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Three Essays on Institutions, Entrepreneurship, and Development

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THREE ESSAYS ON INSTITUTIONS, ENTREPRENEURSHIP, AND DEVELOPMENT

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A Dissertation Submitted to the Faculty of Old Dominion University in Partial Fulfillment of the Requirement for the Degree of

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OLD DOMINION UNIVERSITY
May 2015

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Adam Smith
Old Dominion University, 2015
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ABSTRACT

Each of the three essays contained in this dissertation examine the relationship between institutions and entrepreneurship. The underlying theory that institutions shape entrepreneurs' outcomes is well established. However, the ways in which they do so turn out to be quite nuanced and show marked dissimilarities where low income individuals are involved in the entrepreneurship process. Each essay seeks to understand and identify what contexts individuals are more likely to participate in meaningful, development-oriented entrepreneurship. In essays I and III, the focus is on individuals at the bottom of the economic spectrum.

Essay I links opportunity entrepreneurship to the presence of venture scripts in subsistence economies. The absence of venture scripts (expert entrepreneurial cognitions) helps explain why so many entrepreneurship-enabling organizations, including microfinance organizations, fail or are ineffective in these economies. These organizations often attempt to facilitate entrepreneurship without transferring and instilling important venture arrangement scripts, venture willingness scripts, and venture ability scripts. To maximize impact, entrepreneurship-enabling organizations must begin the arduous process of institutionalizing venture scripts. The model presented conceptualizes this process using Social Cognitive Theory to explain how social connections and interactions introduce, establish, and begin to institutionalize venture
scripts. Two social capital dimensions, bridging social capital and local embeddedness, are critical for the establishment of these embryonic informal institutions. Essay I concludes by using the cases of two entrepreneurship-enabling organizations (Milma and Dastkar from India) to illustrate this process and lead to marked success stories. These two organizations certainly create opportunity entrepreneurs rather than necessity entrepreneurs and their example illustrates the power of the conceptual model.

Essay II takes a macro-level approach and examines opportunity entrepreneurship at the country-level. Specifically, I utilize Whitley's (1999) national business system's framework to better understand society's aggregate level of opportunity entrepreneurship. Opportunity entrepreneurship is an active choice to start a new enterprise based on the perception that an unexploited or underexploited profit opportunity exists. This essay uses a set theoretic perspective to construct configurations of institutions associated with various levels of opportunity entrepreneurship. It introduces a relatively new empirical method, Fuzzy Set Qualitative Comparative Analysis (FSQCA), to the country-level entrepreneurship literature. FSQCA adds rigor to qualitative studies. Four distinct configurations associated with high levels of opportunity entrepreneurship and three distinct configurations associated with low opportunity entrepreneurship are identified. These findings indicate that the ways in which societies foster impactful entrepreneurship via the national business system and entrepreneurial culture exhibit equifinality and that institutions and culture can act as both complements and substitutes. I contribute to the literature by showing that institutions behave in combination, rather than independently, to produce opportunity entrepreneurship. My use of this method helps push the
entrepreneurship literature towards thinking more configurationally about the role of institutions.

Essay III, in contrast, takes a multi-level approach. The main purpose of Essay III is to ascertain whether institutions have a more (or less) meaningful impact on lower income individuals than higher income individuals. In this essay, I use the institutional logics perspective to examine the degree to which market logics have sway over individuals. The institutional logics perspective holds that institutions’ impact on individuals within a society varies based on characteristics and activities of those individuals such that some individuals will deviate from dominant institutional logics and others will not. Analysis is conducted to determine the extent to which variation in entrepreneurial intentions are explained by cross-level (individual and country-level data) variation. Two income levels (lower and higher income individuals) are contrasted. Findings indicate that individuals with higher incomes are better able to deviate from dominant institutional logics. My cross-level analyses of 49,013 individuals from 48 diverse countries supports the notion that institutions have a greater impact on low-income individuals with respect to entrepreneurial outcomes. The study contributes to a more nuanced understanding of embedded agency within the institutional logics perspective. It bridges the literatures on individual entrepreneurship and the institutional logics perspective. Furthermore, the study provides context and evidence on the impact of income on choice and economic well-being.

Overall, the findings of this dissertation make theoretical and empirical contributions to the literature on institutions and entrepreneurship, particularly the ways in which institutions impact the global poor. My more fine-grained application of
institutional theory to the entrepreneurship literature is my primary theoretical contribution. While past research has explored and expounded upon societal institutions’ impact on entrepreneurship, I explore contingencies in this relationship in all three essays. In Essay I, I theorize about what organizations can do to help advance and build cognitive institutions. In Essay II, I explore how the relationship between institutions and a key entrepreneurial outcome is better viewed configurationally rather than as the independent effect of different institutions. In Essay III, I relax the established institutions-entrepreneurship relationship by examining how individual income plays a contingent role in that link.
DEDICATION

To my wife, Constance: You moved away from friends and family for me twice as I pursued a PhD. I don’t know if I could have done this without you and your support, but I know that I would not be as happy or blessed. There were times that I wanted to quit. But you made it worth the effort. I love and admire you more each day. Thank you for everything.
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Additionally, I have been very blessed to have exceptional dissertation committee members who have invested much time and effort in me and my work. Dr. Anil Nair has been extremely helpful in not only providing guidance throughout my studies but working alongside me and other PhD students to insure that we are successful. Anil aided me in research endeavors and was highly supportive of my job search efforts. He is such an easy going good person. He repeatedly put my interests ahead of his own throughout my time at ODU. I feel extremely fortunate to have Anil in my corner.

Dr. Stephen Lanivich was an outstanding committee member and mentor. Dr. Lanivich guided me closely from my second year in the program forward. He is an
outstanding and talented scholar. It is great working with people who are smarter and better than you. Although, he is a very busy Assistant Professor, pursuing tenure and excellence in research, Dr. Lanivich took a special interest in me. I appreciate his time and efforts to make me a better scholar a good deal. Dr. Edward Markowski is the doctoral business program’s secret weapon. His understanding and ability to communicate his knowledge of methods has been invaluable to me and plenty of others. His classes were important and imparted true understanding. As my fellow student, Stav Fainshmidt says, with Dr. Markowski, no sentence is wasted. He is such a thoughtful teacher! I never communicate with Dr. Markowski without learning something new. He has a gift of relating complex topics to people with lower IQs like me, without ever making us feel dumb.

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The generosity and kindness of Tim and George, in particular, to all of us PhD students, in opening their homes and buying food, and spending countless hours offering advice and morale support were above and beyond the call of duty. They are such good people and inspirations to me as I enter the next stage of my career. Both of them are tremendous assets to ODU’s doctoral program. If I ever have a problem, I know I can count on Tim to do absolutely everything he can to solve it for me.
I especially want to thank two of my fellow students, Amir Pezeshkan and Stav Fainshmidt. They are now my lifelong friends whether they like it or not. These two men, more than any others, aided me in my quest for a PhD. It is hard to put into words what they have meant to me over the last four years. In 2015, Amir is the best friend I have outside of my family. We came into ODU together in the fall of 2011 and have spent countless hours working together since. I could not have earned a PhD by myself. I’m so thankful that Amir is the person I have shared so much of this journey with. Stav, is both a great friend and a perfect mentor. The amount of help he has given me and time spent helping me have been enormous. I have had the joy of working with Stav on several projects now. He makes this fun. He is an ideal colleague and truly a great friend. Although we speak on the phone about various projects a good deal, I have missed him this past year.

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like to change. But the support and kindness that I have received from her through all of it as I have tried to wrap up this dissertation has been so very meaningful. Truly some good has come out of sadness, and I cannot wait to spend the rest of my life with her!

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CHAPTER 1
INTRODUCTION

Institutions, such as market incentives, property rights, corruption control, capital availability, and bankruptcy laws are all necessary for new business activity to thrive and grow (e.g. Busenitz, Gomez & Spencer, 2000; de Soto, 2000; Baumol, Litan & Schramm, 2009;). Therefore, "getting the institutions right," with a strong focus on formal institutions like those listed above, has been an important theme among social science scholars searching for solution to troubled and undeveloped economies (e.g. Williamson, 2000; Boettke, Coyne, Leeson & Sautet, 2005).

However, the model linking formal institutions with economic growth via new venture activity has proven problematic. For instance, post-Socialist countries’ attempts at rapid market liberalization, or “shock therapy,” via an overhaul of formal institutions resulted in some unexpectedly negative outcomes, leaving many policy makers disappointed (Black, Kraakman & Tarassova, 2000). Several scholars argued that this failure occurred because the behavior of economic agents is a result of both correct market incentives and the historical and social processes that have shaped these agents. (e.g. Murrell, 1993). It is therefore remarkably unclear as to whether top-down installation of formal regulatory institutions that run counter to their informal precursors will actually result in wealth creation.

In this dissertation, I address the consequences of this problem as it relates to a very salient form of economic activity: entrepreneurship. I propose that the relationship between institutions and entrepreneurship turns out to be quite complex. I explore the nuances of these relationships in three ways, in my three essays.
First, in Chapter 2, I propose that one possible solution to the institutions-economic activity relationship conundrum is that formal institutions are consequences and expressions of shared culture, values, and cognitions (North, 1990; Boettke, Coyne & Leeson, 2008; Holmes, Miller, Hitt & Salmador, 2013). In subsistence economies, informal institutions, (North, 1990) like entrepreneurial values, expertise, and risk-taking, may not be ingrained in society. In these economies, informal institutional voids can inhibit opportunity recognition and exploitation, while normative voids can reduce the willingness of individuals to take necessary risks (Stenholm, 2011; Webb, Kistruck, Ireland, & Ketchen, 2011). Therefore, I argue that informal institutions, not formal institutions, may be the seminal driving force behind entrepreneurship (Welter & Smallbone, 2011), with formal institutions taking a supporting role as constraints or moderators. As a result, the impact of improved formal institutions on entrepreneurship can lead to economic development so long as informal institutions support a thriving entrepreneurial culture. That is, the impact of new small businesses varies according to informal institutional context.

Consequently, a primary task of organizations seeking to facilitate new venture creation is to find ways to undertake the difficult task of transmitting and institutionalizing entrepreneurial cognitions to subsistence markets. Therefore, in Chapter 2, I draw on past research in entrepreneurship and institutional theory to develop a model that explains how entrepreneurship-enabling organizations can confront adverse institutional conditions by transmitting and fostering the development of entrepreneurial expertise for new venture formation. In sum, I use social cognitive theory to describe and
explain how entrepreneurship-enabling organizations use social characteristics, local embeddedness and bridging social capital to be successful in this process.

Chapter 3 takes a country-level look at the institutions-entrepreneurship relationship. I argue for complexity in this relationship. I put forth both a theoretical and methodological alternative to these recent approaches attempting to quantify the institutions-entrepreneurship relationship. Rather than taking a variance decomposition approach, I view societies’ collections of institutions as configurations. Using linear, variance decomposition approaches, such as regression, may engender understanding of which institutional components are most important on average, but they ignore the possibility of multiple equilibria, i.e. situations in which different bundles of institutions coevolve together in distinct ways resulting in equifinal ends.

