

2017

## Exploring Determinants and Consequences of International Diversification: A Multi-Level Perspective

Ettore Spadafora  
*University of South Carolina*

Follow this and additional works at: <https://scholarcommons.sc.edu/etd>



Part of the [Business Administration, Management, and Operations Commons](#)

---

### Recommended Citation

Spadafora, E.(2017). *Exploring Determinants and Consequences of International Diversification: A Multi-Level Perspective*. (Doctoral dissertation). Retrieved from <https://scholarcommons.sc.edu/etd/4268>

This Open Access Dissertation is brought to you by Scholar Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact [digres@mailbox.sc.edu](mailto:digres@mailbox.sc.edu).

**EXPLORING DETERMINANTS AND CONSEQUENCES OF INTERNATIONAL  
DIVERSIFICATION: A MULTI-LEVEL PERSPECTIVE**

by

Ettore Spadafora

Bachelor of Science  
Università di Pisa, 2004

Master of Science  
Università di Pisa, 2006

Doctor of Philosophy  
Università di Pisa, 2010

---

Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Philosophy in

Business Administration

The Darla Moore School of Business

University of South Carolina

2017

Accepted by:

Tatiana Kostova, Major Professor

Marc van Essen, Committee Member

Kendall Roth, Committee Member

Sali Li, Committee Member

Cheryl L. Addy, Vice Provost and Dean of the Graduate School

© Copyright by Ettore Spadafora, 2017  
All Rights Reserved.

## ACKNOWLEDGEMENTS

I want to sincerely thank my parents and my sister for their constant support over the years.

I also want to thank Professors Tatiana Kostova and Marc van Essen for their guidance during my time in the Ph.D. program, and Professors Kendall Roth and Sali Li for serving on my dissertation committee.

Many thanks also to:

- Professors Sjoerd Beugelsdijk, Claudio Giachetti, and Valentina Marano for the fruitful research collaborations;
- The Sonoco International Business Department, the Center for International Business Education and Research at the Darla Moore School of Business, and the University of South Carolina for the opportunity to be a part of a great academic environment;
- The International Business Department and the Center for International Business Education and Research at George Washington University, and Professors Robert Weiner and Noel Maurer for the opportunity to attend the GW-CIBER Summer Doctoral Institute.

Finally, I want to thank my friends in Columbia, SC and in other parts of the U.S. for the moments shared in the last five years and my friends in Italy for the long-distance conversations.

## ABSTRACT

The dissertation explores determinants and consequences of international diversification and consists of two essays. Essay I focuses on the relationship between international diversification and firm performance (ID-P). Drawing on the global strategy literature and the institution-based view of strategy, we propose that the mixed findings of extant research on the ID-P relationship can be explained by the contextual conditions in which this relationship exists, including home-country formal and informal institutions. The model is tested in a meta-analysis (HOMA, MARA, and HiLLMA analyses) of firm-, industry-, and home country-level factors driving the ID-P relationship. The sample consists of 359 primary studies across 32 countries between 1972 and 2012—the largest sample of primary studies of any meta-analysis on this topic to date. The main finding is that international diversification positively impacts firm performance and the strength of this effect is contingent on the specific formal and informal institutions of the home country. Essay II focuses on the relationship between corporate governance and international diversification (CG-ID). The study utilizes a multidimensional conceptualization of the two constructs, exploring breadth and depth of ID and several mechanisms of CG (e.g., ownership concentration, CEO compensation, and board independence). Drawing on agency theory and the resource and information-processing perspectives, we propose bidirectional causal effects between CG and ID. Our arguments are then contextualized by exploring the moderating effect of home-country institutional and cultural conditions and, in particular, the legal protection of minority shareholders

and the national uncertainty avoidance. We test the model using meta-analytic structural equation modeling (MASEM) with data from 104 primary studies across 28 countries covering the 1970-2012 period and find overall support for our theoretical predictions. The dissertation contributes to the literatures of global strategy and corporate governance and provides valuable insights to the practice of international business.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	iii
ABSTRACT .....	iv
LIST OF TABLES .....	viii
LIST OF FIGURES .....	ix
INTRODUCTION .....	1
ESSAY 1: HOME COUNTRY INSTITUTIONS AND THE INTERNATIONALIZATION- PERFORMANCE RELATIONSHIP: A META-ANALYTIC REVIEW .....	6
INTRODUCTION.....	6
THE PERFORMANCE IMPLICATIONS OF INTERNATIONALIZATION.....	11
MODERATING ROLE OF HOME-COUNTRY INSTITUTIONS.....	17
METHODOLOGY.....	26
RESULTS.....	34
DISCUSSION.....	41
REFERENCES .....	52
ESSAY 2: INTERDEPENDENCE BETWEEN CORPORATE GOVERNANCE AND INTERNATIONAL DIVERSIFICATION: A META-ANALYSIS .....	79
INTRODUCTION.....	79
THEORETICAL BACKGROUND AND MODEL DEVELOPMENT.....	88
METHODOLOGY.....	110
RESULTS.....	120
DISCUSSION.....	130

REFERENCES .....	138
CONCLUSION.....	173

## LIST OF TABLES

Table 1.1 HOMA Meta-Analytic Results .....	70
Table 1.2 MARA Meta-Analytic Results .....	71
Table 1.3 HOMA Country-Specific Meta-Analytic Results.....	73
Table 1.4 Meta-Analyses on the I-P Relationship .....	75
Table 2.1 Meta-Analytic Correlation Matrix .....	157
Table 2.2 MASEM Results for CG→ID.....	159
Table 2.3 MASEM Results for ID→CG.....	161
Table 2.4 MASEM Results for CG→ID – Depth vs Breadth of International Diversification.....	164
Table 2.5 MASEM Results for ID→CG – Depth vs Breadth of International Diversification.....	165
Table 2.6 MASEM Results for CG→ID – High vs Low Legal Shareholder Protection .....	166
Table 2.7 MASEM Results for ID→CG – High vs Low Legal Shareholder Protection .....	167
Table 2.8 MASEM Results for CG→ID – High vs Low Uncertainty Avoidance.....	168

## LIST OF FIGURES

Figure 1.1 Distribution of Papers over Time .....	77
Figure 1.2 Funnel Plot.....	78
Figure 2.1 Model Linking Corporate Governance to the Degree of International Diversification.....	169
Figure 2.2 Model Linking the Degree of International Diversification to Corporate Governance .....	170
Figure 2.3 Effects of Corporate Governance on the Degree of International Diversification.....	171
Figure 2.4 Effects of the Degree of International Diversification on Corporate Governance .....	172

## INTRODUCTION

Business landscapes are increasingly global. Over the last quarter of a century, world FDI outward stock has dramatically increased (from 2,254 billion of dollars in 1990 to 25,875 in 2014) and country investment policy measures around the world have been geared to promote cross-border investment to an ever-larger extent. In this scenario, constantly advancing our understanding of the implications of international diversification is a paramount objective for both scholars and practitioners. Equally important is the investigation of the factors potentially affecting cross-border investment decisions, given the complex competitive and economic cost-benefit trade-off characterizing international diversification. Indeed, the determinants and consequences of international diversification have drawn significant attention in the strategy and international business literatures. Research has investigated antecedents at the individual, group, firm, industry, and country level of analysis, as well as outcomes at the firm and country level of analysis. This dissertation extends the extant literature on the determinants and consequences of international diversification with two empirical essays.

Essay I focuses on the relationship between international diversification and firm performance (ID-P). Understanding the performance consequences of international diversification is widely recognized as a seminal issue in strategic management, given the increasingly global nature of firms' strategic focus and actions. Over the past four decades, numerous empirical studies in management and international business have examined the performance implications of international diversification and found

positive, negative and non-significant linear effects as well as a variety of curvilinear relations. This inconclusive empirical evidence suggests that far from having reached a mature understanding of the ID-P relationship, the field is yet to fully understand this complex phenomenon.

Drawing on the global strategy literature and the institution-based view of strategy, we propose that the mixed findings of extant research on the ID-P relationship can be explained by the contextual conditions in which this relationship exists, including home-country formal and informal institutions. The model is tested in a meta-analysis (HOMA, MARA, and HiLLMA analyses) of firm-, industry-, and home country-level factors driving the ID-P relationship. The sample consists of 359 primary studies across 32 countries between 1972 and 2012—the largest sample of primary studies of any meta-analysis on this topic to date. The main finding is that international diversification positively impacts firm performance, although the overall effect is small and its magnitude is contingent on the specific formal and informal institutions of the home country.

We make three main contributions to the global strategy literatures. First, we develop a novel integration of the theoretical perspectives from the ID-P research and the institution-based view of strategy to explain how embeddedness in home-country institutions affects the strength of the ID-P relationship. Second, we show the importance of including both formal and informal institutions in analyses of firms' institutional embeddedness, thereby extending our knowledge of the effects of institutional complexity. Our third contribution is methodological and reflects our use of advanced meta-analytical techniques based on both product-moment and partial correlations as

effect sizes, which allow us to address unresolved debates about the sign and shape of the ID-P relationship.

Essay II focuses on the relationship between corporate governance and international diversification (CG-ID). From a theoretical point of view, corporate governance scholars suggest that governance mechanisms may affect the extent of international diversification. By contrast, the international management literature suggests that expansion abroad, through multiple theoretical mechanisms, may trigger changes in firms' corporate governance framework. The literature, indeed, provides evidence for both causality directions. For example, research corroborates the argument that firms' degree of international diversification both affects and is affected by the level of contingent executive pay. Similarly, some scholars show that the extent of foreign expansion has an effect on the proportion of outside directors, while others provide evidence that board independence impacts export propensity. Likewise, the literature, on the one hand, shows that board size influences the firm's degree of international diversification and, on the other hand, provides empirical support for the opposite causality direction—from firms' degree of foreign expansion to board size. Besides the direction of causality, the sign of the relationship between corporate governance and international diversification also receives mixed empirical evidence. Some scholars report a positive correlation between the level of ownership concentration and the extent of international diversification, while others provide evidence for a negative correlation. Similarly, research shows both a positive and a negative correlation between CEO duality and the degree of foreign expansion.

Extant research therefore, from both a theoretical and an empirical perspective, does not provide definitive answer as to the nature (i.e., direction, magnitude, and sign) of the CG-ID relationship. Moreover, extant research is somewhat lacking in the exploration of the theoretical mechanisms linking corporate governance and international diversification. In order to have a more impactful research on the CG-ID relationship, it is critical to develop a more fine-grained understanding of which mechanisms are at play and how they operate.

Hence, there is an opportunity for further research, which may push forward the existing theoretical knowledge about the relationship between corporate governance and international diversification. This dissertation utilizes a multidimensional conceptualization of the two constructs, exploring breadth and depth of ID and several mechanisms of CG (e.g., ownership concentration, CEO compensation, and board independence). Drawing on agency theory and the resource and information-processing perspectives, we shed new light on such relationship in three major ways. First, we investigate each direction of causality and the theoretical mechanisms at play. Second, we examine the relative explanatory power of the two alternative cause-effect linkages between corporate governance and international diversification. Third, we contextualize our analysis by exploring the moderating effect of institutional and cultural conditions in the home country including the legal protection of minority shareholders and the national uncertainty avoidance.

We test the model using meta-analytic structural equation modeling (MASEM) with data from 104 primary studies across 28 countries covering the 1970-2012 period and four main findings emerge. First, the causal relationship between corporate

governance and international diversification is bidirectional and multifaceted in nature. Second, corporate governance explains the degree of international diversification better than international diversification explains the activation of corporate governance mechanisms. Third, the nature of the causal linkages between corporate governance and international diversification changes depending on whether the focus is on the depth or breadth of foreign expansion. Fourth, both directions of causality in the CG-ID relationship are moderated by country-level contingencies including legal shareholder protection and uncertainty avoidance.

## ESSAY 1

### HOME COUNTRY INSTITUTIONS AND THE INTERNATIONALIZATION- PERFORMANCE RELATIONSHIP: A META-ANALYTIC REVIEW

#### INTRODUCTION

Understanding the performance consequences of internationalization is widely recognized as a seminal issue in strategic management (e.g., Hitt, Tihanyi, Miller, & Connelly, 2006b; Kirca et al., 2011; Rumelt, Schendel, & Teece, 1994), given the increasingly global nature of firms' strategic focus and actions (Hill & Hult, 2015; Hitt et al., 2006b).<sup>1</sup> Over the past four decades, numerous empirical studies in management and international business (IB) have examined the performance effects of internationalization and found positive, negative and non-significant linear effects as well as a variety of curvilinear relations (see Hitt et al., 2006b). This inconclusive empirical evidence suggests that far from having reached a mature understanding of the internationalization-performance (I-P) relationship, the field is yet to “fully grasp this complex phenomenon” (Wiersema & Bowen, 2011: 154; see also: Cardinal, Miller, & Palich, 2011; Hennart, 2011). We argue that the empirical inconsistencies in the existing research on the I-P

---

<sup>1</sup> We rely on Hitt, Ireland, and Hoskisson's (2007: 251) definition of internationalization as “a strategy through which a firm expands the sales of its goods or services across the borders of global regions and countries into different geographic locations or markets”. Terms such as “internationalization”, “international diversification”, “geographic diversification”, “international expansion”, “globalization”, “multinationality” and “degree of internationalization” are often used to refer to the same phenomenon (Hitt et al., 2006b; Kirca et al., 2011); thus, we use them interchangeably.

relationship stem primarily from its failure to adequately consider the moderating effects of firms' home country formal and informal institutions.

The limited attention paid to the role of home country formal and informal institutions on the I-P relationship is surprising, given that IB research has firmly established the importance of home country institutions for firms' global strategy (e.g., Peng, Wang, & Jiang, 2008) – also referred to as the “country of origin” effect (COE) (e.g., Elango & Sethi, 2007; Harzing & Sorge, 2003; Noorderhaven & Harzing, 2003). Still, there has been little effort to determine which home country institutions influence the I-P relationship, or the mechanisms underlying these effects (Pajunen, 2008: 653). Most empirical works on the I-P relationship, including existing meta-analyses (e.g., Kirca, Roth, Hult, & Cavusgil, 2012a), have either taken home country institutions as a given, examined only institutional distances between home and host country, or relied on a narrow conceptualization of the home country institutional context by using dummy variables or focusing on a single institutional characteristic (e.g., Geringer et al., 1989; Li & Yue, 2008). One important exception is Wan and Hoskisson's (2003) study, which develops a multifaceted conceptualization of the home country institutional context and its moderating effect on the I-P relationship. Further, very few studies have examined how multiple home country institutions shape the I-P relationship across a large number of countries and years (Holmes, Miller, Hitt, & Salmador, 2013). Thus, existing findings may not generalize to sets of “different institutions and to a broader spectrum of countries” (Holmes et al., 2013: 533).

This study addresses these limitations both theoretically and empirically. Theoretically, we draw on the institution-based view and COE traditions in strategic

management to explain how home country formal and informal institutions shape the I-P relationship (e.g., Carney, Gedajlovic, Heugens, Van Essen, & Van Oosterhout, 2011; Elango & Sethi, 2007; Harzing & Sorge, 2003; Peng et al., 2008; Van Essen, Heugens, Otten, & Van Oosterhout, 2012; Wan & Hoskisson 2003). Specifically, we view home country contexts as complex, multifaceted institutional environments that provide the foundational social structures, and thereby create templates for organizational action (North, 1990). Home country institutions are the central components of national business, governance and innovation systems (Henisz & Williamson, 1999; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998; Nelson & Rosenberg, 1993; Whitley, 1992). Therefore, they play a critical role in firms' ability to develop and maintain their competitive advantage at home and abroad by shaping managerial cognition and by enabling or constraining the acquisition and deployment of strategic resources and capabilities (Cuervo-Cazurra, 2011).

Empirically, we use advanced meta-analytic techniques (e.g., Carney et al., 2011; Van Essen, Otten, & Carberry, 2015) to combine numerous single-country studies into a single multi-country study, thereby maximizing the number and diversity of the home country contexts under examination to test our hypotheses about the effects of home country institutions on the I-P relationship. Specifically, our meta-analytic tests combine 359 studies from across the management, economics and finance disciplines – a significant improvement from existing meta-analyses on the I-P relationship (i.e., Bausch & Krist, 2007; Kirca et al., 2011; Kirca et al., 2012a; Ruigrok & Wagner, 2004; Yang & Driffield, 2012), which respectively included 36, 111, 141, 62 and 54 studies. Furthermore, our study covers the years from 1972 to 2012 and a larger number of firm-

year observations (1,558,455 firm observations for the bivariate analyses and 2,576,772 firm-year observations for the partial analyses) and countries (i.e., 32) than any previous meta-analysis on this topic.

Our results show that internationalization has an overall positive, but small, effect on performance, albeit with substantial variation in the effect size distribution depending on firms' countries of origin. Firms in some countries experience significant negative performance effects from their internationalization efforts (e.g., in Mexico), while in others internationalization generates significant positive effects that range from very small (e.g., in South Korea) to sizable (e.g., in Greece), or no effects (e.g., in the Netherlands and Spain). Further, we find that specific home country institutions have different effects on the I-P relationship. In particular, our results show that home country quality of business regulations, political risk, generalized trust, long-term orientation and uncertainty avoidance are all moderators of the I-P relationship.

This research makes three main contributions to the global strategy literature. First, we show that, in the aggregate, the positive linear association between internationalization and performance is modest, and should be considered only as a “stylized fact” (Helfat, 2007). We also show that this relationship is contingent on home country institutional conditions, which can significantly affect the magnitude and sign of this relationship. Taken together, these results indicate that studies of the I-P relationship should account for COE; if not, they are likely to be underspecified both theoretically and empirically. Relatedly, our findings show the relevance of the institution-based view of strategy for studying the I-P relationship. In particular, they suggest that home country institutions influence firms' transaction costs and their managers' cognitive processes,

which, in turn, affect their ability to acquire and deploy strategic resources (Kirca, Jayachandran, & Bearden, 2005), and, ultimately, their potential to succeed in markets at home and abroad. To date, research has largely overlooked the importance of the institution-based view for contextualizing the I-P relationship. Second, we show that multiple formal and informal institutions across many countries, over a long period of time, affect firms' ability to benefit from internationalization, contributing to research on institutional complexity (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011). In doing so, our study provides a richer assessment of how firms' institutional embeddedness in their home country affects their effectiveness in international markets. Our third contribution is methodological and pertains to our meta-analytical tests' use of both Pearson product-moment correlation and partial correlation as effect sizes, which represents a significant improvement from existing meta-analyses that only used Pearson product-moment correlations. Incorporating partial correlations allows us to generate conclusive findings on several important matters that could not be properly addressed by previous meta-analyses, including the sign and shape of the I-P relationship (Stanley & Doucouliagos, 2012).

The paper is organized as follows. We begin with a review of the literature, focusing on the mixed findings about the sign and shape of the I-P relationship and previous attempts at reconciling them. We also identify firm-, industry- and host country-level variables that have been deemed important in existing tests of the I-P relationship. Then, we develop our central arguments based on the institution-based view to explain how the home country institutional context shapes the I-P relationship. We focus on the role of home countries' formal and informal institutions in enabling or constraining

firms' global competitive advantage. We also provide some specific examples of home country formal and informal institutions that are relevant for the I-P relationship. Next, we explain the meta-analytic methodology employed, data, and results. Finally, we conclude with a discussion of our results and a number of avenues for future research on the I-P relationship and the institution-based view in strategy. These suggestions point to other scarcely researched factors that might also affect firms' ability to generate profits from their internationalization efforts, steps needed to further strengthen the methodological rigor of the empirical research on the focal relationship, and ways in which theoretical insights from the institution-based view can further advance research in this area.

### **THE PERFORMANCE IMPLICATIONS OF INTERNATIONALIZATION**

A considerable body of research has focused on the performance implications of internationalization. Several review articles (Cardinal et al., 2011; Hennart, 2011; Hitt et al., 2006b; Matysiak & Bausch, 2012; Oesterle & Richta, 2013) and meta-analyses (Bausch & Krist, 2007; Kirca et al., 2011; Kirca, Hult, Deligonul, Perry, & Cavusgil, 2012b; Yang & Driffield, 2012) have presented overviews of research on this topic, as well as critical assessments of the main theoretical arguments used to explain the I-P relationship (Hennart, 2007). Rather than providing another comprehensive review of the vast literature on the I-P relationship, we focus instead on its central debates regarding the sign and shape of the central relationship, the role of various methodological and model specification artifacts that might explain the heterogeneous findings of this body of research, and recent attempts at reconciling these mixed findings.

## **Conflicting and Inconclusive Empirical Results**

Scholars acknowledge that internationalization is accompanied by inherent benefits (Geringer et al., 1989) as well as costs (Tallman & Li, 1996), which can produce different views about the performance effects of internationalization (Hitt, Hoskisson, & Kim, 1997; Lu & Beamish, 2004). The positive effects are explained by economies of scale and scope, location-based advantages, international arbitrage, broader learning and market opportunities (Cardinal et al., 2011; Hennart, 2011; Hitt et al., 2006b). Costs result from the complexity of internationalization dynamics due to external (e.g., managing across more diverse countries, liabilities of foreignness) and internal (e.g., coordinating more foreign direct investments) factors (Hennart, 2011). Empirical results have been largely inconclusive on the existence and shape of the I-P relationship, providing support for positive linear relationships (e.g., Grant, Jamine, & Thomas, 1988; Kim, Hwang & Burgers, 1989), negative linear relationships (Siddharthan & Lall, 1982; Wan & Hoskisson, 2003), no relationships (Hennart, 2007, 2011), U-shaped relationships (Lu & Beamish, 2001), inverted U-shaped relationships (Geringer et al., 1989; Gomes & Ramaswamy, 1999; Hitt et al., 1997), and sigmoid relationships (Contractor, Kundu, & Hsu, 2003; Lu & Beamish, 2004).

Advocates of the positive linear relationship focus on the benefits of internationalization. This approach has been criticized because it often ignores the fundamental complexity of internationalization (Cardinal et al., 2011). More complex non-linear relationships have been proposed to reflect both the costs and benefits of internationalization. Proponents of a U-shaped I-P relationship (e.g., Lu & Beamish, 2001) argue that firm performance is likely to decline in the early phases of

internationalization due to the costs stemming from the liabilities of foreignness and newness (Hymer, 1976; Zaheer, 1995). However, over time as the firm continues to internationalize, it acquires sufficient knowledge and capabilities to overcome these difficulties and capture the benefits associated with internationalization. Thus, its performance improves over time. Proponents of the inverted U-shaped relationship (e.g., Geringer et al., 1989; Gomes & Ramaswamy, 1999), instead, emphasize the positive effects of internationalization up to an “internationalization threshold”, where the costs of coordination among diverse subsidiaries exceed the benefits. Thus, according to this view, firms are expected to enjoy better performance at moderate levels of internationalization, but experience poorer performance at low and high levels of internationalization. Finally, other researchers (e.g., Contractor et al., 2003; Lu & Beamish, 2004; Thomas & Eden, 2004) propose a sigmoid I-P relationship in an effort to synthesize the arguments made by the proponents of both the U-shaped and inverted U-shaped relationships. Similarly to the advocates of the U-shaped relationship, they suggest that firm performance is likely to deteriorate in the early phases of internationalization, but then improve at later stages. However, negative performance effects are also likely to develop when the firms internationalize beyond a certain threshold, as suggested by the proponents of the inverted U-shaped relationship. Sigmoid models are thus described as more sophisticated and integrative by their authors because they account for the impact of internationalization on performance at different levels of internationalization.

## **Reconciling Conflicting and Inconclusive Results**

Conflicting findings about the sign and shape of the I-P relationship have triggered several attempts to explain them. They can be broadly summarized in two groups. The first group includes studies examining the impact of various methodological approaches on the I-P relationship (see Bowen, 2007), such as differences in the time frames examined, endogeneity controls, and operationalizations of the main variables of interest. For example, Thomas and Eden (2004) show the different effects of internationalization on short-term accounting measures of performance (e.g., return on assets, return on equity, and return on sales) and long-term market-based measures (e.g., excess market value, average market value). They find a stronger S-shaped effect in studies that rely on market-based measures of performance. However, conflicting results can also be found in studies relying purely on market-based measures (Hitt et al., 2006b). Another methodological concern stems from the numerous approaches to measuring internationalization as they capture different aspects of this phenomenon (Hennart, 2011; Thomas & Eden, 2004). For example, while many studies measure firm's internationalization in terms of its "scale" (or "depth" – e.g., ratio of foreign sales to total sales, foreign assets to total assets, or foreign employees to total employees), others rely on measures that reflect "scope" (or "breadth" – e.g., number of countries, international asset dispersion). These measures consider two different facets of firms' internationalization. Scale reflects the strategic importance that a firm assigns to serving foreign markets (Stopford & Wells, 1972); however, scope captures the heterogeneity of internationalization across countries (Goerzen & Beamish, 2003; Tallman & Li, 1996). Scope of internationalization can also help to explain the different non-linear

relationships between internationalization and performance as it captures the potential costs of internationalization. Firms with institutionally diverse portfolios of foreign operations (i.e., with a larger scope of internationalization) are likely to experience substantial complexity in their operations, given the need to manage operations across countries with dissimilar institutional profiles (Kostova & Zaheer, 1999; Zahra, Ireland, & Hitt, 2000). A larger scope of internationalization can also complicate the exploitation of firm-specific assets (Rugman & Verbeke, 2005), thus negatively affecting performance. To include both aspects of internationalization, some studies have developed multidimensional measures of internationalization (e.g., Hitt, Bierman, Uhlenbruck, & Shimizu, 2006a; Sullivan, 1994).

A second group of studies attempts to reconcile the conflicting findings of the I-P literature by focusing on potential theory-driven moderators of the relationship (e.g., Bausch & Krist, 2007; Bowen, 2007; Hitt et al., 2006b). In addition to industry-level moderating effects (e.g., Tallman & Li, 1996), a number of firm-level moderators have been examined in the literature. Some of the most common ones include the degree of product diversification (Hitt et al., 1997), size (Dragun, 2002), ownership type (Allen & Pantzalis, 1996), leverage (Reuer & Miller, 1997), risk (Hejazi & Santor, 2010), growth (Allen & Pantzalis, 1996), firm-specific intangible assets such as marketing and R&D assets (Kirca et al., 2011), advertising intensity (Kim & Lyn, 1986), CEO pay or international experience (Carpenter & Sanders, 2004), top management team's (TMT's) international experience or diversity (Thomas, 2005), and human capital in the case of service industries (Hitt et al., 2006a). However, the empirical results of some of these moderating effects are not always consistent.

Researchers have also examined how differences in firms' internationalization processes, in terms of pace (i.e., the speed with which it is carried out) and rhythm (i.e., the irregularity of the internationalization process) influence performance. For example, using a sample of Dutch firms, Vermeulen and Barkema (2002) show that faster and more irregular internationalization processes negatively moderate the I-P relationship. However, Chang and Rhee (2011), using Korean data, find an insignificant relationship between internationalization rhythm and performance. They also show that greater speed enhances performance only in industries in which globalization pressures are high, and when they are carried out by firms with superior international resources and capabilities.<sup>2</sup> It is important to note that research on the performance implications of heterogeneous processes of internationalization is still limited when compared to other areas of inquiry reviewed herein.

Other studies rely on the construct of institutional distance and its impact on the I-P relationship (e.g., Tihanyi, Griffith, & Russell, 2005). Institutional distance refers to the "difference/similarity between the regulatory, cognitive, and normative institutional environments of the home and host countries" of a multinational enterprise (MNE) (Kostova & Zaheer, 1999: 68). Empirical studies have shown both positive and negative moderating effects of institutional distance on the I-P relationship (e.g., Chao & Kumar, 2010; Tihanyi et al., 2005). For example, Tihanyi et al. (2005) find support for a positive effect of cultural distance on performance, but only for MNEs entering developed countries. Chao and Kumar (2010) also find that cultural distance is positively related to MNE's performance, however the effect for regulatory distance is negative. Some researchers have also examined the overall quality of the institutional environment across

all of the MNE's portfolio of host countries, arguing that weaker institutional contexts are more likely to increase the firm's costs associated with "entry and liabilities of foreignness and newness owing to unclear regulations and weak enforcement of the rules" (Chao & Kumar, 2010: 95).

### **MODERATING ROLE OF HOME COUNTRY INSTITUTIONS**

Attempts to reconcile mixed findings of the I-P relationship have examined a variety of firm-, industry-, and host country-level factors, but scarce attention has been paid to the role of firms' home country institutional environments. This is surprising given the existing view that home country institutions help shape firms' strategies and their ability to succeed at home and abroad by influencing their transaction costs and their managers' cognitive processes. In particular, scholars have argued that home country institutions engaging efficiency and uncertainty reduction mechanisms often determine the cost of transacting internationally, and thereby affect firm performance. For example, Cuervo-Cazurra (2011) argues that home country institutions affect firms' domestic and global performance because the "presence or absence of specific inputs outside the firm induces it to develop distinct resources that either rely on the availability of particular external inputs or compensate for the lack of certain external inputs [...]" (Cuervo-Cazurra, 2011: 383). In addition, "the particular norms and institutions prevailing in the country induce the company to develop specific resources to be able to interact with other players in the marketplace [...]" (Cuervo-Cazurra, 2011: 383). Others have explored country of origin effects through the concept of national administrative heritage, which refers to shared beliefs and cultural templates that determine "how things ought to be done" and legitimize ways of organizing and controlling (Bartlett & Ghoshal, 1989; Elango & Sethi,

2007; Lubatkin, Calori, Very, & Veiga, 1998; Noorderhaven & Harzing, 2003). The concept of national administrative heritage builds on the rich and theoretically eclectic body of work on the institutional embeddedness of firms' behaviors (e.g., DiMaggio & Powell, 1983; Guillén, 1994; Lubatkin et al., 1998). McGahan and Victor (2010) rely on the related concept of employees' imprinting reflecting their absorption of home country-based cognitive frames.

An important exception to the limited empirical attention given to the moderating role of home country institutions on the I-P relationship is Wan and Hoskisson's study (2003), which examines the political, legal and societal institutions of a firm's home country. The authors find that stronger formal and informal institutions positively moderate the I-P relationship. Our study builds on Wan and Hoskisson's (2003) insights by examining the role that home country formal and informal institutions play as moderators of the I-P relationship. Our overarching contention is that, keeping other factors constant, the strength of the I-P relationship will vary depending on firms' home country institutional environment (Andersson, Cuervo-Cazurra, & Nielsen, 2014), as it generates conditions that push them to develop resources and capabilities that can sustain or hinder their global competitive advantage (Cuervo-Cazurra, 2011; Wan & Hoskisson, 2003).

To further illustrate our general contention, we draw on the institution-based view and COE tradition in strategy. We focus on institutional variables that the institution-based view and COE traditions in strategy have identified as potentially influential for firms' global strategy. Even though the majority of the arguments presented below have not been empirically examined before, we do not present institution-specific hypotheses.

The rationale for this approach is two-pronged. First, we are interested in examining the overarching contention that home country formal and informal institutions are important moderators of the I-P relationship, rather than exploring in detail the role of specific institutions. Second, our set of institutional variables should not be viewed as definitive, nor do we explore the theoretical linkages among those variables. Rather, our goal is to propose (based on theory) and test (benefiting from the advantages of advanced meta-analytic methods) promising institutional arguments that are consistent with our general hypothesis. We view our approach as exploratory and consistent with Cantwell, Dunning and Lundan's (2010) appreciative theory, which aims to create "an analytical bridge between empirical investigation and formal models" (Cantwell et al., 2010: 573).

We draw on North's institutional tradition and consider the impact of two different but related types of home country institutions: formal and informal (Holmes et al., 2013; Van Essen et al., 2012). Formal institutions consist of regulatory, administrative, economic and political arrangements that detail the actions of people, systems, and organizations through formal laws, regulations, policies, and other written materials as well as their means of enforcement (North, 1990). Informal institutions are norms and beliefs that are not codified or documented; rather, they are durable systems of shared meanings and understandings that contribute to shape societal structures and behaviors (Holmes et al., 2013).

### **Formal Institutions and the I-P Relationship**

Because formal institutions reflect codified and explicit rules and standards, they provide influential behavioral guidelines within society mainly through regulatory and political structures (North, 1990; Scott, 1995). A large number of empirical studies examine the

influence of various aspects of home countries' formal institutions on firms' behavior and performance (e.g., Chacar, Newburry, & Vissa, 2010; Kirca et al., 2012b; McGahan & Victor, 2010; Van Essen et al., 2012; Wan & Hoskisson, 2003). In reviewing the literature on formal institutions' effect on a firm's global strategy, we follow Holmes et al. (2013) who argue that the most relevant formal institutions for managers are regulatory/legal, economic, and political institutions. Much of the research on these institutions has emphasized that their quality stimulates firms' creation of specific resources that rely on particular external inputs or compensate for the lack of other inputs (Cuervo-Cazurra, 2011).

