The Role of Emergence in Leveraging the Value of Board Director International Experience

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Abstract

Purpose – *This study explores the relationship between directors with professional international experience and firm performance. To theorize when the insights of these directors are likely most impactful for firm performance, we draw on distinct streams of research on emergence: including emergence-enabling states for human capital resources (HCR), emergence of unit-level knowledge, and the role of social capital on HCR emergence (HCRE).*

Method – *The study tests the model on a sample of 461 firm-year observations of S&P large-cap U.S. manufacturing firms between 2010-2014, assessing both short-term and long-term performance.*

Findings – *We find that professional international experience directors positively impact firm performance, contingent on the board committee network density, which is a factor that both enables and reflects the affective emergence-enabling state of cohesion.*

Limitation - *This study's generalizability may be somewhat limited because the sample consists only of boards of firms headquartered in the United States.*

Implications - *The findings build the work in international business on the conditions under which having more board directors who have worked internationally can benefit the overall performance of the firm. The findings also meaningfully build the broader (up to this point, largely OB focused) literature on human capital resource emergence, by testing how such theories apply to an upper echelons context. Specifically, this work suggests that the emergence enabling state of cohesion, may be especially critical for groups of high-level executives to thrive as a unit, in line with the HCRE theory.*

Originality - *The theoretical model in this study integrates insights from the predominately OB-focused emergence literature, with strategy/finance research on corporate governance and boards of directors (including the critical role of board committees). The supplemental tests support that these effects are likely due to the mechanisms put forward by the HCRE theory. In this way, the study validates broadly and illustrates specifically how strategy and international business scholarship can benefit from leveraging OB literature on emergence in work groups.*

Keywords: boards of directors, international work experience, firm performance, emergence

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Introduction

Amid an increasingly globalized labor market (Collings et al., 2019; Harrison et al., 2019), several researchers have examined the intersection of the prior work experience of executives and international business considerations (e.g., Giannetti et al., 2015; Hahn & Lasfer, 2016; Masulis et al., 2012; Miletkov et al., 2017; Tao et al., 2022). This aligns with upper echelons theory, which establishes that executives, such as board directors, act based on personal life experiences, personalities, and values in strategic situations (Hambrick & Mason, 1984). Building on the theory that individuals can learn from professional experience in foreign markets (Ghoshal, 1987), scholars have demonstrated that having a CEO who has worked abroad (i.e., possesses professional international experience) can be beneficial for bottom-line firm performance (Carpenter et al., 2001; Daily et al., 2000; Le & Kroll, 2017). Moreover, having board directors with international work experience can impact firm strategy, such as internationalization choices (see Chen et al., 2016). It is important to note that extant research has found inconsistent results regarding the relationship between foreign directors and firm performance (Hahn & Lasfer, 2016; Masulis et al., 2012; Miletkov et al., 2017). This work herein helps to delve into this issue, particularly by considering how the nature of a board of directors warrants leveraging theory on group/team processes to better understand where/why the professional international experience of directors impacts the firm's bottom line.

Although both CEOs and board directors are executives, there are critical differences between CEOs and board director roles. Boards are inherently tasked with handling *interdependent* tasks and responsibilities (Hillman & Dalziel, 2003; Tasheva & Hillman, 2019) and are, in this way, a unit of working individuals who may or may not be able to effectively collaborate as a group. In this regard, I propose there is value to unique research that explores not only the value of having some number of board members who personally possess international work experience but also when/why certain processes will enable the board, as a unit, to leverage such expertise brought by individual members such that the unit is actually better able to perform its duties to serve the interests of shareholders (e.g., Forbes & Milliken, 1999; Hambrick et al., 2015). Accordingly, the theory emphasizing that reality boards are a multilevel entity (i.e., individual and unit-level considerations are inherent) is highly useful.

Herein, I labor to build such a new theory. I specifically leverage the organizational behavior (OB) literature work on emergence, particularly distinct facets of human capital resource (hereafter 'HCR') emergence research (Grand et al., 2016; Kozlowski & Klein, 2000; Ployhart & Moliterno, 2011; Ray et al., 2023) to empirically test how such underlying theoretical mechanisms can explain the relationship between the international work experience of board directors and firm-level outcomes (performance). In this way, this work demonstrates the potential insights gained from bridging 'micro' and 'macro' camps by seeing how theory on how people work together generally may/may not help us understand how an array of executives can leverage the potential value of having members with international experience, to ultimate work together as a more effective unit.

I draw upon theory on emergence-enabling states (Ployhart & Moliterno, 2011), how sharing impacts unit-level knowledge (Grand et al., 2016), and the role of social capital in HCR emergence (Ray et al., 2023), and integrate these considerations with findings from broader strategy/corporate governance research, to explore three potential moderators of the professional international experience-firm performance relationship. I empirically test the according model on a sample of US-based S&P large–cap manufacturing firms from 2010–2014. I assess the effects of both accounting and market-based performance measures, as well as short- and long-term performance, and examine the robustness of the findings. By doing so, I make an important and simultaneous theory-building contribution to multiple academic literatures.

First, I explore how and why social interactions pertaining to board committee assignments of directors who are colleagues, as well as past board experience of directors, impact the professional international experience directors-firm performance relationship. By doing so, I help extend the theory on HCR emergence to the practically consequential context of firms' upper echelons. Theory on emergence is not specific to particular hierarchical levels of the organization; while this means such propositions can be leveraged in many contexts, it also means distinct work is needed to understand if (and which of) the particular mechanisms of emergence hold in the context of groups of executives who work together. This work also contributes to the international business literature, more broadly. Despite ample research on the human capital of individual directors and the efficacy of boards, including how the professional international work experience of directors can be beneficial (e.g., Giannetti et al., 2015; Tao et al., 2022), there are still many scholars who don't know about what kinds of processes/ social interactions between colleagues, will actually result in a board made up of members who are internationally-traveled, to be more effective as a unit (cf. Johnson, Schnatterly, & Hill, 2013; Klarner et al., 2021). This work offers insights on how theory on emergence (particularly HCR emergence) may be crucial to unlocking the potential value of having several board members who have worked abroad in their personal career histories.

Theoretical Background and Hypotheses

Professional International Experience of Executives

While there are many advantages to doing business internationally, one particular benefit is that international business experience can create learning opportunities. Actors can learn from societal differences in organizational and managerial processes and systems in ways that improve personal decision–making abilities in general (Ghoshal, 1987). This theoretical argument has empirical support, as the professional international experience of CEOs and TMT members is positively associated with internationalization (Herrmann & Datta, 2006; Reuber & Fischer, 1997; Rivas, 2012), and a similar relationship has been found regarding the professional international experience of directors (Chen et al., 2016). Professional international experience can include full–time past professional positions held by an individual outside of the firm's host country (e.g., Chen et al., 2016; Rivas, 2012) or can also include similar post-secondary education and board positions (Oxelheim et al., 2013).