If this is indeed the case, a set-theoretic approach is more appropriate as it analyzes the institutional environment as a complex gestalt of interacting regulative, normative, and cultural-cognitive elements. Moreover, such approaches can identify multiple equilibria associated with a given outcome such that viable paths towards achieving opportunity entrepreneurship are not ignored. Therefore, I use a less familiar methodology, fuzzy-set qualitative comparative analysis, to investigate the following research question: How do institutions and culture collectively configure to influence rates of opportunity entrepreneurship?

I use Whitley’s (1999) national business system framework to examine the configurational effects of each society’s national business system in combination with national culture. That is, I view institutions and culture as gestalts that combine together to lead to entrepreneurial outcomes. Consequently, I argue that elements of formal
institutional expressions combine with culture to form configurations that may or may not be sufficient to provide entrepreneurship, and I seek to identify those institutional configurations that are consistent with opportunity entrepreneurship. Thus, I postulate that mixed findings may occur because the national business system interacts with culture's influence on entrepreneurship in multiple ways. I use fuzzy set analysis to explore these different institutional-cultural bundles.

Chapter 4 explores another nuance in the institutions-entrepreneurship relationship. In this essay, I explore the degree to which societal institutions matter given individual income. This is important because in many 21st century countries, attempted institutional change has simply failed to infiltrate entire societies. Formal institutional changes may have been changed in name, but these changes are not enforced ubiquitously. Particularly, they are not enforced at the lowest levels of society. Thus, in this essay, I explore the relationship between the importance of institutions and income.

I argue that income level is a key moderator in this relationship. That is, the relationship between institutions and entrepreneurship is stronger for the poor than the wealthy. The institutional logics perspective argues that individuals' responses to institutions will vary according to situation and individual characteristics (Thornton, Ocasio, & Lounsbury, 2012; Friedland, 2013). I use this theory to frame my arguments.

In institutional environments with weak market logics (e.g. institutions for entrepreneurship), wealthier individuals are in better position to deviate from dominant behaviors and begin creating identities and goals consistent with entrepreneurship. Conversely, in societies, where attempts at institutional reform have not been realized in effect, the poor suffer disproportionately. Therefore, I hypothesize that the societal level
institutional environment will interact with individual income level such that the effects of institutions on intentions to launch a new venture will be far stronger for low income individuals than for high income individuals. This effect occurs for three major reasons:

1. Market logics are unequally distributed within a society. The powerful may have them but do not grant them to the poor. Thus, capabilities associated with market logics are unobtainable for the poor.

2. The cognitive accessibility of market logics is lower where other institutional logics (e.g. family, religion) dominate. Any market logics cognitions the poor may have are crowded out by cultural embeddedness or are not accessed due to day to day social situations in which the poor normally participate.

3. The costs of engaging in entrepreneurship are higher in societies without strong market logics due to lack of available capital and resource scarcity. This disproportionately effects the poor because they simply cannot afford to act entrepreneurially due to poverty and the consequences of failure.

I explore the above assertions using hierarchical generalized linear modeling on a sample taken from the Global Entrepreneurship Model of 49,013 individuals in 48 countries. I argue that if institutions are going to lead to entrepreneurial outcomes that address poverty alleviation and development concerns, they must be well enough established to reach lower income individuals.

Taken together the three essays explore subsequently address nuances in the institutions-entrepreneurship relationship. The relationship between these constructs is far more complex than economists, under the “Washington Consensus,” proposed (Easterly,
2001). Changing government regulations does not automatically lead to development. Because

1. Informal institutions such as the degree to which societies possess entrepreneurial expertise is critical. Entrepreneurship-enabling organizations may be able to offer a solution to these problems.

2. Institutions and culture may be complements or substitutes in complex gestalts. Furthermore, there are equifinal paths to successful outcomes with regards to entrepreneurship depending upon country characteristics. The Washington Consensus is not the most appropriate path for all countries.

3. Nominally, changing laws and regulations is not enough. In many countries attempted top down changes have not taken root in many societies and are not impacting the poor because the inculcation of market logics has not occurred at a deep level.

My three essays respectively explore these three nuances.

REFERENCES


CHAPTER 2

ESSAY I: INSTITUTIONALIZING ENTREPRENEURIAL EXPERTISE IN SUBSISTENCE ECONOMIES

2.1 ABSTRACT

Interest in entrepreneurship in subsistence economies has grown within international business research due to the failure of foreign aid attempts, limited success of microfinance, and the relatively unexplored promise of private sector solutions. This paper focuses on organizations operating in subsistence economies that seek to promote and support new venture activity in the context of underdeveloped institutions. I label these organizations, entrepreneurship-enabling organizations (EEOs), and I argue for their central role in addressing the institutional voids confronting entrepreneurs. Specifically, I propose that the provision of venture scripts (expert entrepreneurial cognitions) is critical to filling institutional voids in these economies. I use social cognitive and institutional theories to explain how social connections and interactions introduce, and begin to institutionalize new and productive entrepreneurial venture scripts. In so doing, I refine and extend our understanding of entrepreneurship in subsistence economies, as well as our understanding about how EEOs can help to address institutional voids. In this way, I contribute to the growing international business literature examining factors influencing entrepreneurship in subsistence economies.
2.2 INTRODUCTION

A welcome trend in international business (IB) research has been the attention to issues confronting developing, emerging, and subsistence economies. There is increasing recognition among scholars that in a global market, issues and events in such economies also impact developed economies (e.g. Chari, 2013). Understanding the dynamics in these economies need not only lead to economic development and the well-being of their citizens, but as recent research on reverse innovation (Govindarajan & Ramamurti, 2011) suggests, may even benefit the developed world. Both scholars and policymakers propose that new ventures may be an antidote to poverty in such economies. This marks a radical shift in thinking about economic development. While in the past, it was considered the role of domestic or foreign governments to foster economic development and prosperity, it is now commonly proposed and accepted that entrepreneurs and private businesses may be more effective in creating sustainable economic development (e.g. Yunus, 1999; Prahalad, 2006). To this end, the 21st century has witnessed the rapid growth of the microfinance industry and other Entrepreneurship-enabling Organizations (EEOs) in order to fund and create new and viable businesses in subsistence economies. The efforts and funding in the pursuit this goal have been remarkable (McGuire & Conroy, 2010).

Unfortunately, evidence now suggests that the promise of market-based solutions to poverty, like EEOs, have not been realized (Banerjee, Duflo, Glennerster, & Kinnan, 2009; Bateman & Chang, 2012). A fundamental problem is that they assume that the poor are informed and creative economic actors. Unfortunately, this is not generally the case (Karnani, 2009). Individuals launching new ventures in subsistence economies oftentimes lack the needed expertise to make them vehicles for economic change and development. I
address this challenge by beginning to answer the following research question: What characteristics of entrepreneurship-enabling organizations (EEOs) allow them to introduce key knowledge and expertise required for impactful entrepreneurship to subsistence economies?

To help address this question, I argue that individuals engaging in entrepreneurship in subsistence economies may not be successful in creating new ventures due to multiple institutional voids (Webb, Kistruck, Ireland, & Ketchen, 2010). I posit that expert venture scripts can help fill and circumvent these voids. Expert venture scripts are advanced, sequentially ordered, action-based knowledge structures used to create new ventures (Mitchell & Chesteen, 1995; Mitchell, Smith, Seawright & Morse, 2000). Thus, I propose that a key role of EEOs is to introduce expert venture scripts in places where poor property rights thwart knowledge creation due to value appropriation concerns. To develop a model that explains how EEOs transmit and foster the development of expert venture scripts, I draw on both social cognitive theory and institutional theory.

Indeed, many successful EEOs such as the Mowgli Foundation operating in the Middle East and Northern Africa, BRAC in Bangladesh and throughout southern Asia, and Peruventures in Peru have helped to transmit and implement institutions conducive to the growth of entrepreneurial ventures. The institutional entrepreneurship literature has called these embryonic practices, rules and technologies which initially only impact an organization's immediate domain, “proto-institutions” (Lawrence, Hardy & Phillips, 2002). Within subsistence economies, proto-institutions can serve to fill institutional voids and aid entrepreneurs by diffusing localized and informal institutional structures for
entrepreneurs. I theorize that EEOs must focus on two dimensions — bridging social capital and local embeddedness — that independently and in concert help to introduce, diffuse, proliferate, and ultimately institutionalize expert venture scripts.

My study contributes to both the entrepreneurship and international business literatures in several ways. First, I offer a case for the importance of expert venture scripts in subsistence economies. The possession of expert venture scripts likely distinguishes high growth entrepreneurs from those involved in self-employment because they have no other options (Acs, 2006). In subsistence economies, entrepreneurship participation is in fact higher than in developed economies (Banerjee & Duflo, 2007), but these entrepreneurs generally have no substantive impact on economic development. Simply funding entrepreneurs and not improving the quality of entrepreneurship in these regions is not sufficient. Shifting the focus to the importance of entrepreneurial expertise in these regions has been a missing piece of the development puzzle.

Second, I add to the emerging institutional entrepreneurship literature by describing how EEOs work to construct new institutions (DiMaggio & Powell, 1991; Lawrence et al., 2002) by developing informal proto-institutions in contexts where they are highly applicable. The importance of institutionalized formal market-based behaviors has become increasingly evident in recent years with scholars identifying the shortcomings associated with reforms in regulatory institutional alone in subsistence economies (Easterly, 2001). To address this issue, I contribute to current understanding of the initiation and diffusion of expert venture scripts by describing their social network-based antecedents.
Third, by focusing on the linkages and interactions that foster proto-institutions in subsistence economies, this study builds bridges between the international business and the institutional entrepreneurship literatures. EEOs connecting entrepreneurs to information and knowledge about entrepreneurial processes and market opportunities help to narrow the knowledge and technology gap between subsistence and developed economies (Acosta et al., 2011). However, in subsistence economies, organizations seeking to cultivate the internationalization of tacit expert venture scripts require a good degree of local embeddedness. When exogenous (international) and endogenous elements coalesce, the result is more likely to be a dynamic and contextually-adapted business model that is viable within an economy consisting of antagonistic and/or weak institutions.

We begin the theory development section by describing the nature of expert venture scripts and discussing Social Cognitive Theory, which explains the means by which scripts can be socially transmitted. As expert venture scripts are spread and shared they serve as proto-institutions capable of sustaining entrepreneurial activity with growth potential. I then develop propositions examining how EEOs can facilitate the generation of expert venture scripts using bridging social capital and local embeddedness. After describing the model, I provide two concrete examples of EEOs in India that have helped to institutionalize expert venture scripts.

2.3 THEORY DEVELOPMENT

Entrepreneurial Expertise in Subsistence Economies

According to entrepreneurial cognition scholars (e.g. Mitchell et al, 2002), experts differ from non-experts in that they have knowledge structures in integral domains allowing them to succeed where those who do not have access to them cannot. These
knowledge structures are known as “expert scripts” (Glaser, 1984). Expert scripts are advanced, sequentially-ordered knowledge structure specific to a task or field (Leddo & Abelson, 1986).

The knowledge of experts stands in contrast to the knowledge of novices, which is topical instead of contextual. That is, novices’ knowledge must be organized around the explicit rather than what can be inferred. Experts, on the other hand, have the ability to make contextual inferences from information derived and distilled from past experiences (Glaser, 1984). That is, expertise depends on contextually framed knowledge (Chi, Glaser, & Farr, 1988) that comes from understanding the sequences and regularities of task specific circumstances (Mitchell, 1994). Entrepreneurs using expert venture scripts are able to make sound and timely judgments, including the careful evaluation of opportunities and the decision to create a new venture. These individuals use “simplifying mental models to piece together previously unconnected information that helps them to identify and invent new products or services, and to assemble the necessary resources to start and grow businesses” (Mitchell et al., 2002).

