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Institutions as Drivers of Firms’ Strategic Decisions and Performance

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INSTITUTIONS AS DRIVERS OF FIRMS’ STRATEGIC DECISIONS AND PERFORMANCE

By

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A dissertation submitted to the

Faculty of the Graduate School of the

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The dissertation entitled:

Institutions as Drivers of Firms’ Strategic Decisions and Performance
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has been approved for the Department of Management and Entrepreneurship

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_________________________________

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Date: _______________

The final copy of this dissertation has been examined by the signatory, and I find both that content and form meet acceptable presentation standards of scholarly work in the above mentioned discipline
ABSTRACT

Bustamante Viveros, Carla V. (Ph.D. in Management & Entrepreneurship)
Institutions as Drivers of Firms’ Strategic Decisions and Performance
Thesis directed by Professor Sharon F. Matusik

Institutions are an important driver for economic growth and development. Institutions are different in emerging and developing economies. Differences in incentives trigger differences in behavior, shaping firms’ decisions and performance in particular, and economies’ faith at large. Specifically, I aim to advance the understanding on how institutions, and the lack of them: a) shape entrepreneurial ventures’ growth decisions, b) shape entrepreneurial ventures’ performance, and c) shape the advancement in the literature on institutional voids.

Following a three-paper format, the first two papers are empirical and explore how country level institutions and firm level capabilities shape technology startups’ decisions (outsourcing vs. hiring) and outcomes (survival) during and after participation of the world’s largest international accelerator program, Startup Chile. Paper 3, instead, is a theory paper that summarizes and advances the literature around institutional voids, a concept that has gained much popularity across the business field, but has grown fragmented. In the next lines I present the abstract for each of these papers.
Paper 1: Transaction, Firm and Institutional Effects on Strategic Choices: Accelerated Startups’ Outsourcing Decisions

This study examines how firm level contracting capabilities and institutional distance shape entrepreneurial firm’s governance decisions related to growth (insourcing vs. outsourcing). By integrating Transaction Costs, Resource Based View and Institutional theories I illuminate the relevance of contracting capabilities and institutional distance in shaping buy vs. make decisions. Combining three different datasets I create a panel that includes 469 domestic and foreign startups participating of an international acceleration program. I find that institutional distance and contracting capabilities encourage startups’ outsourcing. As a growth strategy, outsourcing allows startups to mitigate transaction and bureaucratic costs. Interestingly, compared to domestic firms, foreign firms facing greater institutional distance rely on outsourcing strategies only to a certain extent; once they have outsourced a handful of times hiring seems a suitable option for foreign firms. My findings suggest that beyond considerations at the transaction level of analysis, firm and country level characteristics are relevant predictors of governance decisions, and that capabilities and institutions deserve additional consideration in the study of firm’s strategic choices related to growth.

Paper 2: Location considerations for international ventures’ performance: institutions and capabilities as drivers for accelerated startups’ failure

Location considerations play a key role in shaping international ventures’ performance. Advancing research concerned with location-firm interactions, my study examines the effects of
institutional distance and location capabilities on international startups’ failure rates. Using a unique dataset obtained from Startup Chile, I rely on survival models to analyze 306 international startups. My results show that after graduating from an acceleration program, international venture’s ability to survive is influenced by relative institutional distance between the venture’s host and home countries. That is, whether it internationalizes to a country with stronger or weaker institutions than those in its home country. In addition, larger location capabilities (defined as the actions to engage with local resources in the host country) reduce international venture failure rate. However, I challenge the generic assumption that greater capabilities dully translate in decreasing failure rates. Instead, I suggest that the value of developing these capabilities is contingent to relative institutional distance between venture’s host and home countries.

**Paper 3: Institutional voids: A Critical Review and Research Agenda.**

This article critically reviews and analyzes the rapidly growing literature around institutional voids, specifically as it is used in the context of transition and emerging economies. I articulate its importance and timeliness considering the growing influence of these economies in today’s global economy. A systematic review of 82 publications published during the last fifteen years reveals that the concept has been quickly adopted across different disciplines within the field of business, that it is a reflection of a mind shift related to acknowledging the importance of contextual factors for processes and outcomes, and that the theoretical advancements around it are sometimes fragmented. Aiming to increase the quality, coherence and impact of the publications using this concept I therefore inventory and organize these
advancements, and develop an ambitious research agenda that addresses unexplored issues and raises interesting questions around institutional voids.
DEDICATION

To Juan José, my son. Thank you for joining me in this, probably the wildest adventure of our lives. While the Ph.D. was supposed to be an end in itself, it also became a means for us – a small family – to start a transformative journey. Without hesitation you followed mom to the other side of the planet. With happiness you joined a school without speaking a word of English, with a smile you told me everything was going to be OK when you saw my confused eyes, when I felt this Ph.D. was too much of a challenge. Thank you for being my number one fun, and for making me a more complete person. I love you.

To Christer, my dear husband. You came into my life exactly when it was destined to happen. Thanks for sitting with me next to the Boulder Creek when I needed to think, and for running with me when I needed to release some tension. Thanks for helping me build the large family I always dreamed of. Thanks for the three wonderful children – Vincent, Sebastian and Elliot –, who became my beloved stepsons, and JJ’s dreamed siblings. I have no idea how I could have done this without your constant help and support, my dearest Swede.

To my parents, Viviana and Mario, and my grandparents and other family members. Thanks for supporting me even when you did not understand what I was up to, for teaching me to give the best of myself and “always finish what I start”, for trusting my gut feelings, and for teaching me the importance of maintaining balance between work and family.

To my siblings – Consuelo, Camila, Mario and Eduardo –, for trusting me and feeling proud of your big sister. I am especially grateful that this adventure also became an excuse for each of you to visit and experience the USA. Every single visit became a golden opportunity for us to bond as a family, and to remember that distance does not change how much we love each other.
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I could not have accomplished what I did without the support of the mentors, professors and peers I relied on during my Ph.D. student years. I still remember how clueless I was during the first three months of the program, wondering how did I get in, and what type of technical mistake allowed me to get the accidental privilege of joining such an intellectually demanding program. It was life changing to learn that the skills that helped me earn a Fulbright scholarship were not easily convertible into predictors of success in a different country. Pride quickly turned into frustration, and lately these feelings turned into hunger and motivation to master a unique opportunity for growth. I have no words to thank those who inspired me to engage in this transformative process.

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I also want to express my sincere gratitude to the other four mentors who were in my dissertation committee. To David Balkin, who accepted this challenge with passion. Thank you David for the dedication you put on each of your thoughtful comments, and special thanks for introducing me to the world of institutions, a topic that got me inspired up to today. To Jeff York, for making room to help. In addition to inspiring me to care about social causes, you also taught me that institutions are important not only for efficiency reasons. Thanks to Ramiro Montealegre, my fellow Spanish-speaking idol. Thanks for joining the crew, even when the ship had already left the port. Thanks for your thoughtful academic advice, and special thanks for caring so much. And last but not least, thanks to Brad Bernthal, who accepted the challenge of reading heavy business jargon. Your mindset and personal experience brought a fresh and relevant look to my work.

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INTRODUCTION

Institutions are the rules of the game that structure social interactions by constraining and enabling actors’ behaviors (Helmke & Levitsky, 2004). They can be either formal or informal (North, 1990). Formal institutions are the rules and procedures created, communicated and enforced through official channels, and informal institutions are socially shared rules, usually unwritten, created and communicated outside official channels. Institutions determine expected payoffs of specific actions (Williamson, 1991) and, as such, are considered the bedrock where the economy rests (Ingram & Silverman, 2002).

The strategic relevance of institutions has garnered attention among academic audiences. Reflecting the growing importance that institutions bring to economic life, a number of Nobel Prize Winners and other respected authors have devoted their time to advance economic theories (e.g. new institutional economics) that consider institutions as key determinants for economic growth and development. Douglas North (1990), for example, explains that economic development is tied to institutional change. Formal and informal constraints contribute to perpetuate the order within a market; when these institutions are poor they do not allocate entrepreneurial resources towards activities that foster prosperity and growth (Baumol, 1990). Williamson (2000) advances our understanding of institutions by classifying them based on the level of social analysis where they apply, suggesting that these are incentives that give rise to alternative modes of organization. These modes, in turn, determine the way in which markets and societies are structured, ultimately shaping their fate. De Soto (2000) provides a specific example on how institutions matter; the premise of his argument is that property rights are key for poverty alleviation. Poor inhabitants from the non-Western world fail to benefit from
capitalism because even when they own a vast amount of assets, they have no formal property rights that allow them to use these assets as collaterals for loans or other sources of capital. Incomplete institutional environments, he concludes, harm economic development. Overall, the contribution of these authors resides in that they bring to life the new institutional economics theory. Departing from neoclassical economics where buyers and sellers were assumed to have perfect information and frictionless transactions in a perfect market (Dhanaraj & Khanna, 2011), this theory embraces more realistic assumptions where socially constructed practices and systems evolve and assist the creation of efficient markets. The point made is that institutions matter, and building efficient institutions is key for economic development.

The above-mentioned theoretical advancements on institutions, as well as the practical implications of this new perspective, have prompted business scholars to develop an increasing interest in institutions. Multiple disciplines within the business field have explored how institutions shape behaviors and performance of individuals and firms. Scholars in strategy have shown particular interest in the institutional perspective (Peng, Li Sun, Pinkham, & Chen, 2009). In strategic analysis, the recognition of a changing institutional environment facilitates the understanding of some firm level processes—such as strategy implementation (Santangelo & Meyer, 2011) and market entry (Meyer, Estrin, Bhaumik, & Peng, 2009). Institutions also help make sense of firm level outcomes, such as firm performance (Banalieva, Eddleston, & Zellweger, 2015). As stated by Ingram and Silverman “institutions directly determine what arrows a firm has in its quiver as it struggles to formulate and implement strategy” (Ingram & Silverman, 2002: 18). Within strategy, scholars pursuing research in emerging economies have perhaps benefited the most by the incorporation of institutions to strategic analysis. Recognizing the relevance of institutions, we might consider if “theories and methodologies used to study
strategy in mature, developed economies are suited to the unique social, political, and economic contexts as well as firm characteristics of emerging economies...” (Wright, Filatotchev, Hoskisson, & Peng, 2005: 2). Compared to developed economies, emerging countries are characterized by limited access to resources, higher reliance on trusted networks, absent or weakly enforced formal institutions, and abundant institutional voids (Khanna & Palepu, 2000). Due to the increasing importance of emerging economies in global strategy, the study of emerging markets requires a fundamental reevaluation of the theories we use (Doh, 2011).

From an empirical perspective, institutions have become an important benchmark to signal where a country is positioned in the global economy. Given this importance, numerous organizations such as the World Economic Forum, the World Bank, and Transparency International have created country level indicators to measure the institutional infrastructure a country has to offer. These indexes are closely followed by international investors, multinational corporations, and a number of organizations choosing where to perform their next move. Similarly, there are a number of indexes tracking the evolution of informal institutions, such as The World Value Survey, and the Hofstede Cultural Dimensions Index. These indicators explore peoples’ changes in values and beliefs, which have enormous implications for social, political and economic life. Empirically, understanding how institutions -and the lack of them- drive firms’ strategic decisions becomes, then, especially important when firms internationalize. While most of the business literature has studied multinational enterprises (MNEs), globalization has opened a window of opportunity for technology startups searching for funds, networks, and expertise abroad. The emergence of international accelerators as an early stage investment vehicle has triggered unexplored internationalization patterns that imply a need for developing an understanding of how these ventures make strategic decisions. While accelerators in advanced
economies have naturally garnered the attention of startups from emerging economies, accelerators in emerging economies have also triggered the flow of startups in the opposite direction (i.e. from advanced economies towards emerging economies). These mobility patterns bring up a number of unexplored issues related to how exposure to a different set of incentives (i.e. institutions) shape startups strategic decision making.

In this dissertation I attempt to address some of these important empirical issues, and at the same time contribute to the literature on institutions in the context of entrepreneurial startups in emerging economies. Following a three-paper format, the first two papers are empirical and explore how country level institutions and firm level capabilities shape startups’ decisions (outsourcing vs. hiring) during, and outcomes (survival) after participation in an international accelerator program. The third paper is a theory paper that summarizes the literature on institutional voids, a concept that has illustrates the institutional gaps that are so abundant in emerging economies. While this concept has gained popularity across the business field, the different legacies that have contributed to its advancement have moved it forward without much coherence, translated in that the field has become fragmented. Aiming to harmonize these findings, I review the existing literature on institutional voids and suggest a research agenda to increase its impact, and quality. In what follows I briefly introduce each of these articles.

In paper 1, I examine how 469 domestic and foreign startups participating in an international acceleration program in Chile make strategic choices related to growth (hire vs. outsourcing). Observations at the meeting level (705 meetings and 2,118 governance decisions) contribute to building a panel documenting startups’ growth decisions during the six months that the program lasts. The main purpose of this empirical study is to expand the theoretical boundaries by which governance decisions are traditionally assessed, and to contribute to the
understanding of how institutions shape startups’ growth in an international accelerator setup. Moving beyond a transaction costs approach (Coase, 1937; Williamson, 1975), this unique setting allows to combine resource based view and institutional theories to examine how variables at the firm (i.e. contracting capabilities) and country (i.e. institutional distance) levels shape startups’ growth decisions. In this paper I propose that outsourcing decisions are determined by institutional distance –defined by Kostova & Zaheer (1999) as the distance between home and host country environment-, and firm contracting capabilities –understood as capabilities and experience in designing contracts that rule inter-organizational relationships (Argyres & Mayer, 2007)-. Specifically, I posit that transaction costs a) increase as institutional distance increases, and b) decrease as firms develop contracting capabilities.

The results of the study have important implications for strategic theory. For instance, a pure transaction cost approach predicts that institutional distance will raise transaction costs, reducing the amount of outsourcing, while contracting capabilities will reduce transaction costs and increase outsourcing. Interestingly, I find that both, institutional distance and contracting capabilities, encourage startups’ outsourcing. Why is that? I propose that firms not only consider transaction costs, but also bureaucratic costs when deciding on growth strategies. While outsourcing implies higher transaction costs (e.g. search, evaluation, monitoring and enforcing contracts), it allows startups to economize in relevant and overlooked bureaucratic costs, such as the costs of resource commitment (Folta, 1998) in an uncertain environment. A growth strategy that requires lower levels of resource commitment (i.e. outsourcing) provides young firms with flexibility to scale faster or reduce personnel more quickly. These costs can be so important for startups that they may prefer to incur in higher transaction costs in order to reduce bureaucratic costs.
These findings have important theoretical implications. I propose that institutional distance shapes the assessment of transaction and bureaucratic costs, and influences startups’ growth decisions by changing the relative costs of different governance modes (hiring vs. outsourcing). In contributing to strategy in emerging economies, this first paper shows that bringing in additional levels of analysis, such as the magnitude of institutional distance between home and host countries, helps explain strategies in emerging markets that wouldn’t have been completely understood using traditional transaction costs analysis. In line with authors promoting an integrative perspective in strategy (Mayer & Salomon, 2006; Meyer et al., 2009; Meyer & Peng, 2005; Wright et al., 2005; Yamakawa, Peng, & Deeds, 2008), I move ahead from the transaction level of analysis, and take into account institutional distance to explain governance decisions for technological startups’ growth strategies. I also contribute to the resource-based view of the firm, and expand the contracting capabilities literature, by showing that contracting capabilities may also contribute to governance decisions by reducing transaction and bureaucratic costs. My results confirm that in the world of technology startups, contracting capabilities play a key role in shaping outsourcing decisions. Finally, these contributions also shed light in the unexplored context of technology startups that have participated in an accelerator program. Future studies may clarify if these theoretical considerations are generalizable to startups that have participated in other accelerator programs or to startups that have not participated of an acceleration program. In any case, I am proud to shed light on the strategic decisions of new firms’ operating in highly dynamic environments.

The second paper in this dissertation is a cross-sectional study that explores the drivers that shape startup performance after graduating from an international acceleration program. Using a similar dataset to the one used for Paper 1 (including new measures of post accelerator
performance), I rely on Cox proportional hazard models to explore the survival rate of 306 international startups. The central topic in this paper is location. While all startups in this study were situated in the same host country location, not all of them performed in the same way. What explains that some startups were better than others in their ability and willingness to extract value from the same location resources that should be equally available for all of them? Scholars in international strategy have advanced the initially generic view of location (Cantwell, 2009; Piscitello, 2011; Zaheer & Nachum, 2011), arguing that location specific characteristics are important, yet location alone is unable to explain firm strategies and performance; they suggest that firm-location interactions must be taken into account. Advancing these ideas, the purpose of this paper is to shed light onto how location considerations can be important drivers of performance for international startups in emerging economies. Similar to paper 1, I combine resource based view and institutional theories to examine how variables at the firm (i.e. location capabilities) and country (i.e. institutional distance) level shape international startups’ performance. Different from the previous paper, in this paper I focus on outcome measures (survival) measured at one point in time, after graduating from the acceleration program. In addition, instead of focusing on the magnitude of institutional distance I address recent calls for refining the understanding of directionality of institutional distance (Aleksynska & Havrylchyk, 2013; Zaheer, Schomaker, & Nachum, 2012), and explore if positive (host institutions better than home country institutions) and negative (host institutions worse than home country institutions) institutional distances trigger different effects on startup survival. Further, advancing the firm-location paradigm (Zaheer & Nachum, 2011), I explore if differences associated with how these firms engage with local resources (i.e. location capabilities) provide firms with distinct capabilities that may also contribute to shape their performance. In summary,
in this paper I focus on the effect of institutional distance and location capabilities developed in the host country to examine how these location considerations shape international startup survival.

The main finding of this paper is that startups from countries with weaker institutions show lower failure rates than startups from countries with stronger institutions. In addition, I find that survival of international firms is also shaped by the startup’s location capabilities. Startups who had worked in developing greater location capabilities at the host country showed lower failure rates than those that made less efforts to engage with their host country environment. Finally, I also found interesting effects for the interaction between institutional distance and location capabilities. While the set of resources available for all startups in the same location is identical, developing these capabilities is of less value for startups from more advanced economies. The empirical evidence shows that compared to firms from weaker institutional frameworks, for startups from stronger institutional environments, developing location capabilities makes less (about half) of a difference in decreasing their odds of failure.

My paper brings important implications for the study of strategy in emerging markets, including implications for theory, practitioners and policy makers. From a theory perspective, I make advancements to the understanding of location considerations for international startups. Specifically, this paper addresses the calls for research related to the effects of the direction of institutional distance and shows that decisions to move to countries with stronger or weaker institutions has implications for startups’ performance. My findings build on recent publications that relate incubation programs’ activities to exit rates (Amezcua, Grimes, Bradley, & Wiklund, 2013). These authors suggest that distinguishing among type of resources has implications for startup survival. Advancing these ideas, I suggest that the value of these resources is contingent
to relative institutional differences between ventures host and home countries. From a practitioner’s perspective, my findings show that although accelerators open opportunities for startups to internationalize, the value of these opportunities should be carefully evaluated.

Moving to a country with stronger or weaker institutional framework is not a trivial decision, and may influence the startup’s odds of survival. Related to this, spending more time in engaging with local resources (i.e. developing location capabilities) does not blindly leads to reduced failure rates. Instead, I argue that the value of developing location capabilities is tied to the direction of the institutional distance between a ventures’ home and host country. As such, I advise that ventures evaluate the costs and benefits of engaging in greater capability development, since their desired benefits are conditional on institutions. Finally, my work also contributes to improve policymaking, especially public policy aimed to foster entrepreneurship.

While these findings show that startups from countries with stronger institutions were less likely to survive, it does not translate in that this (or other) program should focus on accepting only startups from countries with weaker institutions. Expanding the conceptualization of failure, accepting firms that will likely fail also provides lessons related to resiliency, and to accept failure as part of the learning process inherent to entrepreneurship. In a country with low tolerance to failure (such as Chile), bringing in foreign entrepreneurs willing to try and start over might be even more valuable than bringing startups that survive but that create little social or economical value. As such, policy making needs to be seen as an instrument not only focused on capturing economic rents from surviving firms, but also as a means to create cultural change and a vehicle to adopt social norms that embrace tolerance and resilience as key ingredients for successful venturing.
Lastly, Paper 3 is a theoretical review and analysis of the rapidly growing literature around institutional voids, specifically as it is used in the context of transition and emerging economies. Building on the work of North (1990) and Williamson (1975, 1985), Khanna and Palepu (1997, 2000) introduced the concept of institutional voids, defining them as a situation in which weak or absent institutions complicates the establishment of efficient markets. Since its inception the concept of institutional voids (Khanna & Palepu, 1997, 2000) has attracted increasing attention among scholars interested in explaining how organizations make up for gaps in the functioning of the market mechanism (Khanna & Palepu, 2000; Mair & Marti, 2009; Mair, Martí, & Ventresca, 2012). Sharing concerns on how contextual factors shape organizations’ and individuals’ decisions in a market setting, scholars from economic sociology (Mair & Marti, 2009; Mair et al., 2012; McKague, Zietsma, & Oliver, 2015) have integrated strategic and sociological perspectives to advance the understanding of this concept. Integrating micro and macro level processes to the study of institutional voids, and considering a broader set of domains, a number of management researchers fostered a rapidly growing body of work on institutional voids that is rich, yet fragmented.

Aiming to increase the quality, coherence and impact of the studies using this concept, and responding to recent calls to organize this literature (Doh, Rodrigues, Ayse, & Makhija, 2016), I perform a systematic review of books and articles contributing to this perspective during the last fifteen years. Using Google Scholar and Business Source Premier as the primary search engines, I carefully selected 15 top tier journals within the field of business, and defined a number of criteria that finally yielded the 82 papers included in this review.

Interestingly, I found that within these journals, the term “institutional voids” has an average of 12.3 publications per year, reaching a peak of 33 publications in 2014. A deeper
analysis of these publications, however, contributed to unravel issues related to early definitions, implications for strategy, and level of analysis. First, despite the growth in the number of publications, there are fundamental issues related to the limited coherence in the way voids are defined. Researchers with roots in sociology consider that institutional voids are “plural, often contending institutional arrangements”, while researchers in strategy mostly support a view of an “empty institutional space” (Mair et al., 2012: 822). The disagreement in these basic definitions reflects the assumptions of different theoretical streams. Second, the consequential nature of institutional voids suggests that institutions have important implications for strategizing in emerging markets. Specifically, our reviews shows that weak or absent institutions imply that the rules of the game in these settings require a fundamental reevaluation, strategies and theories that work in developed economies might not apply in developing countries. Finally, most articles have focused on the consequences that institutional voids trigger on firm level outcomes. More research is needed to explain how institutional voids shape processes at different levels of analysis, including firm, community and market level.

The key implications of this review suggest that the institutional voids perspective requires a research agenda for improving impact and coherence of research on institutional voids. While the literature streams advancing this concept stem from different legacies, taking stock of this growing body of research is critical to stimulate the advancement of a comprehensive understanding on how institutions -or the lack of them- shape the infrastructure where firms, markets and countries compete. In contributing to this agenda, I focus on three main categories: theoretical issues, context issues and management education issues. On the theory front, I argue for better definitions, more rigor in defining a typology of voids, and more clarity in defining if contextual factors shape boundaries for, and/or integration between, theories. In addressing
contextual issues I raise concerns about the scope that the institutional voids perspective should have, and the extent to which broadening the levels of analysis where it applies either complicates or contributes to its advancement. Concerned about practical implications of the voids framework I also invite researchers to consider the implications that institutional voids bring for managers and organizations tackling high growth emerging markets. Acknowledging that Western strategies may not apply in emerging economies requires a mental shift and an adaptation strategy that still remains to be explored.

To summarize, the goal of the three studies in this dissertation was to advance the understanding of the role that institutions play in emerging economies. Paper 1 and 2 are empirical and focused on how technology startups’ participating in an emerging economy’ international-acceleration program make strategic decisions related to growth and performance that are shaped by institutional differences between home and host country environments, in addition to firm level capabilities. Paper 3, in contrast, contributes to the literature on institutions in the context of emerging economies in a different way. As a theory paper, it provides a literature review on the fragmented literature on institutional voids, and provides an up to date research agenda geared towards building coherence, quality and impact of this literature stream. Table 1 provides a short summary of each of the papers, including the research question, level of analysis, theoretical perspective, methods, sample, data sources, research context, results and implications.
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<th>Paper</th>
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<td>Can institutional distance and location capabilities developed in the host country shape international startup survival?</td>
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<td>Level of Analysis</td>
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<td>1) Resource Based View (RBV) 2) New Institutional Economics (NIE)</td>
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<td>Method</td>
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<td>Sample</td>
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## Results

1) There is a positive relationship between institutional distance (ID) and outsourcing ratio; 2) As startups develop contracting capabilities, they are more prone to outsource; 3) The positive effect of contracting capabilities on outsourcing ratio is moderated by institutional distance

## Implications

1) Theories explaining governance decisions (Williamson 1985) such as firm growth need to consider the impact of exogenous institutional distance on these decisions; 2) Contracting capabilities can encourage outsourcing, yet they may be limited by the fact that they are embedded in a startups’ home country, and are not easily transferable to a host country; 3) Institutional distance shapes the assessment of transaction and bureaucratic costs; 4) This paper illuminates governance decisions in an unexplored context of international accelerated startups

## Literature around institutional voids

1) Literature around institutional voids is rapidly growing among top journals (average 12.3 articles per year during the last 15 years), peaking in 2014 with 33 publications; 2) This literature is fragmented in terms of how IV are defined, the literature streams using this concept, and the theories used to study it; 3) Most of these publications focus on the consequences that IV generate, as well as the organizations that must deal with them

1) Disagreement on defining institutional voids pose limitations to their understanding and challenges for theory development; 2) A missing typology of IVs brings important implications for theory, because theoretical explanations are likely to apply to some but not all voids; 3) IV may allow for the novel integration of theory at different levels of analysis; 4) A clearer identification of the context in which IV coexist facilitate advancing theory; 5) The IV perspective implies that management studies need to develop contextual intelligence, and strategy teachers must be aware of these new mental models
PAPER 1: Transaction, Firm and Institutional Effects on Strategic Choices: Accelerated Startups’ Outsourcing Decisions

ABSTRACT

This study examines how firm level contracting capabilities and institutional distance shape entrepreneurial firm’s governance decisions related to growth (insourcing vs. outsourcing). By integrating Transaction Costs, Resource Based View and Institutional theories we illuminate the relevance of contracting capabilities and institutional distance in shaping buy vs. make decisions. Combining three different datasets we create a panel that includes 469 domestic and foreign startups participating of an international acceleration program. After analyzing 705 meetings and 2,118 governance decisions we find that institutional distance and contracting capabilities encourage startups’ outsourcing. As a growth strategy, outsourcing allows startups to mitigate transaction and bureaucratic costs. Interestingly, we found that compared to domestic firms, foreign firms facing greater institutional distance rely on outsourcing strategies only to a certain extent; once they have outsourced a handful of times hiring seems a suitable option for foreign firms. Our findings suggest that beyond considerations at the transaction level of analysis, firm and country level characteristics are relevant predictors of governance decisions, and that capabilities and institutions deserve additional consideration in the study of firm’s strategic choices related to growth.
INTRODUCTION

What shapes a firm’s growth strategic choices? One of the most fundamental questions in the field of strategy has to do with firm’s governance decisions. Among many decisions firms need to make, governance choices (Williamson, 1975, 1985), such as outsourcing and insourcing decisions are key, because organizing activities internally (integrating activities within a firm) and externally (externalizing activities by using the market) are two alternative strategic choices that have been found to shape firm’s performance (Leiblein, Reuer, & Dalsace, 2002). From a practical stand point, the relevance of outsourcing decisions has increased in recent years (Bhalla & Terjesen, 2013; Kotabe & Mol, 2009a; Mol & Brewster, 2013) given the geographical and technological dispersion of knowledge (Leiblein et al., 2002; Teece, 1992) and the quick pace of technological change that new firms face. Responding to the fast paced environmental trends for growth, outsourcing practices have grown explosively (Bertrand, 2011; Bertrand & Mol, 2013). Startups in particular increasingly use outsourcing (Michael A Hitt, Ireland, & Lee, 2000; Terjesen & Bhalla, 2009) to perform non-core supporting activities. Outsourcing helps startup companies face initial resource limitations and capability barriers (Bhalla & Terjesen, 2013) such as scarcity of talent, and limited operational know how. Due to its theoretical and practical importance (Leiblein & Miller, 2003), causal explanations for strategic choices (Child, 1972) related to governance have been addressed from different theoretical perspectives, including transaction cost economics theory (TCE) (Coase, 1937; Williamson, 1991), the resource based view perspective (RBV) (Barney, 1991; Penrose, 1959) and new institutional economics theory (North, 1990; Williamson, 1998). Recent calls have addressed the importance of integrating
these theories to find more complete answers to governance questions (Mayer & Salomon, 2006; Meyer et al., 2009; Peng et al., 2009).