Research on legal institutions shows that the degree to which legal traditions prioritize investor and private property rights helps explain cross-country variation in financial development and corporate strategies (La Porta et al., 1998). Common law systems provide stronger protection to both shareholders and creditors (La Porta et al., 1998). Building on these ideas, Li and Yue (2008) test and find support for the notion that firms from civil law countries achieve better performance in their international operations than their common law counterparts. The authors attribute this outcome to civil law countries' less supportive legal environment, which forces local firms to develop coping skills and capabilities that help them compete against their common law counterparts in the global arena (Elango & Sethi, 2007; Li & Yue, 2008). In sum, these findings imply that civil law home country traditions are likely to positively moderate the I-P relationship.

Home country's business regulations, including antitrust and product liability regulations, contract enforcement, and financial market oversight, have also been found

to shape local firms' access to resources and thus to influence their ability to compete in the international arena (Chacar et al., 2010; Nachum, 2004; Wan & Hoskisson, 2003). Two conflicting perspectives have emerged in this area with regard to how these institutions can shape firms' performance abroad. The first one suggests that higher quality business regulations enable local firms' economic activities because they reduce firms' transactions costs by limiting opportunistic behaviors and uncertainty in market transactions. These regulations produce stronger national economies that provide more resources, which in turn help firms to develop skills and routines that can strengthen their ability to profit from their foreign operations (Chacar et al., 2010; Kirca et al., 2012b; Wan & Hoskisson, 2003). Hence, these arguments suggest that home country quality of government's business regulations positively moderates the I-P relationship. The second and conflicting perspective comes from the research on institutional voids (i.e., weak or missing institutions) and firm performance (e.g., Khanna & Palepu, 1997). It contends that weaker business regulations at home stimulate local firms' development of coping skills, which can be deployed in their foreign operations and translated into competitive advantages over firms from countries with stronger regulations (Luo & Tung, 2007: 486). Therefore, this perspective views home country quality of government's business regulations as likely to negatively moderate firms' ability to benefit from internationalization.

Research also suggests that the political system in an MNE's home country can affect the I-P relationship. Relative to autocratic regimes, democratic political systems create more effective economies, more cooperative relationships between businesses and governments, and higher levels of transparency due to the large number of influential and

informed stakeholders embedded within them (Hillman & Keim, 1995). Democratic political systems also decrease the level of political risk in a country. By political risk, we refer to the potential for arbitrary and capricious policymaking, which creates uncertainty for firms (Henisz & Zelner, 2004). Lower levels of political risk can improve performance by reducing uncertainty and enabling firms to identify and conform to government priorities and facilitate relationships with government officials (Orr & Kennedy, 2008). Two competing theoretical logics have emerged regarding the role of political risk relative to firm's performance that are similar to some of the arguments discussed above for business regulations. For example, Wan and Hoskisson (2003) show that firms headquartered in countries with stronger political institutions (which they examined together with "legal" and "societal" institutions) tend to profit more from internationalization than firms from countries with less strong institutions. They argue that the latter group of firms may "lack globally redeployable capabilities for successfully competing in foreign markets" (Wan & Hoskisson, 2003: 31). This is because their competitive advantages usually depend on the lax home country institutional environment and thus are "in many respects local and [...] likely to dissipate in foreign countries" (32). However, others provide competing arguments. For example, Puffer, McCarthy and Boisot (2010) argue that while countries characterized by unstable and unpredictable political systems are prone to market inefficiencies, such conditions force firms to develop coping strategies and capabilities to deal with difficult institutional settings. In turn, these coping skills can help firms manage the challenges they experience in their foreign operations (Elango & Sethi, 2007). This second perspective emphasizes the positive effects of weak home country institutions (Khanna & Palepu, 1997) for firms

when they internationalize: thus, it suggests that home country political risk should positively moderate the I-P relationship.

### **Informal Institutions and the I-P Relationship**

Culture is an important informal institution in a country (North, 1990; Peng et al., 2008). Culture is composed of interrelated values and norms (Hofstede, 2001; Parsons & Shils, 1951), as well as repertoires, worldviews, stories, and symbols that people use to determine strategies for action (Swidler, 1986). Culture is durable and provides a tacit context for the development of formal institutions (Dunning & Bansal, 1997; Holmes et al., 2013). A number of empirical studies have shown the impact of national culture on firms' administrative heritage (Lubatkin et al., 1998) and performance (Li, Lam, & Qian, 2001). National culture can affect managers' ability to interpret and respond to strategic issues (Schneider & De Meyer, 1991), leadership style, human resource management and other organizational practices (Harzing & Sorge, 2003; House et al., 1999), which in turn influence a firm's ability to acquire and deploy strategic resources (Kirca et al., 2005). IB research has examined how specific dimensions of national cultures affect firm performance; hence, studying culture can help understand cross-country performance variation. Based on an extensive review of the relevant literature, we identify three facets of home country culture that are most likely to moderate the I-P relationship: generalized trust, future orientation, and uncertainty avoidance.

Research shows that higher levels of home country societal trust, cooperative norms, and relational activities enable firms to extract greater value from their international operations (Wan & Hoskisson, 2003). This is because societies with higher levels of trust have stronger cooperative norms that propel economic actors to work

towards collective benefits (Knack & Keefer, 1997). International strategies have been linked to a specific type of social trust referred as “generalized trust” (Kramer & Lewicki, 2010; Yamagishi & Yamagishi, 1994) and defined as the degree to which a country’s population perceives people from foreign countries to be trustworthy (Ertug, Cuypers, Noorderhaven, & Bensaou, 2013). Generalized trust reflects a social categorization effect in that assumptions or stereotypes associated with membership in a social category (e.g., a foreign country) affect how much trust is afforded to members of that group (Kramer & Lewicki, 2010). Generalized trust is part of a country’s national culture (Ertug et al., 2013) and varies across countries (Ferrin & Gillespie, 2010; Huff & Kelley, 2003). In addition to shaping local firms’ managerial practices (Calori, Lubatkin, Very, & Veiga, 1997; Ertug et al., 2013), it is especially relevant for internationalization strategies (e.g., Ertug et al., 2013). Indeed, higher generalized trust translates into firms’ greater openness to foreign activities and practices (Huff & Kelley, 2003; Yamagishi, Cook, & Watabe, 1998), as well as a stronger learning orientation in foreign markets (Yilmaz, Alpkun, & Ergun, 2005). By extension, this stronger openness to foreign activities and markets and heightened learning orientations can lead to greater propensity to develop relevant practices, skills and routines that foster firms’ ability to succeed abroad (Chen, Meindl, & Hui, 1998; Yilmaz et al., 2005; Zahra et al., 2000). Hence, these arguments indicate that home country generalized trust positively moderates the I-P relationship.

Other facets of home countries’ cultural systems may also be relevant for the I-P relationship. For example, research suggests that the degree of the home country’s future orientation (Hofstede, 2001) affects firms’ entrepreneurialism and performance (e.g., Li et al., 2001). Future orientation suggests an emphasis on long-term rather than short-term

outcomes; hence, planning and investing activities are geared towards long-term outcomes (Ashkanasy, Gupta, Mayfield, & Trevor-Roberts, 2004). Prevalent social norms, such as delayed gratification, prompt individuals and organizations to opt for savings and forgo immediate spending. Ultimately, this enables capital accumulation through investments in projects with long-term payoffs and the avoidance of expenditures associated with short-term payoffs (Hofstede & Bond, 1988). Future orientation exists in cultures that place a premium on loyalties and commitment, and the extension of familial values to corporate settings (Ouchi, 1981). Future orientation may have an impact on the supply and demand of capital by framing a country's investment options as long-term growth-opportunities. Thus, these ideas suggest that a country's cultural emphasis on future orientation could enhance its firms' ability to extract value from foreign investments/operations.

Finally, research points to one other facet of the home country's cultural system that is relevant for the I-P relationship, namely the degree of home country's uncertainty avoidance (Noorderhaven & Harzing, 2003). Uncertainty avoidance reflects the degree to which individuals within a culture are tolerant of uncertain situations. Individuals and organizations embedded in cultures with high degrees of uncertainty avoidance tend to be more easily threatened by ambiguous situations, and prefer structures, regulations and expert knowledge that mitigate risk (Hofstede, 2001). However, these preferences tend to create cognitive constraints that limit a firm's strategic flexibility (Brinckmann, Girchnik, & Kapsa, 2010; Lubatkin et al., 1998). In turn, the lack of strategic flexibility can harm firms' ability to learn from their exposure to international markets and ultimately reduce their ability to extract rents from them (Mosakowski, 1997). Instead, firms headquartered

in countries with lower uncertainty avoidance may have better responsiveness, strategic flexibility and tolerance for improvisational activities that help them to adapt to and perform more effectively within the requirements and expectations of foreign local conditions, thereby enhancing their chances for success in foreign markets (Brinckmann et al., 2010). Thus, home country uncertainty avoidance should negatively moderate the I-P relationship.

## **METHODOLOGY**

In order to develop a systematic empirical evaluation of the firm-, industry-, home and host country-level factors driving the I-P relationship that were discussed in the preceding sections, we conducted a meta-analytic study following established methodological guidelines (e.g., Buckley, Devinney, & Tang, 2013). In this section, after describing our sample and coding approach, we discuss our three main meta-analytic approaches, namely Hedges and Olkin-type meta-analytic techniques (HOMA; Hedges & Olkin, 1985); meta-analytic regression analysis (MARA; Lipsey & Wilson, 2001); and hierarchical linear modeling meta-analysis (HiLMMA; Hox, 2002; Raudenbush & Bryk, 2002). We conclude this section by describing our measurement approach.

### **Sample and Coding**

To identify the highest possible number of studies testing the I-P relationship, we used five search strategies. First, we consulted several review articles (e.g., Hennart, 2011; Hitt et al., 2006b; Li, 2007) and six prior meta-analytic articles (Bausch & Krist, 2007; Kirca et al., 2011; Kirca et al., 2012b; Kirca et al., 2012b; Ruigrok & Wagner, 2004; Yang & Driffield, 2012). Second, we explored five major electronic databases using the following search terms: “multinationality”, “MNC”, “international diversification”,

“internationalization”, “geographic diversification”, “international expansion”, and “globalization” (Hitt et al., 2006b; Kirca et al., 2011; Kirca et al., 2012a, 2012b). Third, we conducted a manual search in journals across the disciplines of economics, entrepreneurship, management, and finance that have published articles on the I-P relationship from the year of the first publication of each of the journals to 2014. Fourth, after collecting an initial set of studies, we gathered all studies cited in the previously retrieved articles, along with all articles citing them, using Google Scholar and ISI Web of Knowledge. Fifth, we directly contacted researchers who had previously written one or several papers relevant to this topic but did not report effect size information or whose studies we could not retrieve by other means. We asked them for a correlation table, sample size, regression output, and additional empirical studies. Combined, these strategies yielded a final sample of 359 primary studies (288 published and 71 working papers) with samples of firms from 32 countries across the 1972-2012 time period. In Figure 1.1, we show the number of primary studies for each year included in our meta-analysis and the growth trajectory of research on the I-P relationship.<sup>2</sup>

We proceeded by reading all articles and by developing a coding protocol (Lipsey & Wilson, 2001) to extract data on all relevant variables and study characteristics. Two authors coded all the data, and a third author re-checked all effect sizes to assess the degree of agreement in the extracted information from primary studies (Stanley & Doucouliagos, 2012). We resolved remaining discrepancies via discussion until we reached a consensus.

---

<sup>2</sup> We were not able to determine the year for eight working papers. Thus, those papers are not included in Figure 1.1.

## Meta-analytic Procedures

We used three analytical procedures depending on our research objectives.

**HOMA procedure.** We use Hedges and Olkin-type meta-analytic techniques (HOMA; Hedges & Olkin, 1985) to measure the meta-analytic mean correlation between internationalization and performance and the corresponding confidence interval. In addition, this procedure allows us to assess whether the heterogeneity of the effect size distribution in the I-P relationship depends on the different operationalizations of the two main constructs of interest (i.e., internationalization and performance) and variations in the internationalization processes that firms pursue. It also enables us to examine the shape of the I-P relationship. To carry out HOMA analyses, we use both Pearson product-moment correlation  $r$  and the partial correlation  $r_{xy.z}$  as effect sizes because these are easily interpretable and scale-free measures of linear association. We use  $r$ , as this is the most commonly reported effect size statistic in management (Geyskens, Krishnan, Steenkamp, & Cunha, 2009). In addition, we use  $r_{xy.z}$ , which represents the association between  $I(x)$  and  $P(y)$ , given a set of  $n$  control variables ( $Z$ ), and allows us to incorporate studies in which bivariate effect size information was not reported. Exploring partial correlations is useful for several additional reasons. First,  $r_{xy.z}$  gives insights into the direction of causality between two variables, provided that the authors of the primary study corrected for endogeneity. Second,  $r_{xy.z}$  controls for the effect of other variables and can be used to determine the minimally required set of control variables for future studies (see our discussion about the MARA technique below). Furthermore, it can also provide information about nonlinearity when the authors of primary studies have incorporated squared transformations of linear terms in their regression work.

When primary studies reported effect size statistics other than  $r$  and  $r_{xy,z}$ , we transformed these to an  $r$  value. When we encountered multiple measurements of the focal effect, for example due to the reporting of results for several different operationalizations of internationalization, all effects were included in our overall analysis and we unpacked them later with subgroup analyses (Bijmolt & Pieters, 2001).

**MARA procedure.** We use meta-analytic regression analysis (MARA; Lipsey & Wilson, 2001) to examine the impact of formal and informal institutions on the I-P relationship. Similar to multiple regression approaches, MARA estimates a linear regression model in which the dependent variable (in our case, the correlation between I-P in a given primary sample) is regressed on a set of predictors (which are the potential moderators of the focal relationship) (Carney et al., 2011). We weight the effect sizes again by their inverse variance weight to account for differences in the precision of the information contained in them. We follow Van Essen et al. (2015) and a long tradition of meta-analytic research in economics (e.g., Stanley & Doucouliagos, 2012) and use  $r$  and  $r_{xy,z}$  as our effect size estimates for the MARA procedure, which, in our case, captures the I-P relationship, with a given set of  $n$  control variables. One of the unique advantages of using MARA is that it allows modeling the variance in the effect size distribution in light of home country-level institutional variables that were not included in the primary studies (Van Essen, Van Oosterhout, & Heugens, 2013). The institutional variables are measured longitudinally, which allows us to match the individual effect sizes to the temporally closest available institutional variables.

**HiLMMA procedure.** Finally, we rely on hierarchical linear modeling meta-analysis (HiLMMA; Raudenbusch & Bryk, 2002) to assess whether primary study results

are consistent across countries, and if not, which percentage of the variability in the effect size contribution depends on a firm's country of origin. We also use HiLMMA as a robustness check to rule out the possibility that stochastic dependencies between multiple effect sizes harvested from a single primary study biased our HOMA and MARA parameter estimates. Specifically, we interpret each effect size as a level 1 observation, nesting it in the study from which it was derived, and coding this study as a level 2 predictor. If the intercept of the standardized HiLMMA test is comparable to the mean effect size retrieved by the HOMA test, it signals the absence of estimation bias due to stochastic dependencies. Inversely, a significant difference between the two values would indicate the presence of such biases.

### **Measures of Performance and Internationalization**

**Firm performance.** Building on the findings by Hitt and colleagues (2006b), we include four types of firm-level performance measures: (1) *accounting-based measures* (e.g., Hitt et al., 1997; Thomas & Eden, 2004), such as ROE, ROA, ROS, ROI, profit margin, and profit; (2) *market-based measures* (e.g., Thomas & Eden, 2004), such as stock market performance, market to book value, Tobin's Q, and excess market value; (3) *sales growth* (e.g., Zahra et al., 2000); and (4) *survey-based measures* (e.g., Dhanaraj & Beamish, 2003), which capture respondents' perceptions of firm performance.

**Internationalization.** Based on Sullivan (1994) and Thomas and Eden (2004), we include 11 internationalization variables grouped into five categories. (1) *Depth of internationalization.* We include the following measures of depth: foreign sales to total sales (Tallman & Li, 1996); foreign assets to total assets (Gomes & Ramaswamy, 1999); foreign employees to total employees (Brock & Yaffe, 2008); and export to total sales (Lu & Beamish, 2001). Together, these ratios suggest the extent to which the firm's

activities are conducted outside the home country (Thomas & Eden, 2004). (2) *Breadth (scope) of internationalization*. We include the following measures of breadth: number of countries (Delios & Beamish, 1999); number of regions (Kim, Hoskisson, & Wan, 2004); dispersion across countries (Goerzen & Beamish, 2003); and dispersion across regions (Hitt et al., 1997). Together, these variables capture the span of a firm's foreign operations (Thomas & Eden, 2004). (3) *Foreign subsidiaries* (e.g., Vermeulen & Barkema, 2002), measured as the number of the firm's foreign affiliates in a given year, and the ratio of foreign subsidiaries to total subsidiaries (Gomez-Mejia & Palich, 1997). (4) *Internationalization dummy* (Chakrabarti, Vidal, & Mitchell, 2011), which takes value of 1 if the firm has an international presence and 0 otherwise. (5) *Composite measure* (Sanders & Carpenter, 1998), which measures the internationalization of a firm in a given year by integrating different internationalization measures into a composite indicator.

### **Institutional Moderators**

**Formal institutions.** As proposed in our preceding review, we examine three sets of formal institutions. First, we assess the role of a country's legal tradition on the I-P relationship in terms of civil law vs. common law. Specifically, we use a time invariant dummy variable that equals 1 if the country relies on the English common law system and 0 otherwise (e.g., La Porta et al., 1997). These data are extracted from the database compiled by the University of Ottawa's JuriGlobe. Second, to capture economic regulatory institutions, we consider the quality of government regulations targeting starting, operating and closing a business. Specifically, we use the home country's degree of business freedom, which measures the quality of the regulations of business behavior such as licensing and registration requirements. This measure comes from the Index of

Economic Freedom, which is computed by the Heritage Foundation on a yearly basis (Heritage Foundation, 2015) and has also been used widely in the international management research (e.g., Meyer & Sinani, 2009; Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010). This variable is time variant. Third, we explore the role of political institutions by examining the degree to which a country's political structure creates political risks for firms and investors. Specifically, we use Witold Henisz's Political Constraint Index dataset (POLCON V), which measures political risk in terms of the degree of restrictions on policy changes and the distribution of power across political branches (Henisz, 2000). The index ranges between 0 (most hazardous) and 1 (most constrained, i.e., stable) and has been extensively used in IB research (e.g., Guler & Guillén, 2010; Lu, 2002). This index is time variant. Also, we reverse code the index, so that higher levels indicate more politically risky home countries.

**Informal institutions.** As discussed in our review, we examine the role of three informal institutions. First, we examine the moderating role of generalized trust, which reflects the degree to which a country's citizens trust members of other nations. Data for this time variant variable were obtained from the World Value Survey, which has been used extensively in international research on generalized trust (e.g., Ertug et al., 2013; Ferrin & Gillespie, 2010). Second, we examine the home country's future orientation, which is "the degree to which individuals in organizations or societies engage in such behavior as planning, investing in the future, and delaying individual or collective gratification" (House, Hanges, Javidan, Dorfman, & Gupta, 2004: 12). This measure comes from the GLOBE project, which has been widely used by scholars exploring the management implications of national culture (e.g., Sarala & Vaara, 2010) and is time

invariant. Third, we assess home country's uncertainty avoidance, which is "the extent to which members of an organization or society strive to avoid uncertainty by relying on established social norms, rituals, and bureaucratic practices" (House et al., 2004: 11).

This time invariant measure is also drawn from the GLOBE project.

### **Control Variables**

We also include numerous firm-, industry-, home and host country-level control variables in the MARA model. To control for definitional effects, we include separate dummy variables for the different definitions of internationalization and performance that we discussed above, using *foreign subsidiaries* and *market-based measures* as the two reference categories. We also include dummy variables measuring whether internationalization was lagged (1) or not (0) in the studies.

To control for methodological artifacts, we test for the "file drawer problem" (Rosenthal, 1979) by including a dummy variable denoting whether a study was *published* or not (reference group). To allow for the possibility that the focal relationship might change over time, we control for the *median year of sample window*. We also include dummy variables indicating whether effect sizes were based on a *panel* or *cross-sectional* (reference group) design, and whether they were derived from a study controlling for *endogeneity* of internationalization on firm performance or not (reference group). We control for type of firm, namely whether the sample includes only *public firms*, *private firms* or both (reference group). We also control for firm size, namely whether the sample includes only *large firms*, *small medium size enterprises* (SMEs) or both (reference group). We control for the four industries in which sector-specific results were available: *chemical*, *consultancy*, *high tech*, *pharma/biotech* and mixed (reference

group). We assess whether primary studies controlled for *industry effects* or not (reference group), *year effects* or not (reference group), and we include the *number of variables included in the regression models*. We also include a control denoting whether the sample included firms from *multiple countries* or not (reference group). Finally, we include *home country total GDP* to control for the size of the home country's economy as it could influence the I-P relationship (Elango & Sethi, 2007).

To account for the effects of specific omitted variables, we incorporate a set of dummy variables indicating whether the following variables were included (yes = 1) in the model from which a given effect size was derived: *firm previous international experience, prior firm performance measure, firm size, firm age, R&D intensity, advertising intensity, product diversification, debt to equity level, firm risk, firm growth, capital intensity, CEO/Top Management Team (TMT) international experience, board independence, ownership concentration, inside ownership, foreign ownership, family ownership, business group affiliation, industry performance, host country potential (i.e., the opportunities associated with operations in the host country), and country distance (i.e., the institutional distance between the home and the host country)*.

## RESULTS

### I-P Relationship: Size, Shape and Related Methodological Issues

**HOMA results.** We present in Table 1.1 the results for our  $r$ -based (left-hand panel) and  $r_{xy.z}$ -based (right-hand panel) HOMA analyses. Like prior meta-analyses (Bausch & Kirst, 2007:  $r$ -based mean = 0.06; Kirca et al., 2011:  $r$ -based mean = 0.10; Ruigrok & Wagner, 2004:  $r$ -based mean = 0.04), we find that, overall, internationalization has a small but statistically significant positive effect on firm performance, albeit smaller when focusing on partial correlation ( $r$ -based mean = 0.06;

$r_{xy,z}$ -based mean = 0.02) and with the caveat that the variance contained in both effect size distributions is high ( $r$ -distribution:  $Q = 16,663.38$ ,  $I^2 = 0.97$ ;  $r_{xy,z}$ -distribution:  $Q = 26,479.83$ ,  $I^2 = 0.95$ ). Under these conditions, the mean is best interpreted as an average rather than a common true correlation value (Hedges & Olkin, 1985: 235), implying that the I-P relationship has a negative sign in several samples and also suggesting influence from moderators. Thus, further moderator analyses are needed. The funnel plot presented in Figure 1.2, which represents sample size against effect size, visually depicts the heterogeneity present in the effect size distribution. The spread of the retrieved effect sizes is considerable, and the distribution occupies broad zones left and right of the zero mark.

Sub-group HOMA analyses reveal that the heterogeneity in study findings is at least partially driven by how firm performance is operationalized. Based on the  $r$ -based HOMA analysis, we find that, first, the measures of firm performance are positively but not highly correlated with one another ( $r$ -based mean = 0.33). Second, we find that, whereas the mean effect sizes based on accounting measures ( $r$ -based mean = 0.06;  $r_{xy,z}$ -based mean = 0.01 n.s.), market measures ( $r$ -based mean = 0.05;  $r_{xy,z}$ -based mean = 0.03) and sales growth ( $r$ -based mean = 0.05;  $r_{xy,z}$ -based mean = 0.04) are close to the overall mean effect size, those based on self-reported survey data are substantially higher ( $r$ -based mean = 0.14;  $r_{xy,z}$ -based mean = 0.09).

Consistent with prior research (Sullivan, 1994), we find that the internationalization construct is multidimensional and that these dimensions are far from perfectly correlated with each other: the mean correlation between internationalization variables is 0.35 in the  $r$ -based HOMA analysis. This result points to the need to further

examine the role of this focal construct: only the measures of internationalization by depth ( $r$ -based mean = 0.06;  $r_{xy,z}$ -based mean = 0.01) or breadth ( $r$ -based mean = 0.07;  $r_{xy,z}$ -based mean = 0.06) are statistically significant with a positive sign in both analyses. This suggests that the differential operationalizations of the internationalization variable moderate the overall I-P relationship.

In the  $r_{xy,z}$ -based HOMA analyses, we also test for non-linear relationships between internationalization and firm performance. Neither the quadratic nor the cubic relationship is supported, as the quadratic and cubic terms are statistically insignificant.

Finally, in only seven percent of all  $r_{xy,z}$ , the Z-vector also contained an instrumental variable to address potential endogeneity issues. We find in the HOMA analyses that endogeneity is an important issue because the meta-analytic mean for studies using endogeneity corrections is considerably lower than that for studies not using such corrections. Importantly, the statistically significant overall effect of the I-P relationship disappears for studies using endogeneity corrections (-0.01 (n.s.) vs. 0.02).

In the HOMA analyses, we also consider the heterogeneity of the internationalization process and its potential influence on firm performance. Specifically, we test whether speed and rhythm of the internationalization process affect firm performance (Vermeulen & Barkema, 2002). Our results show that the rhythm of the internationalization process does not affect firm performance ( $r$ -based mean = -0.05 n.s.;  $r_{xy,z}$ -based mean = 0.01 n.s.). Speed of internationalization is not a consistently relevant moderator of the I-P relationship, as shown by a coefficient that is both positive and statistically insignificant in the  $r$ -based analyses (i.e.,  $r$ -based mean = 0.01 n.s.) but negative and statistically significant in the  $r_{xy,z}$ -based analyses ( $r_{xy,z}$ -based mean = -0.04).

**MARA results.** These results further illustrate the importance of controlling for measurement, methodological, and model specification artifacts and are reported in Table 1.2. In terms of measurement concerns, they show that the coefficient estimates of breadth of internationalization ( $\beta = 0.05$ ,  $p < 0.01$ ) and survey measures of performance ( $\beta = 0.08$ ,  $p < 0.01$ ) are the largest among the statistically significant estimates of the internationalization and firm performance definitions, respectively. These results are consistent with the HOMA results and also confirm previous findings (i.e., Kirca et al., 2012b; Thomas & Eden, 2004) suggesting that breadth of internationalization has a stronger effect on firm performance than depth.

The positive and statistically significant coefficient estimate for the published study variable ( $\beta = 0.02$ ,  $p < 0.05$ ) indicates that the “file drawer problem” is present in the I-P literature. Studies reporting greater effects have a better chance of being published. In addition, the positive and statistically significant coefficient estimate for the median year of the sampling window ( $\beta = 0.002$ ,  $p < 0.01$ ) suggests that studies using more recent samples find stronger I-P relationship effects. Our MARA results also show a negative and statistically significant moderating effect of the endogeneity control variable ( $\beta = -0.05$ ,  $p < 0.01$ ), confirming that studies using endogeneity corrections report weaker effects. In addition, we see a positive and statistically significant coefficient estimate for our large firm control variable ( $\beta = 0.02$ ,  $p < 0.01$ ), which suggests that the I-P relationship is stronger for large firms. In terms of industry controls, we find that, relative to the multiple industry samples, the banking, finance and insurance ( $\beta = -0.04$ ,  $p < 0.01$ ), consultancy ( $\beta = -0.05$ ,  $p < 0.01$ ), high tech ( $\beta = -0.08$ ,  $p < 0.01$ ), and pharma/biotech ( $\beta = -0.08$ ,  $p < 0.01$ ) industries are all characterized by a weaker

influence of internationalization on firm performance. However, this relationship is stronger for firms in the chemical industry ( $\beta = 0.10$ ,  $p < 0.01$ ). Finally, we find that the home country's total GDP has a statistically significant (albeit moderate) effect on the focal relationship ( $\beta = -0.00$ ,  $p < 0.10$ ).

Finally, the MARA results also indicate that omitted variable biases frequently affect I-P studies (see discussion of this issue in Kirca et al., 2011). In particular, failing to control for: *i) prior firm performance, ii) firm size, iii) firm age, iv) firm risk, v) firm growth, vi) CEO/TMT international experience, vii) foreign ownership, and viii) institutional distance between the firm's home and host countries* may distort estimates of the focal relationship. Therefore, such variables should be included in the vector of control variables in future studies to prevent omitted variable biases.

### **Country-level Variance of Effect Sizes**

The variance in the effect size distribution is partially detailed in Table 1.3 by dividing the overall sample into country-specific subsamples. A formal meta-analytic hierarchical linear model estimation (Raudenbush & Bryk, 2002), in which effect sizes are nested in countries, shows that home country effects account for 12-22 percent of the variance in the effect size distribution. A casual inspection of these sub-sample results indicates that a significant amount of variance resides at the home country level of analysis. First, there are countries in which internationalization has statistically significant negative effects on firm performance in both analyses (Kenya and Finland). Second, there are 14 countries, developed and emerging alike, in which the focal relationship is statistically insignificant (Australia, Canada, Hong Kong, Hungary, Indonesia, Japan, Malaysia, the Netherlands, New Zealand, Pakistan, Spain, Taiwan, Turkey and Uruguay). In a third set of countries

(in China, France, Germany, Greece, India, Italy, Russia, Sweden and the U.S.), internationalization results in statistically significant performance advantages in either  $r$ -based or  $r_{xy,z}$ -based HOMA analyses. Finally, in seven countries (Brazil, Finland, Singapore, Slovenia, South Korea, Switzerland and the U.K.), the focal relationship is statistically significant in both analyses and ranges from small to strong positive values. In sum, these results indicate that the strength of the focal relationship varies across contexts, thus providing the impetus for an examination of the institutional home country moderator effects.

### **Home Country Institutional Moderators of the I-P Relationship**

The results of the MARA procedure, which pertain to the moderating effects of home country formal and informal institutions, are presented in Table 1.2.<sup>3</sup> The dependent variable for each model is the correlation between internationalization and firm performance. The results in Table 1.2 show that the coefficient estimate for the law tradition dummy is not statistically significant ( $\beta = -0.01$ ,  $p > 0.10$ ). Therefore, home country legal tradition does not moderate the relationship between internationalization and performance. Results in Table 1.2 show a statistically significant negative coefficient estimate for quality of business regulations ( $\beta = -0.001$ ,  $p < 0.05$ ). This suggests that the home country's business regulations negatively moderate the focal relationship and, thus, internationalization has a less positive effect on firm performance when the quality of business regulations is higher. Finally, home country political risk positively moderates

---

<sup>3</sup> Multicollinearity between country-level variables did not constitute a significant problem, as the highest correlation is point 0.71 (between generalized trust and common law tradition). Moreover, when one of the variables is left out of the model, the coefficient estimates remain basically unchanged, which also suggests that our results are not affected by multicollinearity issues.

the I-P relationship ( $\beta = 0.08, p < 0.01$ ), implying that internationalization has a more positive effect on firm performance when political risk is higher.

The results in Table 1.2 show that generalized trust positively moderates the focal relationship ( $\beta = 0.001, p < 0.01$ ), suggesting that internationalization has a more positive effect on firm performance when home country's levels of generalized trust are higher. Table 1.2 results also show that the focal relationship is positively moderated by home country future orientation, albeit at a marginal level of statistical significance ( $\beta = 0.04, p < 0.10$ ). Higher home country future orientation is associated with a stronger influence of internationalization on firm performance. Finally, in Table 1.2, the coefficient estimate of uncertainty avoidance is negative and statistically significant ( $\beta = -0.03, p < 0.01$ ), suggesting that internationalization has a less positive effect on firm performance when home country uncertainty avoidance is higher.

### **Additional Robustness Tests**

We perform additional robustness tests to assess whether stochastic dependencies deriving from the harvesting of multiple effect sizes from a single study caused material problems in our data and findings. First, we run a separate HiLMMA analysis (Raudenbush & Bryk, 2002; Van Essen et al., 2012a), in which we modeled effect sizes (level 1 observations) as nested in studies (level 2 observations). The corrected mean correlations ( $r$ -based mean = 0.04;  $r_{xy,z}$ -based mean = 0.03), which in HiLMMA are denoted as the level 1 intercept  $\gamma_0$  (Raudenbush & Bryk, 2002), are similar to the uncorrected mean correlations between I-P (see Table 1.1). This diagnostic test thus shows that stochastic interdependencies between effect sizes deriving from similar studies do not influence our results. Second, we conduct a separate HOMA test in which

all studies are represented by a single value by combining all individual measurements of the focal effect into a linear composite (Hunter & Schmidt, 1990: 457-460). The results show an  $r$ -based mean correlation of 0.06 and an  $r_{xy.z}$ -based mean correlation of 0.02, suggesting that the incorporation of multiple measurements of the focal effect in the HOMA analyses does not affect our results. Finally, we test for the effect of outliers in both HOMA and MARA models (Buckley et al., 2013) and confirm that the results are not affected by observations with extreme values.