Expert venture scripts have been shown to have significance in entrepreneurial success and decision making in a variety of national contexts. However, their actual levels vary across institutional conditions (Lim, Morse, Mitchell, & Seawright, 2010). This heterogeneity is in keeping with the Austrian perspective (Hayek, 1945) that holds that knowledge and information are unevenly dispersed among actors and throughout societies.

In subsistence economies, information needed for entrepreneurial processes is relatively scarce (Darr & Pretzsch, 2008). Past ethnographies (i.e. Geertz, 1978) indicate
that there is often widespread ignorance about alternatives to the goods, services, and ways of doing business that have characterized life for generations. The expertise and knowledge needed for new venture formation is often absent. Hence, examining venture script formation in subsistence economies may be one way to overcome the considerable institutional voids that confront entrepreneurs in these contexts.

Mitchell et al. (2000) proposed three types of expert knowledge structures or scripts that are needed for new venture formation: venture arrangement scripts, venture willingness scripts, and venture ability scripts. Venture arrangement scripts are the knowledge structures individuals possess about the provisions and tools needed to engage in an entrepreneurial endeavor. These knowledge structures include “a protectable idea, access to resources, and venture specific skills” (Lim et al., 2010: 495). People in subsistence economies have a difficult time exploiting opportunities due to a lack of knowledge about venture specific skills and resources. Individuals with low levels of education, a lack of prior non-subsistence work experience, very limited Internet access, and a social network made up of only close tightknit ties will be unlikely to have exposure to venture arrangement scripts.

Venture ability scripts are “the capabilities, skills, knowledge, norms, and attitudes that individuals require to create a venture, such as ability–opportunity fit, venturing diagnostic ability, and venture situational knowledge” (Lim et al., 2010). These scripts concern the ability to recognize opportunities through new combinations of people, materials, or products (Kirzner, 1982; Mitchell et al., 2000), the ability to understand the systematic elements involved in the creation of new ventures (Krueger & Carsrud, 1993; Mitchell et al., 2000) and the ability to use previous market experience
and apply the knowledge it provides to a specific situation (Mitchell et al., 2000; Stuart & Abetti, 1990). In subsistence markets, few consider alternatives to traditional goods or services due to information barriers, which freezes the entrepreneurship process. Additionally, low levels of education and prior business experiences with profitable ventures may limit the ability to make sound day-to-day business operation decisions, shape strategy, and adapt the business model in the exploitation stage.

Finally, venture willingness scripts include the inclination and motivation to try new things, assume risk, and take action in the face of uncertainty (Mitchell et al., 2000). Subsistence economies are again riddled with problems in their ability to support venture willingness scripts. Most small business activity takes place within a familial or communal context. Often individuals are unwilling to strain close familial and communal ties to pursue opportunities (Ansari, Munir & Gregg, 2012). Individuals who forsake their family business and strike out on their own may be viewed as greedy, disloyal, and reckless. Failure can lead to serious social repercussions. Reinforcing these informal institutions, the regulatory institutional environment dissuades people from risk-taking.

Transmission of Venture Scripts via Social Cognitions

One model of entrepreneurial cognition development holds that expert venture scripts are transmitted through interactions and experiences with experts (Mitchell & Chesteen, 1995; Lim et al., 2010). These scholars use social cognitive theory to provide an explanation for the individual and dyadic-based mechanisms that transmit cognitions and behaviors (Rizzello & Turvani, 2002). Social cognition theorists maintain that individuals’ knowledge of how to act in situations and what to believe about themselves and their activities is learned through observing others via social interactions (Bandura,
Also, cognitions occur within the framework of a perceived social environment (Bandura, 1989).

As exposure to common successful behaviors increases, individuals tend to imitate it. As they encounter others' successes or failures, individuals learn lessons and adjust their behavior accordingly. Thus, social cognitive theory stipulates that a large portion of human behavior is learned from other agents in the environment (Bandura, 1986). Indeed, social cognition scholars have observed that institutions arise via social interaction by which collections of individuals and organizations promote the common cognitions, processes, and practices that define their domain (Dacin, Munir & Tracey, 2010).

The relevance of social cognitive theory for entrepreneurship is that individuals with exposure to a business ecology of successful venture formation gain valuable socially derived experiences that enable them to develop expert cognitions. These individuals can subsequently act upon these expert cognitions whenever they observe a cue in their social environment. Mitchell (1994) argued that expert venture scripts can be developed in novices through extensive exposure to experts. Similarly, Lim et al., (2010) describe how expert information gleaned by exposure to expert founders of new ventures increases venture creation decisions.

Social cognitions propagate learned and mimicked behaviors (Rizzello & Turvani, 2002). Ultimately, as cognitions spread via repeated and increased interactions, they are socially reinforced and eventually may become institutionalized. Thus, social cognitive theory and institutional theory reinforce each other and explain institutional convergence and divergence. In this way, social cognitive theory offers an explanation for how
entrepreneurial expertise can be transmitted and become institutionalized at a societal level. In other words, as individuals are surrounded by experts, they are exposed to behaviors conducive to successful venture formation. Expertise begets expertise, and ultimately, the repeated pattern is institutionalized.

These institutionalized behavioral norms and cognitions in turn initiate, shape, and form boundaries around entrepreneurial opportunities and actions (Aldrich & Waldinger, 1990; Davidsson & Wiklund, 1997; Shane, 1993). Unfortunately, in subsistence economies, productive entrepreneurial behaviors are not normative but deviations, if they exist at all; expert venture scripts in these contexts are underdeveloped, sparsely distributed, and not institutionalized. EEOs wishing to develop and establish expert venture scripts must engage in institutional entrepreneurship.

**Institutional Entrepreneurship in Subsistence Economies**

*Institutions in Subsistence Economies*

The variety of institutions and their effects on economic outcomes in subsistence economies is a complex phenomenon. Recent work has asserted that institutions drive economic growth and development and not vice-versa (Boettke & Fink, 2011). Property rights, market incentives, corruption control, capital availability, and bankruptcy laws have all been identified as important for new business activity to be launched and to thrive (e.g. Busenitz, Gomez & Spencer, 2000; Baumol, Litan & Schramm, 2009). Notably, Boettke and Coyne (2009, 158) point out that, "Only under a certain institutional environment will entrepreneurs have an incentive to discover new resources, substitutes for existing resources or trading partners to obtain resources… [O]nly in certain institutional contexts will entrepreneurs have an incentive to discover new
technological knowledge such as new production processes or new organization structures.” These problems are exacerbated in subsistence economies because the economic actors in these contexts face great potential loss—social exclusion, a variety of deprivations, and even starvation—if their search is not productive.

Therefore, "getting the institutions right," with a strong focus on formal institutions has been an important theme among social science scholars searching for solutions to troubled and undeveloped economies (e.g. Williamson, 2000; Boettke, Coyne, Leeson & Sautet, 2005). Good formal institutions establish safeguards for the creation of knowledge, intellectual property, wealth, and other resources that are all key components of entrepreneurship while poor institutions curtail entrepreneurial effort (Bowen & De Clercq, 2007).

Unfortunately, formal institutions cannot be easily introduced to many subsistence economies (Boettke, Coyne, & Leeson, 2008; Boettke & Coyne, 2009) because they often conflict with indigenous belief systems and historical path dependencies (Boettke & Coyne, 2009). The failure of nation-building activities, introduction of foreign governance systems, and MNE strategies from developed economies suggests that the establishment of new formal institutions is not a straightforward undertaking. For example, post-Communist countries’ attempts at rapid market liberalization, or “shock therapy,” via an overhaul of formal institutions resulted in some unexpectedly negative outcomes (Black, Kraakman & Tarassova, 2000).

Instead of working for top-down formal institutional changes, EEOs are better positioned to help create bottom-up informal institutional changes by introducing expert venture scripts—my central theoretical premise. In other words, EEOs wishing to promote
and develop entrepreneurship in the face of these challenges can accomplish their objectives by addressing many of the symptoms of poor property rights and other formal institutional voids through revision of informal cognitive structures. This is particularly salient given that recent research suggests that informal institutions may be particularly important at very low levels of economic development (Williamson & Mathers, 2011). Indeed, the successes of many EEOs in places like India, Latin America, and Ghana show that poor formal institutions with weak property rights protections can in fact be circumvented (Bradley, McMullen, Artz, & Simiyu, 2012). Such organizations are taking actions to shape the behavioral norms and default cognitions in subsistence economies by engaging in institutional entrepreneurship.

**Institutional Entrepreneurship**

Institutional entrepreneurship encompasses modifications and transformations of the formal and informal rules of the game (Boettke & Coyne, 2009). Institutional entrepreneurs are on the forefront of taking actions that lead collective efforts in infusing new beliefs, values, and norms into their business arenas (e.g. Mair, Marti, & Ventresca, 2012). Notably a few studies have examined the role of institutional entrepreneurship for entrepreneurs (e.g. Garud, Jain, & Kumaraswamy, 2002). These studies have recognized that entrepreneurs in emerging economies often construct institutions that help nascent ventures develop processes and gain legitimacy in order to establish, promote, and protect their emergent venture or industry (DiMaggio, 1988; Aldrich & Fiol, 1994; Lawrence et al., 2002; Ahlstrom, Bruton & Yeh, 2008).

Therefore, to confront institutional voids facing entrepreneurs, EEOs can establish a smaller, more confined set of institutional components that help to nurture
entrepreneurs, insulate them from a hostile or unsupportive institutional field, and promote new venture creation. These lower-level emergent institutions are what have been termed "proto-institutions" (Lawrence et al., 2002; Webb, et al., 2010). Proto-institutions are the practices, technologies, and rules that are narrowly diffused and only weakly entrenched, but that have the potential to become widely institutionalized, as proto-institutions. These new practices, technologies, and rules are institutions in the making: they have the potential to become full-fledged institutions if social processes develop that entrench them and they are diffused throughout an institutional field (Lawrence, et al., 2002: 419).

Proto-institutions are, by definition, informal in nature institutions since they have not yet been codified. The term proto-institution denotes that these informal institutions are in a nascent stage and can potentially take root in larger society. Not all proto-institutions will grow, develop, and become engrained in the social fabric as a broader institution (Zeitz, Mittal, & McAulay, 1999). However, as a variety of individuals and organizations adopt them, they can eventually become broadly institutionalized. By generating, implementing, diffusing, instilling, and enforcing the practices, knowledge and rules required for venture growth, EEOs can address institutional deficiencies by developing informal institutions that are vital to the entrepreneurship process. The emergence of proto-institutions often occurs through the interactions of organizations and key stakeholders (Lawrence et al., 2002). Webb et al., (2010), describing subsistence economies, note that proto-institutions allow entrepreneurs to form internal capital markets, secure access to important factors, gain legitimacy from an informal institution's standpoint, and avoid negative implications (i.e., bribery and other corrupt behaviors) of formal institutional voids (Webb et al., 2010: 567).
To this list I add that proto-institutions can also provide regions of societies with the expert knowledge structures that characterize successful new ventures. That is, EEOs may introduce expert venture scripts as a special type of informal proto-institution. In other words, EEOs leverage social networks. In so doing, they sow the seeds of new yet vital informal institutions which are crucial in impoverished regions where broader societal level institutions are traditionally hostile or unsupportive.