However, up to date little work has been done in testing how firm and country level institutions shape startups strategic choices related to firm growth. Those who have include these variables have mostly focused on case studies (Bhalla & Terjesen, 2013), large companies (Arruñada, Vázquez, & Zanarone, 2005), regulated industries (Fabrizio, 2011) and traditional mature sectors such as manufacturing and construction (Brahm & Tarziján, 2014; Delios & Henisz, 2003; Mol & Brewster, 2013). Startup companies have been excluded from these analyses, mostly due to data limitations (Terjesen & Bhalla, 2009). This can be a shortcoming because governance decisions by small companies may differ from decisions by larger firms (Bigelow & Argyres, 2008). Admittedly, outsourcing is an important consideration for startups (Bhalla & Terjesen, 2013; Kotabe & Mol, 2009b). However, our understanding of the factors that drive these governance decisions, and whether or how capabilities and institutions shape these strategic choices is still limited. Given that startups can choose between insourcing and outsourcing as a growth strategy, how do firm’s specific capabilities shape these strategic choices? Do growth choices differ depending on institutional distance? How do these institutional differences shape their capability development, and consequently shape their governance choices? By answering these questions we extend the understanding of startup-firms governance choices, which has been usually explained focusing on micro analytical aspects (Meyer et al., 2009).

In this vein, the purpose of our paper is to unravel the firm and institution level factors that shape outsourcing decisions for technology startups, specifically for technology startups in an international setting. Following Williamson’s (1999) suggestion to consider firm level
differences influencing governance decisions, and Peng’s (2009) emphasis on taking into account institutional factors predicting strategic choices, we contribute to a new wave of empirical research (Brahm & Tarziján, 2014; Fabrizio, 2011; Meyer et al., 2009) that integrates transaction costs, firms’ capabilities and institutions as the key elements defining a firm’s governance preference. Consistently, we agree that outsourcing decisions are driven by cost assessments. We add, however, that transaction and bureaucratic costs are not only dependent on transactions’ characteristics, but they are also a function of country level institutional distance (Gaur & Lu, 2007; Kostova & Zaheer, 1999) and firms’ superior contracting capabilities (Argyres & Mayer, 2007). Specifically, in this paper we posit that these costs may increase as institutional distance (distance between home and host country environment) increases, and may decrease as firms develop contracting capabilities. In explaining this relationship we shed light on the importance of an overlooked type of bureaucratic cost, the costs of resource commitment (Folta, 1998; Luo, 2004; Williamson, 1985). In subfields where investment is exploratory and revenue streams are unpredictable, limiting the costs of committing resources to activities that may add little value is important (Folta, 1998). As a consequence, young technology start-ups may be incented to reduce these costs. Thus, we propose that outsourcing may be the preferred growth strategy when: a) startups face greater levels of institutional distance (which increases the cost of committing resources); b) startups have developed superior contracting capabilities that reduce the costs of using the market (i.e. outsourcing capabilities); c) startups experiencing institutional distance develop superior contracting capabilities.

To test our hypotheses, we use data from the population of startups that participated in a Chilean government-run international acceleration program over the period 2010-2014. Similar to many acceleration programs, this accelerator provides funding and a six month long
cooperative group-like experience for an international cohort of entrepreneurs. After graduation, accelerated startups are expected to raise follow-on funding and keep growing. Up to March 2014, about 900 startups have joined the program and moved into Chile. Because we are interested in the nature of growth decisions, we consider only those firms that have performed outsourcing or insourcing decisions during the six months that the program lasts. Our final sample corresponds to 469 startups from 51 countries that held 705 meetings and executed 2,118 governance decisions related to insourcing and outsourcing over the six-month period in which they were located in Chile.

Our research contributes in several ways. First, it contributes to strategy by expanding the understanding of the drivers of governance decisions. Here we explore an overlooked type of cost that affects firm boundary choices, that is the cost of resource commitment. While we agree with other authors in that institutional distance may shape transaction costs, we add that bureaucratic costs also deserve consideration when evaluating the effect of institutional distance in governance decisions. We suggest that institutional distance shapes the assessment of transaction and bureaucratic costs, and ultimately influences startups’ growth decisions. Particularly, this study contributes to international business and global strategy by exploring the effect of institutional distance on international ventures’ governance decisions. Second, we contribute to RBV by explaining how firm level variation shapes firms’ strategic choices related to governance. Specifically, we show how contracting capability development determines optimal outsourcing choices by shaping firms’ cost assessment. Hence, we expand beyond TCE tenets, and argue that it is not only the characteristic of the transaction, but also differences across firms, that shape firm growth. Third, we respond to the call made by a number of authors (Mayer & Salomon, 2006; Meyer et al., 2009; Meyer & Peng, 2005; Wright et al., 2005;
Yamakawa et al., 2008) to utilize an integrative perspective that includes transaction, firm, and environment level variables to explain governance decisions. Particularly, we contribute to the institution based view of business (Meyer et al., 2009; Peng et al., 2009) by including institutions as a central lever of strategic choices related to growth. Fourth, we shed new light into the unexplored and novel context of entrepreneurial startups that have participated of an accelerator program. Whereas the studies on outsourcing decisions related to new firms’ operating in highly dynamic environments are scant (for an exception, see Bhalla & Terjesen, 2013), studies on startups that have been through accelerator programs are in their nascent stages (Cohen & Bingham, 2013). Because accelerated firms are a growing phenomena, understanding the drivers for their strategic decisions related to growth matters. Finally, we offer relevant implications for practice, theory and future research.

In the following sections we elaborate our hypotheses based on existing theory, considering the theoretical perspectives mentioned above. In section three we introduce the specific context in which our study takes place, followed by the data, variables and models, and empirical analysis of our study. Section four shows our main results, and finally we close with a discussion of our main findings, contributions and limitations of the present study.

THEORY AND HYPOTHESES

Transaction Cost Economics and Governance Decisions

Transaction Cost Economics (TCE) theory explains that firms come into existence (Coase, 1937) when the costs of using the market (costs of exchange) are higher than the costs of internalizing certain transactions within the firm’s boundaries. Due to its behavioral assumptions of bounded rationality and opportunism, Williamson (1985) suggest that firms have a superior
ability to attenuate opportunism through mechanisms of hierarchical control. TCE directs the view towards an assessment of alternative costs for different governance structures, and has centered its attention on those transactions’ characteristics that lead to ex post costs (Geyskens, Steenkamp, & Kumar, 2006). Williamson asserts that the costs of using the market and internalization are shaped by the characteristics of the transactions (Williamson, 1985), driving the decision of using alternative governance structures. In a world of incomplete contracts (Williamson, 1975), complex transactions occurring under conditions of high uncertainty, high frequency, and high asset specificity might leave room for opportunistic behavior. Moving from markets to hierarchies entails internalizing these transactions within the firm boundaries, adding safeguards that ameliorate some of these costs, enhancing efficiency (Williamson, 1975). TCE considers the attributes of transactions and the alternative costs of different governance structures (Geyskens et al., 2006), shaping the growth strategy of a firm.

Because outsourcing and insourcing decisions (buy vs. make) are governance decisions shaping the boundaries of the firm, they are shaped by TCE considerations. Small and large companies constantly need to evaluate governance decisions related to outsourcing versus insourcing. TCE offers a suitable framework to predict outsourcing because it takes into account the costs and characteristics of alternative governance choices.

**Institutions and Governance Decisions**

The New Institutional Economics (Williamson, 1998) theoretical perspective argues that institutions shape the environment in which organizations act and compete. Institutions are key in supporting the effective functioning of the market, lowering the costs and risks that firms bear when engaging in market transactions (Meyer et al., 2009). Institutions, formal and informal, are
the rules of the game that regulate the game that economic actors play (North, 1990). Institutions provide the structure in which economic exchange takes place, defining acceptable behaviors and sanctions for those who do not comply. Whereas well-devised institutions can reduce transaction costs and increase market efficiency, ill devised institutions may have the opposite effect (De Soto, 2007). The institution based-view (Peng et al., 2009), then, advances the arguments introduced by TCE in explaining firms’ growth decisions. The very same proponents of TCE have ascribed to this view, recognizing the value of the institutional environment as a higher order parameter influencing the costs of governance for markets and firms (Williamson, 1991, 2000). Country level institutions are relevant for governance decisions because they can lower transaction costs (Williamson, 1985) and minimize the costs of committing resources by creating an environment where transaction parties can interact free from the risk of contractual hazards and opportunism. Particularly, institutions minimize transaction costs by 1) propagating laws and norms that limit opportunism and reduce uncertainty, 2) by creating mechanisms to monitor adherence to contracts, and 3) by creating and enforcing legal and social sanctions that mitigate opportunistic behavior (Hill, 1995).

Because institutions influence the costs of alternative organizational forms (Williamson, 1985), they have important explanatory power for governance decisions, being widely used to explain a number of them, such as entry mode, diversification strategies, and ownership structures. For example, Khanna and Palepu (2000) suggest that institutional voids shape firms’ governance structures when devising diversification strategies in emerging economies. La Porta et al. (1999) found that greater shareholder legal protection was associated with dispersed ownership structure of firms. Holburn & Zelner (2010) found that firms from countries with a less stringent institutional framework are more skilled at navigating the political system, and
hence more prone to expand operations in countries with higher levels of political risk. Kogut & Singh (1988) found that national culture shapes firms’ entry mode. Taken together, these studies show that existing regulations, laws and policies influence the transaction costs of contracting, influencing strategic choices for growth (Peng & Heath, 1996; Yang, Jiang, Kang, & Ke, 2009). Whereas national level institutions have been used to explain particular business strategies (Hoskisson, Wright, Filatotchev, & Peng, 2013; Khanna & Palepu, 2000; Meyer et al., 2009), less attention has been devoted to studies that consider institutional factors as drivers for outsourcing decisions. As an economic phenomenon, outsourcing decisions are deeply influenced by institutions, and consequently by transaction costs. For example, Arruñada et al. (2004) shows that European institutions shape truck’s companies’ preferences towards subcontracting, instead of hiring employees. Other studies (Arruñada et al., 2005; González-Díaz, Arruñada, & Fernández, 2000) also reaffirm the prevalence of subcontracting in European countries (i.e. Spain) due to institutional constrains. A stricter set of labor (e.g. employment security laws) and tax law institutions increase the costs related to outsourcing by making employee termination costly and difficult. Mol and Brewster (2013) add that firms outsourcing decisions are driven by costs of search and evaluation, which are higher when firms have limited access to an ample supply base. They find that local and foreign firms outsource less than multinationals. Overall, the limited number of studies addressing formal institutions and outsourcing show that the institutional framework can influence outsourcing decisions. Building on previous research, in this study we aim to unravel the specific mechanism by which institutional distance and capabilities shape outsourcing decisions.
Costs of Resource Commitment, Institutional Distance, Institutional Uncertainty and Governance Decisions

TCE suggests that governance decisions are a result of comparing transaction costs to bureaucratic costs. Among the number of costs that a firm needs to face, here we emphasize the importance of an overlooked type of bureaucratic cost, the cost of committing resources (Folta, 1998; Williamson, 1985). The costs of resource commitment are a particularly relevant for 1) new firms (Folta, 1998), and firms that move into new markets (Delios & Henisz, 2000); 2) firms in domains where “pure equilibrium contracting” (Williamson, 1991) does not fully apply; 3) firms facing high levels of exogenous uncertainty, such as those in the technological subfield (Folta, 1998). The costs of resource commitment are usually assessed against the needs for administrative control (Folta, 1998; Mody, 1993; Williamson, 1985). Whereas internalizing activities provides more administrative control, copes with opportunism, and reduces transaction costs, it requires higher levels of commitment. Committing to hire full time employees (insourcing), for example, increases the bureaucratic costs and internal coordination for a startup (e.g. time, secure money for long term payment, learn to write and terminate contracts, etc.). While outsourcing may sacrifice administrative control relative to insourcing, it also provides the advantage of economizing on committing to resources of uncertain value. In circumstances of limited availability of resources, such as in the world of technology startups, these advantages may overwhelm the benefits of reducing transaction costs by internalizing.

In the strategic management literature, institutional distance (Kostova, 1997) is a construct that has been used to measure the difference or similarity between host and home country institutions as a company expands internationally. Building on this construct, researchers have focused in defining it (Kostova, 1997), exploring measurement issues, implications for
legitimacy (Kostova & Zaheer, 1999), and transference of organizational practices (Kostova, 1999). In this paper we are particularly concerned with the regulative dimensions of institutional distance, and its implications for outsourcing decisions. Researchers (Davidson, 1980; Kogut & Singh, 1988; Luo, 2004) have suggested that institutional distance shapes entry choice for corporations that expand internationally. Transferring these findings to the world of international startups, here we suggest that startup firms facing greater levels of institutional distance may be more vulnerable to higher cost structures, and hence, more prone to economize in the costs of resource commitment, consequently, we believe they would be more prone to outsource.

Previous research has found that a particular type of environmental uncertainty, technological uncertainty (Geyskens et al., 2006; Walker & Weber, 1984), shapes firms’ costs of resource commitment (Folta, 1998). Firms in industries facing higher levels of technological uncertainty are more prone to rely on flexible governance structures that allow them to switch partners with better capabilities (Balakrishnan & Wernerfelt, 1986), avoiding to be locked into a technology (Folta, 1998; Geyskens et al., 2006; Heide & John, 1990). In contrast to local firms, foreign firms facing institutional distance may perceive higher levels of environmental uncertainty. Lack of expertise in the host country environment (Caves, 1974) generates uncertainty; limited understanding of the language, cultural codes and ways of doing business contributes to liabilities of foreignness and newness (Zaheer, 1995). Here we suggest that international startups face a type of environmental uncertainty that has not been explored by TCE. We call this is institutional uncertainty, a type of uncertainty that increases as institutional distance increases. Similar to technological uncertainty (Folta, 1998; Walker & Weber, 1984), institutional uncertainty is exogenous to the firm; however it is not necessarily common to all firms in an industry. If the institutions within a country are going through a transition period,
institutional uncertainty would affect all firms in a country in the same way. If institutions in a country are stable, however, institutional uncertainty will affect firms moving into this country, and especially firms that face greater institutional distance. The latter is the case addressed in this paper.

The implication for the presence of institutional distance suggests that, relative to domestic firms, international firms may face higher levels of institutional uncertainty, which can translate into higher transaction and bureaucratic costs, shaping firms outsourcing decisions. As for transaction costs, previous research (Luo, 2004) suggests that institutional distance increases the odds of firms incurring in higher ex ante and ex post transaction costs. While ex ante costs of search, evaluation and negotiation of new personnel might be similar between insourcing and outsourcing strategies, ex post costs (Henisz & Williamson, 1999) related to contractual hazards, opportunistic behavior, resolution of disputes and conclusion might be higher for governance structures related to vertical integration, such as insourcing in a country where the firm has limited experience (i.e. facing high institutional uncertainty). Spending time and money in lawyers, courts and layoff payments is out of the scope for nascent entrepreneurs operating internationally. Higher levels of institutional distance, then, may expose firms to higher transaction and bureaucratic costs. In this paper we suggest that in doing the cost assessment that leads to a preferred governance structure, the internal costs of resource commitment need to be taken into account. In the realm of bureaucratic costs, firms are usually more cautious when committing scarce resources in highly uncertain environments (Williamson, 1985). We argue that institutional distance not only increases transaction costs, but also increases the bureaucratic and internal coordination costs for a startup. A lack of understanding of the host country
regulations makes insourcing costly, complementing the effect that institutional distance has on transaction costs.

We agree with TCE researchers (Geyskens et al., 2006) in that, in the absence of asset specificity, environmental uncertainty leads to flexible growth structures; we add that bureaucratic costs in the form of resource commitment costs may amplify this relationship. Extant research (Folta, 1998; Kogut & Singh, 1988) has already shown that, in expanding internationally and facing higher levels of environmental uncertainty, technology companies prefer flexible governance structures (such as joint ventures and minority direct investments) to internalization (acquisition). In line with previous research, we suggest that in the case of technology startups looking to grow by bringing new personnel into the company would use similar strategies, prioritizing outsourcing over insourcing. International firms face higher costs structures than domestic firms, and the costs associated with understanding local institutions contribute not only to transaction costs but also to the internal costs of resource commitment. Irrespective of whether these costs are accurate appraisals or simple perceptions (Kogut & Singh, 1988), firms facing greater institutional distance (and institutional uncertainty) are incented to find ways to reduce the costs of resource commitment. Institutional distance, then, should create disincentives to commit, increasing the value of delaying any type of activity that requires incurring costs of committing resources. Outsourcing, then, is a strategy to reduce and delay bureaucratic costs when the value of bringing someone into the company is still uncertain. Outsourcing provides flexibility and protects not only the entrepreneur but also the investors who are backing the startup. This strategy is particularly useful for companies confronted with institutional uncertainty, because it allows the entrepreneur to keep his/her fixed cost structure...
low in the short term. Outsourcing is especially attractive for international startups, because they face higher levels of institutional uncertainty than domestic firms.

Outsourcing provides startups with the ability to grow fast, and reduce personnel quickly, providing flexibility to the growing firm. Whereas entrepreneurial ventures at large may have an incentive to outsource, we expect that, due to transaction and resource commitment costs associated with institutional distance, the effect should be more pronounced for international startups. Hence, we hypothesize:

Hypothesis 1: Institutional distance is positively related to startups’ outsourcing.

Dynamic Capabilities and Governance Decisions

The resource-based view (RBV) of the firm builds on Penrose’s (1959) ideas to explain firm’s growth and heterogeneity among them. Advancing her seminal work, Nelson and Winter (1982) found that beyond physical and human resources, firms also develop valuable organizational routines, also called capabilities (Teece & Pisano, 1997). Capabilities are considered firm specific skills (Teece, 1981) that are usually hard to articulate and costly to transfer; invisible assets that firms develop and carry through their human capital (Amit & Schoemaker, 1993). Capabilities also relate to the productive efficiency of a firm, the more skilled and experienced it becomes, the more efficient it is in executing particular activities (Brahm & Tarziján, 2014). They provide an answer to the question of how to achieve competitive advantages in contexts of fast technological change (Teece & Pisano, 1997). Firm capabilities are cumulative, developing over time as organizations perform these routines (Nelson & Winter, 1982). Capabilities affect firms’ boundaries because as capabilities evolve, governance decisions are adjusted. Whereas many authors have studied how capabilities are a critical driver to explain differences in performance among firms (Barney, 1991; Nelson &
Winter, 1982), little attention has been devoted to explore how capabilities explain governance decisions (Mayer & Salomon, 2006). Only in recent years researchers have focused in this relationship (Argyres, 1996; Leiblein & Miller, 2003; Leiblein et al., 2002), showing that capabilities shape governance decisions, and that this work can in fact complement the traditional transaction cost approach to governance.

Transaction cost economics theory portrays that transaction costs are the main driver for governance decisions. However, it does not consider that companies develop governance capabilities that can reduce the impact of transaction costs. Governance decisions may not only be shaped by transaction costs, but also by firms’ capabilities able to reduce these costs (Argyres, 1996). Here, we refer to organizational capabilities, more than other type of resource based or technological capabilities. Organizational capabilities relate to organizational learning, and they can be relevant for strategic behavior (Gulati, 1999). Organizational learning researchers (Levinthal & March, 1993) assert that firms build organizational capabilities from experience, and consequently they are prone to repeat these experiences, refining their capabilities. Among many organizational capabilities, contracting capabilities (Argyres & Mayer, 2007) are particularly important (Brahm & Tarziján, 2014; Gulati, 1999; Mayer & Salomon, 2006). Firms with more experience writing contracts in uncertain environments develop contracting capabilities. For example, firms with experience in dispute resolution face lower transaction costs than those that experience this type of situation for the first time. Firms that have developed contracting capabilities can also reduce the costs of measurement, being more experienced at assessing the quality of the work developed by new comers. In addition, firms’ contracting capabilities condition their ability to outsource transactions (Fabrizio, 2011). Firms that have developed contracting capabilities (Argyres & Mayer, 2007) related to outsourcing have also
developed the skills needed to reduce transaction costs. Consequently, these firms may be more likely to outsource than firms with fewer contracting capabilities. Firms are said to be likely to outsource when the capabilities they require are abundant outside of the boundaries of the firm, and when the contracting hazards, need for internal coordination, and risk of appropriation are minimal (Leiblein et al., 2002).

In the world of technology startups, vendors for these activities are in large supply outside of the firm, with low contracting hazards, low cost, and minimal risk of appropriation for these ventures. The ability to write and enforce contracts with terms aligned to transaction costs and hazards allows entrepreneurial firms to develop outsourcing contracts when transaction costs would have suggested internalization. For startups contracting capabilities are particularly valuable because they allow founders to outsource non-core supporting activities (Dossani & Kenney, 2006), such as marketing expertise, software development, webpage design, and accounting, among others. Thus, we hypothesize:

_Hypothesis 2: Contracting capabilities are positively related to startups’ outsourcing._

**Institutions and Capabilities**

In addition to studying how institutional distance shapes firms’ growth, researchers have explored how capabilities developed through time and experience influence growth strategies. Responding to the call by a number of authors, (Meyer & Peng, 2005; Wright et al., 2005; Yamakawa et al., 2008), and following Meyer et al. (2009) we bring together institutions and resource based view considerations to explain strategic choices.

Contracting capabilities developed to compete successfully in a home country environment may be not deployable in a new host country (Delios & Henisz, 2000). For example, contracting capabilities to outsource specific activities in the home country might not
be applicable in a host country, where the rules and regulations related to employment and doing business are different. Also, the development of knowledge that provides access to an ample supply base is particularly relevant for outsourcing decisions (Kotabe & Mol, 2009a). The network of suppliers that has been developed in a home country environment is not easily transferable to the host country. Having experience of trading with trusted suppliers minimizes the costs of search, evaluation, monitoring and enforcing contracts (Rangan, 2000). Companies that have developed broader contracting capabilities, including knowledge related to the supply base, are expected to face lower transaction costs (Mol & Brewster, 2013; Rangan, 2000) than firms without these skills. For that reason, we suggest that developing contracting capabilities related to outsourcing should be even more important for firms facing greater institutional distance.

By explicitly considering mechanisms by which contracting experience affects outsourcing decisions, and by analyzing how different levels of capability development moderate the relationship between institutional distance and governance decisions, we can make specific predictions of the costs of such growth decisions (Delios & Henisz, 2000). The greater the difference between home and host country institutions, the higher the levels of institutional uncertainty experienced by a foreign firm, and the more urgent its need to economize in committing resources. In the same line of reasoning, developing the capabilities to reduce resource commitment may be especially important when the distance between home and host country institutions is large.

As a startup gains experience in building a network of trusted suppliers and crafting outsourcing contracts, it not only reduces the threat of opportunism, but also the ex post costs related to insourcing. Having developed contracting capabilities suggest more experience and
more efficiency in executing a specific task (Brahm & Tarziján, 2014). Higher experience in devising outsourcing contracts diminishes transaction costs related to writing and enforcing contracts, and having a trusted network diminished the costs of search and evaluation. Outsourcing, then, should be the preferred governance structure for a firm that has already developed these contracting capabilities. These skills become even more important for firms facing institutional distance, and consequently institutional uncertainty. Foreign firms naturally face higher transaction costs than startups starting operations domestically, hence, developing contracting capabilities seems to be even more important for international firms. The interaction between institutions and capabilities sheds light to the institutional based view of business strategy (Peng, 2003) by providing a fined grain understanding of the relationship between institutions and capabilities in predicting governance strategies. Thus:

*Hypothesis 3: The positive effect of institutional distance on startups’ outsourcing is larger for firms with greater contracting capabilities.*

**METHODS**

**Context**

Seed-accelerators are a new phenomenon that has emerged as a unique type of early stage investors, one that aims to fill in the funding and networking gap for new startups. The first accelerator was started in Silicon Valley in 2005; today there are more than 2,000\(^1\) of them around the world, most of them are usually backed by private investors (angels and VCs) aiming to foresee novel opportunities, or governments interested in attracting startups as a means to foster entrepreneurial ecosystems. The success of these novel organizations is explained by their ability to accelerate growth by filling in a funding gap and providing a friendly and cooperative

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group-like experience for a usually international cohort of entrepreneurs that are selected into a program. Accelerators offer intensive entrepreneurship educational programs to cohorts of startups that once into the program, are granted seed stage capital and mentoring for a short period of time, in exchange for a generally low or inexistent stake of stock. After graduation of a program, accelerated startups are expected to raise follow on funding and keep growing. A website\(^2\) that tracks the follow-on funding of 182 accelerators reports that more than 3,000 startups have raised $3.2 billion dollars, and generated exits worth $1.8 billion. While accelerators have become a hot topic in the popular press (e.g. Chaﬁkin, 2009; Geron, 2012; Stross, 2012), academic research on accelerators remains embryonic\(^3\).