Because working in a different national context can allow opportunities for individuals to learn different and effective management practices and strategies (Ghoshal, 1987; Tsang, 2002; Zahra et al., 2000), I broadly assert a board director who has previously worked internationally likely has certain valuable insights that other directors who have only worked in the host country's business environment, may not. With these unique and valuable insights, these directors can aid with both monitoring and/or provision of useful counsel to management. Regarding monitoring, exposure to different national contexts may mean a director with international work experience has learned alternative and perhaps uniquely effective approaches for monitoring tasks, such as effectively structuring the pay package of the CEOs to ensure they serve stakeholder interests. These kinds of insights could be shared with the rest of the board, leading to better decisions. Regarding a board's counsel provision role, a director with professional international experience could share insights learned abroad with management, such as the current CEO. This might help CEOs make wiser choices regarding supply chains, mergers and acquisitions, etc. Additionally, because directors with professional international experience may have developed relationships with a more international array of influential individuals, according to resource dependence theory, these directors can also access a wider pool of resources that the firm can leverage to its benefit (Pfeffer & Salancik, 1978). These mechanisms may work in conjunction; for example, a professional international experience director may explicitly share with their board colleagues a valuable insight they learned from a personal acquaintance who is a prominent business or political figure from another nation.

For these reasons, the presence of directors with professional international experience may positively impact firm performance. This is consistent with evidence that having a CEO with prior professional international experience will likely pay dividends for the firm (Carpenter et al., 2001; Daily et al., 2000; Le & Kroll, 2017). I submit, therefore, that the professional international experience of a director could therefore be considered (at the very least) what Ployhart, Nyberg, Reilly, and Maltarich (2014) would classify as both a) a knowledge, skill, ability, and/or other characteristics (hereafter '*KSAO*') and b) a form of *human capital*. It is critical to stress that Ployhart et al. (2014) classify 'human capital' as those characteristics of individuals, which are KSAOs but which are also actually relevant for achieving economic outcomes. For these reasons, I submit that the professional international experience of a member of a focal board could potentially improve the management of the firm in question and is thus a form of 'human capital'.

However, since board responsibilities necessarily involve interdependent tasks and responsibilities (Hillman & Dalziel, 2003; Tasheva & Hillman, 2019), it is important to understand when and how having several individual professional international experience directors can ensure better corporate governance practices by the board overall. To do so, scholars must consider what enables (or hinders) the insights of these directors from affecting the actions and decisions of the board as a unit. Thus, I revisit the theory of emergence, which speaks to how valuable knowledge and skills held by individual members of a unit may lead to the unit being more effective in a way that is more than the sum of the constituent parts. This is consistent with a distinction Ployhart et al. (2014) emphasize. While human capital is a KSAO that helps economic outcomes, HCR (human capital resources) are those forms of human capital accessible for *unit*-relevant purposes. In my context of interest, this would mean that the board is more effective at performing its governance duties, and/or the bottom-line financial performance of the firm is improved. In either case, the key issue is when/why certain other considerations mean having more professional international experience directors does not just mean more human capital but also more HCR. To understand this, I leverage three related, yet importantly distinct, facets of the OB literature on emergence.

Professional international experience directors and emergence-enabling states

Emergence describes how the qualities of individuals in a unit can converge through social interactions to emerge as group constructs that are more than the sum of their parts (Kozlowski & Klein, 2000). Building from this concept of emergence, Ployhart and Moliterno (2011) describe how three enabling states are important for the emergence of an HCR to occur. Cognitive, affective, and behavioral states work together to facilitate knowledge transfer via interactions among unit members. The three enabling states have been referred to as the "glue" that unites employees together (Hackman, 1976). The affective enabling state reflects how individuals *feel* in a group and may include processes such as cohesion, trust, and affect (Ployhart & Moliterno, 2011). I propose that variance in terms of board committee assignments can offer scholars insight on the specific affective emerging-enabling consideration of cohesion and is thus relevant to assessing if the presence of more directors with professional international experience could actually mean more HCR, i.e., a more effective board as a unit.

Where there is more collaboration among all director colleagues (generally) on board committees, this should be captured by a construct I label 'board committee network density'. Network density refers to the number of actual ties in the network, then normalized by the number of possible ties (Merluzzi, 2017), which reflects the level of collaboration among members and represents the affective state of group cohesion (Wise, 2014). If one conceives of ties on boards as having two individual directors serve on at least one committee together, the construct of board committee network density will refer to the actual committee assignment ties divided by the number of possible ties. The possible ties would be calculated based on the total number of directors on the board since boards have the autonomy to choose their own committee memberships (Finkelstein et al., 2009; Kolev et al., 2019); thus, boards could ensure all director colleagues collaborate with one another on (at least some) committee work. This is also why board committee network density may not only encourage more cohesion between board colleagues but may also reflect the level of cohesion that is already present. Both explain why I propose that board committee network density does speak to Ployhart and Moliterno's (2011) affective emergence-enabling state of cohesion.

Network density, as an affective emergence-enabling state (cohesion, specifically), can assist with creating an environment where members may be more likely to contribute information to the group and share their insights (Ployhart & Moliterno, 2011). Past research has demonstrated that knowledge is more easily shared in dense networks, characterized by a high degree of interconnectivity among members since dense network structures enhance the willingness of team members to share knowledge with one another (Reagans & McEvily, 2003). Ray et al. (2023) also explain that 'accessibility' speaks to how widespread and easily the human capital of individual group members may be reached and used. Ray et al. (2023) specify that accessibility should be increased in dense units because this permits valuable information held by individual group members to be shared more speedily and with less difficulty. This is consistent with evidence information is spread quickly and through multiple paths for dense units (Adler

& Kwon, 2002; Anderson & Jack, 2002; Borgatti et al., 1998; Kang et al., 2008). Together, these points demonstrate board committee network density facilitates and can reflect an environment akin to the affective emergence-enabling state of cohesion. This should mean the presence of more directors with the human capital of professional international experience is enabled to emerge as a (unit-level) HCR, informing the first hypothesis:

> *H1: Board committee network density moderates the professional international experience directors–firm performance relationship, such that when the board committee network is denser, the relationship between professional international experience directors and firm performance will be more positive.*

The Importance of 'Sharing' for Unit-Level Knowledge to Emerge

Within the broader literature on emergence, Grand et al. (2016) specifically discuss how a unit can become more knowledgeable in making better decisions (i.e., having more 'unit knowledge'). Grand et al. (2016) establish that the emergence of unit-level knowledge (e.g., shared mental models) is a function of two processes: *learning* and *sharing*. Learning refers to extracting information while sharing refers to the dissemination of this information among members (Fiore et al., 2010; Grand et al., 2016; Hinsz et al., 1997; Stasser & Titus, 1985). Information members learn is considered internalized knowledge, while sharing information allows externalized knowledge to form, which is the knowledge collectively shared/understood by all members (i.e., shared mental models) (Cannon-Bowers et al., 1993). Shared mental models represent the externalized unit knowledge that can be leveraged for decision-making.

I propose that individual directors who have international experience bring the necessary 'learning' discussed by Grand et al. (2016) to the boardroom. Individuals with international experience are exposed to new or contradictory information from other cultures, which can enhance the learning process to solidify new knowledge (Bandura, 1977). This can take the form of domain-specific knowledge or general competencies. Examples of domain-specific knowledge obtained from international experience are intercultural knowledge, such as knowledge of global networks/international markets (Hermann & Datta, 2006; Ricks et al., 1990). General competencies examples include strategic thinking (Dragoni et al., 2014), creativity (Leung et al., 2008), and global leadership effectiveness (Caligiuri & Tarique, 2009; Daily & Schwenk, 1996). Thus, professional international experience directors have increased stocks of internalized knowledge, providing potential foundations for creative strategies.