## DISCUSSION

Research on the I-P relationship is extensive, and yet its findings, including those about the sign and shape of the relationship, have been inconclusive. To reconcile these inconsistencies, scholars have conducted a number of meta-analyses (e.g., Bausch & Krist, 2007; Kirca et al., 2011; Kirca et al., 2012b; Ruigrok & Wagner, 2004; Yang & Driffield, 2012), which have also yielded inconclusive findings. Our review suggests that a primary reason for this lack of consistent results is that scholars have overlooked the moderating influence of firms' home country institutional contexts on the I-P relationship, even though many have argued that home country institutions have a strong influence on how well firms are able to benefit from their internationalization efforts (Bausch & Krist, 2007; Hitt et al., 2006b; Kirca et al., 2012b; Matysiak & Bausch, 2012; Ruigrok, Amann, & Wagner 2007; Wan & Hoskisson, 2003). This study addresses this research gap, and finds that the nature of the I-P relationship does indeed depend on different formal and informal home country institutions. Specifically, five out of the six examined home country institutional variables moderate the I-P relationship. Hence, the lack of attention to the importance of home country conditions is a key problem of the

extant research on the I-P relationship. In addition, these results contribute to both the institution-based view of strategy and research on the performance benefits of internationalization by providing evidence that the inputs, norms, standards and rules of firms' home countries enable them to acquire, develop and deploy resources that help them achieve (or prevent them from achieving) competitive advantages over firms from other countries. Below we illustrate our main contributions and their relevance for future research on the I-P relationship.

### **Linking Research on the I-P Relationship and the Institution Based View in Strategy**

Our first contribution to the global strategy literature is the demonstration of the need for the integration of arguments from the research on the I-P relationship and the institution-based view of strategy to illustrate the moderating effects of home country formal and informal institutions on this relationship. In particular, our results show that, except for civil law institutions, all of the examined formal and informal institutions moderate the I-P relationship. First, quality of business regulations negatively moderates the I-P relationship, in contrast with some prior research that suggested it might have a positive moderating effect. Our results are in line with Batjargal and colleagues' (2013) findings that strong regulations often are inefficient (too bureaucratic) and thus have a negative influence on internationalization and other types of economic activity (see also: Arregle, Miller, Hitt, & Beamish, 2013). Further, we contend that weak business regulations in the home country may help firms to develop coping skills that they can then leverage in their foreign operations (Luo & Tung, 2007: 486) and require less managerial time and effort

for bureaucratic red tape. Thus, weaker home country regulatory environments allow managers more flexibility in using their resources to explore international markets.

Second, we find that firms from less politically risky home countries receive fewer performance benefits from internationalization. Favorable political environments provide firms with better growth opportunities in their home country, and fewer opportunities in foreign markets to achieve greater returns. In contrast, firms from countries with higher levels of political risk can benefit more from their internationalization as they can access opportunities and resources that are not available in their home markets, increasing their probability of improving their performance. Finally, political risk may drive firms to develop capabilities for managing difficult or unsupportive political institutions in their home country, which strengthen their ability to manage the internal and external complexity in their host countries (Cuervo-Cazurra, 2011).

Third, regarding informal institutions, our results show that firms from home countries with higher generalized trust (i.e., where citizens are more trusting of people from other countries), longer-term orientation, and lower uncertainty avoidance are likely to reap greater returns from internationalization. We believe that embeddedness in a home country with the aforementioned institutional characteristics helps firms to better deal with the inherent challenges involved in internationalization. Internationalization is a long-term strategy that entails risk because it requires firms to develop new capabilities, overcome liabilities of foreignness, and manage complex and sometimes distant international activities (e.g., Hitt, Li, & Xu, 2015; Lu & Beamish, 2004; Vahlne & Ivarsson, 2014). As a result, higher generalized trust, long-term orientation and

uncertainty acceptance can help benefit from internationalization by enabling the development of coping skills, other capabilities, and a general learning orientation. Trust is often critical for building effective relationships with foreign stakeholders (e.g., suppliers, customers, government units) and engaging new environments. A long-term orientation helps firms look beyond the temporary effects of initial costs on long-term performance, and commit to opportunities that have longer-term payoffs. Finally, entering new international markets is often inherently uncertain, such that trying to avoid uncertainty causes managers to overlook markets with the greatest economic opportunities. On the other hand, firms that are comfortable with uncertainty are more likely to identify and exploit more risky but highly beneficial market opportunities.

These results have interesting and important implications for future research on the I-P relationship. First, we have illustrated the importance of several home country formal and informal institutions as moderators of the I-P relationship, but additional facets of the home country institutional context should be examined in future research. Second, our work could be further advanced through primary research aimed at understanding whether managers' perceptions of home country institutional factors shape their decisions about global expansion and their firms' ability to profit from it. Such an investigation could shed light on whether managers' enactment of their home country institutional environment is a salient feature of its moderating effect on the I-P relationship. Third, given the significant effects of numerous firm-, industry-, and host country-level factors, additional interactive, within- and cross-level relationships could be explored. For example, future research could examine how the home country institutional environment moderates the I-P relationship depending on firms' engagement in upstream

or downstream internationalization strategies. The same relationship could be examined based on firms' motivations for internationalization (e.g., market expansion vs. access to valuable/needed resources) (Luo & Tung, 2007).

### **Exploring the Polycentric Nature of the Home Country Institutional Environment**

Our second contribution pertains to the integration of both formal and informal institutions into the analysis of the moderating effects of institutional embeddedness on the I-P relationship. The limited amount of existing research that has accounted for home country institutional context has largely focused on individual attributes of formal institutions (Cuervo-Cazurra, 2011), even though institutional environments contain multiple formal and informal institutions that can affect MNE performance. By examining multiple formal and informal institutions across many countries over a long period of time, our study suggests that the polycentric and complex nature of the institutional environments in which MNEs operate needs to be examined more closely (Batjargal et al., 2013; Marano & Kostova, 2016). In particular, our results support Ostrom's (2005) assertion that institutional polycentrism, or institutions arising from multiple centers of power, can generate concurrent effects on firms, implying that managers should consider such polycentricism when making strategic decisions (e.g., entering new international markets) (Batjargal et al., 2013). For this reason, our study extends research on institutional complexity and suggests that future research on international strategy should also consider such complexity. We believe that configurations of both formal and informal institutions should be examined to accurately understand the institutional effects that shape the I-P relationship. While we have already shown that several sets of home country institutions help explain the strength of the I-P

relationship, some of these institutions may also interact (Holmes et al., 2013) to form configurations that managers should consider. A logical next step would be to identify specific configurations of home country institutions and determine if they have unique effects on this relationship. Although several approaches could be used for such research, fuzzy-set analysis might be especially suited for this type of study (e.g., Fiss, 2011; Pajunen, 2008).

Our results also suggest that future empirical studies on the I-P relationship should consider firms from a variety of home countries to increase the accuracy and generalizability of their results. Because the home country institutional context matters, it is important to move beyond models that simply control for home country and instead include related variables in the theoretical framework and methodological design. As a result, we believe that multilevel modeling and theorizing, which we also implemented in some of our meta-analytic tests, should be used more frequently in research on this topic as it tests theories that include effects at multiple levels of analysis (Hitt, Beamish, Jackson, & Mathieu, 2007; Peterson, Arregle, & Martin, 2012). One of the main advantages of multilevel theorizing and modeling is that they enable researchers to account for the partial effects of individuals' and firms' inclusions in higher-level collectivities and possible interactive effects between levels (Rousseau, 1985). Building on our findings, future research could use a multilevel approach to further investigate other home and/or host country- and even region-level nesting effects on the I-P relationship. However, one of the challenges associated with multilevel modeling statistical techniques such as hierarchical linear modeling (HLM) and random coefficient modeling (RCM) is accessing appropriate data, because the examination of such

multilevel effects requires larger cross-country samples (see Peterson et al., 2012 for a discussion of this issue). We also believe that case studies and other types of qualitative research could be fruitfully used to investigate less explored factors at different levels of analysis that may shape firms' ability to benefit from their internationalization efforts, including (as we further illustrate below) the role of managerial cognition and various process outcomes associated with internationalization.

Finally, scholars could build on our results by investigating the mutual influences between MNEs and their institutional environments. While we emphasized firms' reactions to institutional forces, it is also important to examine the extent to which these organizations can affect the home country contexts where they operate, perhaps by studying the co-evolution of MNEs and their institutional environments (Saka-Helmhout & Geppert, 2011). Such an approach would require shifting from a conceptualization of institutions as variables, and instead embracing "an approach that is historical, contextual and multidisciplinary in nature" (Cantwell et al., 2010: 580-581).

### **Exploring the Role of Methodological Heterogeneity in the I-P research**

Our third contribution is methodological and relates to our meta-analytical tests' reliance on both Pearson product-moment correlation and partial correlation as effect sizes – a significant improvement from existing meta-analyses on this topic. The Pearson product-moment correlation is the most commonly reported effect size statistic in management (Geyskens et al., 2009) and has been used in most previous meta-analyses on the I-P relationship. However, as we illustrated in the methods section, an exclusive reliance on Pearson product-moment correlation precludes existing meta-analyses from generating

conclusive findings on the sign and shape of the I-P relationship (Stanley & Doucouliagos, 2012).

Our results indicate that internationalization has an overall positive effect on performance that is robust across samples of 1,558,455 firms for the bivariate analyses and 2,576,772 firms for the partial analyses from 32 countries between 1972 and 2012. However, this effect is small ( $r$ -based mean = 0.06;  $r_{xy.z}$ -based mean = 0.02,  $p < 0.05$ ) and varies significantly by country. This finding suggests that scholars interested in the I-P relationship should accept a modest positive association between internationalization and performance as a stylized fact (Helfat, 2007), while also understanding that the true nature of the relationship is substantially contingent on home country factors. This also implies that there is less need for further empirical evidence on the I-P relationship, except perhaps for examining the influences of specific national contexts. This result is also consistent with previous meta-analytic findings (e.g., Bausch & Kirst, 2007; Kirca et al., 2011). But, in contrast to previous meta-analyses by Kirca et al. (2012b) and Yang and Driffield (2012) that validated a U-shaped relationship, we do not find support for a non-linear I-P relationship. However, the appropriate meta-analytic approach to test for non-linear relationships involves using partial correlations as effect sizes as we have done in this study (Stanley & Doucouliagos, 2012). We further illustrate the differences between our meta-analytic approach and findings and those of prior meta-analyses on the I-P relationship in Table 1.4.

In all, our results suggest that the benefits of internationalization when examined in the aggregate, including economies of scale and scope, location-based advantages, international arbitrage, broader learning and market opportunities (Cardinal et al., 2011;

Hitt et al., 2006b) barely exceed its costs. They also emphasize the importance of further examining the sources of heterogeneity in firms' ability to benefit from internationalization. In this study we focused our attention on an important (and, to date, scarcely explored) source of such variance, namely country of origin effects. Thus, there is need for additional research in this area. For example, while the COE tradition points to the importance of institutionally-derived cognitive imprinting for firms' global strategy, scant attention has been paid thus far to the role of managerial cognition in shaping the internationalization choices that companies make (Maitland & Sammartino, 2015; Zahra, Korri, & Yu, 2005). Modeling the role of managerial cognition could shed light on how managers "perceive and construct their industries' boundaries and opportunities at home and in host countries" (Zahra et al., 2005: 130). Applying qualitative methods as used in the study by Maitland and Sammartino (2015) could be useful for such a study. Relatedly, our review also shows that we still know relatively little about the type of process outcomes that are generated by firms' internationalization efforts, including operational improvements (Chang, 1995) and organizational learning (Zahra et al., 2000), which can also contribute to performance outcomes (Hitt et al., 2006b), thus requiring more research.

Relatedly, our review of the literature on the I-P relationship also revealed that the process of internationalization continues to receive limited attention; research focuses more on the drivers of speed and rhythm of internationalization and less on their performance-related consequences. While our meta-analytical results indicate that speed and rhythm of internationalization are not consistently important for firm performance, the limited number of studies exploring the performance implications of the

internationalization process suggests that more research is needed to achieve definitive conclusions. Such research would strengthen our understanding of the internal and external contexts in which internationalization decisions are made and their influences on why those decisions are made and how they are implemented.

In our meta-analytical tests we examine other methodological drivers of the heterogeneity in the effect size distribution for the I-P relationship and find that the operationalization of both variables contributes significantly to such variance. Specifically, survey-based measures of performance show the largest effects, while mean effect sizes based on accounting and market measures are more closely clustered around the overall mean effect size. This is consistent with the notion that, as illustrated by previous studies (e.g., Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), survey-derived measures of performance can be inflated. In addition, we find that breadth of internationalization has stronger positive effects on performance than depth of internationalization, number of foreign subsidiaries, the ratio of foreign subsidiaries to total subsidiaries, and the internationalization dummy, which captures whether the firm has an international presence. This suggests that the heterogeneity of institutional contexts across which the firm operates (as implied by our measures of breadth of internationalization) creates learning opportunities for new knowledge that the firm can internalize to improve its performance (Zahra et al., 2000). These results are consistent with the view that exposure to diverse environments promotes system openness and learning of both universal and tacit knowledge (Zahra et al., 2000). They also suggest that future empirical tests should consider more carefully whether the chosen measures of internationalization and performance are consistent with their underlying theoretical

model (for a discussion of these issues see also: Hennart, 2011; Hitt et al., 2006b; Oesterle & Richta, 2013; Thomas & Eden, 2004). Additionally, our results show that the occurrence of omitted variable biases in I-P studies is common and that failing to control for any or all of the eight variables included in Table 1.2 may lead to distorted estimates of the focal relationship. Thus, future research should include these variables as controls to prevent omitted variable biases.

Furthermore, our findings illustrate the importance of examining time-related effects by showing that studies with more recent samples display a stronger I-P relationship. Temporal effects have received limited attention in international strategy research, but are clearly important for understanding the magnitude of outcomes of firm strategies (e.g., Hough, 2006). We thus recommend that future research use multilevel growth modeling to analyze the I-P relationship and capture systematic patterns of change in it over time (Raudenbush & Bryk, 2002). Multilevel growth modeling also has the advantage of avoiding the simplifying assumption that all firms have the same form of change over time, which is typical for most classical regression-based analyses. It can also mitigate biases inherent in other panel data methods, such as increased likelihood of making a Type I error, stronger correlations between observations that are temporally close to each other than observations that are temporally far apart (Bliese & Ployhart, 2002), and heterogeneity in the residuals that can also affect the statistical tests by making them more liberal (Ployhart & Vandenberg, 2010). Furthermore, it facilitates examining how the baseline level and the trend of firm's performance over time are influenced by factors at different levels of analysis (Bliese & Ployhart, 2002).

## REFERENCES

- Allen, L., & Pantzalis, C. 1996. Valuation of the operating flexibility of multinational corporations. *Journal of International Business Studies*, 27(4): 633-653.
- Andersson, U., Cuervo-Cazurra, A., & Nielsen, B. B. 2014. From the Editors: Explaining interaction effects within and across levels of analysis. *Journal of International Business Studies*, 45(9): 1063-1071.
- Arregle, J.-L., Miller, T., Hitt, M. A., & Beamish, P. W. 2013. Do regions matter? An integrated institutional and semiglobalization perspective on the internationalization of MNEs. *Strategic Management Journal*, 34(8): 910-934.
- Ashkanasy, N. M., Gupta, V., Mayfield, M. S., & Trevor-Roberts, E. 2004. Future orientation. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, & V. Gupta (Eds.), *Culture, Leadership and Organizations: The GLOBE Study of 62 Societies*: 282-342. Thousand Oaks, CA, USA: Sage Publications.
- Bartlett, C. A., & Ghoshal, S. 1989. *Managing across borders: The transnational solution*. Cambridge, MA: Harvard Business School Press.
- Batjargal, B., Hitt, M. A., Tsui, A. S., Arregle, J.-L., Webb, J. W., & Miller, T. 2013. Institutional polycentrism, entrepreneurs' social networks and new venture growth. *Academy of Management Journal*, 56(4): 1024-1049.
- Bausch, A., & Krist, M. 2007. The effect of context-related moderators on the internationalization-performance relationship: Evidence from meta-analysis. *Management International Review*, 47(3): 319-347.
- Bijmolt, T. H., & Pieters, R. G. 2001. Meta-analysis in marketing when studies contain multiple measurements. *Marketing Letters*, 12(2): 157-169.

- Bliese, P. D., & Ployhart, R. E. 2002. Growth modeling using random coefficient models: Model building, testing, and illustrations. *Organizational Research Methods*, 5(4): 362-387.
- Bowen, H. P. 2007. The empirics of multinationality and performance. In A. Rugman (Ed.), *Research in Global Strategic Management: Regional Aspects of Multinationality and Performance* (Vol. 13): 113–142. Oxford, U.K: Elsevier.
- Brinckmann, J., Grichnik, D., & Kapsa, D. 2010. Should entrepreneurs plan or just storm the castle? A meta-analysis on contextual factors impacting the business planning–performance relationship in small firms. *Journal of Business Venturing*, 25(1): 24-40.
- Brock, D. M., & Yaffe, T. 2008. International diversification and performance: The mediating role of implementation. *International Business Review*, 17(5): 600-615.
- Buckley, P. J., Devinney, T. M., & Tang, R. W. 2013. Meta-Analytic research in international business and international management. In T. M. Devinney, T. Pedersen, L. Tihanyi (Eds.), *Philosophy of Science and Meta-Knowledge in International Business and Management (Advances in International Management, Volume 26)*: 263-297. Bingley, U.K.: Emerald Group Publishing Limited.
- Calori, R., Lubatkin, M., Very, P., & Veiga, J. F. 1997. Modelling the origins of nationally-bound administrative heritages: A historical institutional analysis of French and British firms. *Organization Science*, 8(6): 681-696.
- Cantwell, J., Dunning, J. H., & Lundan, S. M. 2010. An evolutionary approach to understanding international business activity: The co-evolution of MNEs and the institutional environment. *Journal of International Business Studies*, 41(4): 567-586.

- Cardinal, L. B., Miller, C. C., & Palich, L. E. 2011. Breaking the cycle of iteration: Forensic failures of international diversification and firm performance research. *Global Strategy Journal*, 1(1-2): 175-186.
- Carney, M., Gedajlovic, E. R., Heugens, P. P., Van Essen, M., & Van Oosterhout, J. H. 2011. Business group affiliation, performance, context, and strategy: A meta-analysis. *Academy of Management Journal*, 54(3): 437-460.
- Carpenter, M. A., & Sanders, W. G. 2004. The effects of top management team pay and firm internationalization on MNC performance. *Journal of Management*, 30(4): 509-528.
- Chacar, A. S., Newburry, W., & Vissa, B. 2010. Bringing institutions into performance persistence research: Exploring the impact of product, financial, and labor market institutions. *Journal of International Business Studies*, 41(7): 1119-1140.
- Chakrabarti, A., Vidal, E., & Mitchell, W. 2011. Business transformation in heterogeneous environments: The impact of market development and firm strength on retrenchment and growth reconfiguration. *Global Strategy Journal*, 1(1-2): 6-26.
- Chang, S. J. 1995. International expansion strategy of Japanese firms: Capability building through sequential entry. *Academy of Management Journal*, 38(2): 383-407.
- Chao, M. C. H., & Kumar, V. 2010. The impact of institutional distance on the international diversity-performance relationship. *Journal of World Business*, 45: 93-103.
- Chang, S. J., & Rhee, J. H. 2011. Rapid FDI expansion and firm performance. *Journal of International Business Studies*, 42: 979-994.

- Chen, C. C., Meindl, J. R., & Hui, H. 1998. Deciding on equity or parity: A test of situational, cultural, and individual factors. *Journal of Organizational Behavior*, 19(2): 115-129.
- Contractor, F. J., Kundu, S. K., & Hsu, C. C. 2003. A three-stage theory of international expansion: The link between multinationality and performance in the service sector. *Journal of International Business Studies*, 34(1): 5-18.
- Cuervo-Cazurra, A. 2011. Global strategy and global business environment: The direct and indirect influences of the home country on a firm's global strategy. *Global Strategy Journal*, 1(3-4): 382-386.
- Delios, A., & Beamish, P. 1999. Ownership strategy of Japanese firms: Transactional, institutional and experience influences. *Strategic Management Journal*, 20(10): 711-727.
- Dhanaraj, C., & Beamish, P. W. 2003. A resource-based approach to the study of export performance. *Journal of Small Business Management*, 41(3): 242-261.
- DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2): 147-160.
- Dragun, D. 2002. Challenging the rhetoric: Internationalisation, size and financial performance. *European Retail Digest*, 36: 25-33
- Dunning, J. H., & Bansal, S. 1997. The cultural sensitivity of the eclectic paradigm. *Multinational Business Review*, 5(1): 1-16.

- Elango, B., & Sethi, S. P. 2007. An exploration of the relationship between country of origin (COE) and the internationalization-performance paradigm. *Management International Review*, 47(3): 369-392.
- Ertug, G., Cuypers, I. R. P., Noordhaven, N. G., & Bensaou, B. M. 2013. Trust between international joint venture partners: Effects of home countries. *Journal of International Business Studies*, 44(3): 263–282.
- Ferrin, D. L., & Gillespie, N. 2010. Trust differences across national-societal cultures: Much to do, or much ado about nothing? In M. Saunders, D. Skinner, G. Dietz, N. Gillespie, & R. Lewicki (Eds.), *Organizational Trust: A Cultural Perspective*: 42–86. Cambridge, U.K.: Cambridge University Press.
- Fiss, P. C. 2011. Building better causal theories: A fuzzy set approach to typologies in organization research. *Academy of Management Journal*, 54(2): 393-420.
- Geringer, J. M., Beamish, P. W., & Da Costa, R. C. 1989. Diversification strategy and internationalization: Implications for MNE performance. *Strategic Management Journal*, 10(2): 109-119.
- Geyskens, I., Krishnan, R., Steenkamp, J. B. E., & Cunha, P. V. 2009. A review and evaluation of meta-analysis practices in management research. *Journal of Management*, 35(2): 393-419.
- Goerzen, A., & Beamish, P. W. 2003. Geographic scope and multinational enterprise performance. *Strategic Management Journal*, 24(13): 1289-1306.
- Gomes, L., & Ramaswamy, K. 1999. An empirical examination of the form of the relationship between multinationality and performance. *Journal of International Business Studies*, 30(1): 173–188.

- Gomez-Mejia, L. R., & Palich, L. E. 1997. Cultural diversity and the performance of multinational firms. *Journal of International Business Studies*, 28(2): 309-335.
- Grant, R. M., Jammine, A. P., & Thomas, H. 1988. Diversity, diversification, and profitability among British manufacturing companies, 1972–1984. *Academy of Management Journal*, 31(4): 771-801.
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. 2011. Institutional complexity and organizational responses. *Academy of Management Annals*, 5: 317-371.
- Gubbi, S. R., Aulakh, P. S., Ray, S., Sarkar, M. B., & Chittoor, R. 2010. Do international acquisitions by emerging-economy firms create shareholder value? The case of Indian firms. *Journal of International Business Studies*, 41(3): 397-418.
- Guillén, M. F. 1994. *Models of management: Work, authority, and organization in a comparative perspective*. Chicago, IL: University of Chicago Press.
- Guler, I., & Guillén, M. F. 2010. Institutions and the internationalization of US venture capital firms. *Journal of International Business Studies*, 41(2): 185-205.
- Harzing, A. W., & Sorge, A. 2003. The relative impact of country of origin and universal contingencies on internationalization strategies and corporate control in multinational enterprises: Worldwide and European perspectives. *Organization Studies*, 24(2): 187-214.
- Hedges, L. V., & I. Olkin. 1985. *Statistical models for meta-analysis*. New York: Academic Press.
- Hejazi, W., & Santor, E. 2010. Foreign asset risk exposure, and performance: An analysis of Canadian banks. *Journal of International Business Studies*, 41(5): 845-60.

- Helfat, C. E. 2007. Stylized facts, empirical research and theory development in management. *Strategic Organization*, 5(2): 185-192.
- Henisz, W. J. 2000. The institutional environment for multinational investment. *Journal of Law, Economics, and Organization*, 16(2): 334-364.
- Henisz, W. J., & Williamson, O. E. 1999. Comparative economic organization—within and between countries. *Business and Politics*, 1(3): 261-278.
- Henisz, W. J., & Zelner, B. 2004. Explicating political hazards: A transaction cost politics approach. *Industrial and Corporate Change*, 13(6): 901-915.
- Hennart, J. F. 2007. The theoretical rationale for a multinationality-performance relationship. *Management International Review*, 47(3): 423-452.
- Hennart, J. F. 2011. A theoretical assessment of the empirical literature on the impact of multinationality on performance. *Global Strategy Journal*, 1(1-2): 135-151.
- Heritage Foundation, 2015. Index of Economic Freedom. Retrieved from <http://www.heritage.org/index>.
- Hill, C.W.L., & Hult, G.T.M. 2015. *Global Business Today*. New York: McGraw-Hill/Irwin.
- Hillman, A., & Keim, G. 1995. International variation in the business-government interface: Institutional and organizational considerations. *Academy of Management Review*, 20(1): 193-214.
- Hitt, M. A., Beamish, P. W., Jackson, S. E., & Mathieu, J. E. 2007. Building theoretical and empirical bridges across levels: Multilevel research in management. *Academy of Management Journal*, 50(6): 1385-1399.

- Hitt, M. A., Bierman, L., Uhlenbruck, K., & Shimizu, K. 2006a. The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly. *Academy of Management Journal*, 49(6): 1137-1157.
- Hitt, M. A., Hoskisson, R. E., & Kim, H. 1997. International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4): 767-798.
- Hitt, M. A., Li, D. & Xu, K. 2015. International strategy: From local to global and beyond. *Journal of World Business*, in press.
- Hitt, M. A., Tihanyi, L., Miller, T., & Connelly, B. 2006b. International diversification: Antecedents, outcomes, and moderators. *Journal of Management*, 32(6): 831-867.
- Hofstede, G. 2001. *Culture's consequences: Comparing values, behaviours, institutions and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.
- Hofstede, G., & Bond, M. H. 1988. The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, 16(4): 5-21.
- Holmes, R. M., Miller, T., Hitt, M. A., & Salmador, M. P. 2013. The interrelationships among informal institutions, formal institutions, and inward foreign direct investment. *Journal of Management*, 39(2): 531-566.
- Hough, J. R. 2006. Business segment performance redux: A multilevel approach. *Strategic Management Journal*, 27(1): 45-61.
- House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P. W., Javidan, M., Dickson, M. W., Gupta, V., Li, J.; et al. 1999. Cultural influences on leadership and organizations: Project GLOBE. In W. Mobley (Ed.), *Advances in Global Leadership*:: 175-233. Stamford, CN: JAI Press.

- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. 2004. *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Sage publications.
- Hox, J. J. 2002. *Multilevel analysis: Techniques and applications*. Mahwah, NJ: Erlbaum.
- Huff, L., & Kelley, L. 2003. Levels of organizational trust in individualist versus collectivist societies: A seven-nation study. *Organization Science*, 14(1): 81-90.
- Hunter, J., & Schmidt, F. 1990. *Methods of meta-analysis: Correcting error and bias in research findings*. Beverly Hills CA: Sage
- Hymer, S. H. 1976. *A study of direct foreign investment*. Cambridge, MA: MIT Press.
- Khanna, T., & Palepu, K. G. 1997. Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, 75: 41-51.
- Kim, H., Hoskisson, R. E., & Wan, W. P. 2004. Power dependence, diversification strategy, and performance in keiretsu member firms. *Strategic Management Journal*, 25(7): 613-636.
- Kim, W. C., Hwang, P., & Burgers, W. P. 1989. Global diversification strategy and corporate profit performance. *Strategic Management Journal*, 10(1): 45-57.
- Kim, W. S., & Lyn, E. O. 1986. Excess market value, the multinational corporation, and Tobin's q-ratio. *Journal of International Business Studies*, 17(1): 119-125.
- Kirca, A. H., Hult, G. T. M., Roth, K., Cavusgil, S. T., Perry, M. Z., Akdeniz, M. B., Deligonul, S. Z., Mena, J. A., Pollitte, W. A., Hoppner, J. J., Miller J. C., & White, R. C. 2011. Firm-specific assets, multinationality, and financial performance: A meta-analytic review and theoretical integration. *Academy of Management Journal*, 54(1): 47-72.

- Kirca, A. H., Hult, T., Deligonul, S., Perry, M., & Cavusgil, T. 2012b. A multilevel examination of the drivers of firm multinationality: A Meta-Analysis. *Journal of Management*, 38(2): 502-530.
- Kirca, A. H., Jayachandran, S., & Bearden, W. O. 2005. Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing*, 69(2): 24-41.
- Kirca, A. H., Roth, K., Hult, G. T. M., & Cavusgil, S. T. 2012a. The role of context in the multinationality-performance relationship: A meta-analytic review. *Global Strategy Journal*, 2(2): 108-121.
- Knack, S., & Keefer, P. 1997. Does social capital have an economic payoff: A cross-country investigation. *Quarterly Journal of Economics*, 112: 1251-1288.
- Kostova, T., & Zaheer, S. 1999. Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1): 64-81.
- Kramer, R. M., & Lewicki, R. J. 2010. Repairing and enhancing trust: Approaches to reducing organizational trust deficits. *Academy of Management Annals*, 4(1): 245-277.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. 1997. Legal determinants of external finance. *Journal of Finance*, 52(3): 1131-1150.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. 1998. Law and finance. *Journal of Political Economy*, 106: 1113-1155.
- Li, L. 2007. Multinationality and performance: A synthetic review and research agenda. *International Journal of Management Review*, 9(2), 117-139.

- Li, J., Lam, K., & Qian, G. 2001. Does culture affect behavior and performance of firms? The case of joint ventures in China. *Journal of International Business Studies*, 32(1): 115-131.
- Li, J., & Yue, D. R. 2008. Market size, legal institutions, and international diversification strategies: Implications for the performance of multinational firms. *Management International Review*, 48(6): 667-688.
- Lipsey, M. W., & Wilson, D. B. 2001. *Practical meta-analysis*. Thousand Oaks, CA: Sage publications.
- Lu, J. W. 2002. Intra- and inter-organizational imitative behavior: Institutional influences on Japanese firms' entry mode choice. *Journal of International Business Studies*, 33(1): 19-37.
- Lu, J. W., & Beamish, P. W. 2001. The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6-7): 565-586.
- Lu, J. W., & Beamish, P. W. 2004. International diversification and firm performance: The S-curve hypothesis. *Academy of Management Journal*, 47(4): 598-609.
- Lubatkin, M., Calori, R., Very, P., & Veiga, J. F. 1998. Managing mergers across borders: A two-nation exploration of a nationally bound administrative heritage. *Organization Science*, 9(6): 670-684.
- Luo, Y., & Tung, R. L. 2007. International expansion of emerging market enterprises: A springboard perspective. *Journal of international Business Studies*, 38(4): 481-498.
- Maitland, E., & Sammartino, A. 2015. Managerial cognition and internationalization. *Journal of International Business Studies*, 46(7): 733-760.

- Marano, V., & Kostova, T. 2016. Unpacking the institutional complexity in adoption of CSR practices in multinational enterprises. *Journal of Management Studies*, 53(1), 28-5.
- Matysiak, L., & Bausch, A. 2012. Antecedents of MNE performance: Blinded by the obvious in 35 years of literature. *Multinational Business Review*, 20(2): 178-211.
- McGahan, A. M., & Victor, R. 2010. How much does home country matter to corporate profitability? *Journal of International Business Studies*, 41(1): 142-165.
- Meyer, K. E., & Sinani, E. 2009. When and where does foreign direct investment generate positive spillovers? A meta-analysis. *Journal of International Business Studies*, 40(7): 1075-1094.
- Mosakowski, E. 1997. Strategy making under causal ambiguity: Conceptual issues and empirical evidence. *Organization Science*, 8(4): 414-442.
- Nachum, L. 2004. Geographic and industrial diversification of developing country firms. *Journal of Management Studies*, 41(2): 273-294.
- Nelson, R. R., & Rosenberg, N. 1993. *Technical innovation and national systems. National innovation systems: a comparative analysis*. Oxford, U.K.: Oxford University Press.
- Noorderhaven, N. G., & Harzing, A. W. 2003. The “country-of-origin effect” in multinational corporations: Sources, mechanisms and moderating conditions. *Management International Review*, 43(2): 47-66.
- North, D. C. 1990. *Institutions, institutional change and economic performance*. Cambridge, U.K.: Cambridge University Press.