Accelerators are important for startups because they provide economic and social resources that are fundamental for a nascent startup. Education, networks and seed stage funding are extremely valuable resources and capabilities for startups because they usually face liability of newness (Aldrich & Fiol, 1994) that impacts their ability to perform during their initial stages. Lack of administrative skills, high operational costs, lack of reputation (Philippe & Durand, 2011) and constrains to access high risk capital markets (Lerner, 2000) are common obstacles for business startups (Bøllingtoft & Ulhøi, 2005). Because the aim and spirit of a startup accelerator program is to “accelerate” and foster high growth in a short period of time, accelerated companies need to make growth decisions earlier and more frequent than non-accelerated startups. Hence, accelerators provide a close to perfect setting to study governance decisions

\(^2\) [http://www.seed-db.com](http://www.seed-db.com)

\(^3\) Accelerators are a rich empirical setting that provides the opportunity to explore high growth entrepreneurial startups and how they make growth decisions. Attested by a PDW hosted by the 2013 Academy of Management conference, “…intriguing questions about (accelerators) programs’ effectiveness, proliferation and mechanisms abound…Thus, advancing research on accelerators might contribute not only to entrepreneurship, but also more broadly to organizational theory, strategy, network theory, and institutional theory”. (source: [http://program.aom.org/2013/submission.asp?mode=showsession&SessionID=700](http://program.aom.org/2013/submission.asp?mode=showsession&SessionID=700))
where buy versus make decisions define the way in which accelerated startups grow. The accelerator setting is also promising from a theory standpoint because the transactions pursued by accelerated startups are not standarized, require high levels of cooperation among team members and are performed under high levels of uncertainty and scarce resources. These characteristics generate complex relationships between the leading team and those being hired or outsourced, relationships that can be influenced by transaction, firm and institutional level factors. Due to the novelty of the accelerator phenomena, limited research has been published using accelerated startup’s data (Cohen & Bingham, 2013). We seek to enlighten this phenomenon by drawing the attention to governance decisions for domestic and foreign companies that have participated of a government funded accelerator program.

Launched in 2010 by the Chilean government, Startup Chile is a leading government funded accelerator program. Up to March of 2014, more than 900 startups and 2,000 entrepreneurs from more than 72 different countries have teamed up and joined this program in nine different waves; each startup received US$40,000 in seed funding with no equity obligations. In exchange, the team members committed to reside in Chile during a period of six months, and engage in learning and marketing oriented activities to achieve company growth and create awareness of the program. This program provided us with a unique opportunity to obtain data from a scenario that resembles a quasi experiment, due to that these startups were actually selected and not randomly assigned to participate in the program. This setting is particularly appropriate to test our hypotheses because the heterogeneity of the sample provides us with enough variation in terms of firm and country level differences, allowing us to compare domestic and international startups from a large number of countries. Whereas Startup Chile is particularly big in terms of the number of startups it accepts in each cohort, our findings are generalizable to
startups that have not participated of this program, because moving internationally and finding cheaper ways to grow is a global trend common to technology startups all over the world. Developing contracting capabilities and facing challenges and costs related to institutional distance are common challenges for startups, irrespective of their participation of an accelerator program.

Data

Data for our empirical analysis has been obtained from three different data sources. First, we obtained archival data from the Index of economic freedom, developed by the Heritage Foundation (Kane, Holmes, Kim R., & O’Grady, 2007). Started in 1995, this report provides accurate information related to the evolution of institutions across 186 countries. It provides ten categories that are scaled from 0 to 100, with higher numbers indicating greater economic freedom for individuals’ and firms’ freedoms in a country. Due to that the Index of Economic Freedom is presented as a time series, measured on a yearly basis, it presents an advantage over other measures for institutions. Researchers in economics, management and public policy have extensively used this index, using it in its aggregate form (Chan, Isobe, & Makino, 2008; Easton & Walker, 1997), or based on individual institutions (Meyer et al., 2009; Shinkle & Kriauciuunas, 2012).

Second, data on startups’ background and strategic decision-making has been directly obtained from the Chilean government and executives running the accelerator program. The database contains information at the individual, and startup level. These data were collected using different techniques, for example, the data related to the application process was obtained through a standard questionnaire created by the accelerator program to screen each company as part of the selection process. From this questionnaire we obtained company and individual level
data for the universe of companies accepted in the accelerator program until March 2014. From this data we have learned that the companies we are studying are mainly technology companies, all of them developing applications and services that contribute to the following industries: e-commerce, media, mobile & wireless, social media & social network, healthcare & biotechnology, energy & cleantech, IT & enterprise software, education, finance, tourism, natural resources, social enterprise and others.

Third, information on governance decisions was obtained through a database that stored the outcomes of face-to-face meetings that executives of the program maintained with each selected company. Once accepted into the accelerator program each startup team met at least one time with program executives to report their needs and achievements, it is from these meetings we obtained insourcing and outsourcing data. This means that our outcome variable is measured exclusively during the time the startups were in Chile, and participating of this program. Funded and supervised by the program’s advisors, these companies can either outsource or insource people to perform specific professional activities (e.g. marketing, design, technology development and sales) needed to grow. Since our dependent variable is the ratio of outsourcing, we removed from the sample all of those companies for which no engagement was reported for either type of growth decision during the six months in which they were participating of the program. Initially, our sample was composed by 469 startups that reported any of these decisions during any of the 1,200 meetings they held with program advisors. However, due to that many companies held meetings were no growth was reported (i.e. no insourcing and/or outsourcing decisions), we omitted those observations. In addition to the sources of secondary data, we also met in several occasions with Startup Chile and CORFO officials to clarify questions and
increase our confidence in the validity of our results. In summary, the data provided by CORFO was stored in four different databases that we merged and recoded when it was required.

Our final sample corresponds to 705 meetings and 469 startups in our full sample model, reporting 2118 strategic decisions related to growth by insourcing and outsourcing (1379 of them being outsourcing). This database was created by merging three different data sources described above. In our sample, each company held between one and five meetings during the six months that the program lasted, and the average number of meetings was 1.5. The firms in our sample belong to an ample range of developed and developing economies, whereas fifty one countries are present in the sample, especially representative (more than 40 firms) are startups coming from U.S, UK, Canada, India, Argentina, Brazil and Canada, beyond the Chilean firms that represent about 25% of the sample. Due to the international nature of our sample, it provides us with appropriate conditions to test how between and within firm, and country level factors shape startups’ strategic choices for growth when deciding between outsourcing and insourcing.

**Main Variables and Model**

The analysis of our data explores how governance decisions (i.e. insourcing vs. outsourcing) by technological startups are influenced by institutions and capabilities. Specifically, we test our hypotheses by exploring how startups’ contracting capabilities and institutional distance between home and host country environments affect the “make vs. buy” decision. Following Fabrizio (2012), we depart from the transaction level of analysis. Here we run our analysis and estimations at the firm-meeting level, capturing startups’ outsourcing decisions as a function of variations in startups’ capabilities (that build over time) and institutional distance, along with other control variables. The equation describing our model is the following:
Outsourcing ratio = β0 + β1AID + β2capabilities + β3 AID*capabilities + β4controls + e

**Dependent variable.** Consistent with our hypotheses and following previous studies (Mol, 2005; Mol & Brewster, 2013) we define our dependent variable, outsourcing (OUTS_R), as a ratio. It was calculated as the total number of outsourcing transactions reported in a meeting, divided by the total number of transactions (insourcing and outsourcing) reported in that meeting. This measure is an indication of the extent to which a startup relies on outsourcing as a growth strategy. Whereas other papers have operationalized outsourcing as a binary variable (Jain & Thietart, 2013), we prefer a ratio measure because it provides fine grained detail of the extent to which an entrepreneurial firm is more or less prone to outsource, instead of if it has outsourced at all (which is what is captured by a binary variable). However, we use the binary operationalization of outsourcing in our robustness tests section.

**Independent Variables.** Contracting capabilities (Argyres & Mayer, 2007) relate to experience (Gulati, 1999; Mayer & Salomon, 2006), a consequence of the process of learning. The more a startup relies on external contractors, the more experience it gains, and the higher is the level of contracting capabilities it develops. Organizational learning researchers (Parmigiani & Holloway, 2011), also interested in measuring these constructs, have operationalized it as accumulated output (i.e. experience). Following prior research (Argote & Miron-Spektor, 2011; Brahm & Tarziján, 2014; Gulati, 1999) we measure contracting capabilities based in the *cumulative number of tasks performances*; in our case, the number of outsourced people a startup reports in a specific meeting. Because we do not have data on startup hiring or outsourcing behavior previous to entering the program, we have taken a conservative approach by lagging this variable for all our firms, in order to capture how these capabilities acquired through prior experience affect firms’ strategic decision making. Startups with more experience in writing
contracts in uncertain environments develop contracting capabilities. As capabilities signal experience gained through time, this variable \((CAPAB)\) is continuous and cumulative.

As mentioned before, institutional distance (Kostova, 1997) is a construct that has been used to measure the difference or similarity between host and home country institutions (Gaur & Lu, 2007). Since we are focusing in predicting what drives human resource acquisition, theoretical considerations suggest that our concept of institutional distance should focus on regulative institutions that influence the labor market. Previous researchers considering institutional distance (Gaur & Lu, 2007; Kogut & Singh, 1988; Shinkle & Kriauciunas, 2012) have used different indexes to operationalize this construct. Due to our theoretical considerations, here we follow those (Blumentritt & Nigh, 2002; Fuentelsaz, Garrido, & Maicas, 2014; Meyer & Peng, 2005; Shinkle & Kriauciunas, 2012) concerned with measuring the regulatory efficiency collected by the Index of Economic Freedom, developed by the Heritage Foundation. We built \textit{Absolute Institutional Distance (AID)} including measures for labor freedom, business freedom and monetary freedom; similar to other authors, we lagged this variable by two years. This index has many advantages over other measures for institutional distance (Meyer et al., 2009), being available as a time series it allows us to assign each startup the institutional distance value pertaining to the year it entered the program. Following extant research using institutional distance as a proxy (Aleksynska & Havrylchyk, 2013; Kogut & Singh, 1988; Shenkar, 2001), we use the traditional proxy proposed by Kogut and Singh (1988). AID was constructed using the euclidean distance between host and home country institutions, as follows:

\[
AID_j = \sum_{i=1}^{n} \left[ \frac{(l_k - l_{ch})^2}{V_t} \right]
\]
Where $I_k$ corresponds to the institutional proxy (I) for a firm coming from country $k$, $I_{ch}$ refers to the institutional proxy (I) for Chile (ch), and $V_I$ is the variance of indicator I. $AID_j$ is, then, the absolute institutional distance of a firm arriving from country $k$ to Chile. $AID$ is a proxy that takes the absolute value of institutional distance between home and host country. Whereas for domestic startups the value of $AID$ would be zero, this variable takes positive and higher values as the distance between startups’ host and home country institutions increases.

**Control Variables.** We incorporate several control variables that could affect a firm’s outsourcing ratio, but that are unrelated to the institutional distance and contracting capabilities. At the firm level we included time invariant and time varying variables. Among time invariant variables we control for cohort (COHORT). All the startups that have been part of this six month program have entered the program at different points in time, belonging to one of the nine cohorts that we identify in our database. We, then, included dummies for cohort. Belonging to certain cohort may influence startups decisions in terms of what is the best growth strategy; for example, it is possible that the cohort has an opinionated leader who can influence other startups’ growth decisions. We also introduced industry dummies (INDUSTRY) to control for unobserved heterogeneity. Whereas most startups in our sample are technological startups, they serve different markets. At the time of application the startups’ identify the specific industry they belong to, choosing among thirteen different categories. Industry fixed effects may capture permanent unobserved differences across industries that could influence the outsourcing ratio. A No Spanish variable (NO_SPANISH) was introduced as a binary variable to distinguish firms whose team members speak the host country language from those that do not. We believe that not understanding the host country language may also contribute to resource commitment, hence shaping outsourcing decisions. Score to enter (SCORE) refers to the score obtained by the startup
at the time of application; all startups are assessed by an independent panel of judges on a scale from 1 to 5. Startups with higher scores are probably better prepared and may also have more experience in bringing new personnel to the company. Since outsourcing is a trend among technology startups, there are reasons to believe that startups with higher score and better preparation may be more prone to outsource. Finally we add a binary variable (MALE) to signal the gender of the leader (CEO) of the startup accepted in the acceleration program. There are reasons to believe that males might be more practical and more prone to prefer outsourcing over insourcing. Arrival Stage (ARRIVAL_STAGE) refers to the stage of advancement on the life cycle of a startup at the time of application. We created an ordinal measure where “only an idea” was coded ‘1’, “prototyping” was coded ‘2’, “functional product with users (beta)” was coded ‘3’, and “scaling sales and/or operations” was coded ‘4’. Different stages demand different growth strategies. Startup age at application (STARTUP_AGE) is a variable that reports the number of months a startup has been around before applying to the acceleration program. We believe this could also shape outsourcing decisions. We also control for time variant variables, aspects of the firm, program and industry that may shape outsourcing decisions and that can change between meetings. First, we include Program Executive (EXEC) dummies. This is a categorical variable that indicates the identity of the person in charge of holding the meeting with the startup. The program has a team of nine different executives; either of them may hold a progress meeting with a startup. It may be possible that the program’s executive had an influence by advising a startup to rely on a specific growth strategy, or by misunderstanding what outsourcing means when reporting. Project Stage of Advancement (PROJ_ADV) is a measure for the stage in which the startup was at the time of the meeting, compared to the stage it was at the time of application. There are four different categories, ranging from 0 to 3, depending how the
company has moved along. There are reasons to believe that the advancement in the life of the startup may eventually influence how it grows, shaping outsourcing decisions. *Business Incorporation* (*BUSS_INCORP*) is a dummy variable that reflects if the startup has been formally incorporated, in Chile or abroad, or not. Incorporated businesses may be in more advanced stages, being probably more prone to grow. Finally, we decided to exclude three control variables that we initially considered as part of the model. *Full time people* (*TEAM_SIZE*), and *Capital Raised* prior to the program (*K_RAISED*) were excluded because these variables correspond to items integrated in later questionnaires; for that reason we had missing data for about half of our sample. Adding them did only hurt our sample size. However, as a sensitivity analysis we run our models including this variables and our results were the same. We also decided to exclude *Starting year* (*START_YR*), a dummy variable that signals the year a startup joined a program, because it was highly correlated with cohort. Many cohorts might have started in the same year, but in different months. Since we believe the cohort dummy better captures firm variability, we decided to keep cohort, instead.

**Estimation Technique**

The dataset has a time series and a cross section dimension, opening opportunities to obtain more precise estimates due to a larger sample size (i.e. lower standard errors), and also understand how certain effects, such as contracting capabilities, evolve over time. Panel data presents advantages over cross sectional studies, such as consistency of estimates, omitted variable bias, and reduced concerns about heterogeneity (Angrist & Pischke, 2008). Panel data, however, brings up the possibility of dealing with time invariant effects, also known as unobserved heterogeneity (Semykina & Wooldridge, 2010)(Semykina & Wooldridge, 2010) .
A model that is completely specified could rule this problem out (Gulati, 1999), however it is hard, if not impossible, to define such a perfect model with no omitted variable bias. We perform a regression specification error test to check for model specification (ovtest command, in STATA); the test provides evidence of functional form misspecification. This could be due to omitted variables, or due to that the true population relationship between the dependent and independent variables being non-linear. In order to sort out this problem, fixed and random effects are two common tools to address unobserved heterogeneity. After running the Hausman test, its robust version suggests that we should use fixed effects. Aiming to confirm this recommendation, we also tested by using Breusch and Pagan Lagrangian multiplier test for random effects (xttest0 in STATA). The test results were not significant, rejecting that random effects is appropriate. However, given the structure of our data, fixed effects are not an option. Fixed effects models might suffer of biases for panels over short periods of time (Gulati, 1999), and they also present a shortcoming due that they cannot include time dependent covariates. Our data includes more than 400 firms over a period of six months, all of the startups reported growth during this time period. The characteristics of our dataset poses two main violations of ordinary least square models (OLS). On the one hand, time series suggest that the errors may not be independent; errors are usually auto correlated. On the other hand, cross sectional time series panel data may suffer from panel heteroskedasticity. This was confirmed after we performed a likelihood ratio (LR) test and found that our panel suffers from heteroskedasticity. Whereas OLS models assume that the errors have the same variance through the sample, panels usually present not constant errors variance(Philippe & Durand, 2011). In addition, we performed the Wooldridge test and concluded that our data does not suffer from autocorrelation. Since some of our independent and control variables are time variant, and that all observations are collected
within a period of six months, we followed authors facing similar challenges (Boudreau & Jeppesen, 2014; Patel & Chrisman, 2014; Philippe & Durand, 2011; Yang, Zheng, & Zhao, 2014), and chose feasible generalized least squares (FGLS) as an estimation technique that fits panel data linear models, and that can be used when the dependent variable is a ratio (Berry, 2006) and when the panels are unbalanced (Berry, 2006; Patel & Chrisman, 2014; Philippe & Durand, 2011). This model is appropriate because it addresses potential autocorrelation within panels, cross-sectional correlation, and heteroskedasticity across panels (Semykina & Wooldridge, 2010; Yang et al., 2014). We tested our hypotheses using STATA 12; we incorporate commands that estimate even if observations are unequally spaced in time, which is our case.

RESULTS

Main Results

Table 1 reports the means, standard deviations, and correlations among the variables we have used to test our hypotheses. Consider that the correlations among the main effects are not problematic.

Table 2: Spearman correlation table and descriptive statistics

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<td>0.00</td>
</tr>
<tr>
<td>Max</td>
<td>1.00</td>
<td>9.00</td>
<td>9.00</td>
<td>13.00</td>
<td>13.00</td>
<td>4.83</td>
<td>4.00</td>
<td>4.00</td>
<td>1.00</td>
<td>4.00</td>
<td>17.00</td>
<td>6.00</td>
<td>6.00</td>
</tr>
</tbody>
</table>

* indicates significance at the p < .05 level of confidence
Table 2 presents the FGLS estimations. Model 1 presents our baseline model only including control variables. Model 2 and 3 add the main effects for testing the impact of Absolute Institutional Distance (Model 2) and Contracting Capabilities (Model 3) on a startups’ outsourcing ratio. Model 4 adds the interaction terms between the AID and Contracting Capabilities.

**Table 3: Feasible Generalized Least Squares (FLGS) estimation on Outsourcing Ratio**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Controls</th>
<th>(2) Inst. distance</th>
<th>(3) Contracting capabilities</th>
<th>(4) Full model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort dummies</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Executive dummies</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Industry dummies</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>No. Spanish</td>
<td>0.177***</td>
<td>0.122***</td>
<td>0.148***</td>
<td>0.0430*</td>
</tr>
<tr>
<td></td>
<td>(0.0168)</td>
<td>(0.0232)</td>
<td>(0.0167)</td>
<td>(0.0250)</td>
</tr>
<tr>
<td>Score</td>
<td>-0.0313*</td>
<td>0.00892</td>
<td>-0.00348</td>
<td>0.0265</td>
</tr>
<tr>
<td></td>
<td>(0.0181)</td>
<td>(0.0216)</td>
<td>(0.0261)</td>
<td>(0.0290)</td>
</tr>
<tr>
<td>male</td>
<td>0.00115</td>
<td>-0.00316</td>
<td>-0.0612**</td>
<td>-0.0227</td>
</tr>
<tr>
<td></td>
<td>(0.0196)</td>
<td>(0.0183)</td>
<td>(0.0238)</td>
<td>(0.0190)</td>
</tr>
<tr>
<td>Arrival Stage</td>
<td>-0.0288***</td>
<td>-0.0324***</td>
<td>-0.0584***</td>
<td>-0.0697***</td>
</tr>
<tr>
<td></td>
<td>(0.0100)</td>
<td>(0.0109)</td>
<td>(0.0108)</td>
<td>(0.0106)</td>
</tr>
<tr>
<td>Advancement</td>
<td>-0.00428</td>
<td>0.00558</td>
<td>-0.0234**</td>
<td>-0.0354***</td>
</tr>
<tr>
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<td>(0.00892)</td>
<td>(0.0109)</td>
<td>(0.00997)</td>
</tr>
<tr>
<td>Business Incorporation</td>
<td>-0.0398***</td>
<td>-0.0508***</td>
<td>-0.0685***</td>
<td>-0.0514***</td>
</tr>
<tr>
<td></td>
<td>(0.0149)</td>
<td>(0.0159)</td>
<td>(0.0169)</td>
<td>(0.0170)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.0170*</td>
<td>-0.00629</td>
<td>0.00500</td>
<td>-0.00407</td>
</tr>
<tr>
<td></td>
<td>(0.0101)</td>
<td>(0.0104)</td>
<td>(0.0104)</td>
<td>(0.00960)</td>
</tr>
<tr>
<td>Inst. Distance</td>
<td>0.00561***</td>
<td>(0.00156)</td>
<td>0.0160**</td>
<td>(0.00204)</td>
</tr>
<tr>
<td>Capabilities</td>
<td></td>
<td></td>
<td>0.0538***</td>
<td>0.0739***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.00379)</td>
<td>(0.00623)</td>
</tr>
<tr>
<td>Inst. Distance x Capabilities</td>
<td></td>
<td></td>
<td></td>
<td>-0.00282***</td>
</tr>
<tr>
<td>Constant</td>
<td>1.016***</td>
<td>0.842***</td>
<td>0.960***</td>
<td>0.761***</td>
</tr>
<tr>
<td></td>
<td>(0.0606)</td>
<td>(0.0789)</td>
<td>(0.0914)</td>
<td>(0.107)</td>
</tr>
<tr>
<td>Wald Chi 2</td>
<td>43355.37</td>
<td>7467.44</td>
<td>4089.86</td>
<td>6470.7</td>
</tr>
<tr>
<td>Startups</td>
<td>261</td>
<td>261</td>
<td>261</td>
<td>261</td>
</tr>
<tr>
<td>Obs. per startup</td>
<td>1.55</td>
<td>1.55</td>
<td>1.55</td>
<td>1.55</td>
</tr>
<tr>
<td>N</td>
<td>405</td>
<td>405</td>
<td>405</td>
<td>405</td>
</tr>
</tbody>
</table>

Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1
Among the significant controls in Model 1, we observe that the negative sign for *arrival stage* indicates that startups that arrive into the program at later stages are less prone to outsource than startups in earlier stages. This is also confirmed by the negative term on *business incorporation*, signaling that startups that have not yet been incorporated are more prone to outsource than those that are properly registered. This behavior supports our statements arguing that outsourcing may be a preferred strategy for firms higher degrees of uncertainty, such as startups in earlier stages, when the cost of committing resources can determine the true existence of a company. This model also shows that firms whose team members do not speak Spanish are more prone to outsource than startups led by Spanish-speaking team members. We believe that not speaking the country language adds to institutional distance, making it even more important to keep a lower cost structure. The urgency to economize in resource commitment is even more important for firms that have no knowledge of the local language. In Model 2 we entered the variable *Institutional Distance (ID)*. We found a positive and significant relationship ($b=0.00561, \ p< 0.01$) between Absolute Institutional Distance and Outsourcing Ratio. This is, the larger the distance between home and host country institutions for a startup, the more prone it will be to outsource. The AID coefficient is also positive and significant in Model 4 ($b=0.016, \ p<0.01$). These results support Hypothesis 1 in that higher levels of institutional distance are positively related to higher levels of outsourcing. In Model 3 we entered the explanatory variable Contracting Capabilities (*CAPAB*). Its positive and significant coefficient ($b=0.054, \ p< 0.01$) confirms that as startups learn and incorporate contracting capabilities for outsourcing, they lean more towards this particular growth strategy. The *CAPAB* coefficient is also positive and significant in Model 4 ($b=0.074, \ p<0.01$). Hence, we confirm a positive relationship between Contracting Capabilities and Outsourcing ratio, supporting Hypothesis 2.
Finally, Model 4 introduces the interaction effect between Contracting Capabilities and Absolute Institutional Distance. Aiming to take a conservative approach, we followed previous authors (Burgers & Covin, 2014; Huesch, 2013) and conducted slope difference tests for AID. Using STATA 12 we run the margins command and tested the effect of Contracting Capabilities on outsourcing at different meaningful values of Absolute Institutional Distance, our results show that the interaction effect was significant at each of the values we picked. As for what considered meaningful values, we tested this effect for firms with no Absolute Institutional Distance (AID = 0), and going up to 4,8,12 and 16; consider that the average value for AID was 8.74. Whereas these coefficients are significant at all levels of Absolute Institutional Distance, different from what we hypothesized, and as shown in Model 4, the coefficient for the interaction is negative ($b=-0.00282$, $p<0.01$). This suggests that the positive effect of Absolute Institutional Distance on Outsourcing Ratio is not necessarily strengthened by Contracting Capabilities. To illustrate these results, we plotted the moderating effect of Contracting Capabilities on Outsourcing Ratio (see Figure 1) for different meaningful values of AID.