Yet, for unit-level knowledge to emerge such that the board can make better decisions on how to properly and vigilantly monitor management, Grand et al. (2016) emphasize that sharing activities must also occur according to Grand et al. (2016), sharing mechanisms can transform the internalized knowledge (that stems from directors with international experience) to the collective, externalized unit-level knowledge (i.e., shared mental model) that is beneficial for all members. To this end, I propose the board committees are again relevant for understanding the sharing processes necessary for the emergence of unit-level knowledge. However, I propose it is particularly important that colleagues who differ from one another in terms of professional international experience have sharing opportunities. A key mechanism facilitating sharing among unit members is "communicating information" (Grand et al., 2016). Sharing in this manner involves an overt act of transmitting information from one person to another. In the case of board members, some members contain internalized knowledge (i.e., the professional international experience directors) that needs to be passed to those who will learn this knowledge (i.e., receive, encode, interpret, and integrate this knowledge), which would be the directors who do *not* have professional international experience (Grand et al., 2016). This process should create externalized knowledge (collective knowledge HCR-shared mental model) that all members can access. For this sharing to occur, directors without international experience would need to have more opportunities to interact with their colleagues who do personally have professional international experience.

At the unit level, I propose communication of information could reasonably be operationalized as the average number of committee assignments that non-professional international experience directors have to committees, which include (as members) directors *with* professional international experience. For example, for Company X, imagine that Directors A and B are the only two board members of Company X with professional international experience. Director C, a member of the same board, has no professional international experience. If Director C works on the audit committee with Director A and on the nominating committee with Director B, Director C has at least two opportunities to gain shared and learned insights from colleagues who have experience learned from their time working abroad. Director C could then even pass the knowledge gained to Director D, who also does not have international experience, facilitating the creation of a shared mental model. However, the reaction process of the chain mentioned above is impossible if Director C does not work on the same committees as Director A or B. Moreover, this process is impeded if Director C works only with Director A on a single committee or only with Director B on a single committee, etc. In this way, the degree to which those directors who lack professional international experience have opportunities to collaborate on committees with directors who have such experience speaks to the type of sharing Grand et al. (2016) propose is critical for unit-level knowledge to emerge.

I also submit this theorizing from Grand et al. (2016) as consistent with Ployhart and Moliterno's (2011) conceptualization of behavioral enabling processes. Behavioral processes refer to how individuals *act* in order to meet the demands of the environment and may include processes such as coordination and communication (Kozlowski & Ilgen, 2006). Thus, the work of both Grand et al. (2016) and Ployhart and Moliterno (2011) converge to suggest a shared mental model, which could lead to a more effective board (i.e., a human capital *resource)* is more likely to form where there a) are more directors with professional international experience and b) more communication occurs specifically between those directors who lack professional international experience directors, and their colleagues who have such experience.

H2: Sharing [professional international] experience with non-experienced director colleagues moderates the professional international experience directors–firm performance relationship, such that when those directors who lack professional international experience have more exposure to the perspectives of their director colleagues who are professional internationally experienced directors, firm performance will be more positive.

The Relevance of Professional International Experience Directors' Social Capital

Additional insights into the professional international experience – firm performance relationship for board directors relate to social capital. Directors with professional international experience may have developed relationships with a more international array of influential individuals. Thus, according to RDT, these directors can also access a wider pool of valuable resources the firm can leverage (Pfeffer & Salancik, 1978). This is consistent with evidence that individuals with international experience often have a greater international network to draw (Roth, 1995). These networks may be informal social ties, but they often take the form of partnerships with foreign entities, as the international experience of CEOs has been associated with increased internationalization (Carpenter & Fredrickson, 2001; Reuber & Fischer, 1997; Sambharya, 1996) and foreign direct investment modes (Hermann & Datta, 2006). RDT suggests at least four distinct mechanisms by which a director can serve a resource provision role that benefits the firm (Hillman et al., 2009; Pfeffer & Salancik, 1978). However, I propose it is most relevant to HCR considerations (i.e., is the presence of professional international experience directors leading to a more effective board as a unit) to consider the resource role directors can fulfill as they use personal information channels to the broader business world to identify valuable strategic opportunities, including by anticipating the actions of competitor firms (cf. Burt, 1983; Hillman & Dalziel, 2003).

A director's social capital speaks to the degree they have such valuable information channels that are high quality (Kor & Sundaramurthy, 2009; Nahapiet & Ghoshal, 1998; Sundaramurthy et al., 2014). Social capital is a set of resources rooted in personal relationships, and the central proposition of social capital theory is that networks of relationships for individuals within the firm can constitute a valuable resource for firms (Nahapiet & Ghoshal, 1998). This is so since social capital comprises the network and the assets utilized via that network (Nahapiet & Ghoshal, 1998). Adopting Podolny's (2001) "pipes" metaphor, the connections professional international experiences directors have due to their international experience could function as channels that transmit information. As pipe networks contain more structural holes or nonredundant ties, this configuration allows for rich/novel information to be passed through the networks; thus, social capital creates additional learning opportunities for professional international experience directors.

In this regard, I propose that the social capital of the professional international experience directors serve speaks to Ployhart and Moliterno's (2011) specific consideration of cognitive emergence-enabling states. This is because the authors mentioned above emphasize how cognitive emergence-enabling states refer to the unit's learning, specifically the ability of those within the unit to acquire and absorb information and knowledge (Ployhart & Moliterno, 2011). If a professional international experience director has the more social capital, they have, in essence, 'friends' who can share with them updates on broader trends in the business world, such that there is up-to-date learning of best practices for the board of the focal firm. This is supported by studies within the broader strategy literature, which indicate that when an individual director of a firm has previously served on multiple outside boards, this helps build that director's external social capital in the form of connectivity to other executives (Beckman & Haunschild, 2002; Hillman & Dalziel, 2003; Kor & Sundaramurthy, 2009; Nahapiet & Ghoshal, 1998) and assists with transmitting additional knowledge and information. Directors who are broadly connected to outside actors in the business world have greater social capital, meaning they have expedient access (i.e., channels) to timely information (Chen et al., 2016; Kor & Sundaramurthy, 2009). Such findings are also consistent with Ray et al.'s (2023) propositions that the relational social capital of an individual, i.e., the range of affective and attitudinal characteristics embedded in one's social relationships, can potentially facilitate HCR emergence.

Accordingly, and as my final hypothesis, I propose the ability of the firm to realize the potential benefits of having many professional international experience directors serving may be contingent on whether there is at least one director who has a high level of social capital and professional international experience. Professional international experience directors who also have high social capital will a) personally know the comparative challenges of doing business in the home vs. a foreign market, and b) their high social capital means they have quality information channels to identify the most promising strategic opportunities in the industry, and are thus uniquely qualified to determine how insights and/or personal relationships professional international experience directors possess, can optimally be leveraged to help the firm.

H3: Social capital of professional international experience directors moderates the professional international experience directors–firm performance relationship, such that when one or more of the professional international experience directors serving have high amounts of social capital, the relationship between professional international experience directors and firm performance will be more positive.

Research Method

Sample and Data Collection

The sample is made up of US-based S&P large–cap manufacturing firms from 2010–2014, with data available in Compustat and GMI Ratings. Testing the hypotheses on a sample of firms likely to have professional international experience directors was important. Thus, I selected manufacturing firms since directors from these firms bring valuable learned insights (Zhao & Anand, 2009). Additionally, leveraging cutting-edge knowledge is particularly important in the manufacturing industry (Mayer et al., 2015; Zhou & Wu, 2010). Accordingly, 97% (446 of 461) of observations in the sample had at least one professional international experience director serving. Thus, manufacturing firms were an appropriate sample for testing the model in that there were professional international directors present who could potentially impact firm performance. While I used a sample of manufacturing firms in the primary analyses and according to robustness tests, I collected additional data to analyze a multi-industry sample in supplemental analyses. I ended the sample before 2015, so it was possible to test if constructs of interest affect long-term (as well as more immediate) firm financial performance (see supplemental analyses available upon request). From the initial sample of 541 firm-year observations, I excluded 80 observations: 18 because of incomplete details regarding committee assignments, while 62 were excluded due to incomplete data regarding the covariates. The final sample of 461 firm-year observations represents 105 firms.