Institutionalizing Venture Scripts

An economic development model specifying informal institution change initiated by social networks stands in stark contrast to the model advocating dramatic formal institutional changes for economic growth and development. Transferring venture scripts via social pathways pushes new venture activity rather than merely hoping that formal institutions pull it forward. However, since informal institutions are behavioral and cognitive in nature, the institutionalization of venture scripts must be accomplished slowly by leveraging social network-based characteristics. The transfer process requires learning through social interactions with experts.

Consistent with this scheme, Mitchell and Chesteen (1995) showed that venture scripts spread by means of a two-stage process involving exposure to venture scripts and participation (i.e. mentorship). These two processes share a very social characteristic in which (1) access to a broad range of experts and (2) time spent observing their behaviors lead to the successful and accelerated acquisition of expert venture scripts (Mitchell & Chesteen 1995). Given the very social process of script transmission, dimensions of social capital are key conditions for the institutionalization of venture scripts. Therefore, as an organizational analog to Mitchell & Chesteen (1995), I propose that EEOs can
utilize two interacting social antecedents for venture script development: *bridging social capital* and *local embeddedness* to transmit and establish informal proto-institutions (venture scripts) in subsistence economies.

**Bridging Social Capital**

The technology transfer literature emphasizes knowledge flows that enhance national capabilities via exogenous sources (Feinberg & Majumdar, 2001; Tihanyi & Roath, 2002; Jindra, Giroud, & Scott-Kennel, 2009) like social capital. Social capital describes the potential benefits that stem from the goodwill, favoritism, reciprocity, and cooperation among and between individuals and groups (Narayan-Parker, 1999). These benefits may include resources, information, and legitimacy. *Bridging* social capital concerns those benefits that stem from looser ties of respect and mutuality among people who are socioeconomically, geographically, or ethnically dissimilar (Szreter & Woolcock, 2004; Ansari et al., 2012). Diverse relationships or weak ties allow people to be integrated into a wider society or market (e.g. Granovetter, 1973). “Novel information is thought to flow more smoothly through weak ties than strong ties. Cohesive social networks may constrain both behavior and the flow of information due to strong social norms that are active within the networks” (Poortinga, 2012: 287). Homophily, the propensity for people to bond with those similar to themselves, constrains information flows, narrowing people’s choices to the knowledge, news, worldview, and cognitive pathways of close friends (McPherson, Smith-Lovin, & Cook, 2001). A broader range of information increases its value, applicability, and timeliness (Adler & Kwon, 2002).

This is particularly meaningful in subsistence economies where information is scarce (Geertz, 1978). By exposing local actors to advanced knowledge, technology, and
experiences, *bridging social capital* pushes back cognitive boundaries and allows entrepreneurs to access sources of information on best practices, management expertise, and various market opportunities. In this way, resident entrepreneurs can observe and interact with expert behavioral patterns that help facilitate entrepreneurial activities such as opportunity recognition, venture specific skills, and delivering goods to market.

The process of transfer of expert venture scripts plays out at a very micro-level in which local actors are provided with access to experts by well-connected EEOs. Recent research indicates that such connections can help improve performance of entrepreneurial ventures in subsistence economies (Sutter, Kistruck, & Morris, 2014). When individuals seek to transfer important knowledge in subsistence economies they must make alterations to business practices and processes in order to make them fit local conditions (Sutter et al., 2014). For this reason, the most successful knowledge transfer practices necessarily transfer the principles and concepts underlying it (Baden-Fuller & Winter, 2005).

Individuals with expert venture scripts possess both a detailed understanding of individual practices surrounding the core business model as well as a comprehensive grasp of why different processes are in place (Mitchell et al., 2000). Because of their grasp of the logic underpinning venture scripts, the information these experts share with recipients can be highly targeted, matching suitable adaptations to local requirements without damaging core processes for value creation. (Sutter et al., 2014). Through these interactions, local entrepreneurs acquire new venture arrangement scripts, which lead to a more thorough understanding of many of the tacit meanings underlying prescribed
business-specific practices. Thus, connections with experts constitute important social bridges to new entrepreneurial expertise.

The impact of social bridges has been highlighted recently by the international entrepreneurship literature. Musteen, Francis, and Datta (2010) found that the proportion of internationally connected ties of the entrepreneur is positively associated with the speed of internationalization of the venture and this relationship is stronger when entrepreneur shares a common language with his/her ties. Kiss, Danis, and Cavusgil (2012), in their international entrepreneurship research review, also acknowledged the positive impact of ties on internationalization initiatives in emerging and less developed countries. Domestic networks have a positive impact on new venture internationalization in both transition economies (Manolova, Manev, & Gynoshev, 2010) and emerging economies (e.g. Ellis, 2000; Lin & Chaney, 2007) due to advantages they provide in lowering costs and/or product differentiation. This strategy works especially well for small and new firms attempting to establish new ventures. “Small players [are] able to exploit advantages from being part of a network, such as low transaction costs, assured orders, and access to external resources and knowledge” (Manolova et al., 2010: 259).

The international entrepreneurship literature not only highlights the impact that social bridges can play in knowledge transfer regarding production processes and technology but also their importance in providing knowledge about markets. Due to technology and knowledge gaps, entrepreneurship in subsistence economies often depends upon markets in developed economies (London, Anupindi, & Sheth, 2010; Ramachandran, Pant, & Pani, 2011, Smith & Pezeshkan, 2013). London et al. (2010) found that market constraints severely hampered local entrepreneurs attempting to
produce and sell goods in Africa, South Asia and Latin America. Similarly Ramachandran et al. (2012) report that entrepreneurs in subsistence economies lack awareness of market trends. Ibeh (2003) found that access to networks increased the export entrepreneurial orientation among entrepreneurs in Nigeria by giving them information about consumers and demand overseas. Expert provided knowledge of international markets increases venture ability scripts via increased opportunity recognition. Further, connections to a broader and diverse group of consumers and markets reduce the risk that entrepreneurs assume in initiating a new venture, increasing self-efficacy, resulting in the enhancement of venture willingness. Thus, information about distant markets gained from social bridges can enhance both venture ability and willingness scripts.

In sum, EEOs possessing bridging social capital, including ties to other countries are able to provide knowledge regarding technology, processes, and markets by connecting subsistence actors to a broader spectrum of information regarding the existence and successful implementation of viable and profitable opportunities. Therefore, I propose:

**Proposition 1:** An entrepreneurship-enabling organization’s ability to transmit venture scripts to potential entrepreneurs living in subsistence economies depends on its possession of bridging social capital.

*Local Embeddedness*

Along with the initial transfer of expert venture scripts, EEOs wishing to transfer new knowledge and practices must focus on the post-adoption period (Bessant & Rush, 1995). Simple exposure to expert venture scripts does not assure their effective application; instead, the acquisition of expert venture scripts requires a learning process
in order for organizations and individuals to maximize their functionality (Mitchell & Chesteen, 1995). EEOs that are locally embedded offer two advantages.

First, after venture expert venture scripts are introduced, EEOs with local embeddedness are able to both incubate them and adapt them to the local context. This is because deep interactions that occur when EEOs are locally embedded allow them to better understand the skills and weaknesses of entrepreneurs and the challenges that they face. In depth collaboration between the expert, possessing the scripts and the principles underlying them, and the entrepreneur, possessing information regarding his or her resource bundle and local market constraints, results in a situationally apposite knowledge recombination. Once this occurs, an appropriate business model can be constructed by retaining the central aims of exogenously introduced venture scripts but altering the business model to fit the local context.

Local embeddedness allows organizations to take the original core idea or technology and use “jugaad” principles in order to make them viable. In India, the notion of jugaad (Radjou, Prabhu, & Ahuja, 2012) describes resourceful innovation that emphasizes frugality, flexibility, and inclusivity. This is important in a market characterized by uncertainty and low munificence because entrepreneurial scripts from developed countries may need substantive adaptation in a different context, such as India. Expert venture scripts can aid in inferential processes like jugaad.

By ensuring that adaptations continue to meet the technical intent of the original practice, the template can maintain its value as a guide and referent throughout the implementation process but also be flexible (Jensen & Szulanski, 2007). London and Hart (2004: 365) report that “maintaining flexibility in the product and the business model can
allow local entrepreneurs, who are more familiar with local culture and customer needs, to innovate proactively.” In this way highly involved social interaction can serve as an integral knowledge transfer mechanism (Hansen, 1999; Reagans & McEvily, 2003). To ensure these interactions, EEOs can use locally embedded teams. These teams can gain a better appreciation for what types of expertise are needed, and, in turn, model entrepreneurial behavior, present market opportunities, and properly tailor products and business.

A second benefit of local embeddedness relates to trust and its effects on venture willingness scripts. Social Cognitive Theory involves the evaluation of other actors’ activities and their perceived consequences. For this reason economic activities in subsistence economies utilize informal networks which put a premium on societal trust, enforce normative values, and rely on family ties (De Soto, 2000). However, outside of individuals’ social networks, institutional voids create very high transaction costs and risks (Webb, et al., 2010), reducing economic cooperation and escalating distrust. Individuals with little experience and economic interaction within a market-based system (Geertz, 1978) may be hesitant to form meaningful economic relationships with outsider EEOs. Without being locally embedded, EEOs may be viewed as illegitimate, met with distrust, and be branded as outsiders and viewed as overly risky.

The enactment of venture willingness scripts often requires local actors to have successful interactions with the EEO. By embedding themselves in local networks, EEOs cultivate the development of proto-institutions which serve as substitutes for missing informal institutional elements within the organization’s domain. Locally embedded EEOs gain credibility by acquiring an intimate perspective of the local context and
interacting with potential partners and patrons. As individuals perceive an EEO's business model and actors as well-meaning and competent, they will be much more likely to discard reservations about leaving subsistence activities, specializing in a specific task, and trying something new. Thus, local embeddedness is crucial for the development of venture willingness scripts. Therefore:

**Proposition 2:** Entrepreneurship-enabling Organizations with higher levels of local embeddedness are more capable of providing venture scripts for potential entrepreneurs in subsistence economies than those without high levels of local embeddedness.

*The Interaction of Social Capital and Local Embeddedness*

The first two propositions describe how social interactions and the flow of complex and often tacit information facilitate the transfer, diffusion and entrenchment of informal institutions (expert venture scripts). Bridging social capital aids EEOs in the transmission of complex venture scripts from experts while local embeddedness generates the time, space and repeated interactions necessary for these proto-institutions to take root via increases in trust and understanding. While each of these separate dimensions aid in the institutionalization of expert venture scripts in subsistence economies, their confluence is necessary in order for EEOs to optimize their impact.

Brugmann and Prahalad (2007) championed the idea of cocreation as an important MNE strategy for subsistence economies. Cocreation, they argued, creates viable business opportunities by developing business models which integrate technical expertise from MNEs to work alongside NGOs contextual understanding of resource constraints and people's needs. Central to this idea of cocreation is the idea that when exogenous and endogenous forces for change combine, the results can be a highly
tailored and dynamic business model capable of withstanding institutional weaknesses and antagonistic forces.

