highly identified subsidiaries. Instead, a moderately identified subsidiary could have greater capacity to think differently, generate new ideas, and take actions in taking new projects. As subsidiary initiative has a more critical role in MNEs, headquarters managers may need to incorporate this finding in managing subsidiaries.

Limitations and future directions

Like other studies, ours have several limitations that provide opportunities for future research. First, we suggest that a subsidiary's organizational identification may affect its tendency to show initiative via the subsidiary motivation and headquarters screening mechanisms. This argument is developed under the premise that organizational identification is the primary factor that motivates a subsidiary to show initiative and that a headquarters is fully aware of a subsidiary's organizational identification. While these assumptions allow us to examine organizational identification, other factors may be relevant. For instance, aside from organizational identification, economic incentive may also influence subsidiaries' motivation to show initiative. Similarly, MNEs of different strategies such as multidomestic or global strategies may have different levels of awareness of subsidiary conditions. Researchers can consider these factors in examining subsidiary initiative in the future.

Second, while we have followed prior research to develop our items, some of our measures are exploratory in nature. For instance, our items for subsidiary initiative emphasize the frequency of particular outcomes such as the development of new production processes and new marketing channels. As extensions, future research can design more sophisticated measures to gauge the magnitude of a subsidiary's initiative. Similarly, our measure of subsidiary organizational identification is based on the response from the subsidiary manager only. To gain more insight, researchers can survey other subsidiary executives such as production and marketing managers to better understand the subsidiary's overall orientaiton (O'Brien et al., 2018).

Finally, our findings are based on a sample of Taiwanese MNEs. As firms from different home countries may have different orientations (Cuervo-Cazurra et al., 2018; Weng and Peng, 2018; Witt and Lewin, 2007), future research can examine other nations (e.g., Canada and Korea) as extensions. For example, does MNEs' home country background influence their management of

Table 4
Robustness check: Estimates with endogeneity control.

Variable	Model 9	Model 10
	Dependent Variable = Organizational identification	Dependent Variable = Subsidiary initiative
Constant	2.82**	1.23
	(0.71)	(0.82)
Cultural distance	−0.08	–
	(0.06)	
Institutional distance	−0.23*	−0.11
	(0.10)	(0.12)
Computer components industry	−0.10	−0.44*
	(0.13)	(0.15)
Information technology industry	0.08	0.73*
	(0.09)	(0.35)
Electronics industry	0.06	0.01
	(0.09)	(0.21)
MNE internationalization	−0.16	0.67+
	(0.16)	(0.40)
MNE size	0.18	0.00
	(0.32)	(0.01)
Subsidiary size	0.43*	0.10**
	(0.19)	(0.01)
Endogeneity control	–	0.95*
		(0.46)
Subsidiary autonomy	–	0.04
		(0.16)
Subsidiary dependence on headquarters	–	−0.34*
		(0.15)
Host country institutional challenge	–	0.23*
		(0.11)
Subsidiary age (*M1*)	–	−0.32*
		(0.12)
Subsidiary capability (*M2*)	–	0.48**
		(0.10)
MNE international experience (*M3*)	–	0.25
		(0.24)
MNE scope (*M4*)	–	0.09
		(0.07)
Organizational identification (*X1*)	–	0.63*
		(0.29)
Variable		
$X1^2$	–	−0.19*
		(0.07)
X1 x *M1*	–	−0.32*
		(0.15)
X1 x *M2*	–	0.60**
		(0.13)
X1 x *M3*	–	1.22**
		(0.37)
X1 x *M4*	–	−0.29*
		(0.13)
F value	7.12**	7.92**
Adjusted R^2	0.40	0.49

Note: Unstandardized coefficients are shown, with standard errors in parentheses.
$+p < 0.1$, $*p < 0.05$, $**p < 0.01$; two-tailed tests.

subsidiaries? If so, how? We look forward to studies examining these questions in the future.

Conclusion

How does a subsidiary's organizational identification with the MNE influence its initiative? In this study, we contend that subsidiary organizational identification affects subsidiary initiative via two mechanisms: subsidiary motivation and headquarters screening. The subsidiary motivation mechanism suggests that organizational identification can influence subsidiaries' motivation to demonstrate initiative. Furthermore, the headquarters screening mechanism indicates that organizational identification may affect the headquarters' tendency to dismiss subsidiary projects. Based on these mechanisms, we propose a curvilinear relationship between a subsidiary's organizational identification with an MNE and its initiative. Moreover, we also examine several boundary conditions at

the subsidiary and MNE levels that may strengthen or weaken the two mechanisms. Results based on a sample of Taiwanese MNEs suggest that a subsidiary's organizational identification with an MNE has an inverted U-shaped relation with its initiative and that the effect is contingent on certain boundary conditions. In closing, we hope that the arguments and findings reported here will stimulate more research examining subsidiary initiative and headquarters-subsidiary relations.

Appendix. Major measures and factor loadings

	Loadings	α
Subsidiary initiative (*Sources*: Birkinshaw et al., 1998; Delany, 2000)		0.83
1. The subsidiary creates new production processes	0.82	
2. The subsidiary develops new marketing channels in the host country of value to the MNE	0.80	
3. The subsidiary generates novel product designs that are adopted by the MNE	0.85	
4. The subsidiary identifies new market niches of value to the MNE	0.81	
Organizational identification (*Sources*: Cooper and Thatcher, 2010; Vora and Kostova, 2007)		0.89
1. The subsidiary sees itself as an integral part of the MNE	0.90	
2. The subsidiary is proud to be a part of the MNE	0.89	
3. The subsidiary puts the MNE first in its actions and decisions	0.92	
Subsidiary age (*Sources*: Gaur et al., 2007; Li, 1995)		–
1. The number of years after a subsidiary's establishment	–	
Subsidiary capability (*Sources*: Delios and Beamish, 2001; Fang and Zou, 2009)		0.89
1. The subsidiary has strong R&D capability	0.89	
2. The subsidiary has strong marketing capability	0.92	
MNE international experience (*Sources*: Gaur and Lu, 2007; Zeng et al., 2013)		–
1. The number of years since the MNE's first foreign investment	–	
MNE scope (*Sources*: Lu and Beamish, 2001; Tihanyi et al., 2000)		–
1. The number of unique foreign countries in which the MNE had subsidiaries	–	
Subsidiary autonomy (*Sources*: Birkinshaw et al., 1998; Wang et al., 2014)		–
1. The subsidiary has high autonomy in managing its operations	–	
Subsidiary's dependence on the MNE (*Sources*: Hewett and Bearden, 2001; Kostova and Roth, 2002)		0.91
1. The subsidiary relies on the MNE for support in strategic planning	0.93	
2. The subsidiary depends on the MNE for developing new technology	0.91	
3. The subsidiary relies on the MNE for assistance in acquiring and managing human resources	0.89	
4. The subsidiary relies on the MNE for securing financial capital	0.92	
5. The subsidiary depends on the MNE for instructions on how to design and conduct marketing activities	0.94	
Host country institutional challenge (*Sources*: Cheng and Yu, 2008; Xu and Shenkar, 2002)		0.82
1. The legal system in the host country is stringent	0.95	
2. The economic policy in the local environment is unsupportive	0.93	
3. The local regulations impose strong constraints on the subsidiary's operations	0.79	

Note: The results are obtained via principal factor extraction with varimax rotation.

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