Dependent Measures

Performance was measured based on the information for the year following the firm-year observation (time t+1) to enhance potential causal inference. As an example, if an observation was included based on who served on *firm X's board of directors* in the year *2010* (and their individual career histories in terms of professional international experience), then the regression was run with an outcome variable that was *firm X's financial performance* in the year *2011*. In the primary analyses, I use the accounting–measure of performance of return on assets (*ROA*). In the supplemental analyses, I also test the model using the market–measure of performance, *Tobin's Q*. Results using *Tobin's Q* were consistent with the primary analyses herein (see Table S.1[1] And Figure S.1). Both measures were calculated based on data obtained from Compustat.

Predictor Measures

The primary predictor variable was *professional international experience directors*. Following past studies, I considered a director to have such experience if they had

[1] Full supplemental tables file has been omitted, for the sake of brevity of the manuscript file; this full file is available upon request.

worked for a non–US firm, had worked in a non–US market (for any organization), had post-secondary education from a non–US institution, or had been on the board of a non–US firm (Oxelheim et al., 2013). I also considered any director who had served overseas in the military, worked for an agency (government/think-tank/consulting) focused on international relations/transnational issues, and/or had been a delegate to an international agency (such as the UN), to be a professional international experience director. While I take a broad definition of 'professional' experience in creating the predictor variable of primary theoretical interest, below I describe the inclusion of a covariate which helps to address important qualitative differences if a director has international experience due to past work in the public/non-profit sector vs. past business-related experience in other countries. I coded the professional international experience of individual directors based on firm proxy statement biographies. The final measure is a tally of individual directors with [at least some] professional international experience.

Following past practice (e.g., Merluzzi, 2017), I calculated *board committee network density* as the number of actual ties between directors over the number of possible ties. Two directors were considered to have a tie if they served on at least one committee together. Based on firm proxy statements details of committee assignments for all board committees, I obtained a score for 'actual ties. In keeping with past literature, 'possible ties' was calculated using the formula '(n*n-1)/2' formula, where 'n' was the total number of directors serving.

I operationalized the construct of *sharing experience with non-experienced* by again leveraging firm proxy statement details on committee assignments. Here, I focused on whether those individuals who lacked 'professional international experience' served on committees with colleague directors who were professional international experience directors and to what degree. Each director who lacked professional international experience received an individual score for how many committees upon which they served, where the committee had at least one 'professional international experience director' member. I then averaged the individual scores for all directors who were not professional international experience directors. The raw measure was highly correlated with (the overall tally of) professional international experience directors (r = .62). To address potential multicollinearity issues, I used an orthogonalized measure in our analyses. This meant regressing the raw score variable of sharing experience to non-experienced on the predictor variable of professional international experience directors, then using residuals as the moderating variable (sharing experience to non-experienced) in primary analyses.

For the measure of *social capital*, I leveraged the GMI rating database for the years 2005-2013. From this, I could calculate the number of total directorship appointments each individual director in our sample held in the five-year period prior to the observation. I first added each individual's (professional international experience director or not) scores for the number of directorships in each of the five years prior. From this, I obtained a mean for our sample for the number of prior directorships (13.64) and standard deviation (6.33). Thus, any individual who was a professional international experience director but also had a score of 20 or more for directorship appointments in the prior five years (i.e., one standard deviation above the mean) was considered a director with a *high* amount of social capital. I then tallied how many professionals with international experience directors had high amounts of social capital. The final measure was dichotomous: if the board had at least one professional international director with a high amount of social capital serving, it received a score of 1 (otherwise, it received a score of 0). Due to range restriction, I used a dichotomous measure: a board with only one professional international experience director serving could not have more than one professional international experience director with high social capital. This approach of operationalizing social capital based on directorship appointments to boards of for-profit firms is consistent with extant literature (e.g., Kor & Sundaramurthy, 2009; Sundaramurthy et al., 2014).

Covariate Measures

To control for corporate governance concerns, I included the number of *directors (total)* and *director independence* (proportion of independent directors). Both measures were created using firm proxy statements. I included four firm-level covariates. First, I included *the debt–to–equity ratio* (obtained from Compustat). Second, I included *block ownership,* i.e., the percentage of ownership by those holding more than 5% of the firm stock (obtained from the GMI rating database). Third and fourth: I included *capital expenditures* and *firm internationalization* (both obtained from Compustat). The latter was specifically a measure of taxes firms owed to foreign governments. I acknowledge it is common for studies that have an outcome variable of firm performance to include a covariate for 'firm size'. While I did not include as much in the primary analyses, I ran supplemental analyses with such a covariate, which included leverage from the Compustat database and specifically operationalized as the log of total firm assets. Results were consistent (see Tables S.2 – S.3).

I propose any international work experience, whether in the public or private sector (etc.), can similarly allow individuals to learn from societal differences in organizational and managerial processes, such that this could lead them to bring uniquely valuable insights to improve board decision-making abilities in general (Ghoshal, 1987). Nevertheless, I deemed it appropriate to include a covariate to address how there may be a meaningful qualitative difference between having similar numbers of professional international experience directors who worked in other countries in a conventional 'business' context vs. having such directors who worked abroad in other professional contexts (e.g., working in an embassy; being a journalist in another country; serving overseas in the military, etc.). I created a covariate for *non-business international experience*. Using firm proxy statement biographies, I identified which of those individuals, originally deemed professional international experience directors, worked in another country but never for a for-profit, private sector organization (and/or never worked for a for-profit, private sector organization that itself is headquartered in another country). This covariate is the number of professional international experience directors who worked abroad, but never in such a 'business' context, over the total number of professional international experience directors.

I also used a dummy–coded variable for CEO *duality* (obtained from the GMI rating database). I dummy-coded for the observation year to account for unobserved heterogeneity related to time and dummy-coded for the *firm* (i.e., fixed effects model approach: described below). Although the included covariates are conceptually relevant, I acknowledge concerns that including excessive numbers of covariates may be problematic (Becker, 2005; Carlson & Wu, 2012). Accordingly, I conducted supplemental analyses using 'streamlined' models. Results were consistent with the primary analyses (see Tables S.4 – S.5), suggesting the results of our primary analyses are not likely driven by the covariates themselves.

Results

Fixed Effects Modeling

I employed OLS regression modeling with the 'fixed effects' approach to address non-independence. Yearly observations represent Level 1 or lower-level variables nested in firms that are Level 2 or higher–level entities. The sample consists of 105 firms, and all of these were observed over multiple years. There is thus a non-independence issue, as scores for lower-level variables are influenced by (or clustered by) the higher–level entity (firm). Not accounting for this may bias results (Bliese et al., 2020). Either the fixed effects model (where a dummy code is included for 'firm', along with one for 'year') or the mixed effects approach (random effect component allows intercepts to vary across firms, and a dummy code for 'year' is included) addresses the non-independence issue (Bliese et al., 2020).