Our model takes a similar approach by marrying exogenous social bridges with locally embedded organizations in order to provide the full benefit of expert venture script transfer. As the Austrian perspective would predict (e.g. Hayek, 1945), where there is information heterogeneity, exogenous flows of resources and information are necessary to apply an outside jolt to markets that may possess a good deal of inertia due to local information constraints. However, the benefits of these inward flows cannot be realized without customizing to local institutional constraints. Thus, the model in this study underscores the importance of both badly needed expert venture scripts from outside the context and the ability to tailor these scripts as well as gain trust and willingness at a local context tailoring of solutions in order to initiate viable new proto-institutions.

[INSERT FIGURE 2.1 ABOUT HERE]

Figure 2.1 shows the outcomes expected among individual entrepreneurs in terms of venture script provision and impact due to variation in these two social dimensions. Quadrant I describes the situation in which EEOs have low levels of bridging social capital and local embeddedness or in which local entrepreneurs act alone without access to EEOs. Here, individuals do not gain entrepreneurial expertise and are left to deal with local institutional conditions alone. New ventures launched under this situation are unlikely to rise above subsistence level.

Individuals involved with EEOs in Quadrant II are in a slightly better position. These entrepreneurs may gain a narrow range of expert venture scripts due to support and interactions with local grassroots EEOs, but lack of information and expertise transfer
will significantly reduce growth potential. The wide range of venture scripts that international social bridges can provide will limit the scalability of these new ventures. Many of the venture scripts associated with business specific technology and market opportunities will not be available in this situation.

Conversely, individuals involved with EEOs in Quadrant III have a high degree of bridging social capital but are not locally embedded can introduce best practices and expertise to local communities by connecting them with experts and knowledge about markets and capital sources. However, their impact will also be limited without the ability to adapt the business model to local conditions, to gain the trust of local individuals, and to provide extended interactions in which expert venture scripts can be modeled. Since expert scripts are acquired through sustained experience which allow them to be stored in long term memory (Mitchell & Chesteen, 1995), individuals whose exposure to the scripts is limited can gain a sense of what actions need to occur but do not truly become experts.

Entrepreneurs in Quadrant IV have exposure to EEOs with both network-based benefits. These individuals will reap the greatest advantages from expert venture scripts. By utilizing bridging social capital in conjunction with local embeddedness through sustained social interaction, cognitions encountered from exogenous social bridges are altered, trust increases, and entrepreneurial expertise can be gradually institutionalized. EEOs with both network-based characteristics provide access to a broad range of experts as well as extended interactions and time spent in which individuals can observe their behaviors. Without access to bridging social capital, both the range and radicalness of new expert venture scripts is limited. Without local embeddedness, the deep interactions
necessary for a high degree of expertise to develop cannot occur. The combination of both network-based benefits maximizes the successful and accelerated acquisition of expert venture scripts.

Furthermore, EEOs introducing and nurturing proto-institutional expert venture scripts will be more effective than a generic, top-down transfer of institutional structures from developed economies. This approach involves locally embedded EEOs introducing elements of institutions and then working to help them evolve to fit the local environment. In this way, not only are expert venture scripts introduced and established, but as proto-institutions, they can begin to take root and potentially spread through society. Therefore I propose:

**Proposition 3:** Entrepreneurship-enabling organizations with higher levels of both bridging social capital and local embeddedness are the most capable of providing venture scripts for potential entrepreneurs operating in subsistence economies in comparison with other Entrepreneurship-enabling organizations.

**Venture Script Institutionalization and Venture Quality**

Specifying what success means in a subsistence economy is important as scholars have argued that current entrepreneurial activities in these contexts often do not lead to growth and development. (Acs, 2006; Bowen & De Clercq, 2007). Instead, much of the small business activity occurring there is the result of individuals having to resort to self-employment because they perceive no other economic options and are attempting only to survive. To address this issue, the theoretical model proposed here extends existing work on venture scripts (i.e. Mitchell et al., 2000; Lim et al., 2010) by focusing on *high quality* new ventures rather than simply examining venture creation decisions.

Past entrepreneurial cognition researchers primarily examined how venture scripts influence venture creation decisions (Mitchell et al. 2000; Mitchell et al., 2002; Lim et al.
A venture creation decision is simply the determination to begin a new business for the purpose of either creating a new product or service or for targeting a new market. They argue that entrepreneurs utilize their venture arrangement, willingness, and ability scripts to take the appropriate actions (i.e. find, evaluate, and exploit opportunities) at the appropriate juncture. Would-be entrepreneurs in this framework face two unique challenges in subsistence contexts.

First, due to the social transmission of venture scripts, a lack of expert venture scripts within a society greatly decreases the likelihood that would-be entrepreneurs will acquire them. Since they are surrounded by an economic environment that is largely devoid of expert venture scripts for productive entrepreneurship, they do not acquire them via the social cognitive pathways suggested by past research (Lim et al., 2010).

Second, in the face of the first problem, developing expert venture scripts through organic and natural pathways can take a good deal of time and resources. Some researchers (e.g. Glaser, 1984) have even suggested that developing entrepreneurial expertise may take up to ten years to develop. This is particularly problematic in subsistence economies because search may lead to deprivations that threaten existence as well as social exclusion. Often, individuals simply cannot afford to abandon subsistence activities to pursue different venture ventures (i.e. become serial entrepreneurs). Search costs are simply too high. Fortunately, as noted above, exposure to experts can accelerate this process (Mitchell & Chesteen, 1995).

Lack of venture scripts and high acquisition costs create a unique role for EEOs. As individuals receive scripts from EEOs, they are able to develop the expertise necessary for value-creating entrepreneurship. A primary difference between expert
entrepreneurs and novice entrepreneurs is the knowledge base that expert entrepreneurs have acquired through experience (Glaser, 1984). Expert entrepreneurs use domain familiarity to recognize relevant categories (e.g. potential opportunities) more easily than novice entrepreneurs. In turn, these categories suggest appropriate actions to the experts. Whereas, novice entrepreneurs may organize knowledge about forming a venture around specific characteristics and surface features of a contextualized problem, expert entrepreneurs quickly apply a general principle due to their venture creation related schema. These principles subsume the specifics of the problem or situation (Lord & Maher, 1993). Then, expert entrepreneurs apply their expertise in a superior fashion because their organized knowledge improves their ability to self-monitor themselves.

The result is that expert entrepreneurs are more likely to make venture creation decisions with high growth potential due to superior abilities to evaluate and exploit opportunities. Specifically, individuals with expert venture scripts regarding the use of resources, idea protection, social networks, and venture specific knowledge (venture arrangement scripts), scripts that allow them to easily see opportunities that can create value, evaluate new ventures, and to draw on lessons regarding the successful exploitation of a new venture (venture ability scripts), and scripts relating to risk tolerance and opportunity motivation (venture willingness scripts) will develop thinking patterns and ways of acting that will distinguish them from non-entrepreneurs (Smith, Mitchell, & Mitchell, 2009). Because they are based on experts’ beliefs that an unexploited or underexploited business opportunity exists or can be created, these new ventures are more likely to lead to growth and wealth creation. Therefore, I propose:
**Proposition 4:** The greater the extent to which venture scripts are transferred, diffused and entrenched by entrepreneurship-enabling organization, the greater its ability to generate high quality ventures in a subsistence economy. Figure 2.2 shows the proposed relationships linking the sociological aspects of venture creation decisions with expert venture scripts and ultimately, successful venture creation decisions.

[INSERT FIGURE 2.2 ABOUT HERE]

### 2.4 ILLUSTRATIVE EXAMPLES OF EEOs IN SUBSISTENCE ECONOMIES

We provide illustrative examples of how EEOs can provide, diffuse, and institutionalize venture scripts in an important subsistence economy - India. Within India, the transfer of expert venture scripts is absolutely necessary because the norms generated by the caste system have made entrepreneurship unattractive to many capable individuals. The two successful examples provide concrete case studies illustrating how this study’s theory applies in practice. Founded more than 30 years ago, *Milma* and *Dastkar* have each created successful new venture opportunities for thousands of individuals by providing and institutionalizing venture scripts. *Milma* and *Dastkar* each provided *bridging social capital* and a *locally embedded* supportive presence to poor individuals who were previously very isolated from exogenous information flows.¹

*Milma*

*Milma* is a dairy farming cooperative that has raised the productivity and living standards of thousands in the Indian state of Kerala. *Milma* channels milk from rural Keralite dairy farmers to urban areas and provides them a stable market and price by enabling them to produce, collect, process, and sell over 250 million gallons of milk each

¹See Geertz, 1978 for more an in depth description of poor information flow in subsistence economies.
year. By 2010 *Milma* had grown to a massive dairy cooperative with 2678 dairy farming “societies” and over 830,000 farming entrepreneurs, roughly 15% of the state’s population, with 32,000 more employees working directly for *Milma*, as shippers, veterinarians, feed producers, and retailers. *Milma*’s vast network serves dairy products to millions of consumers in urban markets in India and abroad (Milma, 2014). Prior to the emergence of Milma and a few other dairy cooperatives to India in the 1980’s, the milk market was fragmented and unreliable.

With regards to *bridging social capital*, *Milma* provided experts who taught local dairy farmers about animal husbandry and care to maximize the life, health, and productivity of their herds (Joseph, 2012). Specifically farmers in the cooperative were shown how to select bulls to be used in artificial insemination by experts from Switzerland. The same bull can be used to sire hundreds if not thousands of offspring. Each year *Milma* artificially inseminates about 100,000 cattle at 141 different A.I. centers. Additionally, prior to *Milma*’s arrival small dairy farmers had no experience in marketing their product. To address the lack of expertise, *Milma* provided the farmers with trained marketers in order to aggressively market milk to the surrounding cities and states. These marketers, in turn, used formal relationships with distributors and store owners to help connect the dairy farmers with markets (Joseph, 2007). As a result, different units have been able to initiate technology upgrades in order to adopt standards required for an export license. Consequently, *Milma* began exporting dairy products to countries such as Saudi Arabia, Australia, South Africa and several other countries in 2012 (Zauba, 2014).
Around 1980, *Milma* and several other milk producing cooperatives were launched by embedding pioneering teams that would begin producing milk in different regions, to determine what activities were successful and how to implement them. Their goal was to iron out kinks in the business model and engender a sense of trust in modern dairy farming techniques. Kurien (2007), one of the movement’s founders, describes his experiences in the following passages that help illustrate how local embeddedness leads to venture ability and arrangement scripts:

One or more ‘spearhead teams’ of highly qualified personnel are sent to one or several villages that constitute their learning laboratory or pilot site. Here the teams develop a familiarity with the problem in question from the beneficiaries' perspective and try out some promising approaches to addressing jointly identified needs. They may be supported by a variety of external resource persons with expertise in the social, managerial, and related technical sciences. In this process of exploration and experimentation, errors will be common, and the resource inputs will be high relative to results. It is assumed that rapid adaptive action will be taken as errors in initial assumptions are identified ... As insights are gained into what to do, attention is redirected to learning how to do it more efficiently, eliminating activities that are relatively nonproductive and working out simplified problem-solving routines so that less-skilled people are able to handle critical activities. Local teams (leaders as well as professionals) are identified, and training and education is provided to enable them to take over and run the organizations once established. (Kurien, 2007: 46)

By combining a locally embedded presence with social bridges, *Milma* was able to both provide and institutionalize the venture scripts necessary for successful and growing dairy businesses.