**Figure 1: Interaction effect between institutional distance and capabilities**
Figure 1 illustrates that initially, as predicted, domestic startups (AID=0) outsource less than foreign startups (shown by the positive coefficient of AID, and a higher intercept for foreign startups, as seen in Figure 1). However, this trend is only sustainable until a startup has outsourced about six times (i.e. when contracting capabilities takes a value of five; consider that this variable has been lagged). Interestingly, the negative coefficient of the interaction shows that the slope for domestic startups is steeper than for foreign startups, this can be confirmed by looking at the coefficient for capabilities in Model 4, a beta value of 0.074 represents the slope of the regression line for the domestic startups. The negative interaction term, then, is the difference in slopes between the domestic and foreign startups. As shown in Figure 1, after having outsourced about six times, Chilean startups will be more prone to outsource than international startups facing institutional distance. Hypothesis 3, then, is only partially supported, or supported only until startups have outsourced about six times. This result will be further addressed in the discussion section.

Additional Models and Robustness Checks

Because we are aiming to predict governance decisions, the primary unit of analysis is the meeting where the transactions had been reported. The dependent variable in this study relates to the likelihood of outsourcing for each specific transaction related to governance choices (i.e. hire vs. outsourcing decisions). Aiming to confirm the robustness of our results we performed a number of sensitivity analyses. First, we ran a model where we standardized the Contracting Capabilities and AID variables. We did this with the only purpose of showing that, in our case, not standardizing variables does not make a difference in our results. Because our dependent variable is a ratio, no normalization is required to make comparisons across firms (Berry, 2006). Additionally, we are interested in understanding what happens to outsourcing
when \textit{CAPAB} and \textit{AID} are zero or positive, more than at their mean value. As expected, this new operationalization also keeps our result consistent with what was reported by our main model. Second, aiming to understand the true difference between domestic and foreign firms we created the variable labeled Institutional Distance (\textit{ID}). The \textit{ID} variable is a dummy variable that takes the value of 1 if the startup has internationalized (i.e. it comes from a foreign economy to establish operations in Chile), and the value of 0 otherwise (i.e. a Chilean startup operating in its domestic market). A positive coefficient for \textit{ID} tells us that when capabilities are zero, the ratio of outsourcing is larger for foreign firms. However, a negative coefficient for the interaction tells us that after outsourcing a handful of times, domestic firms are more prone to outsource than foreign firms. The explanation for this phenomenon would be the same as the one for the interaction in our main model, and will be addressed in the discussion section. Again, the results of these regressions remain consistent with our main model. Third, we run an alternative model only using those firms with two or more meetings (i.e. excluding all the firms with only one meeting), reducing our sample size from 450 meetings and 261 firms, to 268 meetings and 116 firms. After running this re-estimation, we observe that the sample size suffers, yet because there are not significant differences between startups with one meeting and those with two or more meetings (tested by running t-tests comparing both samples for each variable), our results remain consistent for our main effects and interaction effects. Fourth, we conducted a number of robustness checks by running our main model by using different estimation procedures. For example, we replicated our FGLS analysis by using a \texttt{XTREG}, obtaining similar results to what we had for our main models. Additionally, we ran a Probit model, obtaining less sophisticated but very similar results. In order to do that, we operationalized our dependent variable as a dummy variable (\textit{OUTS\_binary}) that assumed a value of 1 if the transaction \textit{j} in time \textit{t} reported
that at least one individual was outsourced by the firm, and zero otherwise. This operationalization also kept our results consistent.

**DISCUSSION**

Our analysis highlights the importance of going beyond TCE considerations to explain firms’ growth choices. Here we include firm and institution level considerations to find explanations to startups’ outsourcing decisions. A strong support for Hypothesis 1 shows that when startups move abroad, institutional factors play a key role in shaping outsourcing decisions. Greater institutional distance is positively related with outsourcing. We believe that distance implies higher levels of institutional uncertainty. Therefore, it creates disincentives to commit, increasing the value of delaying any type of activity that requires incurring in costs of committing resources. In doing this, we contribute to unravel new determinants for the cost of resource commitment (Folta, 1998). Interestingly, this is common across firms whose institutions are stronger (e.g. Sweden) and weaker (e.g. Romania, Uruguay) than Chilean regulatory institutions. Irrespective of that the institutions in the home country are stronger or weaker than in Chile, facing greater levels of institutional distance suggest that firms would prefer a growth structure that delays costs when the value of bringing someone into the company is still uncertain. Consequently, we found that outsourcing is the preferred growth strategy for startup firms facing larger levels of absolute institutional distance.

We also looked into how firm level factors, such as contracting capabilities, and confirm that they also play a role in shaping outsourcing decisions. In line with organizational learning arguments (Levinthal & March, 1993), our results show that firms that have relied on outsourcing as a growth strategy in the past seem more prone to lean towards it when bringing new personnel into the company. This tendency is common across domestic (Chilean) and
foreign firms. Dynamic environments, such as the world of technology startups, provide the conditions that facilitate relying on outsourcing as a preferred growth strategy (Leiblein et al., 2002). This is, outsourcing is preferred when the capabilities they require are abundant outside of the boundaries of the firm, and the contracting hazards are lower than those related to vertical integration (i.e. insourcing).

We were initially puzzled by the negative sign of our interaction effect. However, a deeper analysis that included talking to program executives suggests that the moderating effect of contracting capabilities is different for domestic and international firms. Whereas foreign firms are more inclined to outsource than domestic firms, Chilean firms are more inclined to repeat the outsourcing behavior. It is not immediately obvious why international firms are less inclined to outsource after having outsourced a handful of times. Why would they not take advantage of the contracting capabilities they had developed? A possible explanation for this behavior can be related to the costs of search and evaluation suggested by Mol and Brewster (2013). Whereas domestic companies have an advantage in terms of the network of trusted suppliers from which they can outsource, international startups moving to a new country face costs of searching and evaluating new suppliers in the host country. This is, contracting capabilities may be limited by the fact that they are embedded in a startups’ home country, and are not easily transferable to a host country. For that reason, it is possible that initially international startups rely in their trusted home country network of suppliers to deploy specific activities. After a while, however, they might prefer to hire in the host country, to overcome the liabilities and limitations related to a smaller trusted network, and the need to adapt quickly to the local reality. We went ahead and communicated with program executives to confirm these results. They reaffirmed our findings and mentioned that foreign companies were in fact limited
by their knowledge of local sources of outsourcing; they addressed this problem by assigning this
duty as an additional responsibility to one of their executives, who would connect them with
local resources. Hiring locally, then, would be a strategy used by foreign firms to overcome some
of these liabilities. Therefore, whereas outsourcing decisions may lower transaction and
bureaucratic costs, lacking a trusted network of local suppliers may change the parameters that
would have suggested outsourcing as a preferred governance structure (Mol & Brewster, 2013).
In general, contracting capabilities moderate the relationship between institutional distance and
outsourcing, however it works different for domestic and international companies. To
summarize, our results suggest that beyond transactions characteristics, country and firm level
factors play a key role in determining the growth strategy for a startup firm. Specifically, our
findings underscore the importance of taking into account a) institutional distance and its
implications for transaction costs and costs of resource commitment, b) contracting capabilities
as a mechanism able to reduce a startups’ cost structure, and c) the interaction between
capabilities and institutional distance, which trigger a different effect for domestic and
international firms.

IMPLICATIONS AND LIMITATIONS

In this paper, we focused on the question of the boundaries of the firm in the context of
growing technology startups. Consistent with extant research (Mol & Brewster, 2013; Rangan,
2000), we argue that outsourcing decisions are driven by transaction cost considerations. The
first contribution this article makes is to add that bureaucratic costs should also be taken into
account in this cost assessment that precedes outsourcing decisions. The costs of committing
resources early on in the life of a startup are as important as transaction costs; this article
expands the understanding of the costs of resource commitment (Folta, 1998; Luo, 2004;
by bringing up new determinants that shape this overlooked type of cost. Looking into what are the mechanisms that drive these costs is part of our second contribution. In line with authors promoting an integrative perspective in strategy (Mayer & Salomon, 2006; Meyer et al., 2009; Meyer & Peng, 2005; Wright et al., 2005; Yamakawa et al., 2008), we move ahead from the transaction level of analysis, and take into account firm’s contracting capabilities and institutional distance. We contribute to resource-based view and expand the contracting capabilities literature to a context where it has not yet been applied. We confirm that in the world of startups, contracting capabilities play a key role in shaping growth choices. Through our institutions’ lens we make interesting additions to the work on global strategy, we show how domestic and foreign firms differ when it comes to growth strategies. Our findings suggest that foreign startups are more inclined to outsource, but since they do not have the ability to connect to the local supply as easy as domestic startups, they also have an inclination to hire while in Chile. The presence of institutional distance, then, shifts the parameters of what we initially expected. With this, our work contributes to discussions related to costs structures for global outsourcing (Bertrand & Mol, 2013; Mol & Brewster, 2013). Finally, our theoretical contributions are offered in the unexplored context of technology startups that have participated of an accelerator program. Whereas our theoretical considerations are generalizable across startups that have or have not participated of an acceleration program, we are proud to shed light into a new context populated by new firms’ operating in highly dynamic environments.

Naturally, our findings come with some limitations. First, in order to measure institutional distance we relied on country level indexes. Whereas this is the norm in most multiple country studies, we acknowledge that institutions can vary within a country. Within-country institutional differences are not being considered in this study. Second, in order to
account for differences across firms we relied on data entered by the accelerator program executives, they were in charge of collecting it during each meeting. Different understandings among executive might have created subtle differences in our results, whereas we control for the executive variable, we believe that having an identical judgment among all of them might have provided better results. Additionally, while we know from this data that a startup had outsourced certain number of times, the wealth of data did not capture the specific type of activity that was being contracted. Third, all of the startups considered in this study were making decisions in the context of their six-month stay in Chile. Being one of the leading countries in Latin America, we wonder if the growth decisions made by startup firms might have been the same if they were located in a region where country level differences were less dramatic. Fourth, whereas institutional distance may also consider normative and cognitive institutions, we decided to solely focus in regulative institutions, we preferred depth to breath, aiming to unravel if institutions related to labor market would shape outsourcing decisions. Further research is needed to understand if other types of institutions have also an effect on outsourcing decisions.
ABSTRACT

Location considerations play a key role in shaping international ventures performance. Advancing research concerned with location-firm interactions, our study examines the effects of institutional distance and location capabilities on international startups’ failure rates. Using a unique dataset obtained from the largest accelerator program in the world, Startup Chile, we rely on survival models to analyze 306 international startups. Our results show that after graduating from an acceleration program, international venture’s ability to survive is influenced by relative institutional distance between venture’s host and home countries, this is, whether it internationalizes to a country with stronger or weaker institutions than those in its home country. In addition, we show that survival is also shaped by international startup’s location capabilities, defined as the actions to engage with local resources in the host country. Larger location capabilities seem to reduce international venture failure rate. However, we challenge the generic assumption that greater capabilities dully translate in decreasing failure rates. Instead, we suggest that the value of developing these capabilities is contingent to relative institutional distance between venture’s host and home countries.
INTRODUCTION

In the world of technology startups, the emergence of business accelerators has become an undeniable growing phenomena (Carmel & Káganer, 2014; Fehder & Hochberg, 2014; Winston-Smith & Hannigan, 2015). Pioneered by the emergence of Y combinatory in 2005, these programs have quickly multiplied all over the world, reaching more than 2,000 of them by 2014 (Cohen & Hochberg, 2014). Accelerators have been embraced by private parties and governments as a means to foster wealth creation, spillovers (Lerner, 2009) and the virtuous entrepreneurial ecosystem cycle (Saxenian, 1996). As a consequence, thousands of young technology entrepreneurs have packed their bags and computers, willing to move across countries and continents, attracted by resources these programs offer. Location, then, becomes a secondary concern for these lightweight travelers. We wonder, is it? Whereas the accelerator phenomenon has generated excitement and momentum⁴, the dark side of it suggest that a large percentage of the startups that participate of these programs fail to survive after graduation (Winston-Smith & Hannigan, 2015). One of the most important reasons for why startups in early stages fail is due to lack of access to resources (Bradley et al., 2011; Eisenhardt & Schooven, 1990). What, then, explains that some startups are better than others in their ability and willingness to extract value from the same location resources that should be equally available for all of them?

Implications of location on venture performance is a topic that has fascinated scholars from different disciplines across the field of business. Strategy researchers (Berry, 2006; Piscitello, 2011; Zaheer & Nachum, 2011) have shown special interest in location, given the international nature of multi-national enterprises (MNEs). As such, location has become a determinant of knowledge spillovers, increasing returns, and other firm level outcomes (Aharonson, Baum, & Feldman, 2007; Alcácer, 2006; Alcácer & Chung, 2007). Newer publications have advanced the initially generic view of location (Cantwell, 2009; Piscitello, 2011; Zaheer & Nachum, 2011), arguing that location specific characteristics are important, yet location alone is unable to explain firm strategies and performance; they suggest that firm-location interactions must be taken into account. Advancing this view, Zaheer and Nachum (2011) propose a theoretical model\(^5\) that explains how firms that internationalize can extract value from location advantages. Specifically, they suggest that firm outcomes are a function of its ability to recognize opportunities, and its willingness to engage in specific actions to benefit from generic location resources. Their perspective brings to the table a paradigm that includes firm-location interactions (Piscitello, 2011), and argues that creating value from specific locations depends on firm’s endogenous ‘location capabilities’, defined as “the recognition of potential of a location or sense of place and the actions it takes to engage with the location and extract value from it” (Zaheer & Nachum, 2011: 97).

Although tremendously insightful, this model does not get to the drivers that explain the development of these capabilities. Initially developed to explain MNEs growth strategies, it makes the implicit assumption that some international firms are better than others in their ability to develop ‘location capabilities’. They attribute these differences to specific firms’ ‘sense of

\(^5\) Model can be found in Appendix 3
place’ (Seddon, 1972), defined as the recognition of the potential of a location (Zaheer & Nachum, 2011: 97), which is defined by firms’ subjective perceptions. It does not, however, get to the specific mechanisms that explain sense of place. Thus, the literature suggest that individual firms perceive and interact differently with local environments, yet it does not address what causes the heterogeneity in their perception of local resources. We also don’t know if these differences among firms can shape their performance, and their ability to develop location capabilities. Understanding the mechanisms that facilitate capability development is important because superior capabilities, in general, lead to better performance (Barney, 1991; Nelson & Winter, 1982).

Advancing these ideas, the purpose of this paper is to shed light onto how location considerations can be important drivers of performance for international startups. In line with recent calls for refining the understanding of directionality of institutional distance (Aleksynska & Havrylchyk, 2013; Zaheer et al., 2012), we explore if positive (host institutions better than home country institutions) and negative (host institutions worse than home country institutions) institutional distances trigger different effects on startup performance. These are important considerations, given that there are significant differences between advanced and developing country locations. Host countries can be different in terms of institutional, financial, political and cultural aspects that are likely to influence the performance of firms that move into these locations (Berry, 2006). Further, advancing the firm-location paradigm (Zaheer & Nachum, 2011), we posit that differences associated with how these firms engage with local resources provide firms with distinct capabilities that may also shape their performance. In summary, in this paper we focus on the effect of relative institutional distance and location capabilities.
developed in the host country to examine how these location considerations shape international startup failure.

We analyze these issues using a novel dataset of international technology startups that joined Startup-Chile, an accelerator program launched by the Chilean government in 2010. Drawing from multiple data sources, we collected data for startups that participated in seven different cohorts, joining this program between 2010 and 2013. Startups from 65 different countries moved to Chile to join a six-month long program that would provide them with forty thousand dollars, and the chance of internationalizing their ventures. Despite high initial enthusiasm levels of all, international startups were four times more likely to fail than local (Chilean) startups. Our empirical analysis, however, showed that failure rates among international startups were significantly different, depending on if the startup came from a country with stronger or weaker institutions relative to Chile. As shown in Figure 1, our survival analyses report that startups from countries with weaker institutions showed lower failure rates than startups from countries with stronger institutions.

**Figure 2: Kaplan-Meier survival estimates. Survival function for each group**

![Kaplan-Meier survival estimates](image)
In addition, we found that location capabilities were significantly related to international startup failure. Startups developing greater location capabilities showed lower failure rates than those that made less of an effort to engage with their host country environment. Finally, we also found interesting effects for the interaction between institutional distance and location capabilities. While developing location capabilities is beneficial for all startups, they are even more beneficial for firms from countries with weaker institutions. Taken together, these results allow us to challenge the generic assumption that greater capabilities dully translate in decreasing failure rates. Instead, we suggest that the value of developing these capabilities is contingent to relative institutional distance between venture’s host and home countries.

Our paper contributes in several ways. First, we extend a theoretical model (Zaheer & Nachum, 2011) that explains how location-firm interactions shape startups outcomes. Although the essence of the model was developed for MNEs, we bring it to the realm of international startups and contribute to theoretical development by suggesting one specific mechanism behind it. This mechanism brings up our second contribution, that institutional distance is one mechanism that shapes startups’ performance, specifically in the form of survival. Institutions are the background conditions imprinted in ventures’ DNA (Shinkle & Kriauciunas, 2012); as such, institutional differences between host and home country environments shape startups subjective perspectives when firms internationalize. Relative institutional distance, then, shapes startups ability and willingness to recognize local opportunities that ultimately shape performance.

Second, we also contribute to the emerging stream of research that bridges institutions and resource based views (Meyer et al., 2009; Meyer & Peng, 2005). By supporting current claims about the importance of the interaction between international ventures and the
environment (Piscitello, 2011), we suggest that startup performance is not necessarily explained by location resources as generic and available to all firms, but instead by the processes in which entrepreneurs engage in the host countries where they decide to move (Sarasvathy, Kumar, York, & Bhagavatula, 2014). Advancing an action based-view, we suggest that location capabilities play an important role for international startup survival.

Third, our research also contributes to clarify the relative importance of resources for young organizations (Amezcua et al., 2013; Davis & Cobb, 2010). Recent publications on incubators and the effects of these programs’ activities on exit rates (Amezcua et al., 2013) challenge the generic assumption that munificent environments decrease exit rates. These authors suggest that distinguishing among type of resources has implications for startup survival. Advancing these ideas, we suggest that the value of these resources is contingent to relative institutional differences between venture’s host and home countries. Our analysis suggests that location capabilities have a stronger effect among startups internationalizing from weaker institutional environments than among startups from countries with stronger institutions.

Our final contribution is in building our knowledge related to accelerators. Because of the newness of the accelerator phenomenon, there are only a few empirical studies using accelerator data. These studies have explored accelerators’ treatment effects (Cohen & Bingham, 2013; Hallen, Bingham, & Cohen, 2014; Winston-Smith & Hannigan, 2015) and their efficacy for the regional economy (Fehder & Hochberg, 2014), comparing different accelerators. Evidence on the role of location on startups’ processes and performance is, however, scant (for an exception, see Carmel & Káganer, 2014). By focusing on international startups that have been through a specific acceleration program, we help to explain how location-startup interactions shape accelerated startup failure.
This paper proceeds as follows. In the next section we review the literature on location. The third section develops the hypotheses that relate international startup failure to two specific location considerations, institutional distance and location capabilities. The fourth section introduces the data, methods and variables used to run our survival models for hypothesis testing. The final two sections report our empirical results, summarize our main findings, and suggest limitations and avenues for future research.

**THEORETICAL BACKGROUND**

**Location research**

In the international strategy literature, location has been one of the most important decisions a venture needs to make (Caves, 1996; Piscitello, 2011). The relevance of these decisions has to do with the fact that location can provide firms with competitive advantages (Porter, 1998), which translate into higher performance. For example, agglomeration economies, access to consumers with higher purchasing power, better institutions, and lower levels of risk are location related considerations contributing to increase firm performance (Cantwell & Piscitello, 2005).

These studies have substantially advanced the understanding of location characteristics and their implications for international venture performance. However, a more recent stream of research (Piscitello, 2011; Zaheer & Nachum, 2011) has pointed out that in these discussions, location is evaluated in terms of the access it provides to resources, customers and markets, assuming that all of them are equally available to all firms in a given place. Challenging this view of location, they argue that location specific characteristics are important, yet location alone is unable to explain firm strategies and performance. As a consequence, firm-location
interactions must be taken into account. Advancing this view, researchers in global strategy (Zaheer & Nachum, 2011) propose a theoretical model that explains how international ventures-location interactions can extract value from location resources. They argue that the ability of an international firm to recognize the potential opportunities in a location depends on the meaning they assign to that location, meaning its unique “sense of place” (Seddon, 1972). Taking a cognitive perspective, they suggest that the notion of sense of place ‘infuses a particular location with meaning and value…this meaning is often intertwined with the identity of the interpreter’ (Zaheer & Nachum, 2011: 11). The main elements in their model are ‘sense of place’, ‘actions’, and ‘outcomes’. They suggest that firms develop this sense of place as they embark on a cognitive process of making sense of location, recognizing opportunities in it. Then, firms engage in actions oriented to take advantage of local resources, including activities such as engagement, transformation and appropriation. As a consequence, this process contributes to develop location capabilities, which influences firm’s outcomes. Thus, instead of viewing firms as passive beneficiaries of location resources, this view stresses how firm actions in relation to location are critical to extract value from these strategic decisions.

The model proposed by Zaheer and Nachum (2011) suggests that firm perceptions and the actions they embark upon shape outcomes. While they recognize that the process of developing locational capital is likely to vary in “advantageous” versus “disadvantageous” locations, they do not get to the root cause of these differences. Their model is limited to suggest that heterogeneity in firms interpretations “derive from ‘MNEs’ varying histories, administrative heritage, and international strategies (Bartlett & Ghoshal, 1991), as well as from their varying ability to interact and embed themselves in networks of social relationships in a particular location (Gulati, Nohria, & Zaheer, 2006)” (Zaheer & Nachum, 2011: 101). Aiming to advance
these ideas and transfer their insights to the world of international startups, we explore the effect of two location considerations - institutional distance and location capabilities - on international new ventures performance. In the next section, we develop our hypotheses around these ideas.

**Institutional distance**

Location may offer advantages to firms (Sorenson & Baum, 2003), and some of these location advantages are related to institutional distance (Lee, Shenkar, & Li, 2008). Institutional distance (ID) is one of the central constructs of the international business stream (Zaheer et al., 2012). Initially developed by institutional theory researchers, it has been defined as the extent of similarity or difference between regulatory, cognitive and normative institutions of two countries (Kostova, 1997). Since its inception, ID has been a valuable construct, and has been used to explain firm structure and behavior (Xu & Shenkar, 2002). Scholars from different disciplines have adopted it, testing its individual dimensions or as a whole. Whereas it was initially developed to raise awareness about how cultural differences between home and host countries could affect firm outcomes, the operationalization of this construct has expanded. Some argue that its growing popularity is explained by the fact that the concept of distance is at the core of capturing the essence of cross country differences, and as a consequence, it is of fundamental importance for international business phenomena (Shenkar, Luo, & Yeheskel, 2008).

As institutional distance gained popularity, scholars became concerned about how the scholarly community has measured and used this construct (Shenkar, 2001, 2012). One limitation is that most authors assume a symmetric effect of distance (Shenkar, 2012). Thus, moving to countries with better or worse institutions would have a similar effect. One explanation for this shortcoming is due to the fact that the most frequently measure of
institutional distance is the Kogut and Singh (1988) composite index, which measures the absolute value of the distance between two countries. As such, it ignores the issue of perspective (Zaheer et al., 2012). The perceptions from a venture moving from a developed to a developing country are unlikely to be identical to those for a venture moving from a developing country to a developed one. The direction of institutional distance is, however, likely to generate different outcomes. For example, Selmer, Chiu and Shenkar (2007) show that the effect of institutional distance for German expatriates assigned to the U.S. was asymmetric compared to the effect it had on U.S. expatriates in Germany. Controlling for a number of variables, German expatriates were better adjusted to its host country than its American counterparts. The directionality of ID may have important implications for international firm performance (Shenkar, 2012; Shenkar et al., 2008; Zaheer et al., 2012) and so we follow recent research that examines the direction of ID (Lee et al., 2008). Whereas the direction of institutional distance has not been a central issue in the strategy literature, it has been addressed by studies concerned with the flow of foreign direct investment (Aleksynska & Havrylchyk, 2013; Meyer et al., 2009), international venture capital (Li, Vertinsky, & Li, 2014), and studies that compare communist and western economies (Shinkle & Kriauciunas, 2012).

Borrowing from these literature streams, we explore the relationship between the regulatory dimension of ID and startup performance. We focus on macro-level institutions (North, 1990) and how the regulatory framework shapes performance because previous research has suggested that these institutions play a key role in supporting market activity (Meyer et al., 2009), a key element for firm survival. We also posit that the meaning that startups assign to their new institutional environments is determined by founding conditions. Founding contexts
shape the characteristics of a new organization (Johnson, 2007; Stinchcombe, 1965), and institutions are important part of ventures’ founding conditions (Shinkle & Kriauciunas, 2012).

Taken these ideas together, we argue that in the context of international startups, moving to a country with stronger or weaker institutions are strategic choices that can result in different outcomes. This is, if we had two startups from two different countries moving to a third (same) country, one with stronger and the other with weaker institutions than the host country, the directionality of ID will shape perceptions in different ways, and these differences are likely to generate differences in performance. For example, moving to a country with stronger institutions than those in a venture’s home country suggests that firm performance might be attributed to the efforts it made to achieve its goals (Makhija, 2003). Although formal institutions such as business freedom or investment freedom do not ensure success, it is likely that in this new environment the venture will see that its actions translate into competitive outcomes, instead of government determined outcomes (Shinkle & Kriauciunas, 2012). Moving locations to a more market oriented institutional environment, with more freedom to compete, also can motivate firms to increase performance (North, 1990). Countries with better institutions may be better able to foster the entrepreneurial spirit, stimulate higher aspirations (Peng & Heath, 1996), offer higher income levels (Rodrik, Subramanian, & Trebbi, 2004), and lead to higher economic growth (Acemoglu, Johnson, & Robinson, 2005). All in all, numerous studies demonstrate that countries with stronger institutions offer opportunities for better performance for ventures from countries with weaker institutions.

On the opposite side of the spectrum, startups moving to countries with weaker institutions are likely to develop a different perception of their new institutional environment. Internationalizing to a country with weaker institutions generally implies higher transaction
costs, including higher difficulties to enforce contracts, issues related to accessing information, and risks related to weak property rights. For example, comparing FDI flows Cuervo-Cazurra (2006) found that while increased corruption reduces levels of FDI inflows, this reduction was particularly notorious among firms whose home countries had stronger institutions than the recipient country. Relative to firms from countries with weaker institutional frameworks, these investors were less tolerant to country risk, and more sensitive to nuances related to contract enforcement. In general, in countries with weaker institutions, that is places with lower levels of property rights, or enforcement of contracts, for example, firms are exposed to higher levels of risk (Berry, 2006), and higher transaction costs (Coase, 1937), among other liabilities (De Soto, 2000). Moving to countries with weaker institutional frameworks may also pose the threat of government intervention, negatively affecting firm outcomes (Makhija, 2003). The disconnect between actions and outcomes will, in turn, constrain competitive aspirations (Shinkle & Kriauciuunas, 2012) and undermine firm performance.