Descriptive Statistics

Descriptive statistics for primary analyses, including means and standard deviations for all variables used and correlations, can be found in Table 1. To examine the possibility of multicollinearity, I calculated the variance inflation factor (VIF) for all predictor variables using the threshold of 5, an indicator of problematic levels of collinearity (James et al., 2013). All variables had a VIF below this threshold. Capital expenditures and firm internationalization (two of our covariates) were quite highly correlated (r = .88) and also had respective VIFs greater than 4. I thus ran supplemental analyses testing our model with capital expenditures omitted. Results were consistent (see Tables S.6 – S.7).

Table 1: Means, Standard Deviations, and Correlations Among Study Variables

	Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	ROA	8.49	6.77												
2	Tobin's Q	2.29	1.12	.67											
3	Directors (total)	9.82	2.16	-.09	-.13										
4	Director independence[a]	0.88	0.05	-.10	-.08	.39									
5	Debt–to–equity ratio[a]	7.79	3.24	.05	.10	.01	-.04								
6	Block ownership	0.20	0.13	.01	.08	-.21	-.17	.05							
7	Capital expenditures[b]	1,196.01	3,618.23	.00	-.13	.11	-.03	-.02	-.20						
8	Firm internationalization[b]	423.07	1464.05	.07	-.03	.12	-.02	.00	-.20	.88					
9	Non-business international experience	0.21	0.25	.08	.01	.04	.07	.05	-.01	.11	.01				
10	Professional international experience directors	3.75	2.06	.01	.08	.48	.27	.07	-.07	.13	.20	.00			
11	Board committee network density	0.64	0.21	.03	.09	-.14	.01	.09	.18	-.12	-.09	.14	.12		
12	Sharing experience to non-experienced	1.57	0.81	.08	.12	-.18	-.09	.06	.29	-.20	-.15	.16	.00	.65	
13	Social capital	0.51	0.50	-.02	-.10	.15	.12	-.05	.08	.14	.12	.09	.33	.14	.08

Notes: n = 461 in 105 firms. Correlations at or greater than .10 have *p*-value of less than .05. a = measured as a ratio; b = measured in millions of dollars. Mean and S.D. for sharing experience to non-experienced is for non-orthogonalized measure; correlations reported are for orthogonalized version of that measure. Mean and S.D. for orthogonalized version of sharing experience to non-experienced are 0.00, and 0.64, respectively.

Effects on Firm Performance: Accounting & Market-Measures (ROA /Tobin's Q)

Table 2 contains the results of the analyses when operationalizing firm performance as ROA, with standardized coefficients for variables to ease interpretation. Table 2, Model 1 contains our covariates-only model. Table 2, Model 2 shows the inclusion of our variable for professional international experience directors; however, the results indicate professional international experience directors do not directly affect ROA (β = -0.54; p = .478). Table II, Model 3 explores the direct effects of proposed moderating variables (i.e., board committee network density, sharing experience to non-experienced, social capital) upon ROA. The results indicate no direct effect of any of these proposed moderating variables (β = -0.18; p = .765; β = 0.17; p = .753; β = -0.87; p = .287).

Hypothesis 1 posited that the effect of professional international experience directors on firm performance is contingent on the density of the board committee network. In Table 2, Model 4, I find an interaction between professional international experience directors and board committee network density impacting ROA (β = 0.85; p = .055), consistent with Hypothesis 1. Hypotheses 2 and 3 posited that the effect of professional international experience directors on firm performance is contingent on a) sharing experience with non-experienced and b) social capital, respectively. However, the results in Table 2, Model 4, do not indicate interaction effects to support either Hypothesis 2 (β = 0.39; p = .332) or Hypothesis 3 (β = -0.22; p = .742).

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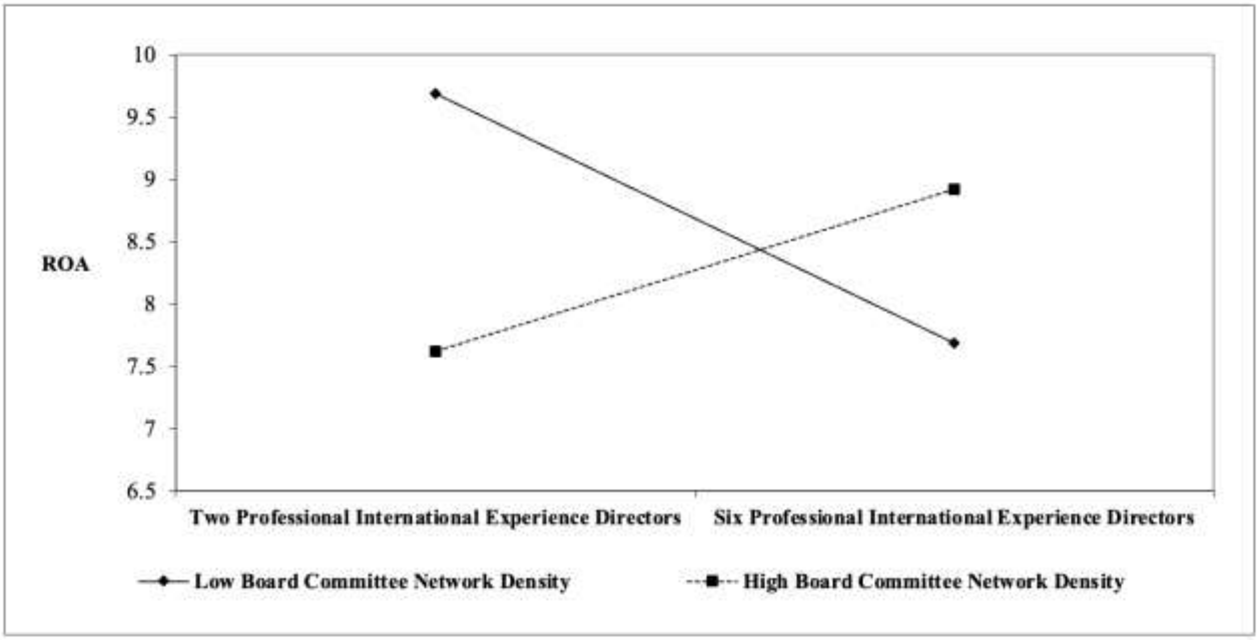
Table 2: Impact of Professional International Experience Directors on ROA (Fixed Effects Model)

	Model 1			Model 2			Model 3			Model 4		
Variable	β	*SE*	*p*	β	*SE*	*p*	β	*SE*	*p*	β	*SE*	*p*
Directors (total)	0.24	(.52)	.649	0.45	(.60)	.454	0.43	(.64)	.504	0.52	(.64)	.417
Director independence	-0.22	(.45)	.629	-0.22	(.46)	.636	-0.22	(.46)	.627	-0.23	(.46)	.623
Debt–to–equity ratio	-0.02	(.20)	.956	-0.02	(.20)	.930	-0.02	(.20)	.905	-0.04	(.20)	.857
Block ownership	0.73	(.43)	.090	0.74	(.43)	.086	0.73	(.43)	.091	0.67	(.43)	.123
Capital expenditures	-2.28	(.86)	.008	-2.34	(.87)	.007	-2.29	(.88)	.010	-2.53	(.90)	.005
Firm internationalization	1.39	(.81)	.087	1.46	(.82)	.075	1.50	(.82)	.069	1.61	(.82)	.050
Non-business international experience	0.28	(.48)	.557	0.31	(.48)	.517	0.34	(.49)	.489	0.47	(.50)	.349
Professional international experience directors				-0.54	(.77)	.478	-0.45	(.78)	.564	-0.18	(.86)	.839
Board committee network density							-0.18	(.60)	.765	-0.31	(.63)	.621
Sharing experience to non-experienced							0.17	(.52)	.753	0.07	(.57)	.906
Social capital							-0.87	(.81)	.287	-0.96	(.84)	.256
Professional international experience directors X Board committee network density										0.85	(.44)	.055
Professional international experience X Sharing experience to non-experienced										0.39	(.40)	.332
Professional international experience X Social capital										-0.22	(.65)	.742
Intercept	8.92	(1.89)	.000	8.82	(1.89)	.000	9.28	(1.97)	.000	9.69	(1.98)	.000
Multiple R^2		.76			.76			.76			.76	
Adjusted R^2		.67			.67			.67			.67	

Notes: N = 461 in 105 firms; year, duality, and firm controls included in all models. Two-tailed tests. Orthogonalized measure used for sharing experience to non-experienced.