**Dastkar**

According to the *All India Artisans and Craftworkers Welfare Association*, 30 million Indians are currently involved in the craftmaking industry. However, the majority of these individuals are not able to rise above a subsistence standard of living (AIACA, 2013). Delhi-based NGO *Dastkar* is a society for “crafts and craftspeople” which was
established in 1981 by six women working in the crafts sector. The main goal of *Dastkar* is helping rural women who have the skills and experience with traditional crafts to be able to utilize them as a means of earning income and “economic self-sufficiency.”

*Dastkar* is helping poor craftspeople throughout the production process by identifying skills and creating awareness of the potential of those skills in both craftsperson and consumer. They assist participants in leveraging their skills by developing, designing, pricing, and then marketing their work. *Dastkar* supports over 250 village groups (Dastkar, 2014).

With regards to bridging social capital, *Dastkar* provided its members with access to trade specific specialists, outside information regarding market trends, and access to both domestic and international markets which were formerly outside their reach. Most craftspeople in India struggle because the social divide between themselves and urban clientele leaves them with little information on the market’s taste. For this reason, many of the designers, especially in rural places, were unable to sell their goods on consignment. Prior to *Dastkar*’s intervention, their markets were either nonexistent or all but dried up. Exacerbating the situation, acquiring loans was an issue because without any incoming contracts, they had no money for purchasing materials (Lewis, 2011). Tyabji, the group’s founder, wanted to construct an organization which would link grassroots producers with urban consumers (Lewis, 2011). Therefore, *Dastkar* first provided craftsmakers with information about domestic and international tastes and then connected those producers with wealthy markets and urban consumers (Lewis, 2011).

*Dastkar* achieved these goals primarily by providing information, expertise, and instruction about both products and markets. This is information that the poor previously
had no access to due to cognitive institutional constraints imposed by culture, geography, and/or poor infrastructure. “The idea that they could slightly change their products and make them into something that someone from the city would buy was a very novel idea” (Lewis, 2011). Further, Hands on Dastkar, a private company in the Dastkar group, undertakes special export orders or on behalf of smaller groups related to Dastkar. It also provides consultancies encouraging the crafts groups to export directly to international markets (Dastkar, 2014).

In addition to providing bridging social capital, Dastkar is also a deeply embedded organization. They locate community groups around India and spend a full year demonstrating best practices in creating a craft making venture that produces highly marketable items. They generally focus on 8 to 10 new groups each year and facilitate their navigation of the production and marketing process. Once the groups are mature and “self-sufficient,” after several years, Dastkar directs its supportive focus to others. In order for its craftspeople to be competitive, Dastkar spends months training them in the design, diversification, proper production, and appropriate means of distribution for their products for an entire year (Dastkar, 2014). While in Rathambore for a year, Dastkar found the area’s only block printer and began paying him to train others in the technique. One woman who learned this new skill — a skill previously unknown in her community, — described how she was able to pay for her children’s education and allow them to bathe every day rather than just once per week (Lewis, 2011).

EEOs, like Milma and Dastkar, which transfer entrepreneurial expertise via social bridges and locally embed themselves in subsistence contexts, are successful because they facilitate the transfer of best practices; thus venture scripts can be both diffused and
entrenched. This process seems to be slowly institutionalizing a culture of entrepreneurial expertise at the regional level.

2.5 DISCUSSION

In previous literature, research on venture scripts focused on their outcomes and broader institutional antecedents, typically within a developed-economy context (Mitchell et al. 2000; Lim et al. 2010). I propose a new way of looking at the institution-venture script relationship and argue that venture scripts can function as informal proto-institutions that can enable new venture success within subsistence economies. The network-based means by which EEOs provides expert venture scripts to increase venture quality in subsistence economies is the central thesis of this study and a primary contribution to the literature.

Relatedly, a second contribution is my exploration of how a lack of expert venture scripts constitutes an institutional void and how those voids might be addressed by EEOs. I argue that institutional voids not only include the provision of financial resources, intellectual property protection, and regulatory certainties, but they also include failure to provide expertise needed for productive entrepreneurship. Recent work shows that informal institutions are likely more powerful than formal institutions in providing property protection (Williamson & Kerekes, 2011). Organizations seeking to be entrepreneurial must attempt to institutionalize informal institutions conducive to the development of new ventures. For EEOs to thrive and achieve their objectives, the proper social dimensions, social bridges and local embeddedness, must be in place. Accordingly, I contribute to the literature on the establishment of proto-institutions in contexts where regulated market-based economic transactions are counter-institutional.
Contributions to the International Business Literature

The field of international business is fundamentally interested in understanding how the domestic and/or international context influences firm behaviors and outcomes (Shenkar, 2004). In this study, I focus on international entrepreneurship, which spans two research domains: (1) entrepreneurship across national borders, and (2) comparative entrepreneurship (McDougall & Oviatt, 2000). This study contributes to both domains. Specifically, it contributes both to a better understanding of entrepreneurship as it is practiced in subsistence and developing economies, and also to an understanding of how international organizations (i.e., EEOs) transfer knowledge and capabilities across large institutional divides to entrepreneurs.

Currently, we know much more about the antecedents and outcomes of entrepreneurial ventures in developed economies than in emerging and subsistence economies (McDougall & Oviatt, 2000) because the vast majority of previous research has presumed an institutional context that does not exist in those contexts (Hoskisson, Eden, Lau, & Wright, 2000). This study helps address this shortcoming of the international entrepreneurship literature by offering a more complete perspective on how and when entrepreneurship unfolds within economies where poverty is endemic.

Recent work in comparative entrepreneurship (Danis, De Clercq, & Petricevic, 2011; De Clercq, Danis, & Dahkli, 2010) indicates that social networks are far more important in entrepreneurs’ efforts to start new businesses in weaker institutional environments and lower income countries than in developed contexts. This model, which focuses on EEOs, parallels those models but emphasizes the importance of social bridges and local embeddedness in solving the issues created by institutional voids. By focusing
on these two social capital variables separately, this study provides a clearer understanding of the roles that individual’s and organization’s different network connections play in the entrepreneurship process. While past studies have postulated a substitution effect of strong institutions or networks (Danis et al., 2011), I propose that strong social networks can in fact help EEOs **construct** the genesis of an institutional framework, i.e. proto-institutions, that is supportive of new venture activity.

Furthermore, the model describes that networks’ effects go beyond access to resources and a source of legitimacy; but instead, they give local entrepreneurs exposure to and experience with key entrepreneurial cognitions, expert venture scripts. Research on the generation of expert venture scripts is important for both individual entrepreneurs and EEOs, including even large, for-profit organizations like MNEs operating there. Understanding how expert venture script allow entrepreneurship to unfold in these contexts can help these organizations be effectively entrepreneurial.

Second, this study contributes an understanding of the benefits of even small organizations bridging actors in multiple contexts in order to create value for organizations and individuals. Past work on knowledge transfer has primarily focused on large MNEs (i.e. Dhanaraj, Lyles, Steensma, & Tihanyi, 2004; Buckley, Clegg, & Tan, 2006). Some of this research has focused on how MNEs and NGOs can partner together to cocreate value in subsistence economies (Brugmann & Prahalad, 2007; London & Hart, 2004; London, 2008; Ramaswamy, 2009). However, the theory and cases presented here are applicable to a wide variety of EEOs. Particularly, this study clarifies how organizations focusing on entrepreneurship, knowledge, and technology transfer to developing and emerging economies can become more effective.
In general, knowledge transfer to markets operating with relatively low technology levels can be difficult (Dayasindhu, 2002). Moreover, NGOs and smaller EEOs face an added challenge because they often lack both the resources and technical skills that MNEs have in abundance. By focusing on social connections and interactions, I show how these constraints can be overcome. Even small EEOs, like Dastkar, can create a good degree of value with their social bridges to other markets so long as they are locally embedded (Saxenian, 2006). Similarly, Dastkar, Milma and other EEOs like them are able to use their connection to other markets in order to facilitate the internationalization process of new ventures. Learning process triggered by EEOs’ international initiatives gradually leads to innovation and knowledge spill-over that can contribute to economy-wide growth over time (Robson, Haugh, & Obeng, 2009).

A final contribution to the international business literature is the refined and expanded notion of how capability enhancement can be accomplished in developing economies. Among policymakers, traditional “top down” foreign aid is a popular prescription for poverty and its ills. However, foreign aid is often misplaced and can create dependency (Easterly, 2006). Moreover, reforms that only focus on problems with financial institutions like microfinance are also likely missing the mark.

The scale of the microfinance industry is enormous. In India alone, there were over 150 micro-finance institutions with 25 million borrowers holding 4.5 billion dollars in loans in 2009 (Vyas & Raman, 2012), with the overall micro-financing industry continuing to grow. However, the last decade has shown that capital access alone may not be enough (Banerjee et al., 2009). Once viewed as a market-based institution that could channel capital to individuals shut out from traditional banking and financing services,
microfinance has met with substantial criticism concerning both misallocation of resources and the indebtedness it places on individuals (Karnani, 2007; Bateman, 2010; Bateman & Chang, 2012). It remains unclear whether the new venture activity stemming from microloans results high growth entrepreneurship or simply more self-employed subsistence activities.

In contrast, I advocate an approach that provides prospective entrepreneurs the opportunity to develop their own capabilities, increasing self-sufficiency and independence from outside assistance. Consistent with recent findings from Africa (Bradley, et al. 2012), I argue that EEOs, including microfinance institutions, should focus their efforts on improving entrepreneurial expertise. Investment in the capacity of local entrepreneurs does not necessarily have to be large to create substantial benefits (London & Hart, 2004). Further, the most successful outsider initiated businesses targeting entrepreneurs in subsistence economies utilize training programs for entrepreneurs or identified opportunities by combining knowledge from both outside and inside the local context (London & Hart, 2004).

We suggest that an important way that this occurs is by EEOs providing expert venture scripts via the use of social bridges and local embeddedness. By bridging international actors, the EEO becomes a channel for the flow of information, capabilities, and financial resources that aid in the formation of expert venture scripts. Milma, for instance, effectively targeted a low-income market by bridging local distributors with customers. Milma spanned both geographic and social chasms between actors by providing script-enhancing advisory assistance and training that revolutionized the inefficient practices by both farmers and intermediaries.
Venture Quality in Subsistence Economies

Banerjee and Duflo (2007) described typical self-employment in subsistence economies as follows:

Being an entrepreneur is often easier than finding an employer with a job to offer. You buy some fruits and vegetables or some plastic toys at the wholesalers and start selling them on the street; you make some extra dosa mix and sell the dosas in front of your house; you collect cow dung and dry it to use it as a fuel; you attend to one cow and collect the milk. These types of activities are exactly those in which the poor are involved (Banerjee & Duflo, 2007: 16).

Such activities do little to generate jobs for others and thus proliferates petty entrepreneurship. By examining entrepreneurship in subsistence contexts where necessity entrepreneurship is the normal mode, another aspect of expert venture scripts becomes particularly important: they aid in the quality of new ventures as well as their quantity (Mitchell et al., 2009). As these societies gain expert venture scripts they can begin to grow businesses beyond a subsistence status, resulting in increased human capital and growth potential.

EEOs that do not provide entrepreneurial expertise may engender “false positive” creation decisions, leaving individuals in deep debt with no viable business and jeopardizing their family’s wellbeing. Since they are already living hand to mouth, a failed business venture will threaten their existence (Banerjee & Duflo, 2007).