- Oesterle, M. J., & Richta, H. N. 2013. Regularly submitted papers internationalisation and firm performance: State of empirical research efforts and need for improved approaches. *European Journal of International Management*, 7(2): 204-224.
- Orr, R. J., & Kennedy, J. R. 2008. Highlights of recent trends in global infrastructure: New players and revised game rules. *Transnational Corporations*, 17(1): 99-133.
- Ostrom, E. 2005. *Understanding institutional diversity*. Princeton, NJ: Princeton University Press.
- Ouchi, W. G. 1981. *Theory z: How American business can meet the Japanese challenge*. Reading, MA: Addison-Wesley.
- Pajunen, K. 2008. Institutions and inflows of foreign direct investment: A fuzzy-set analysis. *Journal of International Business Studies*, 39(4): 652-669.
- Parsons, T., & Shils, E. 1951. *Toward a general theory of action*. Cambridge: Harvard University Press.
- Peng, M. W., Wang, D. Y., & Jiang, Y. 2008. An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, 39(5): 920-936.
- Peterson, M. F., Arregle, J.-L., & Martin, X. 2012. Multilevel models in international business research. *Journal of International Business Studies*, 43(5): 451-457.
- Ployhart, R. E., & Vandenberg, R. J. 2010. Longitudinal research: The theory, design, and analysis of change. *Journal of Management*, 36(1): 94-120.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5): 879-903.

- Puffer, S. M., McCarthy, D. J., & Boisot, M. 2010. Entrepreneurship in Russia and China: The impact of formal institutional voids. *Entrepreneurship Theory and Practice*, 34(3): 441-467.
- Raudenbush, S. W., & Bryk, A. S., 2002. *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Reuer, J. J., & Miller, K. D. 1997. Agency costs and the performance implications of international joint venture internalization. *Strategic Management Journal*, 18(6): 425-38.
- Rosenthal, R. 1979. The file drawer problem and tolerance for null results. *Psychological Bulletin*, 86(3): 638.
- Rousseau, D. M. 1985. Issues of level in organizational research: Multi-level and cross-level perspectives. *Research in Organizational Behavior*, 7(1): 1-37.
- Rugman, A. M., & Verbeke, A. 2005. Towards a theory of regional multinationals: A transaction cost economics approach. *Management International Review*, 45(1): 5-17.
- Ruigrok, W., & Wagner, H. 2004. *Internationalization and firm performance: Meta-analytic review and future research directions*. Paper presented at the annual meeting of the Academy of International Business, Stockholm, Sweden.
- Ruigrok, W., Amann, W., & Wagner, H. 2007. The internationalization-performance relationship at Swiss firms: A test of the S-shape and extreme degrees of internationalization. *Management International Review*, 47(3): 349-368.
- Rumelt, R. P., Schendel, D., & Teece, D. 1994. *Fundamental issues in strategy: A research agenda*. Cambridge, MA: Harvard Business Press.

- Saka-Helmhout, A., & Geppert, M. 2011. Different forms of agency and institutional influences within multinational enterprises. *Management International Review*, 51: 567-92.
- Sanders, W. G., & Carpenter, M. A. 1998. Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. *Academy of Management Journal*, 41(2): 158-178.
- Sarala, R. M., & Vaara, E. 2010. Cultural differences, convergence, and crossvergence as explanations of knowledge transfer in international acquisitions. *Journal of International Business Studies*, 41(8): 1365-1390.
- Schneider, S. C., & De Meyer, A. 1991. Interpreting and responding to strategic issues: The impact of national culture. *Strategic Management Journal*, 12(4): 307-320.
- Scott, W. R. 1995. *Institutions and organizations. Foundations for organizational science*. London: Sage Publications.
- Siddharthan, N. S., & Lall, S. 1982. The recent growth of the largest US multinationals. *Oxford Bulletin of Economics and Statistics*, 44(1): 1-13.
- Stanley, T. D., & Doucouliagos, H. 2012. *Meta-regression analysis in economics and business*. Oxford, U.K.: Routledge.
- Stopford, J. M., & Wells, L. T. 1972. *Managing the multinational enterprise: Organization of the firm and ownership of the subsidiaries*. New York, NY: Basic Books.
- Sullivan, D. 1994. Measuring the degree of internationalization of a firm. *Journal of International Business Studies*, 25(2): 325-342.

- Swidler, A. 1986. Culture in action: Symbols and strategies. *American Sociological Review*, 51(2): 273-286.
- Tallman, S., & Li, J. 1996. Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management journal*, 39(1): 179-196.
- Thomas, D. E. 2005. Top management team international dominant logic: A new linkage in the international diversification-performance link. *Problems & Perspectives in Management*, 2: 54-64.
- Thomas, D. E., & Eden, L. 2004. What is the shape of the multinationality-performance relationship? *Multinational Business Review*, 12(1): 89-110.
- Tihanyi, L., Griffith, D. A., & Russell, C. J. 2005. The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis. *Journal of International Business Studies*, 36(3): 270-283.
- Vahlne, J. E., & Ivarsson, I. 2014. The globalization of Swedish MNEs: Empirical evidence and theoretical explanations. *Journal of International Business Studies*, 45: 227-247.
- van Essen, M., Heugens, P. P. M. A. R., Otten, J., & Oosterhout, H. 2012. An institution-based view of executive compensation: A multilevel meta-analytic test. *Journal of International Business Studies*, 43(4): 396-423.
- van Essen, M., Van Oosterhout, J., & Heugens, P. P. M. A. R. 2013. Competition and cooperation in corporate governance: The effects of labor institutions on blockholder effectiveness in 23 European countries. *Organization Science*, 24(2): 530-551.

- van Essen, M., Otten, J., & Carberry, E. 2015. Assessing managerial power theory: A meta-analytic approach to understanding the determinants of CEO compensation. *Journal of Management*, 41(1): 164-202.
- Vermeulen, F., & Barkema, H. 2002. Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal*, 23(7): 637-653.
- Wan, W. P., & Hoskisson, R. E. 2003. Home country environments, corporate diversification strategies, and firm performance. *Academy of Management Journal*, 46(1): 27-45.
- Whitley, R. 1992. *European business systems: Firms and markets in their national contexts*. Thousand Oaks, CA: Sage Publications.
- Wiersema, M. F., & Bowen, H. P. 2011. The relationship between international diversification and firm performance: Why it remains a puzzle. *Global Strategy Journal*, 1(1-2): 152-170.
- Yamagishi, T., Cook, K. S., & Watabe, M. 1998. Uncertainty, trust and commitment formation in the United States and Japan. *American Journal of Sociology*, 104(1): 164-194.
- Yamagishi, T., & Yamagishi, M. 1994. Trust and commitment in United States and Japan. *Motivation and Emotion*, 18(2): 129-166.
- Yang, Y., & Driffield, N. 2012. Multinationality-performance relationship. *Management International Review*, 52(1): 23-47.

- Yilmaz, C., Alpkan, L., & Ergun, E. 2005. Cultural determinants of customer- and learning-oriented value systems and their joint effects on firm performance. *Journal of Business Research*, 58(10): 1340-1352.
- Zaheer, S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2): 341-363.
- Zahra, S. A., Korri, J. S., & Yu, J. 2005. Cognition and international entrepreneurship: implications for research on international opportunity recognition and exploitation. *International business review*, 14(2): 129-146.
- Zahra, S. A., Ireland, R. D., & Hitt, M. A. 2000. International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal*, 43(5): 925-950.

**TABLE 1.1: HOMA Meta-Analytic Results**

Predictor	Pearson product-moment correlation ( $r$ )						Partial correlation coefficient ( $r_{xy.z}$ )					
	$k$	$N$	Mean	SE	$Q$ test	$I^2$	$k$	$N$	Mean	SE	$Q$ test	$I^2$
Internationalization to performance	640	1,558,455	0.06*	0.00	16,663.38	0.97	1,190	2,576,772	0.02*	0.00	26,479.83	0.95
<i>Endogeneity control</i>							84	478,157	-0.01	0.01	1,170.13	0.93
<i>Quadratic relation</i>												
Linear term							183	641,649	0.03*	0.01	1,970.21	0.91
Quadratic term							183	641,649	-0.00	0.00	1,308.62	0.86
<i>Cubic relation</i>												
Linear term							75	905,934	-0.02*	0.01	615.38	0.88
Quadratic term							75	905,934	0.01	0.01	637.14	0.88
Cubic term							75	905,934	-0.01	0.00	397.08	0.81
Measures of Firm performance												
Accounting measures	413	1,003,484	0.06*	0.01	12,189.44	0.97	643	1,424,417	0.01	0.00	6,149.83	0.90
Market measures	117	474,180	0.05*	0.01	2,998.88	0.96	438	1,019,743	0.03*	0.01	19,551.97	0.98
Sales growth	62	61,437	0.05*	0.01	557.59	0.89	53	110,333	0.04*	0.01	278.02	0.81
Survey-based measures	48	19,354	0.14*	0.03	450.15	0.90	56	22,279	0.09*	0.02	267.95	0.79
Measures of Internationalization												
Depth of internationalization	259	743,494	0.06*	0.01	7166.56	0.96	545	906,640	0.01*	0.00	8203.71	0.93
Breadth (scope) of internationalization	170	281,546	0.07*	0.01	5284.87	0.97	298	462,436	0.06*	0.00	2359.66	0.87
Foreign subsidiaries	33	47,048	-0.01	0.01	227.28	0.86	63	68,921	-0.00	0.01	233.55	0.74
Internationalization dummy	54	295,269	0.12*	0.01	1,928.42	0.97	97	530,677	-0.02	0.02	12,660.20	0.99
Composite measure	65	114,256	0.07*	0.01	898.16	0.93	96	65,635	0.00	0.01	876.96	0.89
Firm performance to firm performance	262	372,861	0.33*	0.02	32,345.31	0.99						
Internationalization to internationalization	242	221,079	0.35*	0.02	25,937.70	0.99						
Rhythm to firm performance	5	7,487	-0.05	0.05	30.43	0.87	7	9,908	0.01	0.01	2.21	0.00
Speed to firm performance	12	3,450	0.01	0.04	48.72	0.77	28	11,969	-0.04*	0.01	30.56	0.12

Mean = mean effect sizes marked with an asterisks (\*) are statistically significant ( $p < 0.05$ ).  $k$  = number of effect sizes;  $N$  = total sample size; SE = the standard error of mean correlation;  $Q$  = Cochran's homogeneity test statistic;  $I^2$  = scale-free index of heterogeneity.

**TABLE 1.2: MARA Meta-Analytic Results**

<b>Variable</b>	<b>Coefficient Estimates</b>
<i>Internationalization definition</i>	
Depth of Internationalization	0.02 (0.01)*
Breadth (or Scope) of Internationalization	0.05 (0.01)***
Internationalization dummy	-0.01 (0.01)
Composite measure	0.03 (0.01)**
Internationalization previous year	-0.03 (0.01)***
<i>Firm performance definition</i>	
Accounting measures	-0.01 (0.01)
Sales growth	0.00 (0.01)
Survey measures	0.08 (0.02)***
<i>Methodological artifacts</i>	
Published study	0.02 (0.01)**
Median year of sample window	0.002 (0.00)***
Panel design	0.00 (0.01)
Endogeneity check	-0.05 (0.01)***
<i>Type of firms</i>	
Publicly listed firms	-0.01 (0.00)
Private firms	-0.03 (0.02)
<i>Size of the firms</i>	
Large firms	0.02 (0.01)***
SME firms	0.02 (0.02)
<i>Industries</i>	
Banking, finance & insurance sector	-0.04 (0.01)***
Chemical	0.10 (0.03)***
Consultancy	-0.11 (0.03)***
High tech	-0.05 (0.02)***
Pharma & biotech	-0.08 (0.02)***
<i>Model specification artifacts</i>	
Industry controls	0.01 (0.01)
Year controls	-0.02 (0.01)*
Number of variables in regression	-0.00 (0.00)
Multiple countries	0.00 (0.01)
<i>Firm controls†</i>	
Firm previous international experience	-0.02 (0.02)
firm's prior performance	0.02 (0.01)***
Firm size	0.03 (0.01)***
Firm age	-0.03 (0.01)***
R&D intensity	-0.01 (0.01)
Advertising intensity	-0.01 (0.01)

**TABLE 1.2: MARA Meta-Analytic Results (continued)**

Product diversification	0.01 (0.01)
Debt to equity level	-0.01 (0.02)
Firm risk	-0.04 (0.01)***
Firm growth	0.04 (0.01)***
Capital intensity	-0.01 (0.02)
<i>Governance and TMT controls†</i>	
CEO/TMT international experience	-0.06 (0.03)*
Board independence	0.04 (0.03)
Ownership concentration	-0.01 (0.02)
Inside ownership	0.03 (0.02)
Foreign ownership	0.06 (0.02)**
Family ownership	0.03 (0.02)
Business group affiliation	0.00 (0.02)
<i>Industry and country controls</i>	
Industry performance†	-0.01 (0.02)
Host country potential†	0.02 (0.02)
Country distance†	-0.07 (0.03)***
Total GDP (home country) in billions	-0.00 (0.00)*
<i>Home country institutions</i>	
Generalized trust	0.001 (0.00)***
Future orientation	0.04 (0.02)*
Uncertainty avoidance	-0.03 (0.01)***
Common law tradition	-0.01 (0.02)
Government business regulation	-0.001 (0.00)**
Political risk	0.08 (0.02)***
$K$	1830
$Q_{\text{model}}(p)$	383.69 (0.00)
$Q_{\text{residual}}(p)$	2547.75 (0.00)
$V$	0.01

The dependent variable is the I-P correlation in a given primary sample. Unstandardized regression coefficients are presented with standard errors in parentheses.  $k$  is the number of samples;  $Q$  is the homogeneity statistic with its probability in parentheses;  $\nu$  is the random effects variance component.

† indicates if a variable is included in a model (yes = 1) to test “omitted variable” bias.

\* $p < 0.10$

\*\* $p < 0.05$

\*\*\* $p < 0.01$

**TABLE 1.3: HOMA Country-Specific Meta-Analytic Results**

Country	Pearson product-moment correlation ( <i>r</i> )						Partial linear correlation coefficient ( <i>r<sub>xy.z</sub></i> )					
	<i>K</i>	<i>N</i>	Mean	SE	<i>Q</i> test	<i>I</i> <sup>2</sup>	<i>K</i>	<i>N</i>	Mean	SE	<i>Q</i> test	<i>I</i> <sup>2</sup>
Australia	6	1,583	0.04	0.05	15.50	0.68						
Brazil	2	424	0.14*	0.05	0.09	0.00	4	2,900	0.09*	0.02	1.50	0.00
Canada	1	167	0.09				44	11,169	0.01	0.02	147.16	0.71
Mainland China	21	395,257	0.01	0.02	145.28	0.86	40	418,253	0.05*	0.01	417.43	0.91
Finland	2	434	0.35*	0.11	4.72	0.79						
France	2	3,014	0.12	0.20	61.36	0.98	12	7,856	0.09*	0.03	67.84	0.84
Germany	12	15,250	0.08*	0.03	104.99	0.90	40	49,764	-0.02	0.03	1807.76	0.98
Greece	1	763	0.06				3	2,289	0.21*	0.07	22.14	0.91
Hong Kong	2	162	-0.03	0.13	2.44	0.59						
Hungary	1	135	-0.02									
India	36	121,983	0.06*	0.01	854.42	0.96	61	158,910	0.00	0.01	319.76	0.81
Indonesia	2	319	-0.03	0.12	1.73	0.42	3	873	-0.00	0.05	3.67	0.46
Italy	7	3,549	0.01	0.05	52.06	0.88	26	27,204	0.05*	0.01	20.37	0.00
Japan	53	200,140	0.01	0.02	3110.32	0.98	57	71,163	-0.02	0.04	6977.19	0.99
Kenya							2	108	-0.29*	0.12	1.42	0.30
Malaysia	6	6,117	0.03	0.04	28.89	0.83	9	8,084	-0.07	0.04	82.93	0.90
Mexico	1	850	0.01				7	4,722	-0.04*	0.02	7.00	0.14
Netherlands	3	2,182	-0.07	0.09	34.40	0.94	12	10,525	0.01	0.02	65.14	0.83
New Zealand	2	410	-0.04	0.05	0.60	0.00	5	866	0.00	0.03	0.09	0.00
Pakistan							1	826	0.02			
Russia							13	42,835	0.02*	0.00	6.24	0.00
Singapore	8	3,620	0.14*	0.04	26.24	0.73	4	1,993	0.10*	0.04	9.61	0.69
Slovenia	5	1,675	0.15*	0.04	9.66	0.59	5	1,675	0.07*	0.02	1.69	0.00
South Korea	39	61,996	0.03*	0.01	405.05	0.91	40	88,030	0.01*	0.01	96.24	0.59
Spain	9	10,583	0.08	0.06	83.16	0.90	1	374	0.03			
Sweden	5	810	0.09	0.06	12.43	0.68	10	2,676	0.09*	0.02	6.23	0.00
Switzerland	5	2,876	0.06*	0.03	6.07	0.34	1	696	0.11			
Taiwan	37	42,540	0.01	0.03	875.76	0.96	35	37,737	0.00	0.02	300.51	0.89
Turkey							16	3,200	0.01	0.02	7.64	0.00

**TABLE 1.3: HOMA Country-Specific Meta-Analytic Results (continued)**

UK	17	25,899	0.11*	0.04	611.84	0.97	42	38,006	0.06*	0.01	140.19	0.71
Uruguay							1	291	0.18			
US	209	466,263	0.09*	0.01	3338.00	0.94	322	922,784	0.01	0.01	9779.86	0.97
Multiple	146	189,454	0.07*	0.01	3809.05	0.96	374	660,963	0.03*	0.00	3922.67	0.90

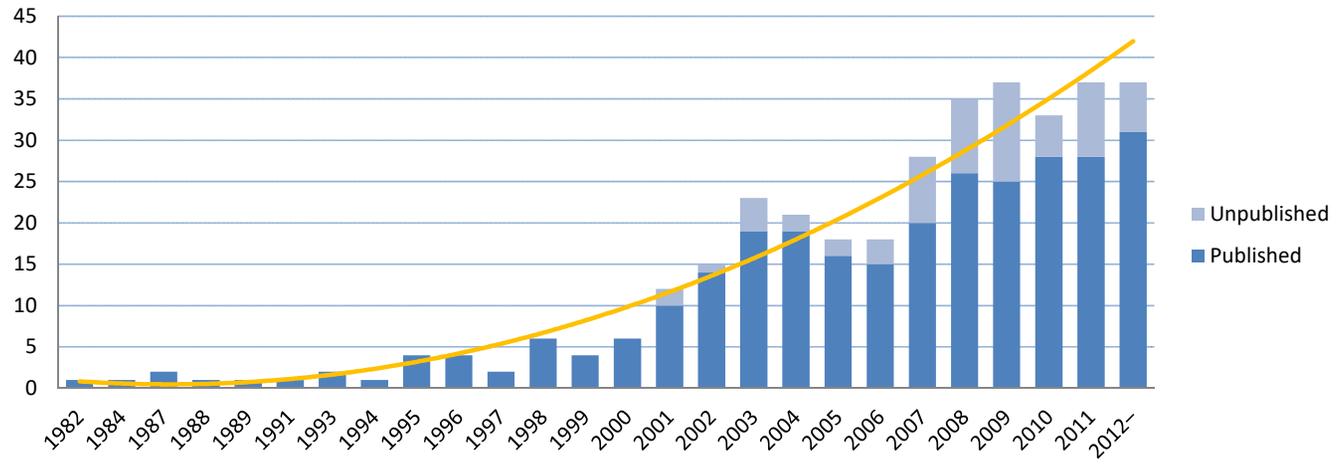
Mean = mean effect sizes marked with an asterisk (\*) are statistically significant ( $p < 0.05$ ).  $k$  = number of effect sizes;  $N$  = total sample size; SE = the standard error of mean correlation;  $Q$  = Cochran's homogeneity test statistic;  $I^2$  = scale-free index of heterogeneity.

**TABLE 1.4: Meta-Analyses on the I-P Relationship**

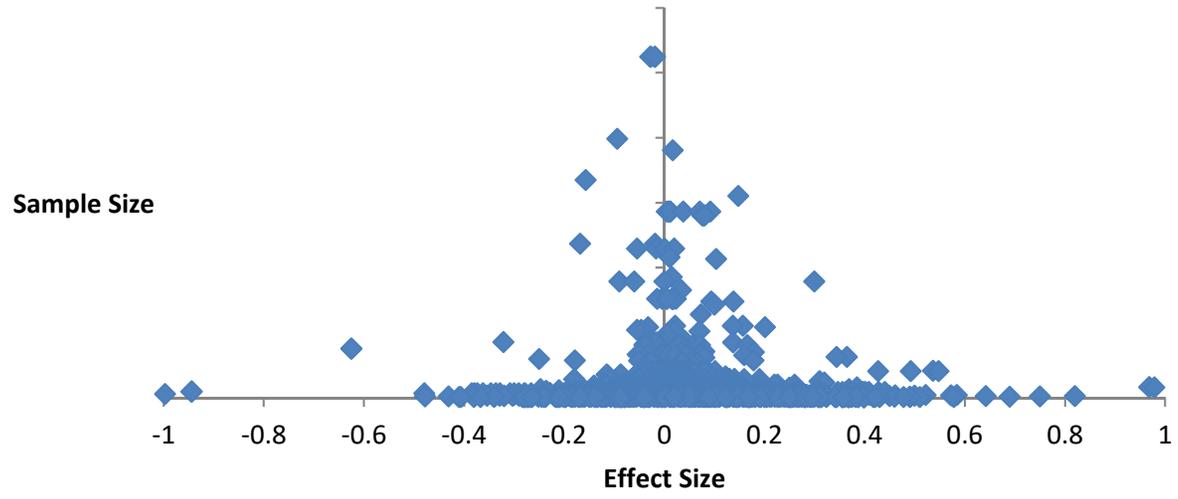
	Our meta-analysis	Bausch & Krist (2007)	Kirca et al. (2011)	Kirca et al. (2012a)	Ruigrok & Wagner (2004)	Yang & Driffield (2012)
No. of primary studies	359	36	111	141	62	54
Data sources	Pearson's $r$ and partial correlation $r_{xy.z}$	Pearson's $r$	Pearson's $r$	Pearson's $r$	Pearson's $r$	$\beta$ coefficients
No. of effect sizes	640 ( $r$ ) and 1,190 ( $r_{xy.z}$ )	146	346	416	174	370
Time window	1972-2012	1979-2004	n.a.	n.a.	n.a.	1962-2004
No. of industries	5	n.a.	n.a.	n.a.	n.a.	n.a.
No. of countries	32	n.a.	17	n.a.	12	21
I-P relationship	$r$ -based mean: 0.06 (sig.) $r_{xy}$ -based mean: 0.02 (sig.) Non-linear relationship: n.s.	$r$ -based mean: 0.059 (sig.)	$r$ -based mean: 0.10 (sig.)	Does not test the direct I-P relationship, but the moderation effect of different operationalizations of I on P (i.e., dummy variable for depth (vs. breadth) of I: - (sig.))	$r$ -based mean: 0.04 (sig.) Non-linear relationship: n.s.	Does not test the direct I-P relationship, but moderation effect of different operationalizations of I on P (i.e., dummy variable for non-FSTS measures of I: - (both sig. and n.s.))
Institutional moderators of the I-P relationship	Country of origin effect (32 countries): sig. (see Table 1.3) <i>Formal institutions</i> : Common law: n.s.; Government business regulations: - (sig.);	Country of origin: USA + (sig.); Europe + (sig.); and Japan (n.s.)	Dummy variables for: Firms from developing economies with high advertising intensity (n.s.); Developing economies with high R&D intensity: + (sig.); Advanced	Dummy variable for advanced economies: + (sig.)	Country of origin: USA + (sig.); Europe + (sig.); and Japan (n.s.)	Dummy variable for non-US firms: + (sig.)

**TABLE 1.4: Meta-Analyses on the I-P Relationship (continued)**

	Political risk: + (sig.) <i>Informal institutions:</i> Generalized trust: + (sig.); Future orientation: + (sig.); Uncertainty avoidance: - (sig.)		economy firms with high advertising intensity: + (sig.); Advanced economies with high R&D intensity: + (sig.)			
Moderation effect of industries on the I-P relationship	Yes (banking, finance and insurance; chemical; consultancy; high tech; pharma and biotech)	Not Tested	Yes (manufacturing vs. service, high tech vs. low tech)	Yes (manufacturing vs. service)	Not Tested	Not Tested
Moderation effect of different operationalizations of IV (I) and DV (P)	Yes	Yes	Not Tested	Yes	Yes	Yes



**FIGURE 1.1: Distribution of Papers over Time**



**FIGURE 1.2: Funnel Plot**

## ESSAY 2

### **INTERDEPENDENCE BETWEEN CORPORATE GOVERNANCE AND INTERNATIONAL DIVERSIFICATION: A META-ANALYSIS**

#### **INTRODUCTION**

Business landscapes are increasingly global. Over the last quarter of a century, world FDI outward stock has dramatically increased (from 2,254 billion of dollars in 1990 to 25,875 in 2014) and country investment policy measures around the world have been geared to promote cross-border investment to an ever-larger extent (UNCTAD, 2015). In this scenario, constantly advancing our understanding of the implications of firms' international diversification is a paramount objective for both scholars and practitioners. Equally important is the investigation of the factors potentially affecting cross-border investment decisions, given the complex competitive and economic cost-benefit trade-off characterizing international diversification. Indeed, the determinants and consequences of firms' international diversification have drawn significant attention in the strategy and international business literatures (see Hitt et al., 2006 for a comprehensive review). Research has investigated antecedents at the individual, group, firm, industry, and country level of analysis (see Kirca et al., 2012 for a meta-analysis of those antecedents), as well as outcomes at the firm (e.g., Reeb et al., 1998; Zahra et al. 2000) and country level of analysis (e.g., Alfaro et al. 2006; Kwok & Tadesse, 2006; Spencer, 2008). In this

paper, we focus on the complex, bidirectional relationship between corporate governance and firms' international diversification.

Anecdotal evidence in international business suggests that corporate governance may affect the extent of international diversification. For example, since the 1990s, Volkswagen Group has pursued an aggressive foreign expansion, consistent with the publicly-announced goal of being the world's largest automaker by sales (The New York Times, 2015). However, as an analyst put it, "VW was an organization full of hubris, [...] dominate the world and walk-on-water type of thinking" (Financial Times, 2016), suggesting that the aggressive international growth, whose side effects included the high-profile violation of US environmental regulations, may not have necessarily been in the interest of minority shareholders and the society at large. Volkswagen's corporate governance framework may have played an important role in the Group's internationalization process. First, growth was a key criterion to which executive compensation was linked, resulting in a strong economic incentive to increase the size of the Group's foreign footprint (Armour, 2016). Second, as pointed out by several experts, corporate governance practices at Volkswagen had "long been uniquely awful" (CNBC, 2015). In particular, the lack of independence in the supervisory board (Financial Times, 2015) exacerbated the effect of the incentives created by the executive compensation structure. Since growth was "an ambition that pleased both stakeholder groups dominating the Aufsichtsrat, the controlling shareholders and the employees" (Armour, 2016), the board closely monitored growth performance (The New York Times, 2015).

When focusing on corporate governance and the degree of international diversification, there is however the other side of the story. For example, after criticism

by U.S. institutional investors about its corporate governance framework, Samsung Group recently announced its plan to split the roles of CEO and chairman of the board at eight of its companies (e.g., Wall Street Journal, 2016). This move represents a step further in “bringing the company into alignment with global practices” (Wall Street Journal, 2016).

From a theoretical point of view, corporate governance scholars suggest that governance mechanisms may affect the extent of firms’ international diversification (e.g., Filatotchev & Wright, 2011). By contrast, the international management literature suggests that expansion abroad, through multiple theoretical mechanisms, may trigger changes in firms’ corporate governance framework (e.g., Kostova et al., 2008; Sanders & Carpenter, 1998). The literature, indeed, provides evidence for both causality directions. For example, research corroborates the argument that firms’ degree of international diversification both affects (e.g., Le et al., 2013) and is affected (e.g., Tihanyi et al., 2009) by the level of contingent executive pay. Similarly, some scholars show that the extent of foreign expansion has an effect on the proportion of outside directors (e.g., Tihanyi et al., 2003), while others provide evidence that board independence impacts export propensity (e.g., Lu et al., 2009). Likewise, the literature, on the one hand, shows that board size influences the firm’s degree of international diversification (e.g., Lien et al., 2005) and, on the other hand, provides empirical support for the opposite causality direction—from firms’ degree of foreign expansion to board size (e.g., Sanders & Carpenter, 1998). Besides the direction of causality, the sign of the relationship between corporate governance and firms’ international diversification also receives mixed empirical evidence. Some scholars report a positive correlation between the level of

ownership concentration and the extent of international diversification (e.g., Alessandri & Seth, 2014), while others provide evidence for a negative correlation (e.g., Hautz et al., 2013). Similarly, research shows both a positive (e.g., Zahra, 2003) and a negative (e.g., Gomez-Mejia et al., 2010) correlation between CEO duality and the degree of foreign expansion.

Extant research therefore, from both a theoretical and empirical perspective, does not provide definitive answer as to the nature (i.e., direction, magnitude, and sign) of the corporate governance-international diversification (CG-ID) relationship. Moreover, extant research is somewhat lacking in the exploration of the theoretical mechanisms linking corporate governance and international diversification (e.g., Filatotchev & Wright, 2011). In order to have more impactful research on the CG-ID relationship, it is critical to develop a more fine-grained understanding of which mechanisms are at play and how they operate. Hence, there is an opportunity for further research, which may advance our comprehension of such business phenomena as those mentioned above, and push forward the existing theoretical knowledge about the CG-ID relationship. Drawing on the corporate governance and international diversification literatures, we attempt to shed new light on such relationship in two major ways. First, we investigate each direction of causality and the theoretical mechanisms at play. Second, we examine the relative explanatory power of the two alternative cause-effect linkages between corporate governance and international diversification. Given the characteristics of our data and method, we believe that our twofold attempt represents also a constructive step in dealing with potential scientific apophenia (i.e., the tendency to find evidence of order where

none exists) in the CG-ID research area (e.g., Goldfarb & King, 2016; Harrison et al., 2014).

Agency theory and the resource perspective are the two primary theoretical lenses of this study. These perspectives are theoretically relevant when exploring the causal linkages between corporate governance and international diversification. Corporate governance is strictly related to the intensity of the agency problem (e.g., Fama & Jensen, 1983; Jensen & Meckling, 1976; Shleifer & Vishny, 1997): A key reason for adopting certain corporate governance practices is the attempt by firms' decision makers to contain the detrimental consequences of agency conflicts between owners and managers. International diversification is subject to agency problems for at least three reasons. First, internationalization decisions may entail a cost–benefit trade-off for managers and owners in terms of organizational outcomes. This is due to the fact that different risk preferences may lead to different objectives pursued by those who own and those who control the firm (e.g., Filatotchev & Wright, 2001). Second, internationalization decisions are characterized by low frequency and long duration, which make even more pronounced the aforementioned trade-off (e.g., Michael & Pearce, 2004). Third, international diversification aggravates information asymmetries between managers and owners, since it increases the external and internal complexity confronting the firm (e.g., Roth & O'Donnell, 1996; Sanders & Carpenter, 1998). External complexity refers to the heterogeneity of the task environments (e.g., Child 1972; Dess & Beard, 1984), as well as to the variety of institutional prescriptions faced by the firm (e.g., Greenwood et al., 2011; Kostova & Zaheer, 1999). Internal complexity refers to the organizational implications, in terms of structure, mechanisms, and culture, of external complexity (e.g.,

Ashby, 1956; Kraatz & Block, 2008; Thompson, 1967). By exacerbating the external and internal complexity that firms need to deal with, international diversification also increases the information-processing demands confronting them (e.g., Sanders & Carpenter, 1998). This implies, *inter alia*, that “information-processing demands [...] and agency concerns [...] are at least partially isomorphic throughout an organization” (Sanders & Carpenter, 1998: 161). Therefore, when developing some of our hypotheses, we complement the agency theory perspective with the information-processing perspective.