I graphed the interaction of professional international experience directors and board committee network density in Figure 1. Professional international experience directors can only be on the board at whole values and were thus set at values of two and six: roughly 0.85 SD below and 1.09 SD above the mean, respectively. The committee network density of the board was set at values of 0.43 and 0.85 (-1 and +1 SD from the mean, respectively). The predicted ROA for firms whose boards have high numbers of professional international experience directors is 16% greater (8.92–7.69)/7.69 when board committee network density is high (0.85) than when it is low (0.43). Practically speaking, these results indicate when the board is largely made up of professional international experience directors, boards that also have high committee network density (consistent with the affective enabling state of 'cohesion' discussed in the HCR emergence literature) (Ployhart & Moliterno, 2011) have better performance than boards with low committee network density. I also calculated the marginal effects, which can be particularly useful when predicting multiple interactions (Busenbark et al., 2022a). Marginal effects indicate firm years with 1 SD more professional international experience directors are associated with lower subsequent ROA (β = − 1.03) when board committee network density is low (0.43) but higher subsequent ROA (β = 0.67) when board committee network density is high (0.85). These results support Hypothesis 1.

Figure 1: The Influence of Board Committee Network Density on the Relationship Between Professional International Experience Directors and ROA



Notes: Figure 1 is based on standardized variables from Table 2, Model 4.

Supplemental Analyses

To assess the robustness of my results, I employed several tests to address endogeneity concerns (broadly). I conducted tests that spoke to the core conceptual issue when conducting strategy research where it is not feasible to randomly assign subjects; namely, without random assignment, it is particularly important to address *omitted variable bias* and attempt to rule out *alternative explanations* (cf. Bliese et al., 2020; Hill et al., 2021). I leveraged Impact Threshold of a Confounding Variable (ITCV) tests to explore if omitted variable bias may exist. These tests yield a threshold an omitted variable would need to be correlated with the outcome variable (i.e., firm performance) but also with a predictor variable of interest (e.g., professional international experience directors) for its omission to call into question the results. If no originally included covariates have such high average correlations, a strong argument can be made that omitted variable bias is not likely a concern (Busenbark et al., 2022b). The ITCV test addresses endogeneity concerns but also avoids drawbacks of the instrumental variables approach, such as how including instrumental variable residuals may mask effects if the instruments are not especially strong (cf. Busenbark et al., 2022b; Semadeni et al., 2014). ITCV test results are reported in Table S.8. These results suggest that the direct effects found in the primary analyses are not likely meaningfully compromised by concerns of omitted variable bias.

The ITCV test cannot be utilized to assess the interaction effects found (Busenbark et al., 2022b), such as those found in this manuscript supporting Hypothesis 1. To address this, scholars can instead employ the RIR (robustness of inference to replacement) test. This test indicates how much of a given effect size needs to be biased for the otherwise statistically significant effect to be overturned (Busenbark et al., 2022b). Following best practices, I found a new covariate (*board meetings*), replicated the primary analysis by adding this new covariate, and then examined if the coefficient of the originally found effects changed by more than the percentage indicated by the RIR. The RIR test indicated that for the effect found in support of Hypothesis 1 in Table 2, Model 4, 1.70% of the estimate would have to be due to bias to invalidate an inference. Adding the covariate mentioned above did not change the coefficient for professional international experience directors X board committee network density, where both Betas are rounded to two decimal places (see Table S.9). Even if betas are rounded to three decimal places, the inclusion of the board meetings covariate does not change the coefficient for professional international experience directors X board committee network density by more than 1.7% (i.e., relevant β in Table 2, Model 4 was .846; relevant β in Table S.9, Model 4 was .845, indicating a change of only 0.12%).

I found consistent results when adding this new covariate of board meetings but operationalizing firm performance as Tobin's Q (see Table S.10). I also re-ran this entire process, using both ROA and Tobin's Q as dependent variables in regression analyses, but instead including a different, new covariate (in this case, average *director tenure*). Again, the results did not indicate a change in the Beta for professional international experience directors X board committee network density greater than the RIR test indicated would be required to suggest the results were not robust (see Table S.11- S.12). Based on these results, I propose it is not likely a relevant omitted variable would undermine the results of our analyses herein.

To account for endogeneity concerns, it is also important to attempt to rule out possible alternative explanations for the effects found. To do as much concerning the professional international experience directors X board committee network density interactions found, I ran several analyses, all employing a similar logic. I considered constructs that would likely be highly correlated with having more professional international experience directors do committee work and/or with committee network density in general but which spoke to distinct theoretical mechanisms from the HCR emergence considerations (i.e., network density as a reflection of the effective enabling state of 'cohesion') related to Hypothesis 1. I obtained a new variable that spoke to this relevant new construct and re-ran our analyses, replacing board committee network density with this new variable. If I did not find interaction effects when doing as much, this supports the position that effects found in our primary analysis are likely due to affective-enabling emergence considerations (particularly related to cohesion) proposed.

Professional international experience directors may hold disproportionate sway/power on the board. I repeated the primary analyses thrice, replacing the committee network density of the board with a variable that spoke to this consideration. I replaced board committee network density with a) a measure of the number of *major committees chaired by professional international experience directors* (see Tables S.13 – S.14), b) number of *committees chaired by professional international experience directors* (see Tables S.15 – S.16), and c) proportion of *major committee seats held by professional international experience directors* (see Tables S.17 – S.18). In all instances, I find no interaction effects. Ray et al. (2023) argue that cognitive social capital can also increase human capital availability. A high level of cognitive and social capital implies there is a shared history or language in a group, which should increase the likelihood that an individual is understood by colleagues (Maynes & Podsakoff, 2014; Ray et al., 2023). I thus acknowledge an alternative explanation for the findings regarding Hypothesis 1, which may involve the 'cognitive' social capital of professional international experience directors in terms of how well these individuals know the focal firm. To address this alternative explanation, I replicated the primary analyses, replacing board committee network density with *professional international experience directors' [average] tenure* (see Tables S.19 – S.20). I found no significant interaction effects.