As such, ID can shape the perceptions of startups moving to new countries, creating a unique “sense of place” for each firm. The relative value (positive or negative) of institutional distance, then, shapes the perceptions of firms, and we believe that these perceptions have an effect of international firm survival. Thus, we posit that international startups’ performance may vary depending on whether they move to countries with stronger or weaker institutions than those in their home country. Hence, we hypothesize:

**H1: Startups from countries with stronger institutions than those in the host country are more likely to fail than startups from countries with weaker institutions, relative to the host country.**
Location capabilities

In the strategy literature, location advantages are usually derived from location resources (Berry, 2006). In order to take advantage of these resources, then, firms need to engage in local actions to capture the value that location resources offer (Zaheer & Nachum, 2011). While these resources can be generic and equally available to all firms in a specific location, there is firm heterogeneity in their ability to take advantage of them (Nachum & Wymbs, 2005; Shaver & Flyer, 2000). Individual firms interact differently with local environments. Zaheer and Nachum (2011) introduce the concept of ‘location capability’ -defined as a firm’s recognition of the potential of a location, and the actions it takes to engage with the location and extract value of it- and suggest that the value of location is derived from location capabilities. As such, location advantages are not exogenous, but created endogenously by firms themselves. Different from other capabilities introduced by the strategy literature (Penrose, 1959; Teece & Pisano, 1997), location capabilities are rooted in a cognitive process where their development depends on firms’ actions and sense of place they develop in a new institutional environment. Location capabilities, then, are dynamic, varying across firms, and firm-location pairs (Zaheer & Nachum, 2011).

Without explicitly mentioning the term “locational capabilities” extant research has shown that engaging with location resources –developing location capabilities- has implications for international firm performance. For example, Hitt et al. (2006) propose a theoretical model where they hypothesize a positive relationship between relational capital and international firm performance. Dess et al. (1995) suggest that establishing relationships with clients in a new market provides legitimacy, helping international firms to overcome the liability of foreignness. Furthermore, Ellis (2000) argues that establishing relationships with local governments in a foreign country provides firms with access to learning about the local culture, market
opportunities, and reputation building. Other research on new venture performance shows that early international commitment improves perceived positional advantage (Blesa, Monferrer, Nauwelaerts, & Ripollés, 2008). In the realm of emerging economies, engaging with business groups (Khanna & Palepu, 2000) and participating in local activities is positively related to performance in emerging markets. Overall, these studies imply that engaging in activities that develop location capabilities can explain variation in performance.

Whereas authors have cited an array of local activities that generate value for international firms, these activities can be classified into three broad categories: engagement, transformation and appropriation activities (Zaheer & Nachum, 2011). Engagement activities lead to the establishment of commitment between the foreign venture and local parties. This process includes actions such as developing relations with powerful actors, getting to know the local stakeholders, and develop knowledge of the immediate business ecosystem. Once firms have achieved local engagement, they are ready to use these relationships to transform generic and openly available resources in a way that they can create specific value to the venture. Transformation activities have to do with investing in local resources and modifying them so they can create unique value (Zaheer & Nachum, 2011). As such, this process includes activities such as hiring employees in the host country, and training them in a way that they can create firm specific advantages. These types of activities transform local resources to the extent that they become unique to the firm, and not as valuable for other competitors (Barney, 1991). After investing in transformation of local resources, firms should engage in activities to lock these investments in. These activities, then, occur through mechanisms such as branding, marketing and other strategies aimed to increase local commitment and preserve their local advantages. As
a whole, these three categories of activities contribute to develop location capabilities (Zaheer & Nachum, 2011).

International startups, too, behave differently in their efforts to develop location capabilities. After internationalization, some startups immediately work on establishing relationships with local suppliers and customers. These business relations can last even if these firms go back to their home countries. Establishing strong ties in a host country is also a good reason for founders to go back to, or prolong their stay in, the host country. Hiring local employees is another way in which international startups can engage with local resources. Another way to develop location capabilities is by bringing a local player as part of the team; working with a local may open doors and facilitate access to other local resources. Social activities with locals may also increase location capabilities. Bridging these actions with theoretical development, we posit that startups that devote time to engaging, transforming and acquiring locational resources, this is, in developing location capabilities, will perform better. Thus, we hypothesize:

\[ H2: \text{There is a negative relationship between location capability development in a host country and startup failure.} \]

Institutional distance and location capabilities

Interestingly, recent findings in the literature of foreign direct investments (FDI) suggest that institutional distance shapes investors’ willingness to engage in local activities in the host country (Pérez-Villar & Seric, 2015). Specifically, they found that the willingness to develop domestic linkages (local sourcing decision) was explained by institutional distance. Greater ID
translates in larger transaction costs, deriving in a lower likelihood of international investors in engaging with domestic suppliers. On the other hand, lower ID was found to have a positive effect in facilitating networking activities with local firms, which reduces the uncertainty perceptions for international firms. In summary, they argue that ID has important implications not only as an investment decision factor but also as a factor driving firms’ willingness to develop location capabilities at the host country.

Taking these ideas to advance our claims on how location capabilities shape startup failure, we suggest that the impact of location capabilities on startup failure differs, depending on the relative value of institutional distance. Specifically, we pose that the negative effect that developing location capabilities has on startup failure is even more negative for firms belonging to countries with weaker institutions, relative to the host country. We argue that this effect is explained by opportunity costs arguments. Literature in corporate diversification (Wu, 2013) has shown that diversification decisions are influenced by alternative (current vs. new) market opportunities in which firms may develop capabilities. Similar to firms choosing to internationalize to institutionally weaker markets, diversifying into less mature markets when the current market has not yet reached maturity, implies higher opportunity costs because the current market still offers higher returns for the deployment of existing capabilities. Following these arguments, we believe that the opportunity costs of developing location capabilities in the new host country will be determined by institutional distance. Whereas the value of developing location capabilities will be lower for startups that internationalize from stronger to weaker institutional frameworks, it will be higher for those startups that internationalize in the opposite direction.
Internationalizing in a country with stronger institutions is likely to provide access to more munificent environments, providing access to resources that may be scarce in their country of origin. For instance, firms may perceive better access to financial capital, and human capital able to provide the technical knowledge obtained in high quality education systems. In addition, the bless of working within an environment of strong formal institutions means that startups can spend more of their time on productive activities, instead of working within inefficient systems, or having to bribe a government official to get working permits in a shorter time period, for example. In addition, going back home is expectedly less attractive for startups from countries with weaker institutions because returning to their home countries, even if they have achieved high education degrees, implies facing lower wages than those offered in countries with stronger institutions. Relative to the home country, then, a startup following this internationalization pattern will be better off, and as a consequence, developing location capabilities in the host country will add more value than if it came from a country with stronger institutions. On the other side of the spectrum, internationalizing into countries with weaker formal institutions is likely to be attractive from a short-term perspective. However, startups might perceive that making the effort to develop location capabilities may be worthless when their home country environments already provided them with the resources needed for the business. Notably, these firms may face high opportunity costs when spending their time in developing location capabilities, because most their home environment already offers more and better conditions than the ones at the host country.

Thus, and in accordance with previous studies (Pérez-Villar & Seric, 2015), we suggest that the value of developing location capabilities is, then, relative and dependent on the direction of institutional distance. For startups from countries with weaker institutions, internationalizing
to a country with stronger institutions implies lower opportunity costs than those faced by startups from countries with stronger formal institutions. While the set of resources available for all startups at this location is identical, developing location capabilities implies higher opportunity costs for startups from more advanced economies, because these opportunities are of less value for them. In consequence, we hypothesize:

**H3: The negative effect of locational capital on startup failure is stronger for startups from countries with weaker institutions (relative to the host country), compared to those from countries with stronger institutions (relative to the host country).**

**METHODOLOGY**

**Data and measures**

The sample in this study is based on 306 international technology startups that have participated from the Startup Chile acceleration program between 2010 and 2013. These startups are divided in cohorts or “classes” (Fehder & Hochberg, 2014; Winston-Smith & Hannigan, 2015) that have participated and graduated from this six-month international acceleration program. Given the theoretical framework for this paper, an international set of startups was the best way to measure how environmental factors related to institutional distance shape startups’ survival. For that reason, we excluded those startups whose teams were formed solely by Chileans and kept the startups that were composed of international members, and those where at least one of its members was not Chilean.

New venture data has been criticized for only including registered new ventures (Yang & Aldrich, 2012), and also because it usually reports only U.S. based firms. This problem relates to
the intense use of D&B dataset (Amezcua et al., 2013), which is government data and hence requires that these firms are registered. Our sample addresses these problems in two ways. First, startup Chile applicants are not required to have a registered business. Many of them arrived to the program at an early stage and were helped by program managers to register their businesses, either in Chile or abroad, during the program (because of this we control for stage of the company in our models). Second, whereas 17% of the startups were from the U.S., this is a program that is international by nature, including startups whose team members belong to 65 different countries.

We obtained our data from different sources. First, following previous research concerned with the direction of institutional differences (Meyer et al., 2009), we used the Index of Economic Freedom developed by the Heritage Foundation. This index provides wide information about a number of institutions; we focused on five items of this index, all of them strongly related to supporting market efficiency and startup activity. The advantage of this index is that it is available as a time series, which allows us to assign each observation the exact value pertaining to the year of entry. Second, Startup Chile management agreed to share the program data with the first author. Data on team composition and company characteristics was obtained from the program’s application questionnaires that startups filled up when applying to the program. Additional data related to firms’ entry scores was collected after a panel of judges received the applications and score them. Data related to class characteristics was obtained directly from the program managers, after the cohorts were created. Performance measures were collected through a post-program survey ran by the program managers during December of 2013. As shown in Table 1, by December of 2013, 580 startups had graduated from Startup Chile. Near 68% of the graduated startups agreed to respond this survey, yielding 436 observations. Because
the first generation of the program was a test group for which data collection by Startup Chile was not systematic, we exclude those firms from our analysis. Due to restrictions related to our regression models, we also dropped observations that had missing values for any of our variables of interest. With that, we were left with 366 valid responses. Finally, since our variable of interest has to do with survival after graduation, we exclude startups that had not graduated at least two months before the survey was performed. We selected a cut off of two months because program managers report that it takes between one and two months after graduation for startups to run out of resources. Hence, we believe a sixty-day period is a reasonable estimate of possibility of failure. Further, the results for our empirical tests do not change whether the period of startup existence was 60 days or 30 days. Using these selection criteria for our survival analysis, we compiled a sample of 306 valid questionnaires to run our analyses, representing 52.7% of the total population of startups that have been through this international acceleration program. All of our startups are technology startups founded by young (27 years old on average) and educated professionals (5 years of post-secondary education on average). At the time of the survey, the average team size (measured in number of team members) is 2.08 members per startup, and the average time of these teams have been working together (startup age) is 23 months.

**Table 4: Survey response and sample design**
In order to address possible response bias in the post-acceleration survey we compare observable characteristics of those firms in the sample to those firms that did not respond the survey. As shown in Table 2 the firm/team level characteristics that we use as predictors are not significantly different between the two groups. This suggests those firms that completed the survey are representative of the Startup Chile population overall, and we do no have a response bias.

<table>
<thead>
<tr>
<th>Class</th>
<th>Number of startups</th>
<th>Responded surveys</th>
<th>Valid surveys</th>
<th>Used surveys</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
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<td>22</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>1</td>
<td>84</td>
<td>57</td>
<td>50</td>
<td>41</td>
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<td>52.3%</td>
</tr>
<tr>
<td>3</td>
<td>86</td>
<td>58</td>
<td>54</td>
<td>53</td>
<td>61.6%</td>
</tr>
<tr>
<td>4</td>
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<td>66</td>
<td>60</td>
<td>58</td>
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</tr>
<tr>
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<td>81</td>
<td>71</td>
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</tr>
<tr>
<td>6</td>
<td>95</td>
<td>67</td>
<td>63</td>
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<td>63.15%</td>
</tr>
<tr>
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<td>436</td>
<td>366</td>
<td>306</td>
<td>60.17%</td>
</tr>
</tbody>
</table>
Variables

**Dependent Variable**

Failure is a relevant measure of performance when firms are young (Amezcua et al., 2013; Fehder & Hochberg, 2014; Geroski, 1995; Winston-Smith & Hannigan, 2015). In our analyses, 36 of the 306 international ventures (11.7%) had failed after graduation. Following research on startup survival we measure failure as the likelihood of the occurrence of an exit event (Agarwal, Sarkar, & Echambadi, 2002; Amezcua et al., 2013). Aiming to provide a nuanced proxy of failure, we emulate previous studies (Delmar & Shane, 2006; Winston-Smith & Hannigan, 2015) and built measure of failure that takes account the time in which failure occurs. *Time to fail*, based on the hazard of the occurrence of this event after graduation. Specifically, *time to fail* was constructed based on the number of days between graduation and date of failure (or time of the survey, if the venture had not failed). It is important to mention that our data also included a number of observations that experienced a change in ownership through a merger or acquisition. Based on previous literature (Amezcua et al., 2013; Cefis & Marsili, 2011) we did not consider these exit events as failure. Taking a conservative approach we created a control variable for mergers and acquisitions (*ownership change*) that we include in our robustness checks, and our results remained consistent.

**Independent variables**

*Institutional distance* was calculated based on the strengths of market institutions ruling in the country of origin for each of the team members, using Chile as a base category. Similar to previous research (Meyer et al., 2009), we focused on five items from the Index of Economic
Freedom, all of them strongly related to supporting market efficiency and startup activity. These variables are: 1) business freedom, 2) trade freedom, 3) financial freedom, 4) investment freedom, and 5) property rights. Positive values of this index signal that the venture’s institutional background is stronger than Chilean institutions. A negative value signals the opposite, that Chilean institutions are stronger than those from the venture’s host country.

*Location capabilities* is a variable that is developed from five survey questions that relate to the activities these firms had engaged in at the host country location. This is a continuous variable that considers: a) if the venture has established and maintained business relations in Chile; b) if at least one of the team founders still resides in Chile at the time of survey; c) if any of the founders has returned to Chile at least once, or has any relatives living in the country; d) if the venture has hired local (Chilean) employees; and e) if the venture has been registered in Chile. Note that we did not include a measure of whether any of the team members were Chilean as part of this variable. We did this because there is high correlation between this item and c. This is, all of those ventures that had at least one team member that was Chilean responded yes to c. We did, however, incorporate this variable as part of our controls.

*Control variables:*

Because economic cycles can affect entrepreneurial activity (Gompers & Lerner, 2004) we include *Year* dummies to capture year fixed effects. We include *Class* as a categorical variable to capture cohort fixed effects due to potential differences among cohorts. Whereas we suspected that *class* level predictors could generate important differences in survival rates, Kaplan Meier survival estimates showed that differences across classes were not significant in
explaining survival rates. Graphical representation of this test is available in Appendix 1. For this reason, we turned our attention to venture level differences in explaining failure. In terms of startup characteristics, we added *Industry* and *Experience* fixed effects. Given that some industries are more promising than others (Sorenson & Stuart, 2001), and because performance may also vary depending on the industry sector in which the startup operates (Baum & Silverman, 2004) we included *Industry* fixed effects. Startup Chile, as a program, is supposed to be generalist across industries (as opposed to accelerators focused only in one specific industry vertical). The application questionnaire has, in fact, 15 different industries from which to choose. However, a careful examination of the ventures’ description (based on application questionnaires) reveals that almost all of them offer some form of software or internet service. For example, a venture developing an app to pay rent would be classified under finance, while a venture that develops an app to learn new languages would be classified under education. Given that the program’s classification harms our regressions’ degrees of freedom, we follow research in a similar context (Amezcua et al., 2013), and use NAIC codes instead of the program’s industry codes. Using NAIC three digit codes we include up to the level of sector codes and reduced the number of dummies from 15 to 3. Details on how we did this are provided on Appendix 2. This operationalization of the industry variable contributes to the power of our estimations and aligns our models to what has been traditionally tested by the management literature for survival models (Amezcua et al., 2013; Delios & Beamish, 2001). *Experience* is a categorical variable that controls for stage of advancement on the life cycle of a startup at the time of the survey. We created an ordinal measure where “only an idea” was coded ‘1’, “prototyping” was coded ‘2’, “functional product with users (beta)” was coded ‘3’, and “scaling sales and/or operations” was coded ‘4’. Previous research has show that startup experience
shapes startup performance (Baum & Silverman, 2004; Hsu, 2007). Startups at later stages are more likely to have achieved milestones that are key for survival. More than the directionality of the relationship we were interested in controlling for it, incorporating to our models the fixed effects of Experience.

Similar to Experience, Entry score also contributes to control for quality of the startup. At the time of application, all startups are assessed by an independent panel of judges that gives applicants a score that ranges from 1 to 5; this score is given based on evaluation of a number of variables, including team quality, size of the potential market, innovativeness of the product, and network of mentors available to the team, among others. Entry score, then, refers to the score obtained by the startup after this panel. If startups with higher scores are better prepared, venture failure should be negatively shaped by this variable. Number of founders is a discrete variable that corresponds to the size of the startup team. We include this variable because previous research has shown that larger teams might influence startup performance (Amezcua et al., 2013; Cefis & Marsili, 2011; Hsu, 2007; Winston-Smith & Hannigan, 2015). Local founder is a dummy that controls for the presence of at least one local (Chilean) team founder. We include it because previous research has shown that having linkages in a host country shapes firm survival (Giarratana & Torrisi, 2010). We controlled for Startup Age, defined as the count of months team members have worked together between its founding and the exit event (which can be either time to failure, or time to survey). Incorporating firm age ensures that any significant effects of our main variables were not simply a result of aging related processes (Agarwal et al., 2002; Amezcua et al., 2013; Baum & Silverman, 2004; Hsu, 2007). MBA degree is a dummy variable that takes the value of 1 when the startup has at least one member holding an MBA degree, and zero otherwise. Holding a masters in business administration suggests that at least one member
of the team has managerial training, human capital that seems to be specially valuable for the performance of technology based firms (Colombo & Grilli, 2005). PhD degree is a dummy variable that signals if at least one member of the venture team holds a doctorate degree. Highly educated, team members holding a doctoral degree probably have deeply developed technical knowledge. As a consequence, this variable might have a different effect from managerial education in startup performance (Colombo & Grilli, 2005; Hsu, 2007). 6

**Estimation technique**

The structure our data corresponds to six cohorts or classes of startups that entered and graduated from an acceleration program at different points in time, between 2010 and 2013. Our observation period, then, extends between time of graduation and the occurrence of an event, be it either failure or the time at which the survey was administered. As a consequence, our data is right censored for those ventures that did not experience failure previous to December of 2013. Given the structure of our data, censored and not following a normal distribution, we tested our hypotheses by examining the hazard rates, or the probability of failure (i.e. probability of not surviving). There are several time models available to estimate hazard rates (Agarwal et al., 2002). Following earlier studies estimating failure rates in the strategy literature (Lee, Mun, & Park, 2014; Miller, 2012; Piao & Zajac, 2015; Winston-Smith & Hannigan, 2015), we use Cox proportional hazard models in STATA 12. The Cox proportional hazard model (Cox, 1972) is a semi-parametric technique that assumes that all startups share the same baseline hazard rate of failure. This technique does not restrict assumptions concerning the precise nature of a hazards

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6 We considered including capital raised as a control variable since previous research has shown that previous funding increases firms’ performance (Hsu, 2007). Due to the large number of missing observations on this item (about 1/3 of the sample), we did not include it.
probability distribution, which makes it unbiased and preferable when not all organizational members need to face a future death (Miller, 2012). Differences in startups’ hazard functions, then, are derived from the covariates. The hazard function gives us the hazard of failure at time $t$, conditional to survival through time, independent and control variables, and the baseline hazard common to all startups (Winston-Smith & Hannigan, 2015). Our model, then, can be written as:

$$h(t \mid x_j) = h_0(t) \exp(x_j \beta_x)$$

Where $h(t \mid x_j)$ as the hazard rate for firm $j$ is a function of the set of independent variables $x_j$, and $\beta_x$ is a vector of the coefficients to be estimated.

**RESULTS**

**Descriptive Statistics**

Table 4 presents our correlation matrix and descriptive statistics. As expected, failure is positively correlated with institutional distance and negatively correlated with location capabilities. Interestingly, the higher correlations are related to the variable *class*. For example, entry score is highly correlated with class because as the program gained more experience the entry score for applicants became higher. The same explanation applies for the high correlation between class and *number of founders*, and *start up age*; in its early days the program accepted solo teams and young firms more often. Finally, class also correlates with failure; as one would expect, recently graduated startups show lower failure rates due to time reasons.
Table 5: Spearman correlation matrix and descriptive statistics

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*Indicates significance at the p<0.05 level of confidence

Table 6: Result of Cox models predicting the odds of firm failure

Table 6 presents the results for our survival models, which are presented as hazard ratios (HR). Ratios higher than one imply an increase in failure rates, while ratios smaller than one imply a decrease in failure rates.

Table 6: Result of Cox models predicting the odds of firm failure

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Model 1 includes only our control variables. While not hypothesized, we noticed that startup age has a negative effect on failure (HR=0.851; p<0.000). As startup age increases by one month, while holding all other variables constant, the rate of failure decreases by 14.9%.
Thus, older startups show lower failure ratios. Model 2 introduces the main effect of institutional distance on failure; in Hypothesis 1 we predicted a positive relationship between startups from countries with stronger institutions and firm failure. Our results show support for this hypothesis; the hazard ratio for this main effect is above 1 and statistically significant (HR= 1.94; p<0.10).

Holding all other variables constant, the rate of failure increases by 94% when a startup moves from a country with stronger institutions to another with a weaker institutional environment. In this model, startup age again shows a negative effect on failure (HR=0.852; p<0.000). Model 3 tests and shows strong support for Hypothesis 2, where we suggested a negative relationship between location capability development and startup failure. The hazard ratio for this interaction term is less than 1 and statistically significant (HR=0.548; p<0.000). As location capability development increases by one unit, holding all other variables constant, failure rate decreases by 45%.7 Here, again, startup age shows a negative effect on failure (HR=0.854; p<0.000).

Interestingly, in this model MBA degree shows a positive relationship with startup failure (HR=2.782; p<0.025). Startups with at least one member holding an MBA degree are almost three times more likely to fail than ventures whose founders do not have this degree. We will address this point in the discussion section. Finally, model 4 tests and shows support for Hypothesis 3, where we predicted that the negative effect of location capabilities on failure rates would be more negative for startups from countries with weaker institutions. The hazard ratio for the interaction term coefficient is above 1 and significant (HR= 2.002; p<0.10). In order to interpret the interaction term, we also run this model with its raw coefficients, instead of hazard ratios, these results are available upon request. Comparing two startups from countries with

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7 When running our regressions, we not only tested the relationship between location capabilities and failure, but also the relationship between failure and each of the items that made up this measure. In our sample, the activities that created the most value for international start-ups were hiring Chilean employees and registering the venture in Chile.
weaker institutions than those in their host country, an increase of location capabilities of 1 unit yields a HR equal to \( \exp(-1.03*1) = 0.35 \). Thus, the rate of failure is decreased by 65% with an increase of 1 in location capabilities. This effect is stronger than the observed within startups from stronger institutional backgrounds. If we were to compare 2 startups moving from countries with stronger institutions, an increase of 1 in location capabilities, while holding all other variables constant, yields a HR equal to \( \exp(-1.03*1 + 0.694*1) = 0.71 \), decreasing the failure rate only by 29%. Finally, we observe that the ID variable is no longer significant in this model, and we cannot conclude that the rate of failure will decrease as a startup moves from weaker to stronger institutional environments.

**Robustness Tests**

Similar to other researchers running survival models (Amezcua et al., 2013; Delios & Beamish, 2001; Delmar & Shane, 2006; Giarratana & Torrisi, 2010), we conducted a number of tests to check for model misspecification and omitted variable bias. First, we tested the proportionality assumption, which is one of the main assumption of the Cox proportional hazards model (Cleves, Gould, Gutierrez, & Marchenko, 2008), by including time-dependent covariates in the model. We did using the tvc and texp options in the stcox command in STATA. If a time dependent covariate is significant, that indicates a violation of this fundamental assumption. As none of our variables were significant either individually or collectively, we conclude that our model supports the assumption of proportional hazard. Second, we examined the proportionality of the model by performing the Schoenfeld test of residuals. Again, the whole model and each of
our predictors were supporting the hazard proportionality assumption. Our tests confirmed that our hypothesized models were not biased by unique cases or by model misspecification. Finally, we also run the hazard model including other exit as a control, our results remain the same.

**DISCUSSION**

The main goal of our paper was to shed light on how location considerations are important for the survival of startups that internationalize. We advance the literature on international venture performance by exploring the role of location for startup’s processes and performance. Specifically, we focus on two location considerations, institutional distance and location capabilities.

Aiming to contribute to research that advances our understanding of the relationship between firms’ unique perceptions (i.e. sense of place) and outcomes (Piscitello, 2011; Zaheer & Nachum, 2011), we suggest that institutional distance is one specific mechanism that shape startups’ survival. As background conditions imprinted in ventures’ DNA (Shinkle & Kriauciuonas, 2012), institutional differences between host and home country environments shape startups subjective perspectives when firms internationalize. As such, two startups moving to the same country might develop different perceptions on the resources and opportunities the host country offers, depending on the direction of institutional distance. A startup experiencing positive (negative) institutional distance may develop a positive (negative) impression of its new location, where the regulatory environment works better (worse) than at home. Government intervention is minimal (intense) and firm outcomes are (not necessarily) driven by strategic actions. Internationalizing to such a munificent (not) location creates a positive (negative)
subjective perspective that can translate to better (worse) odds for performance, including survival. As a construct, institutional distance has been criticized due to researchers’ obsession with this construct’s magnitude (Shenkar, 2012; Zaheer et al., 2012). Aiming to address this issue, we address current concerns on the assumptions of symmetry that the construct of institutional distance holds, and shed light into its direction. Our results show that positive and negative institutional distances trigger different effects on venture survival. Startups that internationalize from countries with weaker to stronger institutions are less likely to fail than startups that internationalized in the opposite direction.