The resource perspective is particularly relevant for exploring the CG-ID relationship for at least two reasons. First, corporate governance mechanisms may favor the acquisition of organizational and managerial resources and capabilities instrumental in firms’ internationalization process. Second, international diversification implies exposure to different institutional environments, both at the national level and the transnational meta-level (Kostova et al., 2008). As a result, the firm may develop awareness of alternative practices in multiple domains, including corporate governance, and learn how to implement and integrate those practices within the organizational framework (e.g., Marano et al., 2016). Based on these two perspectives, we predict that corporate governance mechanisms addressing the agency problem and those providing better access to organizational and managerial resources have a positive effect on the firm’s degree of international diversification. Moreover, we predict that the firm’s degree of international diversification positively influences the activation of corporate governance mechanisms addressing the agency problem and/or increasing the information-processing capacity of the firm.

International management research suggests that depth and breadth of international diversification represent two different (though not orthogonal) dimensions of firms' foreign footprint (e.g., Hitt et al., 2006; Thomas & Eden, 2004), which are characterized by peculiar theoretical implications in terms, for example, of knowledge requirements, resource access and development, economies along the value chain, and risk mitigation. We suggest that distinguishing between the two dimensions may be particularly relevant in the context of the CG-ID relationship. First, the risk preferences of managers may entail different attitudes towards the larger extent of operations abroad associated with higher depth from the greater diversity resulting from higher breadth. Second, depth and breadth seem to have different implications in terms of complexity to cope with, which in turn affect the agency and resource issues confronted by the firm. Failing to unpack international diversification into depth and breadth may leave an important part of the story untold, as depth and breadth may affect and be affected differently by corporate governance. Therefore, we also explore whether and how the direction, magnitude, and sign of the CG-ID relationship changes when considering depth and breadth of international diversification.

An additional step to advance our understanding of the CG-ID relationship is the examination of contingencies that may affect the relationship. Indeed, little is understood about potential moderators altering the causal connections between corporate governance and size of foreign footprint. In this study, we focus on two contingencies at the country level that may moderate the CG-ID relationship: the institutional characteristic of legal protection of minority shareholders and the cultural value of uncertainty avoidance. Research in international finance and international management shows that the legal

protection of shareholders varies across countries (e.g., Djankov et al., 2008; Guillen & Capron, 2016; La Porta et al., 1997, 1998). When studying the CG-ID relationship, the legal protection of shareholders is relevant for at least two reasons. First, the relative impact of (soft) corporate governance mechanisms on international diversification decisions may change, depending on whether the country institutional context contributes to curtail or compound agency problems (e.g., Capron & Guillen, 2009). Second, firms from countries with lower shareholder protection may be particularly eager to adapt to transnational pressures for ‘good’ corporate governance when expanding abroad (e.g., Cuervo-Cazurra, 2011). When exploring the CG-ID relationship, uncertainty avoidance may be another consequential contingency. Given the performance uncertainty associated with the strategic decision to expand into foreign countries, the influence of corporate governance on international diversification may vary across countries characterized by different levels of uncertainty avoidance.

The research questions addressed in this study are, therefore, the following:

1) What is the direction, magnitude, and sign of the causal relationship between corporate governance and international diversification?

2) What are the theoretical mechanisms at play in the CG-ID relationship?

3) Do direction, magnitude, and sign of the causal relationship change when distinguishing between depth and breadth of international diversification?

4) Does the home-country institutional context affect the CG-ID relationship?

Specifically, do the legal protection of minority shareholders and the national uncertainty avoidance moderate the causal effects between corporate governance and international diversification?

In order to address our research questions, we use meta-analytic structural equation modeling (MASEM) with data from 104 studies conducted in the management, economics, and finance disciplines over the last two decades. As Bergh and his colleagues (2016) point out, MASEM offers significant advantages for advancing existing research. First, MASEM allows us to build on the extant body of empirical research testing the CG-ID relationship in order to assess: 1) the direct effects model linking corporate governance to the degree of international diversification; and 2) the direct effects model linking the degree of international diversification to corporate governance. Unlike MASEM, traditional meta-analysis cannot be used to test competing models against one another; it can only be employed to test the sign and significance of the bivariate relationships of interest. MASEM represents a more powerful technique than traditional meta-analysis, providing the opportunity to draw on the accumulated findings to pit alternative complex models (Bergh et al., 2016). Second, previous research on the CG-ID relationship has usually focused on individual mechanisms of firms' corporate governance framework (ownership structure, board structure, etc.). Unlike other meta-analytic techniques, MASEM allows us to shed light on the role played by each governance mechanisms while accounting for interdependencies with other mechanisms. As shown in the literature, corporate governance mechanisms are not independent, being related to one another by forms of complementarity and substitutability (e.g., Aguilera et al., 2008). Third, MASEM allows us to provide new insights on the CG-ID relationship also by testing novel theory-developing hypotheses focused on country-level contingencies potentially moderating the main relationship.

Four main findings emerge from our study. First, the causal relationship between corporate governance and international diversification is bidirectional and multifaceted in nature. Second, corporate governance explains the degree of international diversification better than international diversification explains the activation of corporate governance mechanisms. Third, the nature of the causal linkages between corporate governance and international diversification changes depending on whether the focus is on the depth or breadth of foreign expansion. Fourth, both directions of causality in the CG-ID relationship are moderated by the home-country institutional context and, in particular, by the legal shareholder protection and the national uncertainty avoidance.

The paper is organized as follows. First, we develop our model by discussing from a theoretical perspective the influence of corporate governance on the degree of international diversification as well as the effects of international diversification on the activation of corporate governance mechanisms. Next, we explain the meta-analytic methodology employed (i.e., MASEM), the data, and the results. Finally, we conclude with a discussion of our results and promising avenues for future research on the CG-ID relationship.

## **THEORETICAL BACKGROUND AND MODEL DEVELOPMENT**

In order to develop our theoretical arguments, we draw on the corporate governance and international management literatures and adopt primarily the agency theory and resource perspectives. Given our focus on the CG-ID relationship, the two main theoretical constructs explored in this study are corporate governance and international diversification. From a managerial perspective, corporate governance is defined as the set of “formal structures, informal structures, and processes that exist in oversight roles and

responsibilities in the corporate context” (Hambrick, et al. 2008, p. 381; see also Aguilera et al., 2015). Herein, we focus on the following corporate governance mechanisms: ownership concentration, institutional ownership, board independence, board size, separation of CEO and chairman roles, inside ownership, CEO compensation, and CEO tenure. International diversification is defined as the size of a firm’s foreign operations (e.g., Hennart, 2011). Depth of international diversification refers to the extent to which a firm relies on its foreign operations, while breadth refers to the geographic scope of a firm’s foreign footprint (e.g., George et al., 2005).

### **Effects of corporate governance on the degree of international diversification**

Effects of corporate governance mechanisms on the degree of international diversification may be explained by agency theory (Jensen & Meckling 1976; Eisenhardt, 1989) and the resource perspective on corporate governance (Hillman & Dalziel, 2003).

*Corporate governance mechanisms addressing the agency problem.* The overarching prediction of an agency theory perspective on the CG-ID relationship posits that a reduction of agency problems by means of appropriate corporate governance mechanisms has a positive effect on the degree of international diversification. International diversification is characterized by unusual uncertainty about performance outcomes (e.g., Hymer, 1960; Zaheer, 1995). The strategic nature of international diversification turns that uncertainty into significant risks for firms, since this strategy implies long-term commitment to a certain path that is potentially costly to reverse (Caves, 1984; Ghemawat, 1991). The principal-agent perspective, hence, suggests that managers’ risk aversion may limit the extent of firms’ expansion abroad (e.g., Lien et al. 2005; Filatotchev et al. 2008). By doing so, managers pursue higher job security and

more certain rewards (Ellstrand et al., 2002), albeit shareholders likely prefer courses of actions that maximize returns, even when accompanied by higher risk (Jensen & Meckling, 1976). By curbing the agency problem and thus restraining the effects of managers' risk aversion, such corporate governance mechanisms as ownership concentration (e.g., Shleifer & Vishny, 1986), institutional ownership (e.g., Tihanyi et al., 2003), board independence (e.g., Bhagat & Black, 2002), separation of CEO and chairman roles (e.g., Rechner & Dalton, 1991), inside ownership (e.g., Jensen & Murphy, 1990), and CEO compensation (e.g., Gomez-Mejia & Wiseman, 1997) may favor a higher degree of international diversification.

Research based on agency theory points out that some of these corporate governance mechanisms lower the intensity of the agency problem by increasing the monitoring of managerial behavior (Shleifer & Vishny, 1997). First, ownership concentration may reduce the extent of self-serving behavior by managers, who may attempt to avoid the risks rather than pursue the potential long-term opportunities associated with expansion abroad (Bolton & von Thadden, 1998; Shleifer & Vishny, 1986). Ownership concentration may be an effective governance mechanism closing the gap between ownership and control, thus having important implications for internationalization decisions. Concentrated ownership reduces the information asymmetries between owners and managers and, as a result, increase owners' ability to monitor and control managers. Furthermore, concentrated ownership increases owners' stake in the firm. Large and often undiversified owners have a greater incentive to monitor and control managers, in order to limit the self-serving actions affecting the pursuit of organizational goals. Finally, concentrated ownership provides owners with the

means to restrain managerial opportunism, as they have the power to dismiss managers based on their performance. In sum, by increasing ability, incentive, and power to monitor and control managers, ownership concentration may offset managerial risk-aversion and encourage the search of economic opportunities abroad.

Second, from an agency theory perspective, institutional ownership may also favor firms' expansion abroad. Institutional investors have the incentive to encourage investees' international diversification because they generally have and aim to maintain globally diversified, low-risk portfolios (e.g., Lien et al., 2005; Singh & Gaur, 2013). Moreover, institutional investors are often pressure-resistant investors, who do not have strong business connections with their investee firms (e.g., David et al., 1998; Tihanyi et al., 2003). This gives them the freedom to promote the adoption of corporate governance best practices (e.g., Hoskisson et al., 2002; Lien et al., 2005). Further, institutional investors are usually endowed with superior monitoring abilities, which they employ to scrutinize firms' strategic decision-making process (e.g., Filatotchev et al., 2007). As a result, institutional ownership may reduce the agency problems associated with managerial discretion. This implies, *inter alia*, a positive effect on managerial risk-taking and, thus, on investees' degree of international diversification.

Third, arguments based on agency theory commonly posit that outside and, in particular, independent directors play an important role in monitoring and controlling managerial actions (Bhagat & Black, 2002). Such monitoring role may prevent risk-averse managers from forgoing the economic opportunities associated with international diversification. Extant corporate governance research shows that the number of inside directors sitting on the board is negatively associated with the level of political risk

present in a firm's portfolio of foreign investments (Ellstrand et al., 2002). The theoretical argument explaining this negative association is that inside directors, being part of the top management team, tend to favor strategic alternatives that meet their risk preferences. By contrast, outside and, in particular, independent directors can properly exercise their monitoring function over managerial behavior, given the absence of any kind of connections with the firm and its executive team. Therefore, by extending this line of research, one may reasonably expect that the number of outside and, in particular, independent directors may positively affect the degree of international diversification as well.

Fourth, according to a principal-agent perspective, CEO duality weakens the monitoring process within firms' corporate governance framework. CEOs that are also chairmen of the board are in a stronger position to control the strategic decision-making process (Boyd, 1995; Rechner & Dalton, 1991). As a result, they tend to promote cautious courses of action to protect their position. Empirical evidence shows that CEO duality is negatively related to the level of political risk of firms' investments abroad (Ellstrand et al., 2002). Similarly, one may predict that CEO duality has a negative effect on the degree of international diversification or, equivalently, the separation of CEO and chairman roles positively influences the extent of expansion abroad.

Research based on agency theory points out that, in addition to those concerning monitoring, mechanisms focused on interest alignment may decrease the intensity of the agency problem (Shleifer & Vishny, 1997). First, inside ownership aligns the risk preferences and interests of the managers with those of the owners, as long-term firm performance becomes a primary factor determining their wealth. Research shows that

such alignment enhances managers' propensity to export (Lu et al., 2009) as well as to opt for a riskier entry mode (i.e., acquisition) when investing in a certain host country (Lai et al., 2012). This logic suggests, hence, that alignment of interests may reduce the self-serving risk aversion of managers and prompt the pursuit of the advantages associated with expansion abroad, thus increasing the degree of international diversification of the firm.

Second, the level of total CEO compensation may help overcome the agency problem resulting from managerial risk aversion. By resorting to higher remuneration, firms may attempt to compensate CEOs in advance for the risks associated with expansion abroad. Therefore, one may expect that higher CEO compensation will result in a higher degree of international diversification.

The above arguments, based on agency theory, lead to the following general causal prediction:

*Hypothesis 1: Corporate governance mechanisms addressing the agency problem positively affect the degree of international diversification.*

Specifically, we predict the following:

*Hypothesis 1a: Ownership concentration positively affects the degree of international diversification.*

*Hypothesis 1b: Institutional ownership positively affects the degree of international diversification.*

*Hypothesis 1c: Board independence positively affects the degree of international diversification.*

*Hypothesis 1d: The separation of CEO and chairman positions positively affects the degree of international diversification.*

*Hypothesis 1e: Inside ownership positively affects the degree of international diversification.*

*Hypothesis 1f: The level of CEO compensation positively affects the degree of international diversification.*

***Corporate governance mechanisms providing better access to organizational and managerial resources.*** Besides agency theory, the resource perspective on corporate governance helps explain the influence of corporate governance mechanisms on the degree of international diversification. The overarching prediction of a resource perspective on the CG-ID relationship posits that a better access to organizational and managerial resources by means of appropriate corporate governance mechanisms has a positive effect on the degree of international diversification. Research points out that corporate governance mechanisms may not only play monitoring and control functions, but also contribute to the decision-making process. For example, corporate governance may support firms in a number of complex strategic processes (e.g., product and international diversification, M&As, turnarounds) by facilitating firms' access to organizational and managerial resources such as international experience, industry expertise, functional skills, and professional networks (e.g., Filatotchev et al., 2001; Hillman & Dalziel, 2003). This means that corporate governance mechanisms may change top executives' attitude about internationalization and increase their propensity to undertake foreign direct investments. First, board size is a mechanism that may favor higher degrees of international diversification, since it expands the amount and diversity

of the human and relational capital available for the strategic decision-making process (e.g., Filatotchev et al., 2008; Lien et al., 2005; Lu et al., 2009). Second, longer tenure may better equip CEOs to cope with the challenges of such a resource-intensive and risky move as international diversification (e.g., Kirca et al., 2012). Even though longer tenure results in greater managerial discretion, which makes monitoring more difficult (e.g., Finkelstein & Hambrick, 1990; Hambrick et al., 1993), long-tenured CEOs may be more willing to expand abroad because, over time, they have developed greater managerial skills and acquired deeper knowledge of the firm and its industry (e.g., Hambrick & Fukutomi, 1991; Kirca et al., 2012).

The above arguments, based on the resource perspective, lead to the following general causal prediction:

*Hypothesis 2: Corporate governance mechanisms providing better access to organizational and managerial resources positively affect the degree of international diversification.*

Specifically, we predict the following:

*Hypothesis 2a: Board size positively affects the degree of international diversification.*

*Hypothesis 2b: CEO tenure positively affects the degree of international diversification.*

Figure 2.1 offers a representation of our theoretical model linking corporate governance to the degree of international diversification.

## **Effects of the degree of international diversification on corporate governance**

Effects of the degree of international diversification on corporate governance are predicted by agency theory (e.g., Jensen & Meckling 1976; Eisenhardt, 1989), information-processing theory (e.g., Daft & Lengel, 1986; Galbraith, 1974; Thompson, 1967), and the institution-based resource perspective (e.g., Kostova et al., 2008; Marano & Kostova, 2016).

*Agency theory perspective on the effects of international diversification.* As discussed earlier, agency theory helps explain the effects of corporate governance mechanisms on the degree of international diversification. However, it also explains the opposite causality direction (e.g., Sanders & Carpenter, 1998). The overarching prediction of an agency theory perspective on the ID-CG relationship posits that the degree of international diversification, by affecting the intensity of the agency problem, will be positively related to the use of certain corporate governance mechanisms. Scholars have pointed out that agency problems tend to exacerbate when the complexity confronting the firm increases (e.g., Eisenhardt, 1989; Milgrom & Roberts, 1992; Roth & O'Donnell, 1996). Higher firm complexity aggravates information asymmetries between managers and owners, since it requires more specialized knowledge about the firm and its task environment that will likely be available to managers, but not to owners (e.g., Gomez-Mejia & Balkin, 1992; Roth & O'Donnell, 1996). Moreover, firm complexity is usually associated with a larger number of decision options and more ambiguous causal relationships (e.g., Roth & O'Donnell, 1996). As a result, managerial discretion increases and monitoring managerial behavior becomes more difficult (e.g., Hambrick & Finkelstein, 1987; Rajagopalan & Finkelstein, 1992). By increasing firm complexity,

international diversification aggravates the principal-agent conflict, thus prompting the use of corporate governance mechanisms that strengthen the monitoring of managerial behavior as well as the alignment of interests between owners and managers (e.g., Sanders & Carpenter, 1998). First, when increasing their degree of international diversification, firms may resort to higher board independence (e.g., Luo, 2005). As noted above, corporate governance scholars commonly argue that outside and, in particular, independent directors play an important role in monitoring and controlling managerial actions (Bhagat & Black, 2002). Second, greater expansion abroad may result in larger inside ownership, which aligns—as we previously noted—the risk preferences and interests of the managers with those of the owners.

*Information-processing perspective on the effects of international diversification.* Strictly related to the agency theory perspective on the ID-CG relationship is the information-processing perspective. The overarching prediction of an information-processing perspective on the ID-CG relationship posits that the increase in information-processing demands resulting from a higher degree of international diversification will (contribute to) activate some corporate governance mechanisms—which we term here information-processing enablers. Management scholars adopting an information-processing perspective view firms as open social systems that need to deal with complexity by collecting and processing relevant information (e.g., Sanders & Carpenter, 1998; Tushman & Nadler, 1978). The information-processing demands confronting top executives are therefore determined by the level of complexity that the firm needs to cope with (e.g., Daft & Lengel, 1986; Henderson & Fredrickson, 1996). Such complexity is affected by a number of factors,

including the degree of international diversification (e.g., Bartlett & Ghoshal, 1989; Roth & O'Donnell, 1996; Sanders & Carpenter, 1998). First, international diversification is often a strategic implication of product diversification (e.g., Denis et al., 2002) and vertical integration (e.g., Teece, 1981, 1985), both of which are positively related to firms' internal complexity (e.g., Chandler, 1962; Henderson & Fredrickson, 1996). Second, the decision to expand internationally implies that firms may need to cope with potentially unfamiliar host country environments, limited relevant knowledge, and the effects of cultural, administrative, geographic, and economic distance between home and host countries (Eden & Miller, 2001; Ghemawat, 2001; Kostova, 1999). Put differently, firms' liability of foreignness may result in less effective business decisions than those made by local firms (Hymer, 1960; Mezas, 2002; Zaheer, 1995). The complexity ensuing from the liability of foreignness intensifies along with increases in the degree of international diversification, since the volume and diversity of external environmental stimuli expand (e.g., Sanders & Carpenter, 1998). Third, the internationally diversified firms need to manage (effectively) the strategic interdependence among their subunits. When adopting a global or transnational strategy, a significant degree of interdependence exists among the subunits (Kostova & Roth, 2003). Even when internationally diversified firms do not derive their benefits from an integrated and standardized approach (i.e., when adopting a multinational strategy), there still is a certain amount of interdependence among the subunits, due to such factors as visibility and legitimacy spillovers (Kostova & Zaheer, 1999). Fourth, as a result of subunit interdependence, internationally diversified firms need to continuously handle the internal tensions and conflicts arising whenever inter-unit boundaries are crossed in everyday activities. Indeed, those boundaries

represent the loci where “‘localized’ contestations are likely to erupt, because the units [...] are guided by a different set of goals, practices, and priorities” (Raynard, 2014: 13).

By increasing firm complexity and thus the information-processing demands, international diversification may contribute to activate the corporate governance mechanisms that enable information processing within the firm (e.g., Oxelheim et al. 2013; Sanders & Carpenter, 1998). First, larger boards may expand the overall information-processing capacity of the firm, due to the higher number of members composing them (e.g., Luo, 2005; Sanders & Carpenter, 1998). Hence, board size may be expected to grow as the firm increases the size of its foreign footprint. Second, longer tenure in the firm provides CEOs with greater knowledge of the firm and its task environment (e.g., Herrmann & Datta, 2006), making them more equipped to confront the information-processing demands resulting from international expansion. Thus, from an information-processing perspective, CEO tenure may be positively related to the degree of international diversification. Third, corporate governance research has shown that the volume of information-processing demands positively affects the level of CEO compensation, since information-processing is a critical task for firm survival and success and the ability to process a larger and more complex amount of information is likely to be a scarce and valuable skill (e.g., Henderson & Fredrickson, 1996). This implies that a greater degree of international diversification is positively associated with a higher level of CEO pay (e.g., Sanders & Carpenter, 1998). Fourth, the separation of CEO and chairman positions may increase the information-processing capacity, by spreading power and expanding the number of people involved in the strategic decision-making process (e.g., Sanders & Carpenter, 1998). By increasing the information-processing

demands for the firm, the degree of international diversification is therefore expected to increase the likelihood that CEO and chairman positions are separated.

When investigating the ID-CG relationship, the agency theory and information-processing perspectives stress deliberate responses by firms to the complexity associated with larger foreign footprints. In particular, those perspectives point out the intentional actions that firms take in order to shape their corporate governance framework during or after the internationalization process. This implies that those actions focus on corporate governance mechanisms that can be controlled by the firm. Though not fully under the control of the firm, ownership concentration and institutional ownership may nevertheless be affected by the degree of international diversification. Institutional investors generally have and aim to maintain globally diversified, low-risk portfolios (e.g., Lien et al., 2005; Singh & Gaur, 2013). Consequently, as the firm expands its presence abroad, its attractiveness to institutional investors increases; in turn, greater attractiveness will result in higher institutional ownership and, hence, lower ownership concentration (e.g., Luo, 2005). Furthermore, institutional ownership represents another theoretical mechanism through which international diversification influences the adoption of corporate governance practices addressing principal-agent conflicts. Institutional owners are characterized by dual identity (Pratt & Foreman, 2000), since they are principals also serving as agents for those providing them the funds to invest (Arthurs et al., 2008; Hoskisson et al., 2013). Such dual identity is a primary driver of shareholder activism, since it prompts institutional owners to be more effective monitors of investees' executives in order to protect the interests of their principals (e.g., Useem, 1996). For example, Samsung Group's decision to separate the CEO and chairman positions at eight

of its companies was the “latest attempt to bolster its corporate governance in the wake of shareholder criticism” (Wall Street Journal, 2016).

*Resource perspective on the effects of international diversification.* When the degree of international diversification increases, another mechanism affects the adoption of corporate governance practices curtailing the principal-agent conflict. International diversification implies greater exposure to alternative organizational practices in a variety of domains (e.g., corporate governance, labor relations, corporate social responsibility, human resource management, finance, firm-government relations). Such practices may be institutionalized either in the host countries where the firm operates or in the transnational meta-institutional field (e.g., Kostova et al., 2008). Kostova and her colleagues argue that the transnational meta-institutional field is “very broad and narrow at the same time. It is broad in the sense that it encompasses MNCs in general, but it is narrow with regard to the number and scope of institutionalized values and practices that it enforces” (2008: 998). In a limited number of domains, including principal-agent conflicts, internationally diversified firms confront expectations and requirements that are transnational in nature. When internationally diversified firms fail to meet those expectations and requirements, negative legitimacy spillovers across the meta-institutional field may significantly harm their operations in multiple countries (e.g., Kostova & Zaheer, 1999). Certain corporate governance practices addressing the principal-agent conflict have gone through a transnational institutionalization process over the last quarter of a century. This is reflected, for instance, in the spread around the world of codes of good governance that in most of the cases include some universal recommendations based on agency theory (e.g., Aguilera & Cuervo-Cazurra, 2009;

Cuomo et al., 2016). Hence, internationally diversified firms may adopt those institutionalized corporate governance practices in order to establish or maintain legitimacy in the meta-institutional field and avoid the sanctions resulting from deviant behavior (e.g., Kostova et al., 2008). It is worth emphasizing that pressures from the meta-institutional field may result in the implementation of certain corporate governance practices, but not necessarily in their internalization (e.g., Kostova & Roth, 2002). For example, when Samsung Group announced the split of the CEO and chairman positions of the board at eight of its companies, a research analyst with expertise in South Korean boards described the move as “a symbolic change” (The Wall Street Journal, 2016). This allows us to emphasize that, while our focus is on corporate governance practices addressing the principal-agent conflict, the agency theory and institution-based resource perspectives do not necessarily suggest the same degree of adoption of those practices.

The institutionalization process of corporate governance practices addressing the agency problem originated and enhanced in Western developed countries (e.g., Aguilera & Cuervo-Cazurra, 2009). However, as the aforementioned example about Samsung and CEO duality illustrates, the relevance of those practices is global by now, meaning that expectations in the meta-institutional field concern firms from both developed and developing countries. First, since the late 1990s, transnational organizations, such as the ICGN and the OECD, created codes in order to improve corporate governance practices around the world; moreover, the World Bank actively engaged in the promotion of good governance in multiple countries (e.g., Aguilera & Cuervo-Cazurra, 2009; Cuomo et al., 2016). Second, during the same period, an increasing number of developing countries has developed corporate governance codes (e.g., Aguilera & Cuervo-Cazurra, 2009; Cuomo

et al., 2016). Third, privatization in many developing countries has resulted in corporate governance changes within newly-privatized firms: on the one hand, the adoption of corporate governance practices reducing agency problems has been an important factor contributing to the attraction of foreign capital and, on the other hand, foreign shareholders have pushed for corporate governance changes in order to protect their interests (e.g., Filatotchev & Wright, 2011; Guedhami et al., 2009). Fourth, firms from developing countries are increasingly more internationally diversified (UNCTAD, 2015). Marano and her colleagues argue that higher international diversification favors the development of “organizational identities as global actors in meta-institutional fields” and this should make them “more attentive to meta-institutional pressures and more receptive to adopting legitimate global practices” (2016b: 6).

The above arguments point out the relevance of the institution-based resource perspective when examining the ID-CG relationship. By exposing the firm to alternative corporate governance practices, international diversification provides opportunities for learning (e.g., Baum et al., 2000). The meta-institutional field ‘constrains’ firms to adopt certain corporate governance practices in order to maintain legitimacy. However, by doing so, it also ‘enables’ firms to experience different practices and, thus, to develop knowledge concerning their implementation and integration within the organization (e.g., Marano & Kostova, 2016). This enabling effect does not involve institutional agency and institutional change (e.g., Saka-Helmhout & Geppert, 2011; Seo & Creed, 2002); rather, it concerns the accumulation within the firm of knowledge in the corporate governance domain. This may occur, for example, through observation of the other firms in the meta-

institutional field, or through the transfer of knowledge from institutional owners (e.g., Dau, 2013).

The above arguments, based on the agency theory, information-processing, and resource perspectives on the ID-CG relationship, lead to the following general causal prediction:

*Hypothesis 3: The degree of international diversification positively affects the activation of corporate governance mechanisms addressing the agency problem and/or increasing the information-processing capacity of the firm.*

Specifically, we predict the following:

*Hypothesis 3a: The degree of international diversification positively affects ownership concentration.*

*Hypothesis 3b: The degree of international diversification positively affects institutional ownership.*

*Hypothesis 3c: The degree of international diversification positively affects board independence.*

*Hypothesis 3d: The degree of international diversification positively affects the separation of CEO and chairman positions.*

*Hypothesis 3e: The degree of international diversification positively affects inside ownership.*

*Hypothesis 3f: The degree of international diversification positively affects the level of CEO compensation.*

*Hypothesis 3g: The degree of international diversification positively affects board size.*

*Hypothesis 3h: The degree of international diversification positively affects CEO tenure.*

Figure 2.2 offers a representation of our theoretical model linking the degree of international diversification to corporate governance.

### **Role of depth and breadth of firms' degree of international diversification**

As suggested by international management scholars, international diversification is a multidimensional construct (e.g., Hitt et al., 2006). Specifically, depth and breadth are two distinct dimensions of firms' foreign footprint (e.g., George et al., 2005; Kafouros et al., 2012). Depth refers to the scale of foreign activities, i.e., the extent of business operations abroad (e.g., Thomas & Eden, 2004). Breadth, by contrast, refers to the scope of the international expansion, i.e., the geographic reach around the world (e.g., Lu & Beamish, 2004). These two dimensions, though interdependent, are characterized by peculiar theoretical implications and, therefore, we suggest that distinguishing them may be particularly relevant in the context of the CG-ID relationship. From an agency theory perspective, the effect of corporate governance mechanisms on the depth and breadth of international diversification may differ, since managers' risk preferences may reflect in different attitudes towards the two dimensions. By definition, higher levels of breadth entail dispersion of business operations across a larger number of host countries and regions (e.g., George et al., 2005; Kafouros et al., 2012). This greater dispersion intensifies the uncertainty about performance outcomes and the associated risks for firms more than depth does. The implications of managers' risk aversion in terms of suboptimal foreign expansion, thus, may be more pronounced for decisions concerning the level of breadth, rather than that of depth. Also from a resource perspective, firms' corporate

governance framework may have a greater impact on the breadth of international diversification than on the depth. The better access to organizational and managerial resources that certain corporate governance mechanisms provide, such as international experience, industry expertise, and professional networks, may prove particularly important when coping with the multiplicity and heterogeneity of external environments associated with higher levels of breadth (e.g., Hillman & Dalziel, 2003). Hence, from a resource perspective, corporate governance mechanisms may affect top executives' reluctance to increase the geographical reach of the firm more than their disinclination to expand the scale of foreign operations.

The above arguments, based on the agency theory and resource perspectives, lead to the following general causal predictions:

*Hypothesis 4: The positive effect of corporate governance mechanisms addressing the agency problem is stronger on the breadth than on the depth of international diversification.*

*Hypothesis 5: The positive effect of corporate governance mechanisms providing better access to organizational and managerial resources is stronger on the breadth than on the depth of international diversification.*

The agency theory, information-processing, and resource perspectives suggest that the effect on corporate governance of depth and breadth of international diversification may differ. From an agency theory perspective, one may argue that a greater geographical outreach aggravates information asymmetries between managers and owners more than a larger scale of foreign operations, due to the higher external and internal complexity confronting the firm (e.g., Roth & O'Donnell, 1996; Sanders &

Carpenter, 1998). Moreover, from an information-processing perspective, the higher complexity that breadth implies in comparison to depth results in greater information-processing demands posed to the firm. More serious information asymmetries and greater information-processing demands, in turn, may represent a stronger spur toward the activation of corporate governance mechanisms addressing the agency problem and/or enabling information processing within the firm (e.g., Oxelheim et al. 2013). From a resource perspective, the exposure to alternative organizational practices in a variety of domains (including corporate governance) is, by definition, greater when expanding the breadth of international diversification than when intensifying the depth. The stronger learning effect associated with wider geographical reach allows firms to develop better knowledge concerning the implementation and integration of those practices within the organization, thus favoring their adoption (e.g., Marano & Kostova, 2016).

The above arguments, based on the agency theory, information-processing, and resource perspectives on the ID-CG relationship, lead to the following general causal prediction:

*Hypothesis 6: The positive effect on the activation of corporate governance mechanisms addressing the agency problem and/or increasing the information-processing capacity of the firm is stronger for the breadth than for the depth of international diversification.*

### **Effects of country-level moderators**

Prior research says little on potential moderators altering the causal linkages between corporate governance and international diversification. Below, from an agency theory

perspective, we explore the potential moderating role of two country-level contingencies, namely the legal protection of minority shareholders and uncertainty avoidance.

*Legal protection of minority shareholders.* Around the world, the adoption of certain corporate governance mechanisms may be the outcome of rules, i.e., hard law (e.g., Aguilera et al., 2010, 2012; Hopt, 2011). The law and finance literature points out the importance of corporate law in protecting minority investors (e.g., La Porta et al., 1998, 2000). Since the early 1980s, several countries have increased the level of legal protection of minority shareholders; still, significant differences across countries remain (e.g., Guillen & Capron, 2016; O’Sullivan, 2003). Herein, we argue that the role played by soft corporate governance mechanisms on international diversification decisions may vary, depending on the extent to which corporate law limits the agency costs incurred by minority shareholders. As pointed out by some scholars, corporate governance mechanisms may operate as substitutes, based on efficiency considerations in the quest for the optimal organization of the firm (e.g., Agrawal & Knoeber, 1996; Dalton et al., 2003; Demsetz, 1983; Misangyi & Acharya, 2014; Rediker & Seth, 1995; Shleifer & Vishny, 1997). Building on corporate governance research on substitutability, we suggest that the effect of soft corporate governance mechanisms on the extent of foreign expansion may be stronger when voids in countries’ regulatory context (e.g., Khanna et al., 2005) result in weaker legal protection from managerial opportunism.