Microfinance by itself does not solve these issues. Many microfinance institutions evaluate, on some level, the business plans submitted for potential loans. But they do not help improve them or guide the entrepreneur as he tries to exploit it without the proper knowledge, and they certainly do not institutionalize entrepreneurial expertise.

Oftentimes, loans burden entrepreneurs with large amounts of debt without a clear idea how to tailor and exploit their business model. The model suggests that EEOs that do not
provide access to new markets or information, and who are not deeply involved with nascent entrepreneurs as they implement their new venture will promulgate ventures of low quality. I believe that examining the quality of ventures is an appropriate prism for evaluating EEOs’ impact.

Limitations and Future Research

We primarily address the context of subsistence economies, where expert venture scripts and high growth entrepreneurship are less common, due to the lack of supportive formal institutions and the high cost of failure. Therefore, the model of EEOs’ generation of scripts is limited to those regions where they are in relatively short supply. Additionally, it is limited to regions where the staying power of EEOs is credible because unrest and violence diminishes their ability to connect entrepreneurs with markets. If potential entrepreneurs cannot trust the EEO’s stability because they fear it will be subsumed by turmoil and chaos, there will be no local buy-in. At the same time, volatility should not be seen as prohibitively pervasive in most subsistence economies.

Although many subsistence economies are less stable than more developed nations, global conflict has been substantially reduced since 1990 (Center for Systemic Peace, 2013). So such caveats likely only apply to extremely volatile regions such as Sudan and Afghanistan and do not mean that EEOs must have exceptionally stable ground on which to work. If the trend towards broader global peace continues, EEOs’ role will also expand.

One limitation of this study is that it does not examine the possibility or the consequences of the notion that individuals in subsistence economies may have well-developed expert scripts for “unproductive” entrepreneurial practices (Baumol, 1996;
Minniti, 2008). When I argue that subsistence economies do not have expert venture scripts, I am referring to scripts for productive entrepreneurship. By focusing on scripts associated with productive entrepreneurship (Baumol, 1996), I highlight the types of knowledge structures that lead to economic growth and development. Legal market-based activities require a different set of skills than underground and illegal forms of entrepreneurship. In the latter situation entrepreneurs seek to exploit poor institutions (Webb, Tihanyi, Sirmon, & Ireland, 2009), while in the former situation, individuals strive to build upon strong institutions.

Future research should focus on more micro-level topics in attempting to uncover the processes by which EEOs can best establish bridging social capital and local embeddedness. The model I present is somewhat static and mainly describes the characteristics of an EEO capable of providing expert venture scripts but does not inform as to how it gained these characteristics. Perhaps, research in the broader entrepreneurship literature concerning building legitimacy and building social networks can better inform this discussion. Such an understanding will likely involve field work and grounded theory building.

The in-depth look at the processes institutional entrepreneurs used in creating inclusive markets by Mair et al. (2012) could serve as a prototype for the ethnographic shape that future research in this area should take. However, any research method that gains insight into how beneficial institutional forms emerge in subsistence economies should be encouraged. The poor in these regions suffer many hardships and deserve the attention of entrepreneurship and organizational scholars in addressing those challenges.
We have argued that new ventures will be far less likely to be transformative and successful without the appropriate expert venture scripts. EEOs have become increasingly prevalent and can help institutionalize venture scripts via bridging social capital and local embeddedness. I contribute to the literature by expanding inquiry into the practice and results of institutional entrepreneurship in subsistence economies. In doing so, I have contributed to research on the establishment of entrepreneurial expertise in settings characterized by weak institutions, by expanding understanding of the use of proto-institutions. Further, I add context to the International Business literature’s understanding of not just entrepreneurship, but knowledge transfer as well.

2.6 REFERENCES


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2.7 FIGURES AND TABLES

**Figure 2.1** – A Two Dimensional Model of Expert Venture Script Introduction and Establishment in Subsistence Economies

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<tr>
<th>High</th>
<th>III</th>
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<tr>
<td>Level of Bridging Social Capital</td>
<td>Subsistence entrepreneurs working with foreign EEOs with limited networks in the local subsistence context.</td>
<td>Subsistence entrepreneurs working with networked and embedded EEOs (such as Milma and Dastkar)</td>
</tr>
<tr>
<td><strong>Outcome:</strong> Access to a broad range of expert venture scripts; Low probability of venture script institutionalization.</td>
<td><strong>Outcome:</strong> Transmission, diffusion, and entrenchment of proto-institutional expert venture scripts.</td>
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<tr>
<td>Level of Local Embeddedness</td>
<td>Subsistence Entrepreneurs without access to EEO aid</td>
<td>Subsistence entrepreneurs working with purely domestic EEOs</td>
</tr>
<tr>
<td><strong>Outcome:</strong> Limited potential for transmission or entrenchment of expert venture scripts.</td>
<td><strong>Outcome:</strong> Potential institutionalization of a very narrow range of expert venture scripts. Low potential of developing expert entrepreneurs and proto-institutions.</td>
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Figure 2.2 – The Antecedents and Outcomes of Entrepreneurship-Enabling Organizations’ Venture Script Provision within Subsistence Economies
CHAPTER 3

ESSAY II: A SET-THEORETIC EXAMINATION OF NATIONAL BUSINESS SYSTEMS, ENTREPRENEURIAL CULTURE, AND OPPORTUNITY ENTREPRENEURSHIP

3.1 ABSTRACT

Opportunity entrepreneurship is the process of creating a business for the primary purpose of exploiting a perceived opening in the market for the pursuit of profit. To explore how the institutional environment is linked to opportunity entrepreneurship, I examine each of 45 countries' multi-faceted national business systems (Whitley, 1999) in combination with its entrepreneurial culture (consisting of risk-taking, proactiveness, need for achievement, and innovativeness). I take a set-theoretic approach and construct configurations (i.e. bundles) of country-level institutions associated with various levels of opportunity entrepreneurship. The analysis identifies four different configurations sufficient for high levels of opportunity entrepreneurship and three configurations associated with low levels of opportunity entrepreneurship. These results suggests that there are actually several equifinal ways for societies to foster impactful entrepreneurship using national business systems in combination with an entrepreneurial culture. Further, it suggests that those institutions behave interdependently and synergistically to produce opportunity entrepreneurship.
3.2 INTRODUCTION

The ascendant economic growth paradigm posits that economies develop via the expansion of knowledge (Romer, 1993; Jones, 1995). Individuals and organizations create new knowledge by making it possible to combine inputs in valuable and novel ways (Schumpeter, 1934; Galunic & Rodan, 1998). Innovation processes like research and development, scientific discovery, and organic learning processes lead to technological change, generating new or less costly production possibilities. However, this expansion of knowledge does not automatically lead to development. Once innovators produces new combinations, they need to be applied in order to reduce costs of production, reach unreached markets, or even produce goods and services that are completely new and original. This is precisely where the entrepreneur steps in (Holcombe, 1998).

With this role in mind, Kirzner (1978, 1997) describes entrepreneurs as alert individuals who have the ability to recognize market or technological sea change. These individuals are in a better position to spot opportunities due to some specialized expertise and/or prior market knowledge (see also Shane, 2000). For example, “Those with training in mechanical engineering are more likely to spot potential profit opportunities in the design of the internal combustion engine than those with training in law ... People who travel a lot might notice opportunities because the amenities they find in one place might not be available in another” (Holcombe, 1998:49). The key role of the entrepreneur in both these situations is that of one who recognizes and begins to exploit emerging opportunities. Opportunity entrepreneurship is the process of creating a business for the primary purpose of exploiting perceived market inefficiencies for the pursuit of profit.
Opportunity entrepreneurship plays an instrumental role in fostering societal economic development and efficiency (Van Praag & Versloot, 2007).

In places “where institutions produce a net benefit to productive opportunities, (e.g., arbitrage and innovation), entrepreneurs will exploit those opportunities resulting in the creation of wealth” (Coyne & Boettke, 2009). However, these net benefits are not universal. Entrepreneurial activities, including opportunity entrepreneurship, exhibit significant disparities both across countries and over time (Rees & Shah, 1986; Blanchflower, 2000; De Wit and Van Winden, 1989). A healthy stream of research has linked differences in institutional contexts to entrepreneurship outcomes (e.g. Aldrich & Waldinger, 1990; Thornton, 1999; Busenitz, Gomez & Spencer, 2000; Spencer & Gomez, 2004;; Hwang & Powell, 2005; Bowen & De Clercq, 2007; Lim, Morse, Mitchell & Seawright, 2010; Puffer, McCarthy & Boisot, 2010; Stenholm, Acs, & Wuebker, 2013; Valdez & Richardson, 2013).

In this paper, I put forth both a theoretical and methodological alternative to these recent approaches. While linear thinking may engender understanding of which institutional components are most important on average, they ignore the possibilities of both conjunctural causation and equifinality (multiple equilibria). Conjunctural causation means that the sufficiency of any one institutional aspect may work best in combination with the others such that interrelationships among causes matter a great deal. Equifinality implies that there may be multiple institutional profiles capable of producing high levels of opportunity entrepreneurship. If this is indeed the case, a set-theoretic approach is highly appropriate because set-theoretic methodologies ae uniquely tailored to capture both of these ideas. With this alternative conceptualization in mind, I use fuzzy-set
qualitative comparative analysis (fsQCA) (Ragin, 2000; Fiss, 2007) to investigate the following research question: How does Whitley's (1999) conceptualization of the national business system combine with entrepreneurial culture to produce opportunity entrepreneurship?

Whitley (1999) identified four broad societal elements that coalesce together and influence economic activities such as entrepreneurship: These elements include three regulative elements: the financial system, education and skill development, the government and its codified regulations, and one informal/cultural element: trust and authority relations. Each element shapes and is shaped by other institutions. Over time, these seemingly distinct elements coalesce into the holistic institutional bundles that shape economic behaviors. While Whitley (1999) did include one informal cultural element, trust and power relations, past work has shown that certain societies have a distinctly entrepreneurial culture involving need for achievement, proactiveness, risk taking, creativity, and innovation (Lee & Peterson, 2001). Therefore, to Whitley's national business system, I theorize that an entrepreneurial cultural dimension is also relevant for understanding entrepreneurial outcomes.

Results of the study support the methodology and the notions of conjunctural causation and equifinality in the relationship between institutions and opportunity entrepreneurship. Thus, the results make several contributions to the institutions and entrepreneurship literatures. First, results indicate that Fuzzy-set Qualitative Comparative Analysis (fsQCA) does improve understanding of how institutions combine with one another to influence opportunity entrepreneurship. It does so by allowing for the identification of several institutional bundles that enable individuals to start meaningful
Second, results indicate that different combinations of national business system elements and entrepreneurial culture exhibit equifinality, combining in different ways and yet yielding high levels of opportunity entrepreneurship. This analysis identifies three such bundles. Finally, I contribute to a growing body of research that explores the type rather than simply the rate of entrepreneurship (e.g. Bowen & De Clercq, 2007; Khoury, Webb & Prasad, 2013; Stenholm, et al., 2013). As scholars continue to examine entrepreneurship at the macro-level, it is becoming increasingly apparent that total entrepreneurial activity should not be policymakers' primary focus. Focusing on innovation or opportunity entrepreneurship is likely a far more relevant research agenda.