Building on recent work that sees an advantage in bridging the institution and resource based views (Meyer et al., 2009), we take an action-based perspective (Zaheer & Nachum, 2011) and advance a model that connects location capabilities to international firm outcomes. Our results confirm that greater involvement in local activities to create value from locational resources (i.e. higher location capability development) translates into decreased odds of failure for international ventures. In particular, startups that established and maintained relations with Chile were significantly less likely to fail, especially relevant were engagement in two activities: hiring local employees, and registering the business in Chile. In line with similar research on international performance (Hitt et al., 2006), we attribute this result to a number of benefits derived from these efforts. We believe that the efforts that international startups make in developing location capabilities grants them with access to a number of resources that have been found to be positively related with survival. By embarking in engaging, transforming and appropriating location resources international startups gain legitimacy (Aldrich & Fiol, 1994; Henisz & Zelner, 2005), decrease liability of foreignness (Zaheer & Mosakowski, 1997), and facilitate access to a number of resources (Hitt et al., 2006) that would otherwise be unavailable.
for them. While extant research has suggested that firm heterogeneity shapes its ability and willingness to engage with local resources at international locations (Zaheer & Nachum, 2011), we provide empirical evidence to support that location capabilities in particular play a key role in marking these differences. As such, we contribute to the dynamic perspective of firm-location interaction.

In addition, our analysis suggests that location capabilities have a stronger effect among startups internationalizing from weaker institutional environments than among startups from countries with stronger institutions. As shown in Figure 2, the negative effect of location capabilities on failure is moderated by institutional distance. For startups from countries with weaker institutions, internationalizing implies access to resources that may be scarce in their country of origin.

**Figure 3: Interaction term plot**

As such, participation from an international acceleration program located in a stronger economy improves their strategic position, which translates in lower likelihood of failure. While the set of resources available for all startups at this location is identical, it seems that developing
these capabilities is of less value for startups from more advanced economies. Compared to firms from weaker institutional frameworks, developing location capabilities makes less (about half) of a difference in decreasing their odds of failure for startups from stronger institutional environments. Recent publications on incubators and the effects of these programs’ activities on exit rates (Amezcua et al., 2013) challenge the generic assumption that munificent environments decrease exit rates. These authors suggest that distinguishing among type of resources has implications for startup survival. Advancing these ideas, we suggest that the value of these resources is contingent to relative institutional differences between venture’s host and home countries.

**IMPLICATIONS AND LIMITATIONS**

Our work has important implications for theory, practitioners and policy makers. From a theory perspective, as a whole, our findings advance the understanding of location considerations for international startups. While recent studies suggest that firm’ perceptions shape outcomes, we provide empirical evidence to these claims and shed light on the determinants of these perceptions (i.e. institutional distance and location capabilities). From a practitioner’s perspective, our findings show that although accelerators open opportunities for startups to internationalize, the value of these opportunities should be carefully evaluated. Moving to countries with stronger or weaker institutional frameworks is not a trivial decision, and it may influence startups’ odds of survival. Related to this, while developing location capabilities is a good thing for any startup that internationalizes, spending more time in engaging with local resources does not blindly leads to reduced failure rates. Instead, our results suggest that the value of developing location capabilities is tied to the direction of distance between home and host country institutions. As such, we advise that ventures evaluate the costs and benefits of
engaging in greater capability development, since their desired benefits are conditional on institutions. Finally, our work also contributes to improve policymaking, especially public policy aimed to foster entrepreneurship. While our findings show that startups from countries with stronger institutions were less likely to survive, it does not translate in that this (or other) program should focus on accepting only startups from countries with weaker institutions. Expanding the conceptualization of failure, accepting firms that will likely fail also provides lessons related to resiliency, and to accept failure as part of the learning process inherent to entrepreneurship. In a country with low tolerance to failure (such as Chile), bringing in foreign entrepreneurs willing to try and start over might be even more valuable than bringing startups that survive but create little social value. As such, policy making needs to be seen as an instrument not only focused to capture economic rents from surviving firms, but also as a means to create cultural change and a vehicle to adopt social norms that embrace tolerance and resilience as key ingredients for successful venturing.

Our work does not come without some limitations, which we hope future research will address. First, our models did not include controls for previous funding. This was a data limitation related to that this item was not measured across all of our startups, and for those that it was measured it was done without much precision. For example, some startups were asked if they had received, but not when, or from whom. In addition, incorporating it would drop about one third of our sample, including a large number of the startups that have failed. Since only 11% of our sample had failed, we preferred to not include this variable. Importantly, while we acknowledge that funding has important implications for startup survival, this measure would really have been a proxy for extra funding, given that all participating startups were granted USD 40,000 after joining this program. Because we know that this information was available to the
judges that provided startups with an entry score (reflected in our entry score variable), we expect that our proxies for startup quality capture some of the variance related to previous funding. Hopefully, future research can thoroughly incorporate funding variables. Another limitation of this paper has to do with it implies that countries with stronger regulatory institutions offer more resources to international startups. While countries with stronger institutions tend to be more advanced and grant access to quality resources (such as better prepared human capital, more developed markets, and more political stability, among others), research has also shown that countries with less stringent institutions pose advantages in terms of cheaper and abundant resources. Future work should consider this issue and hopefully incorporate a proxy for resources in the models. Finally, our work was mostly focused on institutional distance related to formal or regulatory institutions. Future work could add other dimensions of distance, such as normative distance, and cognitive distance as determinants of survival.

CONCLUSION

What determines new venture survival (and failure) after internationalization? Our answer is that (1) institutions directly influence startup failure, (2) the engagement in activities with local resources is key to reduce failure, and (3) the negative effect of location capabilities on startup failure is moderated by the direction of startup’s institutional distance between home and host country. Our work supports the view of a dynamic perspective where startup-location interactions play a key role in shaping startups’ odds of survival. While institutional differences are found to be relevant for survival in foreign markets (Meyer et al., 2009), their relevance is enhanced by an action based perspective (Piscitello, 2011). Startups active engagement in developing location capabilities contributes to reduce international venture’s failure rate; these
benefits are even larger for startups moving to a country with stronger institutions than those in their home country. In conclusion, if this paper could only hold one message, it would be that location considerations are in fact important for startups that internationalize. The direction of institutional distance, as well as the ability of the startup to engage in developing location capabilities can mark the difference between life and death as a consequence of this meaningful strategic choice.
PAPER 3: Institutional Voids, a Critical Review and Research Agenda

ABSTRACT

This article critically reviews and analyzes the rapidly growing literature around institutional voids, specifically as it is used in the context of transition and emerging economies. I articulate its importance and timeliness considering the growing influence of these economies in today’s global economy. A systematic review of 82 publications published during the last fifteen years reveals that the concept has been quickly adopted across different disciplines within the field of business, that it is a reflection of a mind shift related to acknowledging the importance of contextual factors for processes and outcomes, and that the theoretical advancements around it are sometimes fragmented. Aiming to increase the quality, coherence and impact of the publications using this concept we therefore inventory and organize these advancements, and develop an ambitious research agenda that addresses unexplored issues and raises interesting questions around institutional voids.
INTRODUCTION

With the increasing importance that emerging markets have gained in the global economy, the institutional voids perspective has grown rapidly over the past fifteen years. Since its inception the concept of institutional voids (Khanna & Palepu, 1997, 2000) has attracted increasing attention among scholars interested in explaining how organizations at different levels—including individuals, firms, countries and supranational bodies—make up for gaps in the functioning of the market mechanism (Khanna & Palepu, 2000; Mair & Marti, 2009; Mair et al., 2012). Building on the work of North (1990) and Williamson (1975, 1985), Khanna and Palepu (1997, 2000) introduced the concept of institutional voids, defining them as a situation in which weak or absent institutions complicates the establishment of efficient markets. As such, the presence of underdeveloped capital markets, lack of regulatory systems, and absence of intermediaries, imply that there are missing mechanisms that facilitate that buyers and sellers get together. Especially useful in explaining how organizations make strategic decisions in the face of incomplete markets, this concept has been largely used by strategy scholars doing research in emerging markets. Sharing concerns on how contextual factors shape organizations’ and individuals’ decisions in a market setting, scholars from disparate business streams have become interested in shedding light and advancing the concept of institutional voids. For example, researchers from economic sociology (Mair & Marti, 2009; Mair et al., 2012; McKague et al., 2015) have integrated strategic and sociological perspectives to advance the understanding of this concept. Following this approach, a number of scholars in international business (Miller, Lee, Chang, & Le Breton-Miller, 2009; Pinkse & Kolk, 2012; Santangelo & Meyer, 2011), entrepreneurship (Desa, 2012; Kistruck, Webb, Sutter, & Bailey, 2015; Sutter, Webb, Kistruck, & Bailey, 2013; Webb, Kistruck, Ireland, & Ketchen, 2010), and management have followed
suit. As a consequence, the emerging interest in contributing to institutional voids has precipitated a rapidly growing body of work. While these contributions from different streams are all valuable, lack of coordination among these streams sometimes derives in a fragmented advancement of the field. A broader conceptualization of institutional voids may facilitate a more detailed consideration of the nature of these voids, and stimulate thinking of a larger number of ways to respond to them. Acknowledging the need for a deeper understanding of institutional voids, and given its relevance for international business, researchers in this field had recently call for a special issue on this matter (Doh et al., 2016).

Aiming to increase the quality, coherence and impact of the publications using the concept of institutional voids, the goal of this paper is therefore to inventory these advancements, perform a critical review, and develop an ambitious research agenda that addresses unexplored issues and raises interesting questions around institutional voids. Given the importance and abundance of institutional voids in emerging markets, we put special emphasis on papers in the context of transition and emerging economies. A systematic review of 82 publications published during the last fifteen years reveals that the concept is being adopted across different disciplines within the field of business, that it is a reflection of a mind shift related to acknowledging the importance of contextual factors for processes and outcomes, and that the theoretical advancements around it are sometimes fragmented.

We start our review by providing an explanation of the methodology we used to identify, select and review scholarly articles on institutional voids. We then present our findings, section that is divided in two subsections: theoretical issues, and common themes. This later subsection includes the consequences that these voids trigger at the macro (industry and market) and micro
(firm and individual) levels, as well as organizations addressing institutional voids. Finally, we provide suggestions for future research and close with limitations and conclusions.

**METHODOLOGY**

As a first step in our process, we used Google Scholar and Business Source Premier as the primary search engine leading our work. In order to get an idea on how the literature review on institutional voids has evolved, we began by running a broad search, aiming to get a sense of the large set of studies on institutional voids. As a first stage of our search, we included all articles across all journals that have ever mentioned the term “institutional void*” (the asterisk allows for search including “institutional void” and “institutional voids”; along the article we use these terms interchangeably). This search yielded 422 articles. As shown in Figure 1, this preliminary search allowed us to observe interesting patterns.

**Figure 4: Frequency of "institutional void*" across all journals**
As noted in Figure 1, the first time the term institutional void was used was in 1990, but it was not used and defined as it is today until 1997, when a Harvard Business Review article published by the strategists Khanna and Palepu suggested that strategies used in developing countries may not be applicable in emerging economies. After that, in the year 2000, the same authors published the first academic paper referring to “institutional voids” and the consequences they generate for firms operating in emerging countries. After these two seminal articles were published -and especially from 2005 and on- we observe a constant and increasing adoption of this term. Between the year 2000 and 2015, this term has an average of 25.3 publications per year, reaching a peak of 66 publications in 2013.

This general search was specifically meant to provide early support to our claim that institutional void is a concept growing in popularity. However, looking into any journal mentioning the words “institutional voids” would not necessarily lead to a high quality review (Webster & Watson, 2002). In order to select the articles for inclusion in this review, then, we followed exemplar literature reviews (Kiss, Danis, & Cavusgil, 2012; Pacheco, York, Dean, & Sarasvathy, 2010) and conducted a systematic search considering leading journals in the field of interest, in our case, the business field. Major contributions for any field are likely to be in leading journals. Aiming to establish clear boundaries for our work, and because our goal is to advance the understanding of institutional voids in the business field at large, we included journals in management, international business, entrepreneurship and strategy. We focused our efforts on a total of 15 journals, including Academy of Management Journal, Academy of Management Review, Academy of Management Perspectives, Academy of Management Learning & Education, Academy of Management Annals, Journal of Business Venturing, Administrative Science Quarterly, Journal of Management Studies, Journal of International Business Studies,

Interestingly, we did not find articles using “institutional void*” among journals in the core disciplines of economics (Journal of Economic Literature, American Economic Review), public policy (Journal of Political Economy), and sociology (American Sociological Review and American Journal of Sociology).

In order to perform our review, we used three criteria to determine whether to include an article or not. First, papers that were included had to explicitly use the term “institutional void(s)”. This led us to 199 articles among the top journals mentioned above. As shown in Figure 2, this refined search provided similar results in term of distribution of articles by time period. As observed, leading journals as well have increasingly incorporated the concept of “institutional voids”. In fact, if we consider that these publications fall within those in our first search, one can conclude that leading journals make up for about half of the contributions to this literature. Between the year 2000 and 2015, this term has an average of 12.3 publications per year, reaching a peak of 33 publications in 2014.
Although all of these articles explicitly used the term “institutional void(s)”, not all of them advanced the understanding of this concept. In many cases, especially among strategy journals, it was mentioned only once or twice to describe the complexity of the context that firms in emerging economies face. To address this issue, we used three additional screens. First, we included articles that listed institutional voids in the title, keywords or abstract, which yielded 17 articles. Then, we read each of the 199 articles published in leading journals to identify additional articles that advanced the understanding of the concept of institutional voids. Finally, in narrowing our scope, we exclusively focused on reviewing papers that address, acknowledge and advance the concept of institutional voids in the context of emerging and transition economies. In consequence, this last step means that we excluded papers that mentioned the existence of institutional voids due to the emergence of new industries in developed countries (e.g. Alvarez, Young, & Woolley, 2015).
Because a high quality literate review is not necessarily confined to one set of journals (Webster & Watson, 2002), we expanded our search by conducting a “backward” search as a fourth step of our process; we read through seminal articles identified in the previous step and reviewed citations found in them. Here, however, we expanded the criteria defined above because we acknowledge that concepts are originally rooted in theories that not necessarily articulate or label a concept as it is used today. This process contributed to add a number of books (Fligstein, 2002; North, 1990) and articles (Khanna & Palepu, 1997) that have been highly cited by the institutional voids literature. As a final step, we did a forward search and identified articles citing the key articles identified in the previous step. In summary, these steps lead us to include 82 articles and books, published between 1990 and 2015, that substantively addressed the topic of institutional voids.

Among these journals, the Journal of International Business Studies is the one that has shown the strongest use of the concept of institutional voids; between 2001 and 2015 it has published 37 articles addressing this concept, in addition it has a forthcoming special issue on this topic, to be released in 2016. Following this trend, entrepreneurship journals have also contributed to institutional voids, while the Journal of Business Venturing leads with 23 articles published between 2005 and 2015, Entrepreneurship: Theory and Practice follows with 17 articles within the same time frame. On the strategy side, the Strategic Management Journal has published 19 articles that use the concept of institutional voids between 2003 and 2015, and the newly released Global Strategy Journal also contributes to advance this concept with 17 publications, a large number considering that it was only launched in 2011. Finally, showing a strong interest in advancing theory around institutional voids, the Academy of Management

8 http://www.palgrave-journals.com/jibs/cfp_institutional_voids.html
Journal has published a total of 17 articles developing this concept between 2000 and 2015. In summary, our preliminary analyses show that the literature around institutional voids is growing, and that the term has gained popularity among top tier journals, as well as other journals. Within leading journals, around 93% of the articles we found had been published during the last decade, and over 45% appeared during the last three years.

However, an increased interest in the adoption of the concept of institutional voids is not enough to support the need for a literature review on the topic. What really makes this review relevant is the fact that the quick pace at which different disciplines have adopted and advanced this concept implies that different disciplines within the field of business interpret and advance the concept of institutional voids in unique ways. This suggest that the concept of institutional voids may require a coherent conceptual structuring of the topic itself (Webster & Watson, 2002). Aiming to contribute to develop convergence and coherence among the rapidly growing literature around institutional voids, we organize our review based on the following categories:

a) Theoretical issues (literature streams, theories, and definitions)
b) Main advancements and common themes (consequences, organizations and motives)

By focusing in these specific categories we were able to assess each article in an organized manner that would allow us to neatly report our findings, which are summarized in our next section.

FINDINGS

This section organizes our main findings around the categories presented above. We start with the theoretical issues section because it introduces the reader to the main literature streams and theories addressing institutional voids; here we consider fundamental issues related to definitions and typologies around this concept. The second section focuses on organizing the
reviewed articles based on common themes and main advancements on the literature on institutional voids. Here we identify a set of recurrent consequences that institutional voids trigger -at the macro and micro levels-. In addition, we also include in this section a set of organizational actors that -guided by different motivations- repeatedly appear in our review as active actors addressing and filling institutional voids.

**Institutional voids: theoretical issues**

The new institutional economics (North, 1986; Williamson, 1998) theoretical perspective argues that in order for economic markets to work in a country, there must be institutions shaping the environment in which organizations act and compete. Institutions are the rules of the game that regulate the game that economic actors play (North, 1990), constraining and promoting specific behaviors. Following an efficiency perspective, economists have suggested that institutions lower transaction costs and minimize the costs of committing resources by creating an environment where transaction parties can interact free from the risk of contractual hazards and opportunism (Williamson, 1985). As such, institutions provide a framework within which people can predict the outcomes of their decisions (Hill, 1995). Over time, socially constructed practices –formal and informal- contribute to the creation of efficient markets (North, 1990). North (1990) distinguishes between formal and informal institutions. Formal institutions are defined as the written regulations and procedures that are communicated and enforced through official channels, and informal institution are the socially shared rules, usually written nowhere, and created, communicated and enforced outside official channels (North, 1990). Due to their relevance in providing more complete explanations to firm strategies, informal institutions have been incorporated into classical institutional analysis, gaining increasingly popularity among management researchers at large (Dunning & Lundan, 2008;
Building on the work of North (1990) and Williamson (1975, 1985), Khanna and Palepu (Khanna & Palepu, 1997), coined the term institutional void to refer to situations in which institutional arrangements that support market functioning—institutions commonly found in the “Western world”—are absent or weak. Concerned with the rapid growth and promising relevance of emerging economies, the first academic article addressing “institutional voids” as it is understood today was published by Khanna and Palepu in the year 2000. After this seminal publication, the use of “institutional voids” became extensive among scholars in strategy and management at large. Due to that the concept of institutional voids introduces the context as a central lever for firm strategy, especially for firms in emerging economies, authors in strategy and international business became particularly interested in it. Authors within the strategy tradition rapidly adopted this concept, adding that institutional voids also refer to “the lack of intermediary firms, regulatory systems and contract-enforcing mechanisms” (Miller et al., 2009: 803). For instance, situations found in the contexts of underdeveloped capital markets, characterized by inexistent market information, high government intervention and lack of mechanisms to enforce contracts (Makino, Isobe, & Chan, 2004). With a strong focus on market based institutions, authors in strategy have used this term to refer to the absence of these mechanisms in the product, labor and capital markets (Chung & Luo, 2013; Khanna & Palepu, 2010), preventing buyer and sellers from efficiently come together (Dhanaraj & Khanna, 2011). Concerned about efficiency and costs, researchers in these traditions rely in theories such as agency, resource based view, transaction costs, and new institutional economics to suggest best practice solutions to trade related issues, and how soft market infrastructure—including
institutions and intermediaries—contribute to market functioning (Leff, 1978). As such, our review reveals that scholars in strategy have explained how institutional voids determine alternative firm strategies and their respective outcomes, including how specific intermediaries—such as business groups and networks—emerge to compensate for this gap. Because their focus is mostly on strategies and outcomes, the unit of analysis they study is generally at the firm level.

Sharing concerns on how contextual factors such as institutions determine organizational and individual outcomes, researchers with roots in mainstream sociology and economic sociology have embraced this concept and extended its definitions (Mair et al., 2012; McKague et al., 2015). While this stream acknowledges the importance of the term initially coined by strategists, it advances the concept of institutional voids taking into account a broader set of spaces in which these voids can occur, as well as a broader set of theories that explain how they operate. As a key assumption, scholars in this tradition assume that organizing rationalities are nested in pluralistic institutional environments (Carney & Farashahi, 2006), and that society is a system of interlinked institutional arenas (Friedland & Alford, 1991). This perspective includes social, religious and political institutions as fundamental for the process of market creation.

Spheres where macro and micro level institutions—including power structures, legacy institutions and institutional practices—converge (Mair & Marti, 2009) in ways that sometimes translate in contradictions and conflict between contending institutional arrangements. Thus, the sociological perspective considers a much broader definition of institutional voids, not only evaluating them with an efficiency lens, or defining them as a space empty of institutions, but instead as “analytical spaces at the interface of several institutional spheres…” (Mair et al., 2012: 822). In consequence, researchers in this tradition (Dorado & Ventresca, 2013; Johanna Mair & Ignasi Marti, 2007; Uzo & Mair, 2014) theorize about entrepreneurial processes of institutional
change triggered by a broad set of actors—such as institutional entrepreneurs, social movements, hybrid organizations, and NGOs—encompassing market and non-market strategies (Doh & Lucea, 2013). Consequently, a broader conceptualization of institutional voids opened up the space for sister theories—such as institutional theory—to explain how social structures influence market processes (Mair & Marti, 2009)(McKague et al., 2015)(McKague et al., 2015).

Concerned with how institutional structures shape activities that provide meaning to social behavior a number of researchers have relied on the institutional theory (Powell & DiMaggio, 1991) to explain how incongruence among these institutions determine the processes in which organizations engage, and the outcomes that they trigger.

Notably, there is a growing set of researchers that have prioritized an integrative approach. This approach is populated by research from a number of disciplines (e.g. researchers from entrepreneurship, business ethics, social entrepreneurship, international business and even strategy) under the umbrella of the management field, characterized by allowing cross-pollinization between literature streams. Less concerned about dogmatic adherence to one theoretical strand or another, they have taken an intermediate position and adopted concepts from strategy and sociology to advance the understanding of institutional voids. Recent publications contribute to these ideas by claiming that “social norms and conventions can contribute to the existence of institutional voids…” (Chakrabarty & Bass, 2013: 530). Mostly concerned with advancing the literature around institutional voids, these researchers integrate micro-entrepreneurial processes with macro-institutional theory (Desa, 2012). As such, they uncovered novel aspects of institutional voids, such as the processes (i.e. bricolage) by which organizations engage in filling institutional voids (Mair & Marti, 2009), and unexpected outcomes that institutional voids can elicit (Kistruck et al., 2015; Sutter et al., 2013). In this middle ground
space we can also find a number of researchers (Banalieva et al., 2015; Meyer et al., 2009) who would ascribe to what is defined as the “institution based view of strategy” (Peng et al., 2009), a trend among strategy scholars that draws “on the best insights of both, economics and sociology” (Peng et al., 2009: 64) to study how the changing institutional environment shapes strategy implementation (Santangelo & Meyer, 2011), performance (Banalieva et al., 2015) and market entry (Meyer et al., 2009).

Overall, our findings show that the concept of institutional voids is rooted in theories on institutions. While it was initially proposed by strategists concerned with formal institutions, a wide array of managerial disciplines have adopted this concept by combining it with some aspects from the sociological tradition. Importantly, the main difference between contributions to institutional voids has to do with the way institutional voids are defined. Researchers with roots in sociology consider that institutional voids are “plural, often contending institutional arrangements…rather than continuing the view of “empty” institutional space” (Mair et al., 2012: 822). However, because this perspective was initially coined by strategists, among top tier publications we observe that about 90% of the papers cite Khanna and Palepu’s seminal papers (1997/2000). Our review shows that most researchers across management disciplines are inclined to mix aspects from both from economic strategy and sociology; this is reflected in how different authors define institutional voids. For example, Table 7 provides a summary of the different definitions and theories articles in leading journals have suggested for institutional voids. This table should provide readers a sense of how these definitions evolve over time.
Table 7: Summary of relevant definitions for "institutional voids"

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Discipline</th>
<th>Theories</th>
<th>What institutions?</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khanna &amp; Palepu</td>
<td>2000</td>
<td>Strategy</td>
<td>New Institutional economics, agency theory</td>
<td>Formal</td>
<td>“A variety of missing institutions in an environment”</td>
</tr>
<tr>
<td>Carney</td>
<td>2005</td>
<td>Entrepreneurship</td>
<td>Agency theory</td>
<td>-</td>
<td>Ambiguous regulatory environments</td>
</tr>
<tr>
<td>Luk et al.</td>
<td>2008</td>
<td>International business strategy</td>
<td>Institutional theory</td>
<td>-</td>
<td>“The lack of formal market-supporting institutions, such as a transparent legal system and non-corrupt law enforcing bodies”</td>
</tr>
<tr>
<td>Mair &amp; Marti</td>
<td>2009</td>
<td>Entrepreneurship</td>
<td>Institutional theory &amp; bricolage</td>
<td>Political, social, cultural and market</td>
<td>“Situations where institutional arrangements that support markets are absent, weak, or fail to accomplish the role expected of them”</td>
</tr>
<tr>
<td>Tan &amp; Meyer</td>
<td>2010</td>
<td>International business strategy</td>
<td>Agglomeration economies</td>
<td>-</td>
<td>“Imperfections in the effectiveness of market exchange due to shortcomings in the institutional frame-work”</td>
</tr>
<tr>
<td>Santangelo &amp; Meyer</td>
<td>2011</td>
<td>International business strategy</td>
<td>Internationalization theories</td>
<td>Formal</td>
<td>“Imperfections in the market mechanisms caused by the lack of appropriate market-supporting institutions”</td>
</tr>
<tr>
<td>Mair &amp; Marti</td>
<td>2012</td>
<td>Management, economic sociology, entrepreneurship</td>
<td>New Institutional economics, sociology of markets</td>
<td>Political, social, cultural and market</td>
<td>“Outcomes of cultural and political contention among actors with differential power and competing frames”</td>
</tr>
<tr>
<td>Sutter</td>
<td>2013</td>
<td>Entrepreneurship</td>
<td>Institutional theory</td>
<td>Formal</td>
<td>“The lack of well-defined or protected property right, established capital markets, ”</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Field</td>
<td>Sub-discipline</td>
<td>Definition</td>
<td></td>
</tr>
<tr>
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<td>--------------------------------------------</td>
<td>-------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Kistruck et al.</td>
<td>2015</td>
<td>Entrepreneurship</td>
<td>Institutional theory</td>
<td>“Complete absence of supportive market institutions, and is a term that has become synonymous with extremely “weak” institutions.” Spaces for power struggle between legitimate and illegitimate orders</td>
<td></td>
</tr>
<tr>
<td>Stephan et al.</td>
<td>2015</td>
<td>Entrepreneurship</td>
<td>Institutional theory and New Institutional economics</td>
<td>“Conditions of limited government support especially for social programs”, as well as “absence of strong rule of law”</td>
<td></td>
</tr>
<tr>
<td>McKague, Zietsma, &amp; Oliver</td>
<td>2015</td>
<td>Management, economic sociology, entrepreneurship</td>
<td>New Institutional economics, sociology of markets</td>
<td>“Contexts in which property rights are loosely defined or difficult to enforce, laws and regulations are unenforced, legal systems are corrupt, and formal market infrastructures are weak”</td>
<td></td>
</tr>
</tbody>
</table>

As a recently developed concept, the dynamic definition of institutional voids shows that the understanding of institutional voids is still evolving. In fact, it is surprising to observe that, as time passes, researchers dare to even integrate traditional institutional theory with new institutional economics in one paper (Stephan, Uhlaner, & Stride, 2015). Recent publications on
this topic reflect that proponents in strategy and management acknowledge that engaging a pure strategy perspective with a more flexible and integrative management perspective can bring up productive conversations (Dhanaraj & Khanna, 2011; Mair et al., 2012).