The above arguments, based on the agency theory perspective, lead to the following general causal prediction:

*Hypothesis 7: The positive effect of (soft) corporate governance mechanisms addressing the agency problem on the degree of international diversification weakens as the level of legal minority shareholder protection increases.*

The legal protection of minority shareholders may moderate also the opposite causal relationship. As discussed previously, international diversification, by aggravating the principal-agent conflict, prompts the use of corporate governance mechanisms that strengthen the monitoring of managerial behavior as well as the alignment of interests between owners and managers (e.g., Sanders & Carpenter, 1998). Building again on substitutability research, we suggest that, when the legal protection of minority shareholders is higher, the push toward the activation of soft corporate governance mechanisms is weaker, because the regulatory context already provides shareholders a shield against managerial opportunism.

The above arguments, based on the agency theory perspective, lead to the following general causal prediction:

*Hypothesis 8: The positive effect of the degree of international diversification on the activation of (soft) corporate governance mechanisms addressing the agency problem weakens as the level of legal minority shareholder protection increases.*

***Uncertainty avoidance.*** Uncertainty avoidance, one of the dimensions of national culture identified by Hofstede, refers to “the extent to which a culture programs its members to feel either uncomfortable or comfortable in unstructured situations.

Unstructured situations are novel, unknown, surprising, different from usual” (Hofstede, 2001: xix). While Hofstede points out that “*uncertainty avoidance does not equal risk avoidance*” (2001: 148, italics in the original), we argue that, when focusing on the effect

of corporate governance on international diversification, the two constructs are strictly interconnected. As discussed earlier, international diversification is characterized by unusual uncertainty about performance outcomes, due to the liability of foreignness that firms expanding abroad need to deal with (Ghemawat, 2001; Hymer, 1960; Mezias, 2002; Zaheer, 1995). The strategic nature of international diversification turns that uncertainty into significant risks for firms, since this strategy implies long-term commitment to a certain path that is potentially costly to reverse (Caves, 1984; Ghemawat, 1991). We therefore suggest that, when uncertainty avoidance is higher, the effect of corporate governance mechanisms on the degree of international diversification is weaker, as the increase in uncertainty avoidance reflects in higher managerial aversion to the risks associated with foreign expansion.

The above arguments, based on the agency theory perspective, lead to the following general causal prediction:

*Hypothesis 9: The positive effect of corporate governance mechanisms addressing the agency problem on the degree of international diversification weakens as the level of uncertainty avoidance increases.*

## **METHODOLOGY**

In order to investigate the CG-ID relationship we used MASEM, which combines the techniques of structural equation modeling with those of meta-analysis (e.g., Cheung & Chan, 2005; van Essen et al., 2015a). In particular, we followed the guidelines recently outlined by Bergh and his colleagues (2016) for using MASEM to advance management research. MASEM represents a more powerful technique than traditional meta-analysis, as it allows to build on the existing body of empirical research (in our case focused on

corporate governance and international diversification) in order to pit alternative complex models (Bergh et al., 2016).

As a first step, we conducted a review of the management, economics, and finance literatures to identify key theoretical perspectives on the CG-ID relationship and all relevant study variables. After consulting studies that provide comprehensive reviews of research on corporate governance (e.g., Aguilera et al., 2015; Shleifer & Vishny, 1997) and international diversification (e.g., Hitt et al., 2006), we carried out an extensive review of the literature on the CG-ID relationship (e.g., Filatotchev & Wright, 2011; Sanders & Carpenter, 1998). This effort allowed us to identify the following relevant corporate governance variables: ownership concentration, institutional ownership, board independence, board size, separation of CEO and chairman positions, CEO tenure, CEO pay, and inside ownership. We used those constructs to develop our theoretical arguments about the CG-ID relationship, formulate our hypotheses, and thus identify *a priori* (Bergh et al., 2016: 481) the general models to be tested. Those models are 1) the direct effects model linking corporate governance mechanisms to the degree of international diversification, based on Hypothesis 1 and Hypothesis 2; 2) the direct effects model linking the degree of international diversification to corporate governance mechanisms, based on Hypothesis 3.

### **Sample and coding**

Our sample consists of published and unpublished empirical studies analyzing the CG-ID relationship, though not necessarily focused, from a theoretical perspective, on such relationship. In order to identify as many relevant primary studies as possible, we implemented multiple search strategies. First, we consulted several review articles (e.g.,

Filatotchev & Wright, 2011; Wu & Tihanyi, 2013). Second, we explored four major electronic databases by conducting keyword searches focused on corporate governance and international diversification. The electronic databases are the following: ABI Inform, Business Source Premier, JSTOR, and Web of Science. We used the following search terms: “corporate governance,” “governance,” “ownership structure”, “ownership concentration,” “institutional ownership,” “board of directors,” “board composition,” “board structure,” “board independence,” “board size,” “CEO/chief executive,” “CEO duality,” “CEO tenure,” “CEO pay,” “CEO compensation,” and “inside ownership” with regard to corporate governance (e.g., Bergh et al., 2016; Filatotchev & Wright, 2011); “MNC,” “internationalization,” “international diversification,” “geographic diversification,” “geographic expansion,” “international expansion,” and “multinationality,” with regard to international diversification (e.g., Hitt et al., 2006; Kirca et al., 2011). Third, using the initial set of studies collected through these two search strategies, we identified relevant papers among those cited in the previously retrieved articles and those citing them. In order to that, we used Google Scholar and Web of Science. Combined, these strategies yielded an initial pool of over 4,000 papers and a final sample of 104 primary studies. Each of the articles in the final sample involved an empirical analysis, included the necessary statistical information (i.e., bivariate correlation coefficients and sample size), and used corporate governance and international diversification measures that reflected conventional definitions of the correspondent constructs (Bergh et al., 2016). In order to ensure that dependence of samples would not represent a major problem in our analyses, we checked whether any primary studies were authored by the same scholars *and* based on the same empirical

sample. We did not find any cases. Despite that, sample dependence may still be an issue because primary studies may rely on the same large and accessible databases. However, our final sample includes articles published over two decades (from 2000 to 2016), covering a period of over forty years (1970-2012), and from different disciplines, thus reasonably increasing the variation in data sources at satisfactory levels (Bergh et al., 2016). Next, we read the sampled articles, developed a coding protocol (Lipsey & Wilson, 2001), and collected data concerning the relationships of interest as well as the study characteristics.

## **Measures**

*Corporate governance mechanisms.* Based on our extensive review of the literature on corporate governance and international diversification (e.g., Aguilera et al., 2015; Filatotchev & Wright, 2011; Shleifer & Vishny, 1997; Wu & Tihanyi, 2013), we identified eight commonly studied corporate governance mechanisms: ownership concentration, institutional ownership, board independence, board size, separation of CEO and chairman positions, CEO tenure, CEO pay, and inside ownership. *Ownership concentration* reflects the extent to which the firm's outstanding stock is in the hands of large shareholders. It is commonly measured as the percentage of the firm's equity held by those who own at least 3% or 5% of the firm's outstanding shares, or the percentage of shares held by the largest shareholders (e.g., Boubakri et al., 2005; La Porta et al., 1998; Wan et al., 2008). *Institutional ownership* represents the extent to which the firm's outstanding shares are in the hands of institutional investors. It is commonly measured as the percentage of the firm's equity held by institutional investors, or the number of institutional investors owning a firm's stock (e.g., Hoskisson et al., 2002; Johnson &

Greening, 1999; Tihanyi et al., 2003). *Board independence* reflects the degree to which the board of directors operates independently from corporate insiders. It is commonly measured as the ratio of (independent) outside directors to the total number of board members (e.g., Bhagat & Black, 2002; Hoskisson et al., 2002; Tihanyi et al., 2003). *Board size* measures how large the board of directors is and is commonly measured as the number of directors sitting on the firm's board (e.g., Dalton et al., 1999; Sanders & Carpenter, 1998). *Separation of CEO and chairman positions* refers to whether the CEO has a tighter control of the firm's strategic decision-making process. It is commonly measured as a dummy variable taking value of 1 if the positions are held by different board members and 0 if the same person jointly holds the two titles (e.g., Boyd, 1995; Rechner & Dalton, 1991). *CEO tenure* reflects the continuity in the strategic management of the firm. It is commonly measured as the number of years since the appointment of the CEO (e.g., Bergh, 2016). *CEO pay* refers to the remuneration granted to the chief executive. It is commonly measured as the level of compensation of the CEO (e.g., Sanders & Carpenter, 1998). *Inside ownership* represents the extent to which the firm's outstanding shares are in the hands of corporate insiders. It is commonly measured as the percentage of equity owned by inside directors or members of the top management team (e.g., Hoskisson et al., 2002).

***Degree of international diversification.*** The degree of international diversification refers to the size of firms' foreign footprint, i.e., the extent to which one or more value chain activities are performed abroad. International management scholars have operationalized the construct in a number of ways (e.g., Lu & Beamish, 2004; Sullivan, 1994; Thomas & Eden, 2004). *Foreign sales to total sales* (e.g., Tallman & Li,

1996), *foreign assets to total assets* (e.g., Gomes & Ramaswamy, 1999), *foreign employees to total employees* (e.g., Brock & Yaffe, 2008), *foreign subsidiaries to total subsidiaries* (e.g., Gomez-Mejia & Palich, 1997), and *total exports to total sales* (e.g., Lu & Beamish, 2001) are common measures of the *depth* of international diversification, i.e., the scale of the activities that are conducted outside the home country (e.g., Thomas & Eden, 2004). *Number of countries* (e.g., Delios & Beamish, 1999), *number of regions* (e.g., Kim, Hoskisson, & Wan, 2004), *dispersion across countries* (e.g., Goerzen & Beamish, 2003), and *dispersion across regions* (e.g., Hitt et al., 1997) are common measures of the *breadth* of international diversification, i.e., the geographic scope of a firm's foreign operations (e.g., Thomas & Eden, 2004).

***Legal protection of minority shareholders.*** We measured the legal protection of minority shareholder using the index developed by Guillen and Capron (2016). The index was developed using cross-country longitudinal data from 78 developed and developing countries, covering the 1970-2011 period. The two scholars gathered information on ten legal provisions regarded as key for the protection of minority shareholder rights, including, among others, board independence, feasibility of directors' dismissal, derivative suit, and disclosure of major share ownership: "If present, each of these legal provisions provides minority shareholders with a comprehensive set of protections against the actions of large shareholders and/or management and in the event of a change in corporate control" (Guillen and Capron, 2016: 136). The index ranges from 0 to 10, with each legal provision receiving a score between 0 and 1.

***Uncertainty avoidance.*** In his study of how values in the workplace are influenced by culture, Hofstede (2001) identified power distance, individualism,

masculinity, uncertainty avoidance, and long-term orientation as dimensions of national culture. We measured country-level uncertainty avoidance using the time-invariant country scores provided by Hofstede (2001).

***Control variables.*** In order to minimize omitted-variable bias, we also included several firm-level control variables: firm size, firm age, debt-to-equity ratio, product diversification, R&D intensity, and firm performance. *Firm size* is any indicator of the size of the firm, such as a firm's total assets, sales, or employees (e.g., Goerzen & Beamish, 2003). *Firm age* is any indicator of the age of the firm, such as the number of years since establishment (e.g., Zahra et al., 2000). *Debt-to-equity ratio* reflects the degree of financial leverage of the firm, measured as the ratio of total debt to total equity (e.g., Goerzen & Beamish, 2003). *Product diversification* is a variable that reflects the diversification across industries of the firm, commonly operationalized using the Herfindahl or entropy index (e.g., Tallman & Li, 1996). *R&D intensity* is a variable that reflects the degree of R&D expenditure of the firm, commonly operationalized as the ratio of R&D expenditure to total sales or employees (e.g., Li & Tallman, 2011). *Firm performance* is any indicator of the financial performance of the firm, including accounting- and market-based measures of performance (e.g., Hitt et al., 1997).

### **MASEM procedure**

To test our hypotheses, we used MASEM (Bergh et al., 2016; Carney et al., 2011; Cheung & Chan, 2005; van Essen et al., 2015a). In the first step of the two-stage procedure, we computed mean correlations between the variables of interest through separate Hedges-Olkin meta-analyses (HOMAs) in Stata 13 (Hedges & Olkin, 1985). In order to run the HOMAs, we first collected from the primary studies the bivariate

correlations (i.e., Pearson's  $r$ ) between all the variables of interest. We followed established guidelines and chose the effect size, rather than the article, as our unit of analysis (Bergh et al., 2016). When multiple operationalizations of the constructs concerning a focal effect were used in a primary study, we included all of them in our analyses.<sup>4</sup> Each effect size was weighted by its inverse variance weight  $w$  to account for differences across effect sizes (Hedges & Olkin, 1985).<sup>5</sup> When computing the weighted mean correlations, we used a 1.0 reliability estimate for all the variables. We used a 1.0 level of reliability because the variables of interest for our study are not particularly exposed to measurement error, since they do not leave much room for subjectivity to researchers carrying out a primary study. While a conservative 0.80 reliability estimate is recommended by some scholars (e.g., Aguinis et al., 2011), both Dalton and his colleagues (1998) and Bergh and his colleagues (2016) did not find any substantive difference in the results of their meta-analyses when using a 1.0 level of reliability instead of a 0.80 level. In order to compute the weighted mean correlations, we run random-effects HOMAs, which are more conservative than fixed-effects HOMAs and account for potential heterogeneity in the effect size distribution (Kisamore & Brannick,

---

<sup>4</sup> Research has shown that including all the effect sizes, as opposed to including a single value for each study, provides advantages in terms of parameter significance testing and parameter estimation accuracy (Bijmolt & Pieters, 2001).

<sup>5</sup>  $w$  is calculated as follows:  $w_i = \frac{1}{se_i^2 + \hat{v}_\theta}$ , where SE is the standard error of the effect size and  $\hat{v}_\theta$  is the

random effects variance component, which are in turn calculated as:  $s.e.(z_r) = \frac{1}{\sqrt{n-3}}$  and

$$\hat{v}_\theta = \frac{Q_T - k - 1}{\sum w - \left( \frac{\sum w^2}{\sum w} \right)}$$

2008). When running the HOMAs, we also computed the standard error for each mean correlation.<sup>6</sup>

In the second step of the two-stage procedure, we run structural equation modeling (SEM) using maximum-likelihood routines in LISREL 8 (Cheung & Chan, 2005). The meta-analytic matrix of mean correlations provided the data to run SEM and no cell contained missing values. MASEM has the advantage that not all relationships under examination need to be included in each primary study, as each cell in the meta-analytic matrix of mean correlations is a different subset of all included studies (Carney et al., 2011; Viswesvaran & Ones, 1995). We based our SEM estimation of the coefficients on the harmonic mean of the sample sizes. This allowed us to deal with the sample size differences and reduce the concern that larger samples might affect the estimation more than smaller samples (Bergh et al., 2016; Carney et al., 2011; van Essen et al., 2015a). Below is the equation that we estimated to test Hypothesis 1 and Hypothesis 2:

$$\text{Degree of ID} = \Sigma \beta_i \text{CG Mechanism}_i + \Sigma \gamma_j \text{Control}_j + \varepsilon \quad (1)$$

where *Degree of ID* is the extent of foreign expansion, *CG Mechanism<sub>i</sub>* is the individual corporate governance mechanism, and *Control<sub>j</sub>* is the individual control variable. In order to test Hypothesis 3, we estimated the following equation:

$$\text{CG Mechanism}_i = \beta_1 \text{Degree of ID} + \Sigma \gamma_j \text{Control}_j + \varepsilon \quad (2)$$

---

<sup>6</sup> The meta-analytic mean is calculated as follows:  $\overline{ES} = \frac{\sum (w \times ES)}{\sum w}$ , with its standard error:

$se_{\overline{ES}} = \sqrt{\frac{1}{\sum w}}$ , and with its 95% confidence interval computed as:  $Lower = \overline{ES} - 1.96(se_{\overline{ES}})$ ,

$Upper = \overline{ES} + 1.96(se_{\overline{ES}})$ .

The tests of Hypotheses 4-6 required a distinction between depth and breadth of international diversification, rather than a focus on the overall degree of expansion abroad. Therefore, we simultaneously estimated the following two equations to test Hypothesis 4 and Hypothesis 5:

$$\text{Depth of ID} = \sum \beta_i \text{CG Mechanism}_i + \sum \gamma_j \text{Control}_j + \varepsilon \quad (3)$$

$$\text{Breadth of ID} = \sum \beta_i \text{CG Mechanism}_i + \sum \gamma_j \text{Control}_j + \varepsilon \quad (4)$$

Furthermore, we estimated the equation reported below to test Hypothesis 6:

$$\text{CG Mechanism}_i = \beta_1 \text{Depth of ID} + \beta_2 \text{Breadth of ID} + \sum \gamma_j \text{Control}_j + \varepsilon \quad (5)$$

In order to test Hypothesis 7 and Hypothesis 8, which focus on the moderating effect of the legal protection of minority shareholders, we split the data set into two subsets using the median value of the country-level contingency. Next, we computed two different meta-analytic correlation matrices, respectively for high and low levels of legal shareholder protection. Then, to test Hypothesis 7 and Hypothesis 8, we estimated again, respectively, Equation (1) and Equation (2) for both high and low levels of the legal protection of minority shareholders.

Similarly, to assess the moderating effect of country-level uncertainty avoidance, on which Hypothesis 9 focuses, we divided the sample into two subsamples based on the median value of this national culture dimension. Next, we computed two different meta-analytic correlation matrices, respectively for high and low levels of uncertainty avoidance. Then, to test Hypothesis 9, we estimated again Equation (1) for both high and low levels of uncertainty avoidance.

Due to meta-analytic data availability, when testing Hypotheses 6-9, we focus only on three (soft) corporate governance mechanisms, which we previously discussed

from an agency theory perspective: ownership concentration, institutional ownership, and inside ownership.

## RESULTS

Table 2.1 reports the meta-analytic correlation matrix, which shows, with regard to the CG-ID relationship, a negative mean effect size for ownership concentration ( $r$ -based mean effect size = -0.005;  $p = 0.775$ ) and inside ownership ( $r$ -based mean effect size = -0.029;  $p = 0.102$ ), and a positive mean effect size for institutional ownership ( $r$ -based mean effect size = 0.016;  $p = 0.326$ ), CEO/chairman separation ( $r$ -based mean effect size = 0.026;  $p = 0.305$ ), CEO pay ( $r$ -based mean effect size = 0.115;  $p = 0.021$ ), and board independence ( $r$ -based mean effect size = 0.012;  $p = 0.585$ ). Therefore, while some corporate governance mechanisms addressing the agency problem have a positive association with the degree of international diversification, others are negatively correlated to it. Table 2.1 also shows that the corporate governance mechanisms providing better access to organizational and managerial resources, i.e., CEO tenure ( $r$ -based mean effect size = 0.025;  $p = 0.229$ ) and board size ( $r$ -based mean effect size = 0.079;  $p = 0.0001$ ) are positively associated with the degree of international diversification. The results of the HOMAs, however, do not give any information about the direction of causality, since they are based on Pearson's  $r$ . Moreover, they do not take into account the interdependencies among the corporate governance mechanisms, as well as the effect of control variables.

### **Effects of corporate governance on the degree of international diversification**

Table 2.2 shows the MASEM results for the direct effects model (Model 1) linking corporate governance mechanisms to the degree of international diversification, based on

Hypothesis 1 and Hypothesis 2. In this model, each corporate governance variable is related directly to the degree of international diversification. Moreover, each corporate governance variable covaries with the other corporate governance variables and the firm-level controls, which, instead, covaries only with the corporate governance variables.<sup>7</sup> Furthermore, independent and dependent variables are observed variables; no latent construct is included in the model.

Regarding Hypothesis 1, our results show that ownership concentration (coefficient = -0.0077,  $t$  value = -0.59), inside ownership (coefficient = -0.012,  $t$  value = -0.84), and board independence (coefficient = -0.0083,  $t$  value = -0.63) are negatively related to the size of the foreign footprint. However, the mean effect sizes, especially for ownership concentration and board independence, are quite small. By contrast, institutional ownership (coefficient = 0.012,  $t$  value = 0.89), CEO/chairman separation (coefficient = 0.046,  $t$  value = 3.12), and CEO pay (coefficient = 0.078,  $t$  value = 3.97) are positively related to the degree of international diversification. The effect of institutional ownership, though, is quite small compared to the effect of CEO/chairman separation and CEO pay. Overall, our findings provide partial empirical support for the idea that corporate governance mechanisms addressing the agency problem positively affect the degree of international diversification. With regard to Hypothesis 2, we find that CEO tenure (coefficient = 0.040,  $t$  value = 2.80) is positively associated with the degree of international diversification. By contrast, the effect of board size (coefficient = -0.020,  $t$  value = -1.19) on the extent of foreign expansion is negative, though smaller in magnitude than that of CEO tenure. Our results, therefore, provide partial empirical support for the idea that corporate governance mechanisms providing better access to

---

<sup>7</sup> This is necessary to have enough degrees of freedom to estimate the model.

organizational and managerial resources are positively related to the degree of international diversification. Figure 2.3 offers a schematic representation of our results concerning the effect of corporate governance on the degree of international diversification.

The direct effects model linking corporate governance mechanisms to the degree of international diversification fits the data relatively well ( $\chi$ -square (15) = 784.03,  $p$ -value < 0.001; RMSEA = 0.096; CFI = 0.91; NFI = 0.90; RMR = 0.039).

### **Effects of the degree of international diversification on corporate governance**

Table 2.3 shows the results of the direct effects model (Model 2) linking the degree of international diversification to corporate governance mechanisms, based on Hypothesis 3.

In this model, the degree of international diversification is related directly to each corporate governance variable. Moreover, the firm-level control variables do not covary with one another.<sup>8</sup> Furthermore, independent and dependent variables are observed variables; no latent construct is included in the model. Our results show that the degree of international diversification is negatively related to ownership concentration (coefficient = -0.008,  $t$  value = -0.58) and institutional ownership (coefficient = -0.003,  $t$  value = -0.25), even though the mean effect sizes are very small. Furthermore, the effect of foreign expansion on inside ownership (coefficient = -0.005,  $t$  value = -0.36) and board independence (coefficient = -0.007,  $t$  value = -0.50) is negative, although—again—the mean effect sizes are very small. We also find that the degree of international diversification is positively associated with board size (coefficient = 0.013,  $t$  value = 1.02), CEO tenure (coefficient = 0.024,  $t$  value = 1.73), CEO pay (coefficient = 0.036,  $t$  value = 3.03), and CEO/chairman separation (coefficient = 0.016,  $t$  value = 1.19). Our

---

<sup>8</sup> This is necessary to have consistency with Model 1.

results, therefore, provide partial empirical support for the idea that the degree of international diversification positively influences the activation of corporate governance mechanisms addressing the agency problem and/or increasing the information-processing capacity of the firm. Figure 2.4 offers a schematic representation of our results concerning the effect of the degree of international diversification on corporate governance.

The direct effects model linking the degree of international diversification to corporate governance mechanisms achieves worse fit than the direct effects model linking corporate governance mechanisms to the degree of international diversification ( $\chi$ -square (43) = 4222.66,  $p$ -value < 0.001; RMSEA = 0.132; CFI = 0.39; NFI = 0.39; RMR = 0.076). This suggests that corporate governance explains the variation of international diversification better than international diversification explains the variation of corporate governance.

### **Effects of corporate governance on the depth and breadth of international diversification**

Table 2.4 shows the results for the direct effects model (Model 3) linking corporate governance mechanisms to depth and breadth of international diversification, based on Hypothesis 4 and Hypothesis 5. In this model, each corporate governance variable is related directly to depth and breadth of international diversification. Moreover, each corporate governance variable covaries with the other corporate governance variables and the firm-level controls, which, instead, covaries only with the corporate governance variables.<sup>9</sup> Furthermore, independent and dependent variables are observed variables; no latent construct is included in the model. With regard to Hypothesis 4, our results show

---

<sup>9</sup> This is necessary to have consistency with Model 1.

that ownership concentration negatively affects the depth of foreign expansion (coefficient = -0.019,  $t$  value = -1.44), but positively influences the breadth (coefficient = 0.028,  $t$  value = 2.28). Similarly, institutional ownership has a negative, though very small, effect on the depth of international diversification (coefficient = -0.0033,  $t$  value = -0.24), but a positive effect on the breadth (coefficient = 0.09,  $t$  value = 7.08). Moreover, CEO/chairman separation and CEO pay positively affect both dimensions of international diversification, but the effect on breadth (coefficient for CEO/chairman separation = 0.094,  $t$  value = 6.89; coefficient for CEO pay = 0.32,  $t$  value = 17.35) is stronger than the effect on depth (coefficient for CEO/chairman separation = 0.040,  $t$  value = 2.74; coefficient for CEO pay = 0.045,  $t$  value = 2.34). By contrast, inside ownership and board independence have a positive, though very small, effect on the depth of international diversification (coefficient for inside ownership = 0.0036,  $t$  value = 0.27; coefficient for board independence = 0.0043,  $t$  value = 0.33), but a negative effect on the breadth (coefficient for inside ownership = -0.066,  $t$  value = -5.20; coefficient for board independence = -0.085,  $t$  value = -6.96). Our findings, therefore, provide partial empirical support for the idea that the positive effect of corporate governance mechanisms addressing the agency problem is stronger on the breadth than on the depth of international diversification.

Regarding Hypothesis 5, our results show that CEO tenure positively influences both dimensions of international diversification, but the effect on depth (coefficient = 0.042,  $t$  value = 3.03) is larger than that on breadth (coefficient = 0.034,  $t$  value = 2.59). Also, board size has a positive effect on the depth of international diversification (coefficient = 0.017,  $t$  value = 1.01), but a negative effect on the breadth (coefficient = -

0.22,  $t$  value = -14.29). Our findings, therefore, do not provide empirical support for the idea that the positive effect of corporate governance mechanisms providing better access to organizational and managerial resources is stronger on the breadth than on the depth of international diversification.

### **Effects of the depth and breadth of international diversification on corporate governance**

Table 2.5 shows the results of the direct effects model (Model 4) linking depth and breadth of international diversification to corporate governance mechanisms, based on Hypothesis 6. In this model, the dimensions of international diversification are related directly to each corporate governance variable. Moreover, the firm-level control variables do not covary with one another.<sup>10</sup> Furthermore, independent and dependent variables are observed variables; no latent construct is included in the model. Our results show that the depth of foreign expansion has a negative effect on ownership concentration (coefficient = -0.022,  $t$  value = -1.61); by contrast, the breadth has a positive effect (coefficient = 0.022,  $t$  value = 1.56). Similarly, the depth of international diversification negatively affects institutional ownership (coefficient = -0.016,  $t$  value = -1.21), while the breadth positively influences it (coefficient = 0.028,  $t$  value = 1.99). Moreover, both dimensions of international diversification positively affect CEO pay, but the effect of breadth (coefficient = 0.11,  $t$  value = 8.98) is stronger than the effect of depth (coefficient = 0.0068,  $t$  value = 0.58). Both depth and breadth have a positive effect on CEO tenure; however, unlike their effect on CEO pay, the effect of depth (coefficient = 0.027,  $t$  value = 1.94) is stronger than the effect of breadth (coefficient = 0.0035,  $t$  value = 0.25). By contrast, the depth of foreign expansion positively influences inside ownership,

---

<sup>10</sup> This is necessary to have consistency Model 1.

CEO/chairman separation, and board independence (coefficient for inside ownership = 0.013,  $t$  value = 0.96; coefficient for CEO/chairman separation = 0.017,  $t$  value = 1.25; coefficient for board independence = 0.023,  $t$  value = 1.72), while the breadth negatively affects those corporate governance mechanisms (coefficient for inside ownership = -0.036,  $t$  value = -2.60; coefficient for CEO/chairman separation = -0.00056,  $t$  value = -0.04; coefficient for board independence = -0.085,  $t$  value = -6.05). Our findings, therefore, provide partial empirical support for the idea that the positive effect on the activation of corporate governance mechanisms addressing the agency problem and/or increasing the information-processing capacity of the firm is stronger for the breadth than for the depth of international diversification.

Similar to the comparison between the fit of Model 1 and that of Model 2, the fit of Model 3 ( $\chi$ -square (16) = 1140.66,  $p$ -value < 0.001; RMSEA = 0.110; CFI = 0.89; NFI = 0.89; RMR = 0.042), which links corporate governance mechanisms to depth and breadth of international diversification, is better than that of the Model 4 ( $\chi$ -square (43) = 4566.22,  $p$ -value < 0.001; RMSEA = 0.134, CFI = 0.45, NFI = 0.45, RMR = 0.072), which links depth and breadth of international diversification to corporate governance mechanisms. This suggests that corporate governance explains the variation of the international diversification dimensions better than the international diversification dimensions explain the variation of corporate governance.

### **Moderating effect of the legal protection of minority shareholders on CG→ID**

Table 2.6 shows the results for the direct effects models linking, based on Hypothesis 7, corporate governance mechanisms to the degree of international diversification under conditions of high (Model 5) and low (Model 6) legal protection of minority

shareholders. In these models, each corporate governance variable is related directly to the degree of international diversification. Our results show that ownership concentration negatively affects the degree of international diversification when the legal protection of minority shareholders is high (coefficient = -0.033,  $t$  value = -5.46), but positively influences it when the legal protection of minority shareholders is low (coefficient = 0.034,  $t$  value = 3.78). Moreover, institutional ownership has a positive, though small, effect on the extent of foreign expansion both when the legal shareholder protection is high (coefficient = 0.00093,  $t$  value = 0.15) and when this country-level contingency is low (coefficient = 0.0055,  $t$  value = 0.62), but the effect is larger in the latter case. By contrast, inside ownership has a negative effect on the degree of international diversification both when the legal shareholder protection is high (coefficient = -0.011,  $t$  value = -1.75) and when this country-level contingency is low (coefficient = -0.0055,  $t$  value = -0.60), but the effect is larger in the former case. Our findings, therefore, provide very limited empirical support for the idea that the positive effect of (soft) corporate governance mechanisms addressing the agency problem on the degree of international diversification weakens as the level of legal minority shareholder protection increases.

#### **Moderating effect of the legal protection of minority shareholders on ID→CG**

Table 2.7 shows the results for the direct effects models linking, based on Hypothesis 8, the degree of international diversification to corporate governance mechanisms under conditions of high (Model 7) and low (Model 8) legal protection of minority shareholders. In these models, the degree of international diversification is related directly to each corporate governance variable. Our results show that the degree of international diversification negatively affects ownership concentration when the legal

protection of minority shareholders is high (coefficient = -0.033,  $t$  value = -5.41), but positively influences it when the legal protection of minority shareholders is low (coefficient = 0.034,  $t$  value = 3.67). Similarly, institutional ownership has a negative, though very small, effect on the extent of foreign expansion when the legal shareholder protection is high (coefficient = -0.00016,  $t$  value = -0.027), but a positive one, though very small, when this country-level contingency is low (coefficient = 0.001,  $t$  value = 0.11). By contrast, the degree of international diversification negatively affects inside ownership both when the legal shareholder protection is high (coefficient = -0.0096,  $t$  value = -1.59) and when this country-level contingency is low (coefficient = -0.00078,  $t$  value = -0.089), but the effect is larger in the former case. Our findings, therefore, provide very limited empirical support for the idea that the positive effect of the degree of international diversification on the activation of (soft) corporate governance mechanisms addressing the agency problem weakens as the level of legal minority shareholder protection increases.

Similar to the comparison between the fit of Model 1 and that of Model 2, the fit of Model 5 ( $\chi$ -square (3) = 749.09,  $p$ -value < 0.001; RMSEA = 0.095; CFI = 0.83; NFI = 0.83; RMR = 0.026), which links corporate governance mechanisms to the degree of international diversification when the legal shareholder protection is high, is higher than that of the Model 7 ( $\chi$ -square (6) = 1208.23,  $p$ -value < 0.001; RMSEA = 0.085; CFI = 0.73; NFI = 0.73; RMR = 0.033), which links the degree of international diversification to corporate governance mechanisms when the legal shareholder protection is high. Similarly, the fit of Model 6 ( $\chi$ -square (3) = 219.58,  $p$ -value < 0.001; RMSEA = 0.076; CFI = 0.93; NFI = 0.93; RMR = 0.022), which links corporate governance mechanisms to

the degree of international diversification when the legal shareholder protection is low, is higher than that of the Model 8 ( $\chi$ -square (8) = 819.54,  $p$ -value < 0.001; RMSEA = 0.104; CFI = 0.75; NFI = 0.75; RMR = 0.041), which links the degree of international diversification to corporate governance mechanisms when the legal shareholder protection is low. This suggests—again—that corporate governance explains the variation of international diversification better than international diversification explains the variation of corporate governance.