The primary analyses did not indicate support for Hypothesis 2 or Hypothesis 3. I considered post-hoc if perhaps the way I operationalized our constructs might explain the lack of effects found. I orthogonalized the measure for sharing experience with non-experienced since it was highly correlated with professional international experience directors. However, I also re-ran the primary analyses using the raw score (i.e., not orthogonalized) for sharing experience with non-experienced (see Tables S.21 – S.22). Results were consistent in that no support for Hypothesis 2 was found. In testing the impact of social capital upon the professional international experience directors-firm performance relationship (i.e., Hypothesis 3), I only assessed the social capital of professional international experience directors. I ran supplemental analyses using a new measure for *social capital for all directors* (see Tables S.23 – S.24). In this case, I tallied all individual directors who had 'high' levels of social capital, independent of their international work experience. The measure used here was a tally of such directors and not dichotomous since there were no range restriction issues. However, again, I find no professional international experience directors X social capital [all directors] interaction effects. In totality, this indicates the lack of support for Hypotheses 2-3 in the primary analyses is not likely a function of how the variables were originally measured.

Ending the sample in 2014 allowed me to explore if the interaction between professional international experience directors and the board committee network density also affected long-term measures of firm performance. To test this, I replicated the primary analyses utilizing dependent variables of average ROA in the two, three, four, and five-year periods after the observation year. I did the same using the average Tobin's Q in the two-, three--, four--, and five-year periods after the observation year. In all cases, the results were consistent with the primary analyses in that they demonstrated support for Hypothesis 1 (see Tables S.25 – S.32). This further supports the robustness of the primary findings and suggests professional international experience directors serving on boards that have high committee network density, may be of value to the firm for both short and longer-term considerations.

While I maintain the focus on manufacturing firms is appropriate, I gathered additional data to test our model using a sample of observations where firms operated in a wider array of industries. I obtained all needed information (using the same data sources) for a total of 201 new observations, all of which were *non-manufacturing* S&P large-cap firms from the year 2014. I combined this with the details on the 101 manufacturing firm observations from 2014 used in the original sample. Means, standard deviations, and correlations between study variables for this secondary sample are in Table S.33, while results of the analyses using this multi-industry secondary sample are in Tables S.34 – 37, respectively. I highlight that in these analyses, I did not a) control for the year (as all observations were from the same year) or b) control for the firm (as each firm was only featured once). I did, however, control for industry, based on SIC classification, using the same dummy coding process used by Schepker, Nyberg, Ulrich, and Wright (2018). In both instances, I do not find support for Hypothesis 1. Because of this, I also took the time to collect data on long-term measures of performance (i.e., average ROA in the 2- and 3-year periods following the observation; Tobin's Q in the 2- and 3-year periods following the observation). I find no support for Hypothesis 1 when using a long-term measure of ROA. However, I find some support for Hypothesis 1 when using long-term measures of Tobin's Q (see Tables S.36 – S.37). I discuss the implications of these results compared to the results using the primary sample (made up solely of manufacturing firms) below.

Another issue meriting exploration is the fact different kinds of board directors bring different forms of value to the board. For example, while some are current/former CEOs who help with broader business-level strategies, others may help more by assisting with specialized considerations like accounting, law, etc. Boards may have larger numbers of the former vs. latter type of director. I explored the possibility that perhaps such professional background considerations interact with professional international experience to impact the overall financial performance of the firm. To test this, I leveraged information from ISS, which groups directors by occupational background. I dichotomized these designations into those with traditional 'business' backgrounds and those with more 'specialized' backgrounds, consistent with Hillman, Cannella, and Paetzold (2000) work. I ran regressions interacting the number of directors with traditional business expertise X the number of professional international experience directors and regressions interacting the number of directors with 'specialized' expertise X the number of professional international experience directors. I ran such regressions using both ROA and Tobin's Q measures but did not find significant interaction effects. Although such non-findings do not preclude the possibility that having directors with specific types of professional expertise in terms of the type of career (e.g., HR, accounting, law, etc.) may impact a variety of important firm-level outcomes, these considerations do not appear to interact with having a large number of professional international experience directors to impact the firm's bottom line.

A director may qualify as a 'professional international experience director' due to one international assignment or could qualify as a 'professional international experience director' owing to multiple international assignments. Moreover, for firms with more than a single professional international experience director serving, it may be that all individuals worked in the same foreign country or they worked in vastly different nations. A full assessment of all possible permutations in this respect is beyond the scope of our study. However, I did conduct two exploratory sets of analyses (see Tables S.38 – S.41), which provide important insight into how such issues might impact the professional international experience directors-firm performance relationship.

I created two new variables for these tests. First, I tallied the number of *unique countries* in which all professional international experience directors for a given firm-year observation had collectively worked in the past. I also considered that working in several countries may not mean new knowledge is brought if those countries are very similar in terms of cultural distance. For this reason, we also created a measure of how *world cultural regions worked*. To do this, I evaluated the names of every country in which each of the professional international experience directors had worked and cross-referenced this with a classification scheme for grouping countries into one of nine possible regions (based on cultural similarities) (first developed by Ronen and Shenkar (1985) and updated by Filippaios and Rama (2011). I included these new considerations as new covariates and replicated our primary analyses. Doing so allowed me to further assess the robustness of the primary results supporting Hypothesis 1. Results were consistent.

Discussion

Although there are demonstrated benefits to having a CEO with professional international experience (Carpenter et al., 2001; Daily et al., 2000; Le & Kroll, 2017), past research has found mixed results regarding the relationship between foreign directors and firm performance (Hahn & Lasfer, 2016; Masulis et al., 2012; Miletkov et al., 2017). This reality, combined with the broader reality of board directors, represents a type of executive role that differs from the role of CEO (cf. Hambrick et al., 2015; Hillman & Dalziel, 2003; Johnson et al., 2013; Klarner et al., 2021), warranted leveraging multilevel theory to further assess when and why firm performance is positively impacted by having more professional international experience directors serve on the board. I specifically assessed how three tested moderators, drawn from related and yet distinct papers within the broader OB literature on the emergence of valuable unit-level resources, might be pertinent to addressing this practically important consideration.

While the results do not demonstrate a direct effect of (the number of) professional international experience directors (serving) upon firm performance, the presence of more of these types of directors does positively impact firm performance, contingent upon the degree there is also high board committee network density. In my theorizing, I discussed how board committee network density speaks to the *affective* emergence-enabling state of *cohesion* proposed by Ployhart and Moliterno (2011). The supplemental analyses support the fact that the professional international experience directors X board committee network density interaction is robust and impacts both short- and long-term measures of firm performance. Thus, the most direct theory-building contribution of this work is to demonstrate which specific components of Ployhart and Moliterno's (2011) work seem to enable firms to benefit financially from having more directors serve who have worked outside the host country. This contributes to the broader literature on HCR emergence, as it demonstrates how the affective emerging-enabling state of cohesion may be disproportionately important to HCR emergence issues when considering boards of directors. Such findings also help firms' understanding of how to ensure the skills/ knowledge-yielding experiences held by individual directors of a board (i.e., the human capital) actually lead the board as a unit to be more effective (i.e., there is an actual *HCR*), and thus contributes to broader theory on corporate governance and the international business literature concerned with questions of what types of boards of directors are most ideal in an increasingly globalized world.

I also propose that the null findings regarding Hypotheses 2-3 make a modest but noteworthy contribution to the literature on HCR emergence. The construct of 'sharing experience to non-[professional international] experienced [directors]' was drawn primarily from Grand et al.'s (2016) work on the importance of sharing processes in order to ensure the emergence of unit-level knowledge, but also spoke to Ployhart and Moliterno's (2011) behavioral emergence-enabling states. The potential relevance of social capital considerations was largely drawn from the integration of Ray et al.'s (2023) work on relational social capital with broader corporate governance research on the social capital of executives (e.g., Kor & Sundaramurthy, 2009; Nahapiet & Ghoshal, 1998; Sundaramurthy et al., 2014), and spoke to Ployhart and Moliterno's (2011) cognitive emergence-enabling states.