In continuing our review, our next section introduces the consequences that a number of authors recurrently identified as inherent to countries and context plagued with institutional voids.

**Consequences**

Scholars across different literature streams agree with that institutional voids pose a number of consequences for organizations. In this section, we embark into the task of classifying these consequences at the macro level – meaning their negative effects for society and markets at large-, and micro level – meaning their negative effects for firms and individual in particular. Importantly, we also create subsections to distinguish between consequences related to outcomes and processes. Across the articles we reviewed, it was a trend to observe that 100% of them did actually refer to at least one consequence that institutional voids pose on organizations.

**Macro level consequences (market and industry level):**

*Outcomes:*

Focusing on the consequences that institutional voids pose for markets at large, researchers with roots in economic strategy have shown that they harm efficient market functioning (Khanna & Palepu, 1997). Common across emerging markets, institutional voids are characterized by uncertainty (Akerlof, 1970), transaction costs (Coase, 1937), and information asymmetries (Santangelo & Meyer, 2011). Providing a more nuanced perspective of the type of
issues inherent to institutional voids, Khanna and Palepu’s seminal article suggest that they generate problems in the capital, labor, and product markets (Khanna & Palepu, 1997, 2010). A recurrent example to explain how institutional voids undermine efficient markets can be found in the influential book by Hernando de Soto (De Soto, 2000); the premise of his argument is that property rights are key for poverty alleviation. Poor inhabitants from the non-Western world fail to benefit from capitalism because even when they own a vast amount of assets, there are no titles that allow people to use them as collaterals for loans or other sources of capital. Instead, property relations rely on informal norms based on trust, which prevent people and firms from garnering resources beyond their social circles. As such, institutional voids in emerging and transitioning economies undermine market activity by preventing local entrepreneurs from accessing basic resources needed for business to thrive. Lacking many of the fundamental institutions that secure efficient transactions in the Western world, institutional voids pose challenges for the exchange of products and services between arm’s length transactors (Leff, 1978). Researchers in the strategy tradition, then, have held institutional voids responsible of increasing the cost of doing business (Inoue, Lazzarini, & Musacchio, 2013), hampering economic exchange (Chen, Chittoor, & Vissa, 2015; Miller et al., 2009), reducing efficiency of markets (Santangelo & Meyer, 2011), and hindering economic and organizational outcomes (Martin, 2014). These findings are summarized in Table 8, below.

Table 8: Macro level consequences (market and industry level)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Type</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harm efficient market functioning</td>
<td></td>
<td>Khanna &amp; Palepu, 1997</td>
</tr>
<tr>
<td>Generate problems in the capital, labor, and product</td>
<td></td>
<td>Khanna &amp; Palepu, 2010</td>
</tr>
<tr>
<td>markets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Pose challenges for the exchange of products and services between arm’s length transactors</td>
<td>Leff, 1978)</td>
<td></td>
</tr>
<tr>
<td>Increase the cost of doing business</td>
<td>Inoue, Lazzarini, &amp; Musacchio, 2013</td>
<td></td>
</tr>
<tr>
<td>Hamper economic exchange</td>
<td>Chen, Chittoor, &amp; Vissa, 2015; Miller et al., 2009</td>
<td></td>
</tr>
<tr>
<td>Reduce efficiency of markets</td>
<td>Santangelo &amp; Meyer, 2011</td>
<td></td>
</tr>
<tr>
<td>Hinder economic and organizational outcomes</td>
<td>Martin, 2014</td>
<td></td>
</tr>
</tbody>
</table>

**Processes:**

In agreement with strategy scholars, researchers in management and especially in sociology add that institutional voids impact market level processes, such as market formation and market functioning. For instance, scholars in the informal economy report that institutional voids harm market functioning because the lack of enforcement of formal rules allows for the emergence of black markets and informal economies (Godfrey, 2011; Webb, Ireland, & Ketchen, 2014). In these contexts, organizational actors operate within a gray space where transactions are instead supported by informal institutions, which define a space for legitimate yet not necessarily legal entrepreneurial ventures (Webb et al., 2010, 2009). Additionally, scholars in entrepreneurship and development streams address consequences at the social level. For example, Mair and Marti (2012) suggest that institutional voids reinforce market inequalities such as market access opportunities for poor women in Bangladesh. In communities governed by
political, religious and cultural prescriptions, instead of market forces, institutional voids determine market participation (and market exclusion). Authors concerned with the social structure of markets support that when the social structure is not build thinking of market transactions, institutional voids can reinforce social inequality (McKague et al., 2015). Some researches have used the term institutional voids to refer to institutional frictions at the industry level (Alvarez et al., 2015). However, since the scope of our study was limited to the use of this term in the context of emerging and transitions economies, we do not refer to these studies because they are centered in industries (i.e. king crab industry) development in advanced economies (i.e. United States). These findings are summarized in Table 9, below.

**Table 9: Macro level processes (market and industry level)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinforce market inequalities</td>
<td>Mair &amp; Marti, 2012; McKague et al 2015</td>
</tr>
</tbody>
</table>

**Micro level consequences (Firm and individual level consequences):**

*Outcomes:*

In our review we found a large number of articles reporting that institutional voids generate difficulties in accessing information. The absence of specialized intermediaries generates difficulties for local financial markets actors in accessing reliable information due to lack of adequate disclosure rules, and weak corporate governance (Khanna & Palepu, 2000). Consequently, this gaps thwart entrepreneurial activity and undermine the ability to pursue
profitable projects (Inoue et al., 2013). Addressing the consequences of information access for international businesses, there is a number of studies suggesting that institutional voids imply that international firms and MNEs must devote a larger amount of resources to gather pre-entry information when evaluating the option of entering emerging economies (Meyer & Peng, 2005; Santangelo & Meyer, 2011; Tong, Reuer, & Peng, 2008). Additionally, our review revealed that a number of studies across different traditions report that institutional voids create hardships in accessing funding. For example, studies in corporate governance have shown that in a foreign IPO, home country institutional voids affect the high value perceptions among US investors (Bell, Filatotchev, & Aguilera, 2014). Among others, this is due to the perceptions of uncertainty (Isobe, Makino, & Montgomery, 2000) and information asymmetry (Santangelo & Meyer, 2011) that institutional voids pose for foreign direct investors (FDI). These arguments also apply to the realm of entrepreneurship; in countries with high informality, lenders (i.e. venture capitalists, angels) do not find intermediaries and structures that ensure repayment. As a consequence, these voids generate limitations to funding availability (Martinez, Cummings, & Vaaler, 2015), this is specially prevalent in emerging and transition economies and countries with high uncertainty avoidance (Li & Zahra, 2012).

Probably less explored, but not necessarily less relevant are the consequences that institutional voids generate in terms of facilitating that firms and individual entrepreneurs become victims of abusive behaviors. Leading research around this issue, Sutter and colleagues (Sutter et al., 2013) reports how small entrepreneurs in Guatemala cope with organized crime. In a second study (Kistruck et al., 2015) they find that engaging in practices that facilitate legitimacy can lead to resource appropriation. Registering their business –compelling with existing regulations- translates in that entrepreneurs in Guatemala attract gangs and organized
crime organizations to steal from them. Paradoxically, they report that in the face of institutional voids, legitimacy can be detrimental. Similarly, Luk et al (2008) report that in contrast with market economies (i.e. Hong Kong), developing social capital (guanxi) in emerging economies (i.e. China) may bring negative unintended consequences. Lacking formal structures to adequately constrain government officials behaviors implies that they take advantage of relationship established with incumbent firms. Research in ethics and entrepreneurship shows that while the absence of institutions favor the need of microcredit organizations, these very same gaps also allow for unethical behavior from these organizations’ loan agents against women borrowers (Chakrabarty & Bass, 2013)

In our review we found a number of publications in strategy that highlight that institutional voids are also a source of competitive advantages (Boddewyn & Doh, 2011; Carney, Van Essen, Gedajlovic, & Heugens, 2015; Narula, 2012). For instance, studies on family firms show that in emerging economies these firms outperform nonfamily firms due to the competitive advantages derived from developing social capital and relational contracting (Carney et al., 2015; Miller et al., 2009). Similarly, studies focused on MNEs show that compared to firms internationalizing from developed economies, firms that are indigenous from emerging economies developed advantages from their familiarity with local institutional voids. Contributing to this perspective, Del Sol and Kogan (2007) suggest that because Chile went into liberalization much earlier than other Latin American countries, Chilean MNEs have ownership assets in ‘liberalization know- how’. These assets became advantages that allow Chilean firms to leverage this knowledge in other regional markets. While the knowledge of local institutions may grant benefits that only last a short amount of time (Narula, 2012), they still imply the development of competitive advantages. Competitive advantages, then, are not only determined
by the technology of the industry but also by structural determinants (Dhanaraj & Khanna, 2011). Advancing this perspective, recent publications coin this term “institutional competitive advantage” (Martin, 2014), achieved by firms that profit from unique resources and activities that have been enabled due to its interaction with the local institutional environment.

While in general strategy scholars concerns are not necessarily focused on individuals, scholars in this tradition have show a growing concern about the challenges that institutional voids pose for Western firm management (Dhanaraj & Khanna, 2011). Internationalizing to emerging economies requires that executives perform many functions that otherwise are played by market intermediaries in developed markets, including obtaining information, enforcing contracts and even interpreting regulation (Luo, 2003). Due to the increasing importance of emerging economies in global strategy, the study of emerging markets require fundamental reevaluations (Doh, 2011). This concern has raised to the point where the very proponents of the institutional voids themselves have recently written articles urging international strategy scholars to shift mental models and teach business students to develop “contextual intelligence”, where emerging markets require strategies different from those that lead to success in the Western world (Dhanaraj & Khanna, 2011; Khanna, 2015). Studies in entrepreneurship have also addressed individual level consequences triggered by institutional voids, including motivations, orientations and perceptions of entrepreneurs. For example, studies suggest that institutional voids influence the likelihood of entrepreneurs engagement in social ventures (Estrin, Mickiewicz, & Stephan, 2013). In a context characterized by institutional voids, the social connections might be so important that they precede the relationship between entrepreneurial orientation and venture creation (Covin & Miller, 2014). Researches concerned about entrepreneurial cognition suggest that institutional voids influence entrepreneurs’ perceptions
and frequency of environmental scanning in emerging economies (Stewart, May, & Kalia, 2008). Finally, scholars concerned about the social and personal implications of institutional voids have suggested that voids around culture and religion can undermine women’s autonomy (Mair et al., 2012). These findings are summarized in Table 10, below.

Table 10: Micro level outcomes (firm and individual level)

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Type</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulties in accessing information</td>
<td>Khanna &amp; Palepu, 2000</td>
<td></td>
</tr>
<tr>
<td>Hardships in accessing funding</td>
<td>Bell et al. 2014</td>
<td></td>
</tr>
<tr>
<td>Abusive behaviors</td>
<td>Sutter et al. 2013; Kistruck et al. 2015</td>
<td></td>
</tr>
<tr>
<td>Negative unintended consequences</td>
<td>Luk et al. 2008; Kistruck et al., 2015</td>
<td></td>
</tr>
<tr>
<td>Unethical behavior</td>
<td>Chakrabarty &amp; Bass, 2013</td>
<td></td>
</tr>
<tr>
<td>Competitive advantages</td>
<td>Boddewyn &amp; Doh, 2011; Narula, 2012; Carney et al. 2015</td>
<td></td>
</tr>
<tr>
<td>Challenges for Western managers</td>
<td>Luo, 2003; Dhanaraj &amp; Khanna, 2011; Doh, 2011</td>
<td></td>
</tr>
<tr>
<td>Shape motivations for social entrepreneurship</td>
<td>Estrin et al. 2013</td>
<td></td>
</tr>
<tr>
<td>Shape cognition and environmental scanning</td>
<td>Stewart et al., 2008</td>
<td></td>
</tr>
<tr>
<td>Undermine women’s autonomy</td>
<td>Mair et al., 2012</td>
<td></td>
</tr>
</tbody>
</table>
Processes:

Naturally, the challenges that institutional voids pose at the macro level translate into consequences for individuals and firms in particular. In the following section we review research that has shed light onto some of most recurrent processes that firms and individuals engage in.

Internationalization: Contributing to uncover alternative organizational strategies suitable to cope with institutional voids, research in international strategy has introduced international joint ventures (IJV) as a prevalent strategy among international firms entering emerging markets (Michael A. Hitt, Dacin, Levitas, Arregle, & Borza, 2000). Local partner selection is an important factor influencing IJV performance because these partners are a primary channel through which foreign firms may obtain access to local resources, including valuable information about local institutional context and voids in the host country (Makino & Delios, 1996; Tong et al., 2008). As such, partnering with local firms seems to be one predominant strategy among MNEs. Due to their prevalence in emerging economies business groups appear as important potential partners for foreign entrants. Group affiliated firms can offer IJVs access to resources that otherwise unavailable for them (Lu & Xufe Ma, 2008).

Alliance formation: While most of the research on alliance has been studied in the context of market strategies, recent publications (Doh & Lucea, 2013) have highlighted the importance of establishing alliances with non-market actors as a means for firms to overcome institutional voids. For example, Inoue et al. (2013) propose that including the state as a minority shareholder contributes to substitute for voids in capital markets that prevent established firms from accessing credit and investing in profitable projects, especially projects requiring large, fixed capital allocations. Similarly, other authors (Boddewyn & Doh, 2011) suggest that when
governments fail to provide essential public goods, local and international firms must to engage in (non market) strategies that require alliances between private parties and public actors. In this vain, institutional voids generate instance for strategies related to collaborative participation of business, NGOs and government. In the context of base of the pyramid research, Webb and colleagues (2010) suggest that the negative effects that institutional voids generate for MNEs tackling these markets can be offset through productive partnerships with local NGOs. These alliances grant MNEs access to knowledge of local markets and institutions, and social embeddedness, which translates into legitimacy in dealing with host country stakeholders. All in all, the studies that reported that firms in emerging economies rely in alliances as strategies to cope with institutional voids. These alliances can be either between private sector firms, or also include non-market actors.

Network formation: Among all the strategies we identified across studies in the strategy and international strategy perspectives, probably the most popular strategy to fill institutional voids is the establishment of networks, governance structures that that “make up”, “substitute” and “complement” for missing institutions and intermediaries (Ahuja, Soda, & Zaheer, 2011). Scholars in our review emphasize the benefits of joining local networks (Granovetter, 2005), arising from durable and multiple ties between their members (Chen et al., 2015). Most of these studies agree that network affiliation has positive effects on firm performance (Acquaah, 2012; Carney, Gedajlovic, Heugens, Van Essen, & Van Oosterhout, 2011; Lu & Xufei Ma, 2008; Miller et al., 2009). Among different types of networks, business groups are the predominant and most studied network type intermediary in the context of institutional voids. Scholars explain the positive relationship between affiliation and performance due to that business group affiliates enjoy lower levels of uncertainty, better access to resources (Fisman & Khanna, 2004).
information (Keister, 1998) and business opportunities (Weidenbaum & Hughes, 1996) through repeated interactions among its members (Carney et al., 2011). In a similar vein, some researchers (Acquaah, 2012; Banalieva et al., 2015; Miller et al., 2009) have explored the role of family firms and the ties they establish with different stakeholders in making up for institutional voids. Acquah (2012), for example, shows that family firms benefit more than non-family firms from networking relationships with bureaucratic officials in Ghana. Because top managers of family firms are usually the owners, they create more trust than non-family firms. In addition, researchers in this area (Miller et al., 2009) explain that developing lasting and deeper relationships with their employees, family firms in emerging economies may compensate for the shortage of capital, product and labor infrastructures that characterize developed economies. In the context of foreign investors, researchers in our review also support the importance of establishing networks. Entering emerging markets imply facing voids that increase the perceived levels of uncertainty and lower trust in information that is publicly available. As such, foreign entrants have high incentives to establish networks in the host country, especially valuable are networks established with firms from the same country of origin (Tan & Meyer, 2011).

Operational strategies: A relatively unexplored area is the development of operational strategies as a means for firms to deal with institutional voids. Pioneering this work, Kistruck at al. (2013) show that sales related strategies prove to be useful in coping with agency costs. In the context of BOP markets, where limited infrastructure and institutions translate in that monitoring systems becomes difficult and expensive to implement, identity based mechanisms between sales representatives and the product prove to be an efficient strategy in filling these voids.

Bricolage: Defined as the process of “making do with whatever is at hand” (Levi-Strauss, 1966), bricolage has proven to be a recurrent strategy among organizations dealing with
institutional voids. Mair and Marti (2009) grounding work on institutional voids illustrate how an NGO within a poor community was able to engage in market creation processes through bricolage. Shedding new light on the process of bricolage and uncover three aspects of this process: sense making, the political nature of making do, and the generation of unexpected consequences. Similarly, Desa (2012) shows that in the context of social ventures, international entrepreneurs facing institutional voids engage in bricolage to reconfigure existing resources. Bricolage embodies resourcefulness and adaptativeness, key to cope with institutional voids while legitimizing institutional change.

Strategic responses: Adding to the literature on strategic responses to the institutional environment (Oliver, 1991), McKague and colleagues (2015) suggest that the processes related to creating the social structure of a market precede and enable efficient economic markets. Specifically, they suggest that NGOs need to engage in strategies of contextual bridging, brokering relationships and funding experimentation that allow them to create this cornerstone structure. Similarly, research in entrepreneurship dealing with illegitimate actors suggests that entrepreneurs need to develop strategic responses against illegitimate arrangements. These responses vary depending on entrepreneurs’ networks and individual perceptions of threat and resource mobility. These findings are summarized in Table 5, below.

Table 11: Micro level processes (firm and individual level)

<table>
<thead>
<tr>
<th>Type</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processes</td>
<td></td>
</tr>
<tr>
<td>Internationalization</td>
<td>Hitt et al., 2000; Tong et al., 2008, Lu&amp;Ma, 2008</td>
</tr>
<tr>
<td>Alliance formation</td>
<td>Doh &amp; Lucea, 2013, Inoue et al., 2013; Boddewin &amp; Doh, 2011; Webb et al.,</td>
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</table>
In summary, our research on consequences triggered by institutional voids show agreement across all disciplines that voids pose challenges for society, culture and markets at large, as well as organizations and individuals in particular. Whereas market level consequences have been broadly addressed, most articles addressing institutional voids have shown special attention to how they affect firms and entrepreneurs. A promising and unexplored aspect of these consequences has to do with indirect and unintended consequences that institutional voids generate. This is, consequences due to the emergence of organizations that are there to cope with these voids. While most researchers praise social networks and non-profit organizations as second best solutions to institutional voids, a few studies have raised the issue that even when the goal of these organizations is to create value, they can also destroy value by allowing unethical, disruptive and abusive behavior among undermined populations.

**Type of organizations addressing institutional voids.**

In this section we specifically focus on addressing the organizations that have an active engagement in dealing with institutional voids, acting as potential agents of change, a concept that institutionalists would label institutional entrepreneurs (Pacheco et al., 2010). Some may argue that the emergence of these organizations may as well be a direct “consequence” of

<table>
<thead>
<tr>
<th>Type of organizations</th>
<th>Year</th>
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<tbody>
<tr>
<td>Network Formation</td>
<td>2010</td>
</tr>
<tr>
<td>Operational strategies</td>
<td></td>
</tr>
<tr>
<td>Bricolage</td>
<td></td>
</tr>
<tr>
<td>Strategic responses</td>
<td></td>
</tr>
</tbody>
</table>
institutional voids. Instead of engaging in a definitional fight on this matter we decided to address these organizations in a different section. It is our belief that the characterization of each of them, their motives and actions merits its own section. We discuss each of these major categories below.

Business Groups: Among strategy scholars, business groups are perhaps the most commonly researched response to institutional voids. In the face of institutional voids firms build business groups, intermediary organizations able to provide affiliated firms with quick access to resources in markets where these inputs are scarce or hard to obtain (Carney et al., 2011; Khanna & Palepu, 2000; Leff, 1978; Wan & Hoskisson, 2003). In this tradition, a large number of articles supports the denominated “institutional voids thesis” (Carney et al., 2011), which posits that firms in markets with weak or absent institutions benefit from group affiliation because of the numerous advantages these groups provide in terms of accessing limited resources. To name a few, research has found that business groups provide access to efficient internal labor markets (Fisman & Khanna, 2004), generate internal capital markets providing access to equity liquidity (Almeida & Wolfenzon, 2006), contribute to the enforcement of contracts (Hoskisson, Johnson, Tihanyi, & White, 2005; Weidenbaum & Hughes, 1996) , and provide advantages related to network embeddedness (Granovetter, 2005), in which support among affiliates reduce perceptions of uncertainty (Keister, 1998), and grants access to timely information about market opportunities (Luo & Chung, 2005).

The State: Although most publications in strategy imply that actors engage in institutional voids guided by self serving interests, there are some articles that acknowledge the existence of actors whose motives are other than profit maximization, such as state actors (Inoue et al., 2013; Musacchio, Lazzarini, & Aguilera, 2015). In the face of institutional voids, states
can step in as relevant stakeholders in providing alternative forms of capital to foster the local economy. A number of articles in entrepreneurship, for example, acknowledge the role of the state, generally pointing out that ineffective and corrupt states are one of the key contributors to the existence of these voids (Mair & Marti, 2009). Taking a more positive perspective, recent studies (Jain & Sharma, 2013), suggest that states play a key role in solving institutional voids although its agency is often hampered by political interests, and extant ideologies.

MNEs: Among the studied we reviewed, we found a number of them –specifically in international business and strategy- that introduced the MNEs as playing an active role in trying to fill institutional voids. In the context of climate change, for example, Pinkse and Kolk (2012) explore how multinationals implement self-imposed /voluntary norms and codes of moral behavior to fill institutional voids in the context of a problem that suffers from ineffective monitoring and enforcement mechanisms. Contributing to explore the active role of MNEs in the presence of institutional voids Boddewyn & Doh (2011) explain that when multinationals enter emerging countries with “failing governments” (i.e. governments unable to provide basic services such as health, education, electricity, and water, among others) they need to compensate for the role of these governments and contribute to provide locals with public goods. In general, it is recognized in the literature that when MNEs step in emerging markets they need to engage both in market and non market strategies to substitute for institutional voids (Doh & Lucea, 2013).

Illegitimate actors: While most research address how legitimate and formally constituted actors tackle institutional voids, there is a set of researchers exploring the role of illegitimate actors filling the void left by weak institutions. These actors are profit seeking destructive entrepreneurs (Baumol, 1993), such as gangs and organized crime. They are labeled “semi
formal illegitimate institutions” (Sutter et al., 2013) because they lie between formal and informal institutions. They follow clear standards, and have visible enforcement mechanisms, yet they are illegitimate because they are enforcing norms that are not widely accepted. Quite common among based of the pyramid markets, these organizations are known for targeting and extracting wealth from specific targeted individuals and organizations, as well as punishing those that do not follow this actors’ prescriptions.

Social entrepreneurs: An increasing number of articles recognize the role that social entrepreneurs -understood as actors prioritizing social wealth creation over economic wealth (Stephan et al., 2015; Zahra, Gedajlovic, Neubaum, & Shulman, 2009)- play in dealing with institutional voids. In this category we include NGOs (non governmental organizations), microfinance organizations, and actors aiming to provide social value. Acting as social entrepreneurs aiming to fill institutional voids, researchers have recognized the active role of microfinance organizations (Chakrabarty & Bass, 2014), especially beneficial in hostile environments where there are no other means of access to credit (Chliova, Brinckmann, & Rosenbusch, 2015). Quite prevalent among the studies we reviewed were NGOs, playing a key role in filling voids where government and private firms cannot. NGOs fill voids where governments are challenged, corrupt or simply unable to serve social needs , as well as when firms are unwilling to step in due to uncertainty and risk constraints. Acting as social entrepreneurs, (NGOs) play a key role in contributing to fill institutional voids. Mair and Marti (2009), for example, report how BRAC, an NGO acts as an agent of change in alleviating poverty and empowering the poor in Bangladesh. In a similar attempt, MC Kague and colleagues (2015) recognizes the important role NGOs play in building the social structure needed for markets to work, exemplifying how these organizations drove social change needed for
developing a dairy value chain in Bangladesh.

In summary, the characterization of the intermediaries that emerge to facilitate market functioning in the face of these voids is a topic that has shown dynamic and sometimes unorganized contributions. Whereas strategy researchers have been fascinated by the role that business groups play in facilitating market functioning in the presence of these voids (Khanna & Palepu, 2000; Manikandan & Ramachandran, 2015), recent publications have proposed other types of actors that emerge to cope with these voids, including the state (Inoue et al., 2013) multinational enterprises (MNEs) (Boddewyn & Doh, 2011; Pinkse & Kolk, 2012), illegitimate actors (Sutter et al., 2013), social entrepreneurs (Stephan et al., 2015), non-governmental organizations (NGOs) (Mair & Marti, 2009; McKague et al., 2015), and microfinance organizations (Chakrabarty & Bass, 2013). These findings are summarized in Table 12, below.