### **Moderating effect of national uncertainty avoidance on CG→ID**

Table 2.8 shows the results for the direct effects models linking, based on Hypothesis 9, corporate governance mechanisms to the degree of international diversification under conditions of high (Model 9) and low (Model 10) uncertainty avoidance. In these models, each corporate governance variable is related directly to the degree of international diversification. Our results show that ownership concentration negatively affects the degree of international diversification when uncertainty avoidance is high (coefficient = -0.010,  $t$  value = -0.69), but positively influences it when uncertainty avoidance is low (coefficient = 0.028,  $t$  value = 5.93). Similarly, institutional ownership has a negative effect on the degree of international diversification when uncertainty avoidance is high (coefficient = -0.13,  $t$  value = -8.84), but a positive one when uncertainty avoidance is low (coefficient = 0.046,  $t$  value = 9.64). Also, inside ownership negatively influences the degree of international diversification when uncertainty avoidance is high (coefficient = -0.047,  $t$  value = -3.20), but positively affects it when uncertainty avoidance is low (coefficient = 0.010,  $t$  value = 2.18). Our findings, therefore, provide partial empirical support for the idea that the positive effect of corporate governance mechanisms

addressing the agency problem on the degree of international diversification weakens as the level of uncertainty avoidance increases.

## **DISCUSSION**

The inconclusive and inconsistent empirical findings about the CG-ID relationship were the starting point of this meta-analytic study, in which we explored the complex interdependence between corporate governance and international diversification.

### **Causal linkages between corporate governance and international diversification**

The first key finding of our MASEM study is that, as the agency theory, resource, and information-processing perspectives suggest, bidirectional causal linkages exist between corporate governance and international diversification. This important finding constructively addresses the potential scientific apophenia (i.e., the tendency to find evidence of order where none exists) in the CG-ID research area (e.g., Goldfarb & King, 2016; Harrison et al., 2014). It also shows the multifaceted interdependence between corporate governance and international diversification (e.g., Buckley & Strange, 2011; Filatotchev & Wright, 2011). Furthermore, it provides additional evidence in support of the complementarity and substitutability between corporate governance mechanisms at the firm level (e.g., Aguilera et al., 2008, 2012; Dalton et al., 2003).

The agency theory perspective suggests that certain corporate governance mechanisms will positively affect international diversification by curbing the agency problem resulting from managerial risk aversion. Our findings show that institutional ownership, CEO/chairman separation, and CEO compensation have this role of foreign expansion facilitators. Therefore, our study adds to the body of empirical evidence showing the role played by those mechanisms in the principal-agent relationship.

Interestingly, however, we find that inside ownership has a negative effect on the extent of foreign expansion, which corroborates the idea in the management and finance literatures that the use of equity for compensation results in greater incentives to ‘play it safe’, as a larger slice of executives’ financial wealth is linked to the firm’s prospects (e.g., Gormley & Matsa, 2016). Also, ownership concentration and board independence have a negative impact on the degree of international diversification. Their effect, however, is very small, suggesting that a more nuanced relationship may exist, depending on whether the focus is on the depth or breadth of international diversification.

The resource perspective suggests that certain corporate governance mechanisms will positively affect the degree of international diversification by providing better access to organizational and managerial resources. Consistent with the idea that a longer tenure may better equip CEOs to cope with the challenges of such a resource-intensive and risky move as international diversification, we find that this corporate governance mechanism has a positive effect on expansion abroad. By contrast, board size has a negative effect on the degree of international diversification. While counterintuitive from a resource perspective, this result may be explained through an agency theory lens. Corporate governance scholars point out that larger boards may aggravate the agency problem, amplifying the effect of managerial risk aversion: “even if boards’ capacities for monitoring increase with board size, the benefits are outweighed by such costs as slower decision-making, less-candid discussions of managerial performance, and biases against risk-taking” (Yermack, 1996: 186).

In addition to the impact of firms’ corporate governance mechanisms on the degree of international diversification, our MASEM results provide support for the

prediction that foreign expansion prompts the activation of corporate governance mechanisms addressing the agency problem and/or increasing the information processing capacity of the firm. Consistent with previous international management research, we find that the higher information-processing demands and/or greater information asymmetries associated with larger operations abroad result in longer CEO tenure, higher CEO pay, CEO/chairman separation, and larger board size (e.g., Sanders & Carpenter, 1998). Furthermore, the effect on CEO/chairman separation provides empirical support for an institution-based resource perspective (e.g., Kostova et al., 2008; Marano et al., 2016) on corporate governance, since CEO/chairman separation is one of the “mechanisms largely held as “silver bullets” for the governance problem” (Misangyi & Acharya, 2014: 1702). Similar considerations may be made also for CEO compensation, given its central position in the agency framework since the development of agency theory (e.g., Jensen & Meckling, 1976; Jensen & Murphy, 2010; van Essen et al., 2015b).

### **The role of depth and breadth of international diversification**

The second key finding of our MASEM study is that the nature of the causal linkages in the CG-ID relationship depends on the dimension of international diversification. While the international management literature has clearly pointed out that international diversification is a multidimensional construct (e.g., Hitt et al., 2006), extant research says little about whether and how depth and breadth differently affect and/or are differently affected by corporate governance. Our findings improve our understanding of this relevant theoretical aspect. From an agency theory perspective, we predicted that certain corporate governance mechanisms have a stronger positive effect on the breadth of foreign expansion than on the depth. Consistent with our prediction, CEO/chairman

separation and CEO pay positively affect both dimensions of international diversification, but breadth to a larger extent. Furthermore, ownership concentration and institutional ownership negatively influence depth, but positively breadth. The negative effect on the depth of international diversification suggests that shareholders with the ability, incentive, and power to monitor and control managers (e.g., Filatotchev et al., 2007; Shleifer & Vishny, 1997) may limit executives' pursuit of the private benefits associated with an increase in the size of the foreign footprint (e.g., Buckley & Strange, 2011; Morck & Yeung, 1991). Expansion abroad implies larger firm size, which may affect power, reputation, and compensation of executives (e.g., Buckley & Strange, 2011). Also, such a risky strategic move as international diversification may protect managers' job, since it makes harder to assess their contribution to performance and, thus, their managerial skills (e.g., Hermalin, 1993). At the same time, the positive effect of ownership concentration and institutional ownership on the breadth of international diversification suggests that the aforementioned shareholders may seek the benefits, in terms of development and expansion of the resource endowment, associated with greater institutional, competitive, and technological heterogeneity of the 'host-country portfolio' (e.g., Kafouros et al., 2012; Kostova et al., 2008). Our findings regarding the effect of inside ownership (positive effect on depth and negative on breadth) do not support our prediction. However, those findings are consistent with the idea, previously discussed, that the use of equity for compensation results in greater managerial risk aversion. Managers, therefore, may pursue the private benefits associated with depth, while avoiding the risks inherent in breadth. Finally, the fact that board independence has a negative effect on the breadth of international diversification and almost no effect on the

depth seems to point out the intrinsic limitations of this corporate governance mechanism, e.g., the actual independence of outside directors, as well as the hurdles to its proper functioning, including board processes and board culture (e.g., Pye, 2001; Udueni, 1999).

Also from a resource perspective, we predicted that certain corporate governance mechanisms have a stronger positive effect on the breadth of foreign expansion than on the depth. Our findings do not support such prediction. The positive effect of board size on depth and the negative effect on breadth, while counterintuitive from a resource perspective, may be explained from an agency theory perspective. As discussed above, larger boards may exacerbate the agency problem and, consequently, favor the pursuit of the private benefits of depth and the avoidance of the risks of breadth by the top management. As regards CEO tenure, our findings suggest that longer tenures provide access to organizational and managerial resources that are industry- and host country-specific and, thus, more fruitful when expanding the depth rather than the breadth.

The distinction between depth and breadth is relevant also when focusing on the effect of international diversification on corporate governance mechanisms. However, our prediction of a greater positive effect of breadth than of depth receives support only for CEO compensation, ownership concentration, and institutional ownership.

### **The moderating role of the legal shareholder protection and uncertainty avoidance**

The third key finding of our MASEM study is that the CG-ID relationship is moderated by two country-level contingencies: the legal protection of minority shareholders and uncertainty avoidance. Previous research says little about potential factors affecting the CG-ID relationship. Our study, therefore, sheds some preliminary light on this additional

aspect of the complex causal interdependence between corporate governance and international diversification.

Specifically, our findings do not suggest a strong substitution (e.g., Dalton et al., 2003; Shleifer & Vishny, 1997) across levels between hard and soft corporate governance mechanisms. However, the fact that ownership concentration has a non-negligible positive effect on the degree of international diversification when the legal protection of minority shareholders is low, and a non-negligible negative one when the country-level contingency is high, suggests that controlling shareholders may have, within distinct national corporate governance systems, different perceptions of expansion abroad. The legal protection of minority shareholders moderates the relationship between ownership concentration and international diversification also when focusing on the opposite direction of causality. International diversification may naturally lead to more dispersed ownership when the legal protection of minority shareholders is high (e.g., Luo, 2005). However, consistent with an agency theory perspective, ownership concentration is activated as a response to increases in the foreign footprint when the legal shareholder protection is low.

Our findings also show that uncertainty avoidance moderates the effect of corporate governance mechanisms on the degree of international diversification to such an extent that their effect turns negative when uncertainty avoidance is high.

### **Explanatory power of the alternative directions of causality**

The fourth key finding of our MASEM study is that corporate governance explains the variation of international diversification better than international diversification explains the variation of corporate governance. In all comparisons of the fit of CG→ID models

versus that of ID→CG models, the fit of the models linking corporate governance mechanisms to the degree of international diversification is better. This suggests, from both a theory and practice perspective, the primary *ex-ante* (as opposed to *ex-post*) nature of corporate governance mechanisms.

### **MASEM versus traditional meta-analysis**

The fifth key finding of our MASEM study is that the magnitude and sign of the CG-ID relationship in the MASEM results are, in some cases, different from those in the HOMA results. This confirms the importance, when conducting meta-analytic studies, of going beyond traditional techniques, in order to take into account the interdependencies between all the independent variables as well as the effect of control variables (e.g., Bergh et al., 2016). Our study, therefore, is consistent with recent best practices in management research as to how conduct meta-analyses, including the use of partial correlation as effect size, MARA techniques, and MASEM techniques (e.g., Carney et al., 2011; van Essen et al., 2012, 2015a).

Lastly, we point out that, when studying whether and how corporate governance mechanisms affect firms' expansion abroad and vice versa, endogeneity is a relevant issue due to potential reverse causality effects. A limitation of our study, therefore, is that meta-analytic techniques, including MASEM, are not ideal for addressing endogeneity issues. We, therefore, encourage scholars exploring in the future the CG-ID relationship to incorporate in their research design solutions to address this potential methodological issue. Strictly related to this, we believe that our study may be fruitfully complemented by further research using different data and methodologies. For example, research based on secondary data could explore whether and how the ratio of fixed to variable executive

compensation, which is a variable difficult to measure within a meta-analytic research design, affects and/or is affected by firms' degree of international diversification. Similarly, future research based on secondary data could explore the effect of different ownership identities on the extent of foreign expansion. While data on ownership identity may be collected within a meta-analytic research design, measurement error is likely to be higher, especially when considering identity in conjunction with the owned share of the firm equity.

## REFERENCES

- Agrawal, A., & Knoeber, C. 1996. Managerial compensation and threat of takeover. *Journal of Financial Economics*, 47: 219-239.
- Aguilera, R. V., & Cuervo-Cazurra, A. 2009. Codes of good governance. *Corporate Governance: An International Review*, 17(3): 376-387.
- Aguilera, R. V., Desender, K., Bednar, M. K., & Lee, J. H. 2015. Connecting the dots: Bringing external corporate governance into the corporate governance puzzle. *The Academy of Management Annals*, 9(1): 483-573.
- Aguilera, R. V., Desender, K. A., & Kabbach de Castro, L. R. 2012. A bundle perspective to comparative corporate governance. In T. Clarke & D. Branson (eds.), *The SAGE handbook of corporate governance*, 379-405. London: SAGE.
- Aguilera, R. V., Filatotchev, I., Gospel, H., & Jackson, G. 2008. An organizational approach to comparative corporate governance: Costs, contingencies, and complementarities. *Organization Science*, 19(3): 475-492.
- Aguilera, R. V., & Jackson, G. 2010. Comparative and international corporate governance. *The Academy of Management Annals*, 4(1): 485-556.
- Aguinis, H., Pierce, C. A., Bosco, F. A., Dalton, D. R., & Dalton, C. M. 2011. Debunking myths and urban legends about meta-analysis. *Organizational Research Methods*, 14(2): 306-331.
- Alessandri, T. M., & Seth, A. 2014. The effects of managerial ownership on international and business diversification: Balancing incentives and risks. *Strategic Management Journal*, 35(13): 2064-2075.

- Alfaro, L., Chanda, A., Kalemli-Ozcan, S., & Sayek, S. 2006. *How does foreign direct investment promote economic growth? Exploring the effects of financial markets on linkages*. National Bureau of Economic Research.
- Armour, J. 2016. *Volkswagen's emissions scandal: Lessons for corporate governance?* <https://www.law.ox.ac.uk/business-law-blog/blog/2016/05/volkswagen%E2%80%99s-emissions-scandal-lessons-corporate-governance-part-2>. Retrieved on May 31, 2017.
- Arthurs, J. D., Hoskisson, R. E., Busenitz, L. W., & Johnson, R. A. 2008. Managerial agents watching other agents: Multiple agency conflicts regarding underpricing in IPO firms. *Academy of Management Journal*, 51(2): 277-294.
- Ashby, W. R. 1956. *An introduction to cybernetics*. Eastford: Martino Fine Books.
- Bartlett, C. A., & Ghoshal, S. 1989. *Managing across borders: The transnational solution*. Boston: Harvard Business School Press.
- Baum, J. A. C., Li, S. X., Usher, J. M. 2000. Making the next move: How experiential and vicarious learning shape the locations of chains' acquisitions. *Administrative Science Quarterly*, 45(4): 766-801.
- Bergh, D. D., Aguinis, H., Heavey, C., Ketchen, D. J., Boyd, B. K., Su, P., Lau, C. L. L., & Joo, H. 2016. Using meta-analytic structural equation modeling to advance strategic management research: Guidelines and an empirical illustration via the strategic leadership-performance relationship. *Strategic Management Journal*, 37: 477-497.
- Bhagat, S., & Black, B. S. 2002. The non-correlation between board independence and long-term firm performance. *Journal of Corporation Law*, 27: 231-273.
- Bijmolt, T. H., & Pieters, R. G. 2001. Meta-analysis in marketing when studies contain multiple measurements. *Marketing Letters*, 12(2): 157-169.

- Bolton, P., & von Thadden, E. 1998. Blocks, liquidity, and corporate control. *The Journal of Finance*, 53(1): 1-25.
- Boubakri, N., Cosset, J. C., & Guedhami, O. 2005. Postprivatization corporate governance: The role of ownership structure and investor protection. *Journal of Financial Economics*, 76(2): 369-399.
- Boyd, B. K. 1995. CEO duality and firm performance: A contingency model. *Strategic Management Journal*, 16(4): 301-312.
- Brock, D. M., & Yaffe, T. 2008. International diversification and performance: The mediating role of implementation. *International Business Review*, 17(5): 600-615.
- Buckley, P. J., & Strange, R. 2011. The governance of the multinational enterprise: Insights from internalization theory. *Journal of Management Studies*, 48(2): 460-470.
- Capron, L., & Guillén, M. 2009. National corporate governance institutions and post-acquisition target reorganization. *Strategic Management Journal*, 30(8): 803-833.
- Carney, M., Gedajlovic, E. R., Heugens, P. P., van Essen, M., & Van Oosterhout, J. H. 2011. Business group affiliation, performance, context, and strategy: A meta-analysis. *Academy of Management Journal*, 54(3): 437-460.
- Caves R E. 1984. Economic analysis and the quest for competitive advantage. *American Economic Review*, 74 (2): 127-132.
- Chakrabarti, A., Vidal, E., & Mitchell, W. 2011. Business transformation in heterogeneous environments: The impact of market development and firm strength on retrenchment and growth reconfiguration. *Global Strategy Journal*, 1(1-2): 6-26.
- Chandler, A. D. 1962. *Strategy and structure: Chapters in the history of the American industrial enterprise*. Cambridge, MA: MIT Press.

- Cheung, M., & Chan, W. 2005. Meta-analytic structural equation modeling: A two-stage approach. *Psychological Methods*, 10(1): 40-64.
- Child, J. 1972. Organizational structure, environment and performance: The role of strategic choice. *Sociology*, 6(1): 1-22.
- CNBC, 2015. *Volkswagen's 'uniquely awful' governance at fault in emissions scandal*.
- Cuervo-Cazurra, A. 2011. Global strategy and global business environment: The direct and indirect influences of the home country on a firm's global strategy. *Global Strategy Journal*, 1(3-4): 382-386.
- Cuomo, F., Mallin, C., & Zattoni, A. 2015. Corporate governance codes: A review and research agenda. *Corporate Governance: An International Review*, 2016: 24(3): 222-241.
- Daft, R. L., & Lengel, R. H. 1986. Organizational information requirements, media richness and structural design. *Management Science*, 32(5): 554-571.
- Dalton, D. R., Daily, C. M., Certo, S. T., & Roengpitya, R. 2003. Meta-analyses of financial performance and equity: Fusion or confusion? *Academy of Management Journal*, 46: 13-26.
- Dalton, D. R., Daily, C. M., Ellstrand, A. E., Johnson, J. L. 1998. Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal*, 19(3): 269-290.
- Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. 1999. Number of directors and financial performance: A meta-analysis. *Academy of Management Journal*, 42(6): 674-686.

- Dau, L. A. 2013. Learning across geographic space: Pro-market reforms, multinationalization strategy, and profitability. *Journal of International Business Studies*, 44(3): 235-262.
- David, P., Kochhar, R., & Levitas, E. 1998. The effect of institutional investors on the level and mix of CEO compensation. *Academy of Management Journal*, 41(2): 200-208.
- Delios, A., & Beamish, P. 1999. Ownership strategy of Japanese firms: Transactional, institutional and experience influences. *Strategic Management Journal*, 20(10): 711-727.
- Demsetz, H. 1983. The structure of ownership and the theory of the firm. *Journal of Law and Economics*, 26: 375-390.
- Denis, D. J., Denis, D. K., & Yost, K. 2002. Global diversification, industrial diversification, and firm value. *The Journal of Finance*, 57(5): 1951-1979.
- Dess, G. G., & Beard, D. W. 1984. Dimensions of organizational task environments. *Administrative Science Quarterly*, 29(2): 52-73.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. 2008. The law and economics of self-dealing. *Journal of Financial Economics*, 88(3): 430-465.
- Eden, L., & Miller, S. 2001. Opening the black box: Multinationals and the costs of doing business abroad. *Academy of Management Proceedings & Membership Directory*, C1-C6.
- Eisenhardt, K. M. 1989. Agency theory: An assessment and review. *Academy of Management Review*, 14(1): 57-74.

- Ellstrand, A. E., Tihanyi, L., & Johnson, J. L. 2002. Board structure and international political risk. *Academy of Management Journal*, 45(4): 769-777.
- Fama, E. F., & Jensen, M. C. 1983. Separation of ownership and control. *The Journal of Law & Economics*, 26(2): 301-325.
- Filatotchev, I., Dyomina, N., Wright, M., & Buck, T. 2001. Effects of post-privatization governance and strategies on export intensity in the former Soviet Union. *Journal of International Business Studies*, 32(4): 853-871.
- Filatotchev, I., Stephan, J., & Jindra, B. 2008. Ownership structure, strategic controls and export intensity of foreign-invested firms in transition economies. *Journal of International Business Studies*, 39(7): 1133-1148.
- Filatotchev, I., Strange, R., Piesse, J., & Lien, Y. C. 2007. FDI by firms from newly industrialised economies in emerging markets: corporate governance, entry mode and location. *Journal of International Business Studies*, 38(4): 556-572.
- Filatotchev, I., & Wright, M. 2011. Agency perspectives on corporate governance of multinational enterprises. *Journal of Management Studies*, 48(2): 471-486.
- Financial Times, 2015. *Boardroom politics at heart of VW scandal*.
- Financial Times, 2016. *VW management back in scandal spotlight*.
- Finkelstein, S., & Hambrick, D. C. 1990. Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 484-503.
- Galbraith, J. R. 1974. Organization design: An information processing view. *Interfaces*, 4(3): 28-36.

- George, G., Wiklund, J., & Zahra, S. A. 2005. Ownership and the internationalization of small firms. *Journal of Management*, 31(2): 210-233.
- Ghemawat P. 1991. *Commitment: The dynamics of strategy*. New York: Free Press.
- Ghemawat P. 2001. Distance still matters. *Harvard Business Review*, 79(8): 137-145.
- Goerzen, A., & Beamish, P. W. 2003. Geographic scope and multinational enterprise performance. *Strategic Management Journal*, 24(13): 1289-1306.
- Goldfarb, B., & King, A. A. 2016. Scientific apophenia in strategic management research: Significance tests & mistaken inference. *Strategic Management Journal*, 37(1): 167-176.
- Gomes, L., & Ramaswamy, K. 1999. An empirical examination of the form of the relationship between multinationality and performance. *Journal of International Business Studies*, 30(1): 173–188.
- Gomez-Mejia, L. R., & Balkin, D. B. 1992. Determinants of faculty pay: An agency theory perspective. *Academy of Management Journal*, 35(5): 921-955.
- Gomez-Mejia, L. R., Makri, M., & Kintana, M. L. 2010. Diversification decisions in family-controlled firms. *Journal of Management Studies*, 47(2): 223-252.
- Gomez-Mejia, L. R., & Palich, L. E. 1997. Cultural diversity and the performance of multinational firms. *Journal of International Business Studies*, 28(2): 309-335.
- Gomez-Mejia, L., & Wiseman, R. M. 1997. Reframing Executive Compensation: An Assessment and Outlook. *Journal of Management*, 23(3): 291-374.
- Gormley, T. A., & Matsa, D. A. 2016. Playing it safe? Managerial preferences, risk, and agency conflicts. *Journal of Financial Economics*, 122(3): 431-455.

- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. 2011. Institutional complexity and organizational responses. *The Academy of Management Annals*, 5(1): 317-371.
- Guedhami, O., Pittman, J. A., & Saffar, W. 2009. Auditor choice in privatized firms: Empirical evidence on the role of state and foreign owners. *Journal of Accounting and Economics*, 48(2): 151-171.
- Guillén, M. F., & Capron, L. 2016. State capacity, minority shareholder protections, and stock market development. *Administrative Science Quarterly*, forthcoming.
- Hambrick, D. C., & Finkelstein, S. 1987. Managerial discretion: A bridge between polar views of organizational outcomes. In B. M. Staw, & L. Cummings (Eds.), *Research in organizational behavior*, 8: 369-406. Greenwich, CT: JAI Press.
- Hambrick, D. C., & Fukutomi, G. D. 1991. The seasons of a CEO's tenure. *Academy of Management Review*, 16(4): 719-742.
- Hambrick, D. C., Geletkanycz, M. A., & Fredrickson, J. W. 1993. Top executive commitment to the status quo: Some tests of its determinants. *Strategic Management Journal*, 14(6): 401-418.
- Hambrick, D. C., Werder, A. v., & Zajac, E. J. 2008. New directions in corporate governance research. *Organization Science*, 19(3): 381–385.
- Harrison, J. S., Banks, G. C., Pollack, J. M., O'Boyle, E. H., Short, J. 2014. Publication Bias in Strategic Management Research. *Journal of Management*, forthcoming.
- Hautz, J., Mayer, M. C., & Stadler, C. 2013. Ownership identity and concentration: A study of their joint impact on corporate diversification. *British Journal of Management*, 24(1): 102-126.

- Hedges, L.V., & Olkin, I. 1985. *Statistical models for meta-analysis*. New York: Academic Press.
- Henderson, A. D., & Fredrickson, J. W. 1996. Information-processing demands as a determinant of CEO compensation. *Academy of Management Journal*, 39(3): 575-606.
- Hennart, J.-F. 2011. A theoretical assessment of the empirical literature on the impact of multinationality on performance. *Global Strategy Journal*, 1(1-2): 135-151.
- Hermalin, B. E. 1993. Managerial preferences concerning risky projects. *Journal of Law, Economics, & Organization*, 9(1): 127-135.
- Herrmann, P., & Datta, D. K. 2006. CEO experiences: Effects on the choice of FDI entry mode. *Journal of Management Studies*, 43(4): 755-778.
- Hillman, A. J., & Dalziel, T. 2003. Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3): 383-396.
- Hitt, M. A., Hoskisson, R. E., & Kim, H. 1997. International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4): 767-798.
- Hitt, M. A., Tihanyi, L., Miller, T., & Connelly, B. 2006. International diversification: Antecedents, outcomes, and moderators. *Journal of Management*, 32(6): 831-867.
- Hofstede, G. 2001. *Culture's consequences: International differences in work-related values (2<sup>nd</sup> ed.)*. Beverly Hills, CA: SAGE.
- Hopt, K 2011. Comparative corporate governance: The state of the art and international regulation. *American Journal of Comparative Law*, 59(1): 1-73.

- Hoskisson, R. E., Arthurs, J. D., White, R. E., & Wyatt, C. 2013. Multiple agency theory: An emerging perspective of corporate governance. In M. Wright, D. S. Siegel, K. Keasey, & I. Filatotchev (Eds.), *Oxford handbook of corporate governance*, 673-702. Oxford: Oxford University Press.
- Hoskisson, R. E., Hitt, M. A., Johnson, R. A., & Grossman, W. 2002. Conflicting voices: The effects of institutional ownership heterogeneity and internal governance on corporate innovation strategies. *Academy of Management Journal*, 45(4): 697-716.
- Hunter, J. E. & Schmidt, F. L. 2004. *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park, CA: SAGE.
- Hymer S. 1960. *The international operations of national firms: A study of direct foreign investment*. Cambridge, MA: MIT Press.
- Jensen, M. C., & Meckling, W. H. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4): 305-360.
- Jensen, M. C., & Murphy, K. J. 1990. Performance pay and top-management incentives. *Journal of Political Economy*, 98(2): 225-264.
- Jensen, M. C., & Murphy, K. J. 2010. CEO incentives: It's not how much you pay, but how. *Journal of Applied Corporate Finance*, 22(1): 64-76.
- Johnson, R. A., & Greening, D. W. 1999. The effects of corporate governance and institutional ownership types on corporate social performance. *Academy of Management Journal*, 42(5): 564-576.

- Kafouros, M. I., Buckley, P. J., & Clegg, J. 2012. The effects of global knowledge reservoirs on the productivity of multinational enterprises: The role of international depth and breadth. *Research Policy*, 41(5): 848-861.
- Khanna, T., Palepu, K. G., & Sinha, J. 2005. Strategies that fit emerging markets. *Harvard Business Review*, 83(6): 4-19.
- Kim, H., Hoskisson, R. E., & Wan, W. P. 2004. Power dependence, diversification strategy, and performance in keiretsu member firms. *Strategic Management Journal*, 25(7): 613-636.
- Kirca, A. H., Hult, T., Deligonul, S., Perry, M., & Cavusgil, T. 2012. A multilevel examination of the drivers of firm multinationality: A Meta-Analysis. *Journal of Management*, 38(2): 502-530.
- Kirca, A. H., Hult, G. T. M., Roth, K., Cavusgil, S. T., Perry, M. Z., Akdeniz, M. B., Deligonul, S. Z., Mena, J. A., Pollitte, W. A., Hoppner, J. J., Miller J. C., & White, R. C. 2011. Firm-specific assets, multinationality, and financial performance: A meta-analytic review and theoretical integration. *Academy of Management Journal*, 54(1): 47-72.
- Kisamore, J. L., & Brannick, M. T. 2008. An illustration of the consequences of meta-analysis model choice. *Organizational Research Methods*, 11(1): 35-53.
- Kostova, T. 1999. Transnational transfer of strategic organizational practices: A contextual perspective. *Academy of Management Review*, 24(2): 308-324.
- Kostova, T., & Roth, K. 2002. Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects. *Academy of Management Journal*, 45(1): 215-233.

- Kostova, T., & Roth, K. 2003. Social capital in multinational corporations and a micro-macro model of its formation. *Academy of Management Review*, 28(2): 297-317.
- Kostova, T., Roth, K., & Dacin, M. T. 2008. Institutional theory in the study of multinational corporations: A critique and new directions. *Academy of Management Review*, 33(4): 994-1006.
- Kostova, T., & Zaheer, S. 1999. Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1): 64-81.
- Kraatz, M. S., & Block, E. S. 2008. Organizational implications of institutional pluralism. In R. Greenwood, C. Oliver, R. Suddaby, & K. Sahlin-Andersson (Eds.), *The SAGE Handbook of Organizational Institutionalism*: 243-275. London: SAGE.
- Kwok, C. C., & Tadesse, S. 2006. National culture and financial systems. *Journal of International Business Studies*, 37(2): 227-247.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. 1997. Legal determinants of external finance. *Journal of Finance*, 52(3): 1131-1150.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. 1998. Law and finance. *Journal of Political Economy*, 106: 1113-1155.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. 2000. Investor protection and corporate governance. *Journal of Financial Economics*, 58: 3-27.
- Lai, J. H., Chen, L. Y., & Chang, S. C. 2012. The board mechanism and entry mode choice. *Journal of International Management*, 18(4): 379-392.

- Le, H., Brewster, C., Demirbag, M., & Wood, G. 2013. Management compensation systems in MNCs and domestic firms. *Management International Review*, 53(5): 741-762.
- Li, S., & Tallman, S. 2011. MNC strategies, exogenous shocks, and performance outcomes. *Strategic Management Journal*, 32(10): 1119-1127.
- Lien, Y. C., Piesse, J., Strange, R., & Filatotchev, I. 2005. The role of corporate governance in FDI decisions: Evidence from Taiwan. *International Business Review*, 14(6): 739-763.
- Lipsey, M. W., & Wilson, D. B. 2001. *Practical meta-analysis*. Thousand Oaks, CA: SAGE.
- Lu, J. W., & Beamish, P. W. 2001. The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6-7): 565-586.
- Lu, J. W., & Beamish, P. W. 2004. International diversification and firm performance: The S-curve hypothesis. *Academy of Management Journal*, 47(4): 598-609.
- Lu, J., Xu, B., & Liu, X. 2009. The effects of corporate governance and institutional environments on export behaviour in emerging economies. *Management International Review*, 49(4): 455-478.
- Luo, Y. 2005. How does globalization affect corporate governance and accountability? A perspective from MNEs. *Journal of International Management*, 11(1): 19-41.
- Marano, V., & Kostova, T. 2016. Unpacking the institutional complexity in adoption of CSR practices in multinational enterprises. *Journal of Management Studies*, 53(1), 28-5.

- Marano, V., Tashman, P., & Kostova, T. 2016. Escaping the iron cage: Liabilities of origin and CSR reporting of emerging market multinational enterprises. *Journal of International Business Studies*, forthcoming.
- Mezias, J. M. 2002. How to identify liabilities of foreignness and assess their effects on multinational corporations. *Journal of International Management*, 8(3): 265-282.
- Michael, S. C., & Pearce, J. A. 2004. Choosing constraints as a third solution to agency. *Journal of Management Studies*, 41(7): 1171-1197.
- Milgrom, P., & Roberts, J. 1992. *Economics, organization and management*. Upper Saddle River, NJ: Prentice-Hall.
- Misangyi, V. F., & Acharya, A. G. 2014. Substitutes or complements? A configurational examination of corporate governance mechanisms. *Academy of Management Journal*, 57(6): 1681-1705.
- Morck, R., & Yeung, B. 1991. Why investors value multinationality. *Journal of Business*, 64(2): 165-187.
- New York Times, 2015. *Problems at Volkswagen start in the boardroom*.
- O'Sullivan, M. 2003. The political economy of comparative corporate governance. *Review of International Political Economy*, 10: 23-73.
- Oxelheim, L., Gregorič, A., Randøy, T., & Thomsen, S. 2013. On the internationalization of corporate boards: The case of Nordic firms. *Journal of International Business Studies*, 44(3): 173-194.
- Pye, A. 2001. Corporate boards, investors and their relationships: Accounts of accountability and corporate governing in action. *Corporate Governance: An International Review*, 9(3): 186-195.