The 'human capital resource' necessarily speaks to human capital (rooted in individual KSAOs), which helps achieve desirable *unit*-level economic outcomes (Ployhart et al., 2014). The null findings, utilizing a sample made up exclusively of upper-echelon level executives within firms (board of directors), therefore offer potential boundary conditions on research on unit-level knowledge emergence (Grand et al., 2016) and the role of social capital in HCR emergence. It is important to note neither sharing experience with non-experienced nor social capital directly moderates the professional international experience directors-firm performance relationship. This possibly indicates that such considerations may not prove relevant to bottom-line considerations for firms that have hired directors with a specific form of human capital, which is the knowledge gleaned from professional experience working abroad.

It is beyond the scope of this paper to determine if such findings are unique to the human capital of 'professional international experience' of directors or point to a broader reality that leveraging the value of directors' human capital (any/all) does not generally involve unit-level knowledge emergence processes and/or social capital. What I see as most important about my paper is that all three of our proposed moderators are informed by distinct facets of the emergence-related literature, which has at least some demonstrated support when studying work units. I find some, but not all, of the proposed moderators actually impact the professional international experience directors-firm performance relationship, validates the importance of research that specifically seeks to understand why it might be that processes/considerations that are crucial for creating an effective work unit of front-line employees, might be less critical for creating an effective unit of executives (e.g., a board of directors), and vice-versa.

Limitations and Future Research

While I submit that the chosen sample was appropriate, I acknowledge that the specifics of this sample imply I must be cautious in claiming the results will generalize to all other contexts. That said, I propose the choice of sample and the totality of findings illustrate valuable future research agendas that merit explicit recognition. First, the primary analyses utilized a sample of manufacturing firms; in the supplemental analyses, I gathered additional data to test the same model on a sample, including hundreds of non-manufacturing firms' observations. I did not, however, find entirely consistent results. In this way, I acknowledge it is possible that the (robust) results I find in support of the professional international experience directors X board committee network density interaction, impacting firm performance, may only generalize to firms that operate in specific industries. I would highlight that manufacturing, specifically, accounted for roughly 30% of the US economy in 2019 (Nia, 2020); thus, the empirical findings are still practically important, even if they only apply to the manufacturing industry. When using the multi-industry sample, I find some support for Hypothesis 1 when considering longer-term measures of market performance. However, I propose explorations of where/why the findings do/do not hold for firms in specific industries, representing a fruitful potential integration of theory on HCR emergence with the resource-based view's (RBV) VRIO model.

In post hoc analysis, I noticed the reality that while the mean of [number of] professional international experience directors serving on the board was 3.75 for the sample of manufacturing firms, the mean of the same consideration was only 3.07 for the 201 non-manufacturing firms included in the secondary sample I tested. The VRIO framework suggests that one of the four key considerations for achieving a sustained competitive advantage is having a comparatively rare resource (Barney & Wright, 1998).

Yet, in this case, it was in the sample of manufacturing firms, where professional international experience directors appear to be *less* rare, that I find more robust support for Hypothesis 1. This could indicate affective emergence-enabling states can substitute for parts of the VRIO framework or point to an intriguing boundary condition of the VRIO framework. In either case, assessing for which industries the results I find herein do and do not replicate could help to bring together HCR emergence and the VRIO model to build new and needed theory on the relationship between the KSAOs of executives and the degree the firm will see sustained competitive advantage.

I submit that board committee network density does indeed speak to the (affective emergence-enabling state of) cohesion on a board of directors and thus stands by the validity of our measure. However, I acknowledge that using this specific measure, and not a direct survey-derived measure of 'cohesion', was partially due to a practical trade-off. Both the samples were made up of S&P large-cap firms. The benefit of this is that the findings represent tests of a sample of firms that are practically important for entire national economies. However, the drawback is the reality that directors at such large/influential firms are less likely to have the time/willingness to fill out surveys for research projects. I chose to capture cohesion through board committee network density because the latter could be computed based on public records of board committees (i.e., no surveying required). Directly surveying directors on the cohesion of their board has merits. I encourage future scholars to build on this work, perhaps by reaching out to directors of smaller firms who may be more willing to complete surveys for an academic research project. Such a paper would also offer insight by exploring if/how tests of our proposed model may/may not yield similar effects for startups and/or family firms. The 'cohesion' items used by Mathieu, Kukenberger, D'innocenzo, and Reilly (2015) could help towards this end.

While I defend my choice of the sample of board directors of S&P large-cap firms, I do submit an important research agenda for other scholars to consider how replicating my theoretical model may/ may not yield comparable results if exploring the performance of a team made up of front-line employees (and/or non-executives/ executives of smaller firms). I would particularly highlight the discussion of the affective emergence-enabling state of cohesion (as captured by board committee network density), and the behavioral enabling processes I propose are captured by sharing the experience with non-experienced. In the results, only the former of these considerations impacts performance. While such findings are relevant as large firms consider how to structure their boards to leverage the value of directors having worked abroad, it is important to consider why things may play out differently when considering (for example) a group of non-executives.

Directors of large firms are often very busy with other responsibilities (cf. Field, Lowry, & Mkrtchyan, 2013; Khanna et al., 2014), and boards only meet a handful to a dozen times in a year, so cohesion may be especially critical to ensure time-efficiency.

Second, there is a non-random sample reality tied to the nature of the job. In order to be nominated to serve as a board director of a prestigious firm, a person realistically must be highly accomplished in their field. This may at least partially explain why, in our results, cohesion seems to be more important than knowledge-sharing processes to lead to a more effective unit. It is possible that for a team of front-line employees to leverage the value of its members who have learned from time spent working in different countries, different processes are more/less important. Exploring this consideration would build on this work and contribute to a holistic theoretical understanding of HCR emergence in work groups by explaining how precisely the hierarchical level of the work group within the firm matters.

I focused on firms located in the U.S. and thus cannot be sure the results would generalize to firms in all other countries. However, I submit this point to an important potential future line of research in international business literature. The average time American directors have worked abroad may not be the same as that of directors in other countries (Hamori & Koyuncu, 2011). The value of professional international experience directors is perhaps different for firms headquartered in countries that are member states of trade unions (e.g., The EU) precisely because directors there have more typically worked in multiple countries. Perhaps for firms in the EU, world cultural regions worked is a more critical consideration. Exploring these considerations in such a context would generate deeper insights into the theoretical reasons it may, in certain cases, not only matter if a director has worked abroad but also *where* they worked.

Conclusion

The results of my study indicate that having a high number of individuals who have professional international work experience serving on a board, in and of itself, did not impact firm performance. However, I leveraged literature on HCR emergence and proposed that having professional international experience directors on the board, when accompanied by specific emergence-related processes/ considerations, could positively impact firm performance. The results supported this latter position in that high board committee network density (which both reflects and supports the effective emergence-enabling state of cohesion) ensures firms with more directors with professional experience working abroad actually see firm performance benefits accordingly. These findings particularly help international business scholars and practitioners working in multinational firms better understand how to ensure the international work experience hired executives have accrued, indeed translating to desirable bottom-line results benefitting stakeholders of the firm. The results also more broadly support the value of potential theoretical integrations between the broader OB literature on HCR emergence and the study of units/teams of executives.

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