Table 12: Characterization of intermediaries by type and author

<table>
<thead>
<tr>
<th>Type</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business groups</td>
<td>Carney et al., 2011; Khanna &amp; Palepu, 2000; Leff, 1978; Wan &amp; Hoskisson, 2003; Almeida &amp; Wolfenzon, 2006; Fisman &amp; Khanna, 2004;</td>
</tr>
<tr>
<td>State</td>
<td>Inoue et al., 2013; Musacchio, Lazzarini, &amp; Aguilera, 2015; Jain &amp; Sharma, 2013</td>
</tr>
<tr>
<td>MNEs</td>
<td>Pinkse &amp; Kolk, 2012; Boddewyn &amp; Doh, 2011</td>
</tr>
<tr>
<td>Illegitimate actors</td>
<td>Luk et al. 2008; Kistruck et al., 2015</td>
</tr>
<tr>
<td>Social entrepreneurs</td>
<td>Sutter et al. 2013</td>
</tr>
<tr>
<td>NGO</td>
<td>Stephan et al., 2015; Chakrabarty &amp; Bass, 2014; Chilova et al., 2015; Mair &amp; Marti, 2009; McKague et al., 2015</td>
</tr>
</tbody>
</table>
In addition to organizing our findings around organizational actors addressing institutional voids, our review exercise allowed us to observe that the organizations identified above behave in unique ways, depending on three issues: (1) motives (economic, social) driving their behavior, (2) particular strategies (market and non-market strategies) in which decide to engage, and (3) particular ways in which they address (substitute, complement, abuse or manage around) these voids. In addressing the first point, we observe that the agents and motives considered by the sociological and middle ground perspectives are broader than those in the pure strategy perspective. While most strategy and international business papers mostly focus on organizations ‘economic motives as the main reason to address institutional voids, management research –including entrepreneurship and base of the pyramid publications- portray that organizational actors address voids also because of a wider set of motives, including social and even sustainability related motives. Interestingly, although still an emerging stream, we even identified some publications that consider that organizations with economic motives must broaden the set of motives if they are to pursue businesses in developing economies. Second, our research also reported that there is a growing set of studies concerned with that, organizations must engage in non-market strategies as they address institutional voids (Doh & Lucea, 2013). Among others, this involves cooperation between profit pursuing firms and non-profit pursuing organizations (including governments and NGOs) as a strategy to soft land emerging countries filled with institutional voids. As we will mention in our future directions’ section, this area allows for wide exploration. Finally, it is worth noting that while all of the studies mentioned above had in common that these organizations engaged in action to “address” institutional voids, it does not necessarily mean that all of them engaged in activities meant to change the institutional environment. As mentioned in the open paragraph of this section, these
organizations can “potentially” act as agents of change (i.e. as institutional entrepreneurs). For example, business groups emerge as a network of firms that –among others- facilitate access to resources. This does not imply that these groups engage in actions to make up for the voids that affect the economy at large, but instead they focus on the group members in particular. They do not aim to lobby with politicians in order to change the current rules, or by trying to change the culture for people and organizations to be less risk averse. Filling market wide institutional voids within the group allows them to profit from competitive advantages compared to firms that do not belong to a business group. So, in the case of these organizations, institutional change may not be beneficial. NGOs, in the other hand, have been frequently reported as agents of institutional change, triggering culture, religion and social level changes in order to address concurrent institutional voids in emerging countries. Connecting this insight with the topic around strategies as consequences of institutional voids introduced in the previous section allows us to observe that different authors mention different roles that intermediary organizations play in the face of institutional voids, including substituting, complementing, abusing, managing, circumventing (Khanna & Palepu, 2000) and working around these voids. This implies that organizations may address institutional voids using different strategies, a topic partially addressed by Oliver (1991). Summarizing, although these studies have advanced our understanding of how specific organizations address unique types of voids, to our knowledge, work has yet to systematically organize these findings. Specifically, it would be useful to identify factors that determine the emergence of these specific kinds of actors that emerge to fill voids, and the types of strategies they follow to do so.

At this point, we have gone through the main findings on our literature on institutional voids. We have reviewed the distribution or articles based on time period and journal, we have
introduced our readers to institutional voids’ theoretical roots, definitions for different theoretical perspectives, consequences that institutional voids trigger, and types of organizations that emerge in order to address these voids. On each section we have devoted some time to analyze common themes and central questions among different research streams. With that, our next section introduces future research directions.

**FUTURE RESEARCH DIRECTIONS**

Overall, the broad array of disciplines and authors advancing the notion of institutional voids have shown that cross-pollination among research fields has contributed to advance the understanding of this perspective. In suggesting a research agenda for improving impact and coherence of research on institutional voids we focus on three main categories: theoretical issues, context issues and management education issues. In the theory front, we argue for better definitions, more rigor in defining a typology of voids, and more clarity in defining if contextual factors shape boundaries for, and/or integration between, theories. In addressing contextual issues we raise concerns about the scope that the institutional voids perspective should have, and the extent to which broadening the levels of analysis where it applies whether complicates or contributes to its advancement. Concerned about practical implications of the voids framework we also invite researchers to consider the implications that institutional voids bring for managers and organizations tacking high growth emerging markets. Acknowledging that Western strategies may not apply in emerging economies requires a mental shift and an adaptation strategy that still remains to be explored. A summary of the future research opportunities we suggest is included in Table 13.
Table 13: Opportunities for future research in "institutional voids"

<table>
<thead>
<tr>
<th>Category</th>
<th>Dimension</th>
<th>Research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical Issues</td>
<td>Definitions</td>
<td>1. What are these institutional voids, really?</td>
</tr>
<tr>
<td></td>
<td>Types of voids</td>
<td>2. Are there particular types of IV?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Are all types of IV equally important?</td>
</tr>
<tr>
<td>Theory boundaries and integration</td>
<td></td>
<td>1. To what extent can the institutional voids’ perspective inform and facilitate the integration of theories at different levels of analysis?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Can institutional voids shape validity of existing theories?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Can institutional voids perspective complement existing theories?</td>
</tr>
<tr>
<td>Context issues</td>
<td>Boundaries of the concept</td>
<td>Are IVs only present in emerging markets? Can they also characterize specific industries in developed economies? How can agents other than governments make up for the fulfillment of basic needs in emerging and developed economies? Do IV invite private firms to engage in non market strategies?</td>
</tr>
<tr>
<td>Management education</td>
<td>Implications for teaching</td>
<td>How can managers of the future recognize opportunities within IV? Does the relevance of emerging markets in the global economy—and IV within them—change the way educators should teach strategy in business schools?</td>
</tr>
</tbody>
</table>
Definitions:

As shown in Table 7, researchers from a number of literature streams have attempted to define institutional voids considering different dimensions (i.e. market, religion, social, etc.) as antecedents for their emergence. While most researchers agree with the definition provided by Khanna and Palepu (1997), advancements rooted in economic sociology (Mair et al., 2012) suggest that there is still some disagreement on what are the boundary conditions that define the dimensions where institutional voids can exist. For example, researchers in economics and strategy focus on voids rooted in formal institutions, although they do not seem too concerned with informal institutions. While they acknowledge their existence, they seem to either ignore them or assume that they are in good standing. This is, they seem to imply that if formal institutions were in place and supporting market transactions, informal institutions will follow. Their implicit assumption, then, is that business relations precipitate social relations (McKague et al., 2015). Researchers in economic sociology, on the other hand, go beyond the market dimension to include social, political and religious spheres. These researchers not only argue that informal institutions are important, but also that the key institutions leading to successful market exchanges are not necessarily market institutions (Mair et al., 2012). Instead, they suggest that the emergence of the social structure (i.e. informal institutions) needed to build successful markets in fact precedes economic exchanges (McKague et al., 2015). Arguably, discrepancies in defining a construct pose challenges for theory development. Future research should, then, address this is lack of clear definitions. Resolving the disagreement in defining the realm in which institutional voids operate, and defining the dimensions that explain the emergence of institutional is, we believe, one of the central questions that research on institutional voids should examine.
Types of voids:

Lack of agreement in defining institutional voids naturally translates in struggles related to offering a typology of voids. Work focused on conceptually identifying specific types of institutional voids is still in an early development stage. Notably, Khanna and Palepu (2010) collapsed the complexity of missing institutions into a taxonomy that identifies six types of intermediaries tackling specific institutional voids. Narrowing their definition of voids to a set of formal institutions, they suggest that institutional voids are present both in markets for outputs (products and services) and markets for inputs (labor and capital market). As an example, they argue that situations in which buyers and sellers need to assess the credibility of each other can be solved by credibility enhancers, a type of intermediary that contributes to voids related to information flow in developed markets (Khanna & Palepu, 2010: 57–58). In line with a specific focus on formal institutions, a number of newly published articles in the strategy and management tradition have attempted to identify a handful of “formal” voids (Sutter et al., 2013; Webb et al., 2010), including voids in scarce capital markets (Inoue et al., 2013). In a similar attempt, Chakrabarty (2009) writes an empirical paper where he tests how institutional voids shape the extent and dominance of family ownership in different countries. In addition to this main contribution, he comes up with two types of voids (voids in agency contracting and voids in financial credit availability), yet these are operationalized as weak formal institutions, and there is no theoretical development on a typology of voids. Finally, a recent meta-analysis on business groups (Carney et al., 2011) has found that business group affiliation benefits firms in contexts of weak financial and labor market institutions, but not in contexts of weak legal safeguards. Although insightful, a strict attachment to gaps in formal institutions poses
limitations to their insights. If formal structures were present, does it grant market functioning in a society where, for example, social norms do not support, for example, autonomous behaviors for people to participate of the market? Omitting the assessment of informal institutions, then, limits the contributions of these findings.

Incorporating the role of informal institutions for market functioning, a small number of researchers anchored in sociology have admittedly come up with alternative typologies of institutional voids. However, their typologies emerge as side effects of their papers, instead of being the main focus of their contributions. For example, Mair and Marti (2009) suggest that “without explicitly using the term institutional void” previous research has recognized two broad types of institutional void, including voids that hinder market functioning, and those that hamper market development. Building on these findings, they propose a third type of institutional void, which relates to voids that impede market participation of particular groups (Mair & Marti, 2009: 422).

Overall our literature review supports a need for researchers and practitioners to make finer-grained distinctions between specific types of institutional voids. In line with Carney et al. (2011) we agree that theoretical support for the institutional voids thesis is widespread, but less agreement exists about the relative importance of different types of voids. This brings important implications for theory, because theoretical explanations are likely to apply to some but not all voids. Similarly, particular institutional voids might be more (or less) consequential for market transactions, triggering unique consequences and requiring customized treatments. Future research should, then, contribute to unravel specific types of voids.

*Theory boundaries and integration*
Leading emerging economies scholars suggest that researchers should reconsider if “theories and methodologies used to study strategy in mature, developed economies are suited to the unique social, political, and economic contexts as well as firm characteristics of emerging economies.” (Wright et al., 2005: 2). In the same spirit, research that acknowledges the presence of institutional voids requires fundamental evaluations on how some particular type of voids shape theory in these contexts. To what extent can institutional voids pose boundary conditions to theories that apply in developed economies? May this perspective shape the validity of the assumptions that support management theories? An interesting example of such boundary conditions is provided by Kistruck and colleagues (2015). They recently published paper - focused on the base of the pyramid context-, suggesting that in emerging economies, legitimacy has a dark side. Whereas legitimacy is usually correlated with positive outcomes, under conditions of organized crime engaging in legitimate behaviors (i.e. registering a business) can lead both to increase resource provision, as well as unexpected resource appropriation (registration signals wealth to powerful illegitimate actors). As a consequence, legitimacy will facilitate that local gangs target these businesses. Future research should, then, exploring how institutional voids challenge theoretical assumptions that seem to be widely accepted in developed markets.

In a similar vein, the institutional voids perspective may also prove to be useful in facilitating the integration of research streams (Dhanaraj & Khanna, 2011) and theories (Kistruck, Sutter, Lount Jr., & Smith, 2013) at different levels of analysis. Among the articles we reviewed, Kistruck et al. (2013) had the novel idea of integrating agency and identity theories to suggest that, in the presence of institutional voids, there might be alternative and less expensive identity based mechanisms to reduce the costs of monitoring sales representatives (i.e. agency
Identification with a specific product increases commitment, reducing the costs of monitoring sales force. These mechanisms are particularly relevant for rural, base of the pyramid environments where agency costs related to monitoring are expensive. Similarly, the institutional voids perspective can complement traditional strategy frameworks. Porter’s Five-Forces analysis, for example, could be benefited if we consider that the bargaining power of customers is driven by structural determinants. Due to the unique resource constraints and high costs structures posed by institutional voids in emerging markets, integrating theories and frameworks at different levels might allow a better understanding of firm and individual behavior in these contexts. As such, the institutional voids framework constitutes a promising avenue for integration of traditional analysis (Dhanaraj & Khanna, 2011).

**Boundaries of the context**

Identification of the contexts in which institutional voids are found is also an area that allows for exploration. Conventional wisdom suggest that institutional voids are especially common in emerging markets, which explains why this term has gained so much popularity among scholars conducting research in developing economies (Chakrabarty, 2009; Chakrabarty & Bass, 2013; Khanna & Palepu, 2010; Mair et al., 2012; Miller et al., 2009). In contrast with developed economies, where markets generally work well and the market-supporting institutions are almost invisible (Mc Millan, 2007), emerging markets are characterized by imperfect institutional arrangements. For the same reason, we narrowed our review of the literature to the context of transition and emerging economies. Recent publications, however, suggest that institutional voids can also play a role in developed markets (Dhanaraj & Khanna, 2011; Khanna & Palepu, 2010). Situations such as the U.S. subprime crisis and the dot com crisis are true examples of
institutional voids in developed economies. Similarly, studies from sociology and entrepreneurship in developed countries also have suggested the possibility of institutional voids unique of particular industries and sectors (Alvarez et al., 2015; Boddewyn & Doh, 2011). For example, organizations such as Teach for America make up for inequality in the provision of education in the U.S. (Mair, 2010). As such, these situations imply that emerging markets may be also present within rich countries (Black & Mendenhall, 1990). Future research could be pursued in order to understand how these voids emerge in the context of developed economies. In these scenarios, however, it is our belief that the study of institutional voids might be oriented to the exploration of voids at the industry level of analysis. Industries moving faster than the implementation of new rules allow for exchange when intermediaries and institutions are not yet in place, exchange that can trigger unexpected consequences.

Interestingly, there is a small and promising number of studies (Doh & Lucea, 2013; Pinkse & Kolk, 2012) suggesting the existence of institutional voids at even higher levels of analysis, such as in supranational context. Macro level issues such as climate change imply that institutional voids can also affect supranational contexts. Exploring the processes by which for profit and non profit sectors organizations engage in non-market strategies (Doh & Lucea, 2013) that involve collaborative arrangements between developing and developed economies in order to make up for these voids could shed light on how institutional voids are a phenomenon that is not unique to emerging economies.

**Implications for teaching**

Going beyond future research directions, a number of authors (Dhanaraj & Khanna, 2011; Doh, 2011; Khanna, 2015) have made the point that there are topics around institutional voids that merit to be quickly translated into future teaching directions. “Importantly, these
recommendations are not incremental but fundamental, requiring new ways of thinking about government, competition, data, and success.” (Doh, 2011: 682). Khanna’s work has pioneered strategy research in emerging markets. In conjunction different colleagues, he has authored a number of articles and books that introduce the concept of institutional voids and explain how the presence of these voids require some fundamental reevaluations of international strategy. Strategies that appear to be successful in Western economies might not provide the same outcomes in economies where the role of government, competition and institutions play a different role from the one in developed countries. As such, recent publications by these authors (Dhanaraj & Khanna, 2011; Khanna, 2015) integrate their conceptual advancements on institutional voids with an invitation for strategy professors to “shift mental models”. Specifically, they make a call and urge scholars to make an effort and develop learning approaches that incorporate the unique contextual circumstances –full of voids- that characterize emerging economies. The importance of developing “contextual intelligence” (Khanna, 2015), and adapting to economies structured around institutional voids translates in managers better prepared to take advantage of entrepreneurial opportunities in rapidly growing markets. Interestingly enough, this invitation goes beyond a narrow focus on future research directions, encompassing the relevance that institutional voids have for practitioners.

LIMITATIONS

Naturally, as in most studies, our findings do not come without limitations. First, our review was mostly focused on a set of peer reviewed 15 journals that are supposed to be leading in the field of business. Whereas our selection overlaps with those included in similar literature reviews, we acknowledge that our selection was ultimately arbitrary. Selection of these journals was based on our interest in the field of business, yet does not translate in that the selection was
exhaustive. Additionally, we selected a limited set of keywords to determine if a paper was to be included. While the backwards search led us to articles that did not use these words, our primary search was exclusively based on them. As such, we might have excluded papers that address weak or missing institutions, but that did not use the same terms we picked for our keywords. Finally, perhaps the appropriateness of the decisions we made in developing the empirical part of this article could be subject to differences of opinion but, as mentioned earlier, the main aim of our paper was to provide a rich compendium on the fragmented and rapidly growing literature on institutional voids, prioritizing depth over breadth.

**CONCLUSION**

Sharing concerns on how contextual factors shape organizations’ and individuals’ decisions in a market setting, scholars from disparate business streams have become interested in shedding light and advancing the concept of institutional voids. As a consequence, lack of coordination among these streams sometimes derives in a fragmented advancement of the field. This issue calls for a better understanding of the very nature of institutional voids. As emerging markets take a central role in the global economy, a deeper understanding of the institutional voids perspective becomes prominent and timeliness. A broader conceptualization of institutional voids may facilitate a more detailed consideration of the nature of these voids, and stimulate thinking of a larger number of ways to respond to them.

Aiming to increase the quality, coherence and impact of the publications using the concept of institutional voids, the goal of this paper was to inventory these advancements, perform a critical review, and develop an ambitious research agenda that addresses unexplored issues and raises interesting questions around institutional voids. A systematic review of 82 publications published during the last fifteen years reveals that the concept has been embraced
differently across different disciplines within the field of business, that it is a reflection of a mind shift related to acknowledging the importance of contextual factors for processes and outcomes, and that the theoretical advancements around it are sometimes fragmented. We hope our review contributes to provide a clearer understanding on where the literature on institutional voids is today.
SUMMARY OF FINDINGS AND CONTRIBUTIONS

Purpose of the dissertation

Institutions determine expected payoffs of specific actions (Williamson, 1991) and, as such, are considered the bedrock where the economy rests (Ingram & Silverman, 2002), and the basic structure in which entrepreneurial opportunities emerge (Mair & Marti, 2009). The strategic relevance of institutions has garnered attention among academic audiences. Reflecting the growing importance that institutions bring to economic life, a number of Nobel Prize Winners and authors have devoted their time to advance economic theories that consider institutions as key determinants for economic growth and development, and in consequence, for entrepreneurship. The theoretical advancements on institutions, as well as the practical implications of this new perspective, have prompted business scholars to develop an increasing interest in institutions. Multiple disciplines within the business field have explored how institutions shape behavior and performance of individuals and firms. However, the institutions that have been largely studied in developed economies are not necessarily the same institutions ruling the markets in emerging economies. Due to the increasing importance of emerging economies for global strategy in general, and entrepreneurs targeting international markets in particular, the study of institutions in emerging markets requires a fundamental reevaluation of the theories we use (Doh, 2011). To what extent can institutions pose boundary conditions to theories that apply in developed economies? Is it possible that, when competing in underdeveloped markets, entrepreneurial ventures rely on different strategies from those used in developed economies?
In this dissertation I attempt to answer these questions and contribute to the literature on entrepreneurship and institutions in the context of emerging economies. Following a three-paper format, the first two papers are empirical and explore how country level institutions and firm level capabilities shape startups’ decisions (outsourcing vs. hiring) and outcomes (survival) during and after participation in an international accelerator program. The third paper is a theory paper that summarizes the literature on institutional voids; a concept that has gained popularity across the business field, but over time has become fragmented. Each of these pieces contribute to shed light onto how differences in institutions, and friction between them, can trigger unexpected results shaping firms decisions and outcomes in particular, and market functioning at large.

**Insights for Theory**

Paper 1 and 2 in this dissertation contribute to the emerging stream of research that bridges institutions and resource based views (Meyer et al., 2009; Meyer & Peng, 2005). In the first paper in this dissertation, I focused on expanding the theoretical boundaries by which governance decisions (i.e. buy vs. make) are traditionally assessed. Moving beyond a micro-analytical lens, such as the traditional transaction cost approach (Coase, 1937; Williamson, 1975), I combine resource based view and institutional theories to examine how variables at the firm (i.e. contracting capabilities) and country (i.e. institutional distance) levels shape startups’ growth decisions. I do this in the realm of technology startups, specifically for technology startups in an international setting. The results of the study have important implications for theory. For instance, transaction cost theory predicts that institutional distance will raise transaction costs and reduce the amount of outsourcing, while contracting capabilities will reduce transaction costs and increase outsourcing. However, I find that both institutional distance
and contracting capabilities encourage startups’ outsourcing. I explain this finding by suggesting that firms not only consider transaction costs, but also bureaucratic costs when deciding on growth strategies. While outsourcing implies higher transaction costs (e.g. search, evaluation, monitoring and enforcing contracts), it allows startups to economize in relevant and overlooked bureaucratic costs, such as the costs of resource commitment (Folta, 1998) in an uncertain environment.

Paper 2 in this dissertation also explains how firm and institution level variables shape young firms, but at this time focusing on their performance. With a focus on location considerations I suggest that location capabilities and institutional distance were significantly related to international startup failure. Theoretically, this piece contributes to clarify the relative importance of resources for young organizations (Amezcua et al., 2013; Davis & Cobb, 2010). I suggest that the value of these resources is contingent to relative institutional differences between venture’s host and home countries. My analysis suggests that location capabilities have a stronger effect among startups internationalizing from weaker institutional environments than among startups from countries with stronger institutions.

Paper 3, on the other hand, has a direct theoretical contribution to the literature concerned with institutions and emerging economies, this is, the literature on institutional voids. The key implications of this review suggest that the institutional voids perspective requires a research agenda for improving impact and coherence. While the literature streams advancing this concept stem from different legacies, taking stock of this growing body of research is critical to stimulate the advancement of a comprehensive understanding on how institutions -or the lack of them- shape the infrastructure where firms, markets and countries compete. As such, I perform an
exhaustive literature review and suggest an ample research agenda that advances theory in and around institutional voids.

**Insights for Policy Makers**

Due to the importance of institutions for growth and economic development, and considering that the accelerator program in our study was created as part of entrepreneurship policy in an emerging economy, my dissertation has the advantage to offer a number of policy insights. For instance, Paper 1 contributes to discussions related to cost structures for global outsourcing (Bertrand & Mol, 2013; Mol & Brewster, 2013), an important topic for policy making and labor law to foster entrepreneurship. In addition, the setting of Paper 1 and Paper 2 provides a unique scenario where the emergence of international accelerators as an early stage investment vehicle has triggered unexplored internationalization patterns that imply a need for developing policy around these immigration waves. Our setting is especially interesting because it fosters the international movement of human capital in an unexpected direction. While accelerators in advanced economies have naturally garnered the attention of startups from emerging economies, my dissertation reports that accelerators in emerging economies have also triggered the flow of startups in the opposite direction (i.e. from advanced economies towards emerging economies). These mobility patterns bring up a number of unexplored issues related to how these flows may contribute to country growth at large, and firm performance in particular.

Paper 2 has particularly contributed to improve policymaking, especially public policy aimed to foster entrepreneurship. While my findings show that startups from countries with stronger institutions were less likely to survive, it does not translate into that this (or other) program should focus on accepting only startups from countries with weaker institutions.
Expanding the conceptualization of failure, accepting firms that will likely fail also provides lessons related to resiliency, and to accept failure as part of the learning process inherent to entrepreneurship. In a country with low tolerance to failure (such as Chile), bringing foreign entrepreneurs willing to try and start over might be even more valuable than bringing startups that survive but create little social or economic value. As such, policy making needs to be seen as an instrument not only focused on capturing economic rents from surviving firms, but also as a means to create cultural change and a vehicle to adopt social norms that embrace tolerance and resilience as key ingredients for successful venturing.

**Avenues for Future Research**

This dissertation does also offers suggestions for future work on institutions in emerging economies. For example, in my two empirical pieces the proxies used to measure institutions exclusively focus on regulative (formal) institutions. Further research is needed to understand if other types of institutions, such as normative and cognitive (informal) institutions have also an effect on technology startups’ outsourcing decisions and performance. Another suggestion for future research using similar empirical data involves incorporating country level proxies of resources as a control variable. Generally, countries with stronger institutions tend to be more advanced, granting access to quality resources (such as better prepared human capital, more developed markets, and more political stability, among others). Future work should consider this issue and hopefully incorporate a proxy for resources in the models.

As a literature review, the third paper in this dissertation naturally suggests a number of future research avenues. In contributing to this agenda, I focus on three main categories: theoretical issues, context issues and management education issues. On the theory front, I suggest that research on institutional voids is in need of better definitions, more rigor in defining
a typology of voids. In addressing contextual issues I raise concerns about the scope that the institutional voids perspective should have, and the extent to which broadening the levels of analysis where it applies whether complicates or contributes to its advancement. Concerned about practical implications of the voids framework I also invite researchers to consider the implications that institutional voids bring for managers and organizations tackling high growth emerging markets.

Concluding Remarks

To summarize, the goal of the three studies in this dissertation was to advance the understanding of the role that institutions play in emerging economies, and the implications that this brings for startup activity. Institutions are fundamental in outlining the desired and undesired behaviors within a market; as such, they provide the incentives for entrepreneurs to engage in productive and unproductive entrepreneurial activity. Understanding how institutions in emerging economies shape ventures growth decisions and their latter performance is a first step in contributing to an emerging stream of research that brings institutions as an important lever for strategy (Meyer et al., 2009; Meyer & Peng, 2005). It is my hope that the three papers in this dissertation contribute to advance the understanding of institutions in emerging economies.
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