- Pratt, M. G., & Foreman, P. O. 2000. Classifying managerial responses to multiple organizational identities. *Academy of Management Review*, 25(1): 18-42.
- Rajagopalan, N., & Finkelstein, S. 1992. Effects of strategic orientation and environmental change on senior management reward systems. *Strategic Management Journal*, 13(S1): 127-142.
- Raynard, M. 2014. Deconstructing complexity: Configurations of institutional complexity and structural hybridity. *Working paper*.
- Rechner, P. L., & Dalton, D. R. 1991. CEO duality and organizational performance: A longitudinal analysis. *Strategic Management Journal*, 12(2): 155-160.
- Rediker, K. J., & Seth, A. 1995. Boards of directors and substitution effects of alternative governance mechanisms. *Strategic Management Journal*, 16: 85-100.
- Reeb, D. M., Kwok, C. C., & Baek, H. Y. 1998. Systematic risk of the multinational corporation. *Journal of International Business Studies*, 29(2): 263-279.
- Roth, K., & O'Donnell, S. 1996. Foreign subsidiary compensation strategy: An agency theory perspective. *Academy of Management Journal*, 39(3): 678-703.
- Saka-Helmhout, A., & Geppert, M. 2011. Different forms of agency and institutional influences within multinational enterprises. *Management International Review*, 51(5): 567-92.
- Sanders, W. G., & Carpenter, M. A. 1998. Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. *Academy of Management Journal*, 41(2): 158-178.
- Seo, M. G., & Creed, W. D. 2002. Institutional contradictions, praxis, and institutional change: a dialectical perspective. *Academy of Management Review*, 27(2): 222-47.

- Shleifer, A., & Vishny, R. W. 1986. Large shareholders and corporate control. *Journal of Political Economy*, 94: 461-488.
- Shleifer, A., & Vishny, R. W. 1997. A survey of corporate governance. *The Journal of Finance*, 52(2): 737-783.
- Singh, D. A., & Gaur, A. S. 2013. Governance structure, innovation and internationalization: Evidence from India. *Journal of International Management*, 19(3): 300-309.
- Spencer, J. W. 2008. The impact of multinational enterprise strategy on indigenous enterprises: Horizontal spillovers and crowding out in developing countries. *Academy of Management Review*, 33(2): 341-361.
- Stanley, T. D., & Doucouliagos, H. 2012. *Meta-regression analysis in economics and business*. Oxford, U.K.: Routledge.
- Sullivan, D. 1994. Measuring the degree of internationalization of a firm. *Journal of International Business Studies*, 25(2): 325-342.
- Tallman, S., & Li, J. 1996. Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management Journal*, 39(1): 179-196.
- Teece, D. 1981. Multinational enterprise: Market failure and market power considerations. *Sloan Management Review*, 22: 3-17.
- Teece, D. J. 1985. Multinational enterprise, internal governance, and industrial organization. *The American Economic Review*, 75(2): 233-238.
- Thomas, D. E., & Eden, L. 2004. What is the shape of the multinationality-performance relationship? *Multinational Business Review*, 12(1): 89-110.

- Thompson, J. D. 1967. *Organizations in action: Social science bases of administrative theory*. Livingston, NJ: Transaction Publishers.
- Tihanyi, L., Hoskisson, R. E., Johnson, R. A., & Wan, W. P. 2009. Technological competence and international diversification. *Management International Review*, 49(4): 409-431.
- Tihanyi, L., Johnson, R. A., Hoskisson, R. E., & Hitt, M. A. 2003. Institutional ownership differences and international diversification: The effects of boards of directors and technological opportunity. *Academy of Management Journal*, 46(2): 195-211.
- Tushman, M. L., & Nadler, D. A. 1978. Information processing as an integrating concept in organizational design. *Academy of Management Review*, 3(3): 613-624.
- Udueni, H. 1999. Power dimensions in the board and outside director independence: Evidence from large industrial UK firms. *Corporate Governance: An International Review*, 7(1): 62-72.
- UNCTAD, 2015. *World investment report: Reforming international investment governance*. Geneva: United Nations Publications.
- Useem, M. 1996. *Investor capitalism: How money managers are changing the face of corporate America*. New York: Basic Books.
- van Essen, M., Carney, M., Gedajlovic, E. R., & Heugens, P. P. M. A. R. 2015a. How does family control influence firm strategy and performance? A meta-analysis of US publicly listed firms. *Corporate Governance: An International Review*, 23(1): 3-24.

- van Essen, M., Heugens, P. P., Otten, J., & van Oosterhout, J. H. 2012. An institution-based view of executive compensation: A multilevel meta-analytic test. *Journal of International Business Studies*, 43(4): 396-423.
- van Essen, M., Otten, J., & Carberry, E. J. 2015b. Assessing managerial power theory: A meta-analytic approach to understanding the determinants of CEO compensation. *Journal of Management*, 41(1): 164-202.
- Vermeulen, F., & Barkema, H. 2002. Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal*, 23(7): 637-653.
- Viswesvaran, C., Ones, D. S. 1995. Theory testing: Combining psychometric meta-analysis and structural equations modeling. *Personnel Psychology*, 48(4): 865-885.
- Wall Street Journal. 2016. *Samsung Group firms to vote on making boards more independent.*
- Wan, W. P., Yiu, D. W., Hoskisson, R. E., & Kim, H. 2008. The performance implications of relationship banking during macroeconomic expansion and contraction: a study of Japanese banks' social relationships and overseas expansion. *Journal of International Business Studies*, 39(3): 406-427.
- Wu, N. H., & Tihanyi, L. 2013. Corporate governance, multinational firms and internationalization. In M. Wright, D. S. Siegel, K. Keasey, & I. Filatotchev (Eds.), *Oxford handbook of corporate governance*, 673-702. Oxford: Oxford University Press.
- Yermack, D. 1996. Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2): 185-211.

- Zaheer S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2): 341-363.
- Zahra, S. A. 2003. International expansion of US manufacturing family businesses: The effect of ownership and involvement. *Journal of Business Venturing*, 18(4): 495-512.
- Zahra, S. A., Ireland, R. D., & Hitt, M. A. 2000. International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal*, 43(5): 925-950.

**TABLE 2.1: Meta-Analytic Correlation Matrix**

<b>Variable</b>	1	2	3	4	5	6	7	8
1. Firm size	1.000	194,302	174,268	21,489	8,576	248,556	59,213	39,137
2. Firm age	0.194	1.000	141,042	13,873	5,337	165,614	35,785	21,289
3. Debt-to-equity ratio	0.087	0.016	1.000	10,640	3,966	171,022	33,748	25,398
4. CEO tenure	-0.020	-0.018	-0.069	1.000	8,042	13,079	12,260	7,197
5. CEO pay	0.461	0.228	0.140	-0.062	1.000	4,412	6,310	4,134
6. Ownership concentration	0.027	0.000	0.010	0.108	-0.061	1.000	48,324	33,693
7. Institutional ownership	0.103	0.076	0.046	-0.016	-0.091	-0.051	1.000	10,207
8. Inside ownership	-0.094	-0.066	-0.046	0.253	-0.082	0.009	0.102	1.000
9. CEO/chairman separation	0.036	0.091	-0.025	-0.246	-0.229	0.035	-0.026	-0.123
10. Board independence	0.067	-0.017	0.022	-0.067	0.086	-0.069	0.014	-0.080
11. Board size	0.338	0.129	0.012	-0.113	0.561	-0.010	0.077	-0.171
12. Product diversification	0.189	0.164	0.013	-0.022	0.067	-0.014	0.092	-0.052
13. International diversification	0.171	0.026	-0.024	0.025	0.115	-0.005	0.016	-0.029
14. R&D intensity	0.055	-0.047	-0.109	0.026	0.042	-0.005	-0.006	-0.057
15. Performance	0.057	-0.010	-0.110	0.055	0.147	0.005	0.020	0.018

**TABLE 2.1: Meta-Analytic Correlation Matrix (continued)**

<b>Variable</b>	9	10	11	12	13	14	15
1. Firm size	7,129	55,255	64,440	139,740	381,029	72,106	230,470
2. Firm age	3,518	26,507	25,934	89,957	293,283	31,152	143,108
3. Debt-to-equity ratio	3,225	13,773	25,617	86,363	277,666	40,869	143,463
4. CEO tenure	3,622	4,000	1,165	5,699	23,758	8,647	9,480
5. CEO pay	620	3,048	192	17,131	22,986	928	1,834
6. Ownership concentration	2,869	8,924	33,147	167,320	265,302	73,898	109,019
7. Institutional ownership	3,780	5,894	18,848	4,217	62,143	39,484	65,486
8. Inside ownership	2,615	10,382	2,472	22,610	45,727	8,086	32,577
9. CEO/chairman separation	1.000	2,955	2,410	5,652	9,520	3,227	6,001
10. Board independence	-0.027	1.000	33,186	13,493	84,993	5,490	42,457
11. Board size	0.038	0.049	1.000	2,057	110,382	17,327	23,591
12. Product diversification	-0.035	0.067	0.215	1.000	170,451	30,426	100,205
13. International diversification	0.026	0.012	0.079	0.084	1.000	88,137	248,494
14. R&D intensity	0.036	0.028	0.011	0.012	0.165	1.000	64104
15. Performance	0.051	0.020	0.086	0.001	0.037	-0.009	1.000

Cells below the diagonal contain mean correlations. Cells above the diagonal contain the total number of observations (N)

**TABLE 2.2: MASEM Results for CG→ID**

	<b>Model 1</b>
	International diversification
Firm size	0.12 (0.015) (8.36)
Firm age	-0.022 (0.014) (-1.60)
Debt-to-equity ratio	-0.025 (0.013) (-1.91)
Product diversification	0.063 (0.013) (4.67)
R&D intensity	0.15 (0.013) (11.27)
Performance	0.014 (0.013) (1.05)
CEO tenure	0.040 (0.014) (2.80)
CEO pay	0.078 (0.020) (3.97)
Ownership concentration	-0.0077 (0.013) (-0.59)
Institutional ownership	0.012 (0.014) (0.89)
Inside ownership	-0.012 (0.014) (-0.84)
CEO/chairman separation	0.046 (0.015) (3.12)

**TABLE 2.2: MASEM Results for CG→ID (continued)**

---

Board independence	-0.0083 (0.013) (-0.63)
Board size	-0.020 (0.017) (-1.19)
<hr/>	
Harmonic mean N (firm-years)	5560
Chi-square (df)	784.03 (15)
RMSEA	0.096
GFI	0.98
CFI	0.91
NFI	0.90
RMR	0.039

---

RMSEA = root mean square error of approximation; GFI = goodness-of-fit index; CFI = comparative fit index; NFI = normed fit index; RMR = root mean square residual

Standard errors and *t* values in parentheses

**TABLE 2.3: MASEM Results for ID→CG**

	<b>Model 2</b>			
	CEO tenure	CEO pay	Ownership concentration	Institutional ownership
Firm size	-0.017 (0.014) (-1.27)	0.410 (0.012) (35.42)	0.032 (0.014) (2.35)	0.077 (0.013) (5.69)
Firm age	-0.010 (0.013) (-0.75)	0.160 (0.011) (13.48)	-0.003 (0.013) (-0.24)	0.049 (0.013) (3.71)
Debt-to-equity ratio	-0.059 (0.013) (-4.44)	0.120 (0.011) (10.62)	0.007 (0.013) (0.54)	0.039 (0.013) (2.97)
Product diversification	-0.019 (0.013) (-1.39)	-0.041 (0.012) (-3.60)	-0.019 (0.013) (-1.41)	0.069 (0.013) (5.21)
R&D intensity	0.017 (0.014) (1.24)	0.036 (0.012) (3.07)	-0.005 (0.014) (-0.33)	-0.004 (0.013) (-0.27)
Performance	0.049 (0.013) (3.64)	0.140 (0.011) (11.96)	0.004 (0.013) (0.32)	0.020 (0.013) (1.54)
International diversification	0.024 (0.014) (1.73)	0.036 (0.012) (3.03)	-0.008 (0.014) (-0.58)	-0.003 (0.013) (-0.25)

**TABLE 2.3: MASEM Results for ID→CG (continued)**

	<b>Model 2</b>			
	Inside ownership	CEO/chairman separation	Board independence	Board size
Firm size	-0.072 (0.013) (-5.36)	0.022 (0.013) (1.61)	0.059 (0.014) (4.39)	0.300 (0.013) (23.54)
Firm age	-0.049 (0.013) (-3.69)	0.098 (0.013) (7.38)	-0.037 (0.013) (-2.80)	0.047 (0.012) (3.80)
Debt-to-equity ratio	-0.043 (0.013) (-3.25)	-0.018 (0.013) (-1.36)	0.021 (0.013) (1.60)	-0.010 (0.012) (-0.76)
Product diversification	-0.029 (0.013) (-2.15)	-0.057 (0.013) (-4.26)	0.062 (0.013) (4.63)	0.150 (0.012) (12.11)
R&D intensity	-0.059 (0.013) (-4.36)	0.036 (0.013) (2.66)	0.026 (0.014) (1.91)	-0.007 (0.013) (-0.59)
Performance	0.017 (0.013) (1.24)	0.049 (0.013) (3.65)	0.019 (0.013) (1.42)	0.068 (0.012) (5.47)
International diversification	-0.005 (0.013) (-0.36)	0.016 (0.014) (1.19)	-0.007 (0.014) (-0.50)	0.013 (0.013) (1.02)

**TABLE 2.3: MASEM Results for ID→CG (continued)**

Harmonic mean N (firm-years)	5560
Chi-square (df)	4222.66 (43)
RMSEA	0.132
GFI	0.91
CFI	0.39
NFI	0.39
RMR	0.076

RMSEA = root mean square error of approximation; GFI = goodness-of-fit index; CFI = comparative fit index; NFI = normed fit index; RMR = root mean square residual

Standard errors and *t* values in parentheses

**TABLE 2.4: MASEM Results for CG→ID – Depth vs Breadth of International Diversification**

	<b>Model 3</b>	
	Depth of international diversification	Breadth of international diversification
CEO tenure	0.042 (0.014) (3.03)	0.034 (0.013) (2.59)
CEO pay	0.045 (0.019) (2.34)	0.32 (0.018) (17.35)
Ownership concentration	-0.019 (0.013) (-1.44)	0.028 (0.012) (2.28)
Institutional ownership	-0.0033 (0.013) (-0.24)	0.09 (0.013) (7.08)
Inside ownership	0.0036 (0.014) (0.27)	-0.066 (0.013) (-5.20)
CEO/chairman separation	0.040 (0.015) (2.74)	0.094 (0.014) (6.89)
Board independence	0.0043 (0.013) (0.33)	-0.085 (0.012) (-6.96)
Board size	0.017 (0.017) (1.01)	-0.22 (0.016) (-14.29)
Harmonic mean N (firm-years)	5859	
Chi-square (df)	1140.66 (16)	
RMSEA	0.110	
GFI	0.98	
CFI	0.89	
NFI	0.89	
RMR	0.042	

RMSEA = root mean square error of approximation; GFI = goodness-of-fit index; CFI = comparative fit index; NFI = normed fit index; RMR = root mean square residual

Results for the control variables are not reported (available upon request)

Standard errors and *t* values in parentheses

**TABLE 2.5: MASEM Results for ID→CG – Depth vs Breadth of International Diversification**

	<b>Model 4</b>							
	CEO tenure	CEO pay	Ownership concentration	Institutional ownership	Inside ownership	CEO/chairman separation	Board independence	Board size
Depth of international diversification	0.027 (0.014) (1.94)	0.0068 (0.012) (0.58)	-0.022 (0.014) (-1.61)	-0.016 (0.014) (-1.21)	0.013 (0.014) (0.96)	0.017 (0.014) (1.25)	0.023 (0.014) (1.72)	0.047 (0.013) (3.71)
Breadth of international diversification	0.0035 (0.014) (0.25)	0.11 (0.012) (8.98)	0.022 (0.014) (1.56)	0.028 (0.014) (1.99)	-0.036 (0.014) (-2.60)	-0.00056 (0.014) (-0.04)	-0.085 (0.014) (-6.05)	-0.077 (0.013) (-5.91)
Harmonic mean N (firm-years)	5859							
Chi-square (df)	4566.22 (43)							
RMSEA	0.134							
GFI	0.91							
CFI	0.45							
NFI	0.45							
RMR	0.072							

165

RMSEA = root mean square error of approximation; GFI = goodness-of-fit index; CFI = comparative fit index; NFI = normed fit index; RMR = root mean square residual

Results for the control variables are not reported (available upon request)

Standard errors and *t* values in parentheses

**TABLE 2.6: MASEM Results for CG→ID – High vs Low  
Legal Shareholder Protection**

	<b>Model 5</b>	<b>Model 6</b>
	<i>High</i>	<i>Low</i>
	<i>legal shareholder protection</i>	<i>legal shareholder protection</i>
	International diversification	International diversification
Ownership concentration	-0.033 (0.006) (-5.46)	0.034 (0.0089) (3.78)
Institutional ownership	0.00093 (0.0061) (0.15)	0.0055 (0.0089) (0.62)
Inside ownership	-0.011 (0.006) (-1.75)	-0.0055 (0.0091) (-0.60)
Harmonic mean N (firm-years)	27562	12546
Chi-square (df)	749.09 (3)	219.58 (3)
RMSEA	0.095	0.076
GFI	0.99	1.00
CFI	0.83	0.93
NFI	0.83	0.93
RMR	0.026	0.022

RMSEA = root mean square error of approximation; GFI = goodness-of-fit index; CFI = comparative fit index; NFI = normed fit index; RMR = root mean square residual

Results for the control variables are not reported (available upon request)

Standard errors and *t* values in parentheses

**TABLE 2.7: MASEM Results for ID→CG – High vs Low Legal Shareholder Protection**

*(a) High legal shareholder protection*

	<b>Model 7</b>		
	Ownership concentration	Institutional ownership	Inside ownership
International diversification	-0.033 (0.0061) (-5.41)	-0.00016 (0.0060) (-0.027)	-0.0096 (0.0061) (-1.59)
Harmonic mean N (firm-years)	27562		
Chi-square (df)	1208.23 (6)		
RMSEA	0.085		
GFI	0.99		
CFI	0.73		
NFI	0.73		
RMR	0.033		

*(b) Low legal shareholder protection*

	<b>Model 8</b>		
	Ownership concentration	Institutional ownership	Inside ownership
International diversification	0.034 (0.0091) (3.67)	0.001 (0.0091) (0.11)	-0.00078 (0.0088) (-0.089)
Harmonic mean N (firm-years)	12546		
Chi-square (df)	819.54 (6)		
RMSEA	0.104		
GFI	0.98		
CFI	0.75		
NFI	0.75		
RMR	0.041		

RMSEA = root mean square error of approximation; GFI = goodness-of-fit index; CFI = comparative fit index; NFI = normed fit index; RMR = root mean square residual

Results for the control variables are not reported (available upon request)

Standard errors and *t* values in parentheses

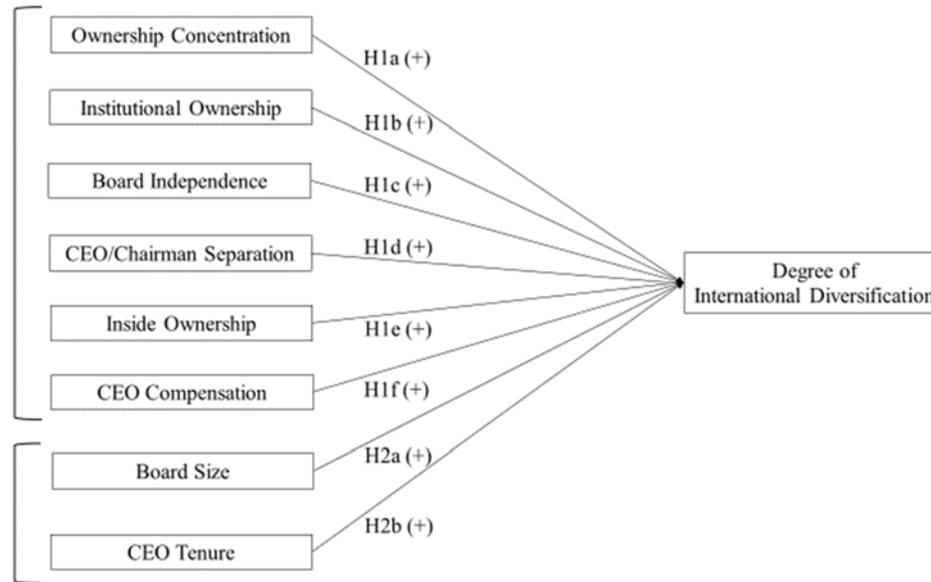
**TABLE 2.8: MASEM Results for CG→ID – High vs Low  
Uncertainty Avoidance**

	<b>Model 9</b>	<b>Model 10</b>
	<i>High</i>	<i>Low</i>
	<i>uncertainty avoidance</i>	<i>uncertainty avoidance</i>
	International diversification	International diversification
Ownership concentration	-0.010 0.014 -0.69	0.028 0.0047 5.93
Institutional ownership	-0.13 0.015 -8.84	0.046 0.0047 9.64
Inside ownership	-0.047 0.015 -3.20	0.010 0.0047 2.18
Harmonic mean N (firm-years)	4787	44340
Chi-square (df)	282.27 (3)	755.15 (3)
RMSEA	0.139	0.075
GFI	0.99	1.00
CFI	0.81	0.90
NFI	0.81	0.90
RMR	0.040	0.021

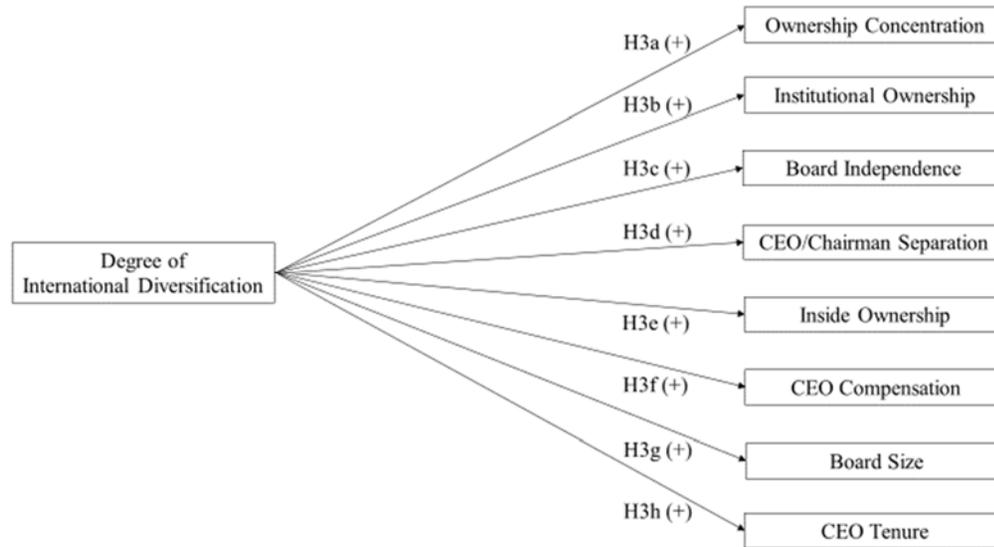
RMSEA = root mean square error of approximation; GFI = goodness-of-fit index; CFI = comparative fit index; NFI = normed fit index; RMR = root mean square residual

Results for the control variables are not reported (available upon request)

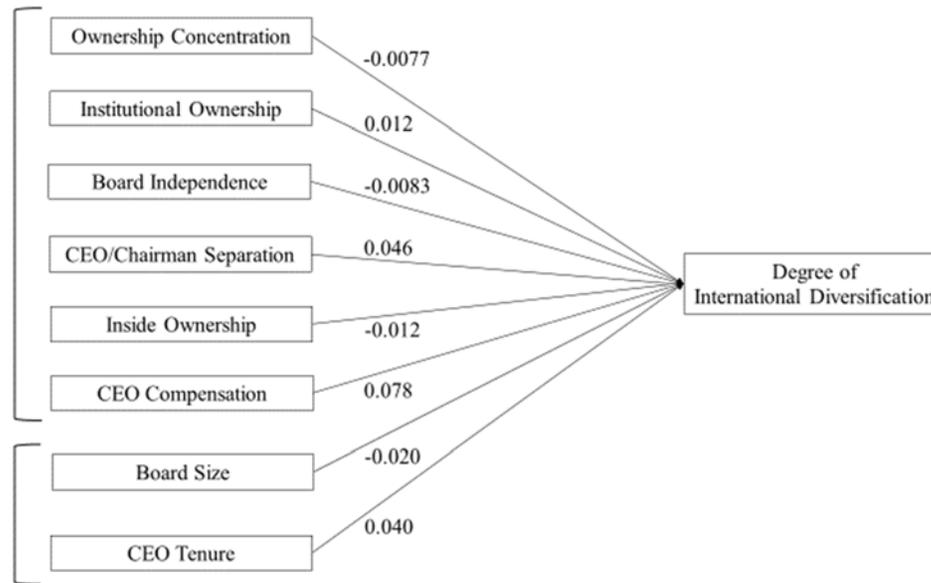
Standard errors and *t* values in parentheses



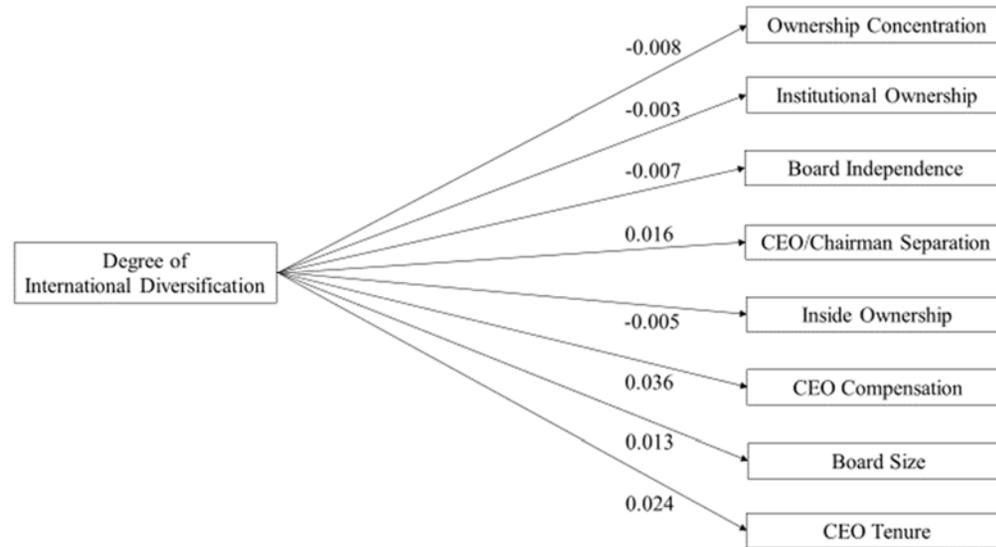
**FIGURE 2.1: Model Linking Corporate Governance to the Degree of International Diversification**



**FIGURE 2.2: Model Linking the Degree of International Diversification to Corporate Governance**



**FIGURE 2.3: Effects of Corporate Governance on the Degree of International Diversification**



**FIGURE 2.4: Effects of the Degree of International Diversification on Corporate Governance**

## CONCLUSION

The dissertation extended extant literature on determinants and consequences of international diversification. In Essay I, we focused on the relationship between international diversification and firm performance. Our meta-analysis (the largest on this topic to date) shows that international diversification has an overall positive, but small, effect on firm performance, albeit with substantial variation in the effect size distribution depending on firms' countries of origin. Firms in some countries experience significant negative performance effects from their internationalization efforts (e.g., in Mexico), while in others internationalization generates significant positive effects, which range from very small (e.g., in South Korea) to sizable (e.g., in Greece), or no effects (e.g., in the Netherlands and Spain). Further, we find that specific home-country institutions have different effects on the ID-P relationship. In particular, our results show that home-country quality of business regulations, political risk, generalized trust, long-term orientation and uncertainty avoidance are all moderators of the ID-P relationship.

This research makes three main contributions to the global strategy literature. First, we show that, in the aggregate, the positive linear association between internationalization and performance is modest, and should be considered only as a “stylized fact”. We also show that this relationship is contingent on home country institutional conditions, which can significantly affect the magnitude and sign of this relationship. Taken together, these results indicate that studies of the ID-P relationship should account for country-of-origin effect; if not, they are likely to be underspecified

both theoretically and empirically. Relatedly, our findings show the relevance of the institution-based view of strategy for studying the ID-P relationship. In particular, they suggest that home country institutions influence firms' transaction costs and their managers' cognitive processes, which, in turn, affect their ability to acquire and deploy strategic resources, and, ultimately, their potential to succeed in markets at home and abroad. To date, research has largely overlooked the importance of the institution-based view for contextualizing the ID-P relationship. Second, we show that multiple formal and informal institutions across many countries, over a long period of time, affect firms' ability to benefit from internationalization, contributing to research on institutional complexity. In doing so, our study provides a richer assessment of how firms' institutional embeddedness in their home country affects their effectiveness in international markets. Our third contribution is methodological and pertains to our meta-analytical tests' use of both Pearson product-moment correlation and partial correlation as effect sizes, which represents a significant improvement from existing meta-analyses that only used Pearson product-moment correlations. Incorporating partial correlations allows us to generate conclusive findings on several important matters that could not be properly addressed by previous meta-analyses, including the sign and shape of the I-P relationship.

In Essay II, we focused on the relationship between corporate governance and international diversification. Our MASEM study contributes to the global strategy and corporate governance literatures through five key findings. The first key finding of our MASEM study is that, as the agency theory, resource, and information-processing perspectives suggest, bidirectional causal linkages exist between corporate governance and international diversification. This important finding constructively addresses the

potential scientific apophenia (i.e., the tendency to find evidence of order where none exists) in the CG-ID research area. It also shows the multifaceted interdependence between corporate governance and international diversification. Furthermore, it provides additional evidence in support of the complementarity and substitutability between corporate governance mechanisms at the firm level. The second key finding of our MASEM study is that the nature of the causal linkages in the CG-ID relationship depends on the dimension of international diversification. While the international management literature has clearly pointed out that international diversification is a multidimensional construct, extant research says little about whether and how depth and breadth differently affect and/or are differently affected by corporate governance. Our findings improve our understanding of this relevant theoretical aspect by showing that the positive effect of and on the breadth of international diversification tends to be greater. The third key finding of our MASEM study is that the CG-ID relationship is moderated by institutional and cultural conditions in the home country and, in particular, by the legal protection of minority shareholders and the national uncertainty avoidance. Previous research says little about potential factors affecting the CG-ID relationship. Our study, therefore, sheds some preliminary light on this additional aspect of the complex causal interdependence between corporate governance and international diversification. The fourth key finding of our MASEM study is that corporate governance explains the variation of international diversification better than international diversification explains the variation of corporate governance. The fifth key finding of our MASEM study is that the magnitude and sign of the CG-ID relationship in the MASEM results are, in some cases, different from those in the HOMA results. This confirms the importance, when conducting meta-analytic

studies, of going beyond traditional techniques, in order to take into account the interdependencies between all the independent variables as well as the effect of control variables.

Although consisting of two meta-analyses, one of the main objectives of the present dissertation was to push forward the extant literature in three main ways: first, by explaining the mechanisms connecting the main constructs in our theoretical models; second, by assessing the role of the different dimensions of international diversification; third, by exploring the role of context (and, thus, advancing a theory *in* context) in the ID-P and CG-ID relationships. Indeed, meta-analysis has recently emerged in the management field not only as a data synthesis technique, but also as a methodological tool for theory advancement. Still, we believe that the dissertation essays could be expanded with further research using different data and methodologies. For example, our meta-analysis on the ID-P relationship could be complemented by case studies and other types of qualitative research investigating less explored factors at different levels of analysis that may shape firms' ability to benefit from their internationalization efforts, including the role of managerial cognition and various process outcomes associated with internationalization. Our meta-analysis on the CG-ID relationship could be complemented, for example, by research that assesses, by using secondary data, the bidirectional causal effects between the two constructs while accounting for potential endogeneity in the relationship.

From a more general perspective, this dissertation could be expanded by further research exploring the connections between international diversification and formal and informal institutions (and, thus, advancing a theory *of* context). A key finding of this

dissertation is that the home-country institutional context moderates the relationships between international diversification and its determinants and consequences. However, the formal and informal institutions of the home as well as the host country may play not just a moderating role in the causal chain. Indeed, the various institutional contexts confronting firms doing business internationally may directly influence and/or be influenced by firms' decision to expand and invest abroad.

Finally, we believe that this dissertation provides at least two valuable insights to the practice of international business. First, in current global business landscapes characterized by ongoing debates on corporate governance practices, we show the importance of executives' risk preferences and corporate governance mechanisms in foreign expansion decisions. Second, we point out the role that home-country institutional contexts play in determining, on the one hand, the performance implications of international diversification and, on the other hand, the impact of firms' corporate governance frameworks on their expansion abroad.