3.3 THEORY DEVELOPMENT

Opportunity Entrepreneurship

Past research has conceptualized and measured entrepreneurial phenomena in several different ways. Among these are rates of innovation (e.g. Shane, 1993), small business ownership (Hofstede, Noorderhaven, Thurik, Uhlaner, Wennekers & Wildeman, 2004), and high growth entrepreneurship (e.g. Bowen & De Clercq, 2007). Opportunity entrepreneurship is the focus of this paper. As outlined above, opportunity entrepreneurship is the process of creating a business for the primary purpose of exploiting a perceived market inefficiency for the pursuit of profit. It is a reaction to "those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production" (Singh, 2001: 220).

Particularly in developing economies, the incidence of self-described entrepreneurs is quite high. However, this is generally due to self-employment in
subsistence activities rather than participation in high growth entrepreneurship (Banerjee & Duflo, 2007; Bowen & De Clercq, 2007). Many self-employed individuals in these markets become entrepreneurs because they perceive no other options for employment or because of cultural-cognitive barriers imposed by environmental conditions. Additionally, they often have very few skills and startup capital. In contrast, opportunity entrepreneurship is not passively engaging in intergenerational subsistence activities, but it is an active choice to begin a new venture based on the perception that an unexploited or underexploited business opportunity exists or can be created. Necessity entrepreneurship has little effect on economic development and can even serve to fossilize economic activity such that change cannot take place. However, opportunity entrepreneurship has a positive and significant effect (Acs & Varga, 2005; Acs, 2006). Therefore, I examine opportunity entrepreneurship due to its relevance for economic growth and development.²

The National Business System, Entrepreneurial Culture, and Entrepreneurial Outcomes

Institutional theory examines the rules, behavioral norms, values, and dominant thinking patterns that categorize societies as collections of economic actors (Fang, 2010). Due to their importance and ubiquity, scholars can “understand entrepreneurship research and practice more fully by finding out what was institutionalized, that is, which activities, beliefs, and attitudes have come to acquire taken-for-granted or rule-like status (and which ones have not). These salient institutions, in turn, enable and constrain

² Acs & Varga (2005) provide a full discussion differentiating opportunity entrepreneurship from other types and exploring its’ consequences.
entrepreneurial activities (Bruton, Ahlstrom, & Li, 2010).” Institutional theory turns attention away from individual characteristics towards the market and environmental institutions in which they operate (Thornton, 1999). Societies either formally codify or tacitly approve institutions. Institutions include both concrete objects and resources as well as verbal and social activities (Valdez & Richardson, 2013). Institutions can alter the rate of new venture creation as well as venture size and potential (Gnyawali & Fogel, 1994; Hwang & Powell, 2005).

In this study, I follow Bowen and De Clercq (2007) and use Whitley’s (1999) national business system framework to examine the configurational effects of each society’s national business system in combination with entrepreneurial culture. Whitley (1999: 47) recognized four broad national institutional components influencing the nature of actors’ economic activities: These are (1) the financial system, (2) education and skill development, (3) the government and its codified regulations, and (4) trust/authority relations. I argue that a society’s level of opportunity entrepreneurship will be related to the accessibility of financial capital for new ventures; the degree to which its skill development system focuses on entrepreneurship; the degree to which the state’s legal framework supports entrepreneurship as evidenced by the regulatory ease for launching new ventures due to policies of the state, and the state’s protection of property; and, finally, the degree to which the society maintains trust relations through control of corruption (Bowen & De Clercq, 2007).

In addition to the national business system, I posit that entrepreneurial culture is an additional crucial element. Though Whitley (1999) did include one informal cultural element, trust and power relations, past work has shown how some countries have a
distinctly entrepreneurial culture involving need for achievement, proactiveness, risk taking, creativity, and innovation (e.g. Thomas & Mueller, 2000; Lee & Peterson, 2001; Mueller & Thomas, 2001; Beugelsdijk, 2007). Therefore, to Whitley's national business system, I theorize that an entrepreneurial cultural dimension is also highly relevant for understanding entrepreneurial outcomes. Examinations of culture in driving entrepreneurial phenomena has met with mixed results, implying a complex and nuanced relationship between culture and entrepreneurship (Noorderhaven, Wennekers, Hofstede, Thurik, and Wildeman, 1999). In this study, I postulate that mixed findings may occur because the national business system interacts with entrepreneurial culture's influence on entrepreneurship in multiple ways.

**Elements of the National Business System**

**Capital Availability**

The availability of financial resources for the founding of new businesses is vital for entrepreneurs. Such funding sources include banks, equity, government subsidies, and venture capitalists. Past work has shown that the availability of financial resources positively influences the new venture creation activity (Levie & Autio, 2008). Financial capital for nascent entrepreneurs could consist of capital from informal investors (Szerb, Rappai, Makra, & Terjesen, 2007), established venture capital firms (Deeds, Mang, & Frandsen, 2004), or banking institutions (Cetorelli & Strahan, 2006). It is therefore critical for a society to possess a financial infrastructure that understands and actively seek to satisfy the particular requirements of scalable entrepreneurial ventures (De Clercq, Lim & Oh, 2013).
Prior work shows that entrepreneurs' ability to acquire funding in order to be able to engage in opportunity entrepreneurship differs by country (Bygrave, Hay, Ng, & Reynolds, 2003). Primarily, the extent that the financial system affects opportunity entrepreneurship hinges on the society's financial liquidity. Generally, equity-based financial systems tend to allow funds to flow towards new ventures far more freely than debt-based systems. Under debt-based systems in which banks are the primary actors, financial capital is often provided to new ventures at higher interest rates (Whitley, 1999). In such cases, the cost of forming a new business may be prohibitive. Thus, in societies in which financial capital is more affordably available to new ventures, opportunity entrepreneurship will be more likely to flourish.

**Skill Development System**

The skill development system is another important aspect of the national business system that affects entrepreneurs (Whitley, 1999). Societies that possess a high quality skill development system for opportunity entrepreneurship provide good preparation for starting up and growing new ventures. Whitley embraced the role of practical instruction of adults for business occurring through the combination of post-secondary educational institutions and businesses. Experiences provided by post-secondary educational institutions can enhance people's career choices.

The skill development system contributes to opportunity entrepreneurship by imparting autonomy and self-efficacy, informing career choices, and providing understanding of markets, business transactions, social trends and demands and what constitutes legitimate market opportunities (Reynolds, Hay and Camp, 1999; Verheul, Wennekers, Audretsch, and Thurik, 2002). A country's skill development system can
promote opportunity entrepreneurship (i.e. improve the nature and quantity of entrepreneurial activity) by helping to engender market-based psychological schema, improving the perceived social standing of entrepreneurs, and developing basic entrepreneurial skills (Gavron, Cowling, Holtham, and Westall, 1998). Furthermore, characteristics needed for opportunity entrepreneurship like innovativeness and risk taking can be fostered (Van der Kuip, 1998). Indeed, post-secondary educational environments can build students' business acumen, especially by offering entrepreneurship courses (OECD, 1998). In these ways, a country's skill development system can enhance opportunity entrepreneurship (Bowen & De Clercq, 2007).

**Government**

Past work has identified two key aspects of government that is linked to advanced entrepreneurial outcomes: regulator burden and property rights (Bowen & De Clercq, 2007). In this study, the regulatory ease of launching new ventures refers to lower costs and fewer government regulations associated with new venture creation. In order to engage in opportunity entrepreneurship, several legal hurdles must be cleared (Djankov, La Porta, Lopez-de-Silanes, & Shleifer, 2000). These costs and demands vary by country (Klapper, Laeven, & Rajan, 2006). Such barriers dissuade people from transitioning into opportunity entrepreneurship, even if they believe that they likely have a viable business model idea.

While established businesses can devote personnel and resources to dealing with government regulations, new ventures may struggle to meet and comply with these administrative costs. Such activities divert attention from the business model, and in the early stages of new ventures, time is of the essence. Additionally, a complex regulatory
environment hinders firm growth and the exploitation process. Some entrepreneurs may decide not to make new hires due to legal obligations and red tape (Niehof, 1999).

Unclear legislation may also result in high transaction costs (Verheul et al., 2002). For instance, when different government levels and agencies do not consistently use the same jargon to describe equivalent concepts it creates confusion. In these countries, individuals wishing to engage in opportunity entrepreneurship may not understand government codes and stipulations. Verheul et al., (2002: 32) notes that in many cases, policymakers change tax systems frequently and at multiple government levels. Oftentimes, the codes can be difficult to understand. At the extreme, in places like the former French colonies in Africa, government complexity can be absolutely crippling to opportunity entrepreneurs wishing to participate in the formal economy (Djankov et al., 2001). Burdensome regulations involve time, money, and effort from the entrepreneur in order to meet the requirements (Verheul et al., 2002). Overall, individuals will be far less likely to engage in opportunity entrepreneurship where regulations complicate and add costs to the entrepreneurship process.

Another important aspect of Whitley’s (1999) frameworks subsumed under government is property rights protection. Property rights are government regulations stipulating how individuals can control, benefit from and transfer property. In societies in which property rights are protected, individuals are able to capitalize on proprietary assets. A fair and transparent judicial system allows for the preservation and protection of private property. (Johnson McMillan, & Woodruff, 2002) It further promotes a society wide recognition of the importance of safeguarded transactions. This, in turn, encourages market participation and risk taking at a level that can support the actions required for
opportunity entrepreneurship. Particularly important for opportunity entrepreneurs is the
ability to exploit one's own intellectual property. Intellectual property, the idea at the
core of the business model, is the central impetus for innovativeness and, consequently,
transformative opportunity entrepreneurship.

Empirical evidence has shown that people more readily exploit new and innovative ideas in the marketplace when there are strong intellectual property right protections in place (Sobel, 2008). In society's lacking the basic protections, any opportunity that entrepreneurs believe they perceive may not be real since it could easily be poached or duplicated before the innovator is able to collect entrepreneurial rents. In these societies, would be opportunity-driven entrepreneurs may be reluctant to invest their savings into capital (physical or human) formation activities (Johnson et al., 2002). History bears out this lesson. For centuries in China, for instance, the legal system could not and did not enforce contracts and entrepreneurship consequently suffered (Baumol, 1990). McMullen, Bagby, & Palich (2008), among others, have shown that the property rights-entrepreneurship relationship still holds true with cross-country data from 36 countries. Given both theory and accumulated empirical evidence, it is right to conclude that a society's property rights protections influence individuals' ability and willingness to engage in opportunity entrepreneurship. In societies with strong property rights, individuals believe that the rule of law will protect and preserve their entrepreneurial efforts and creative actions.

Trust Relations and the Control of Corruption

Whitley (1994, 1999) describes how entrepreneurial behavior is strongly linked to the reliability or trustworthiness of its citizens and organizations. Trust refers to the
reliance on the integrity of others within society. It generally denotes confidence in the certainty of future payment for goods and services received. In the national business system, trust plays a key role complementing other societal institutions. Formal institutions cannot be successful unless parties can set up a working trusting relationship in which individuals have faith in both the dependability of transactions as well as the enforcement of the appropriate penalties when necessary. Trust allows for reliable connections between strangers and the creation of both social and business groups (Welter & Smallbone, 2006). As a relationship-enhancer, it is particularly important where property rights and other legal regulations are not strictly enforced. In these cases, corruption and opportunistic behavior rises. In situations in which legal regulations are imperfectly enforced, trust decreases transaction costs by increasing information flow and safeguarding contracts. In this way, societal trust reduces the likelihood of corruption. (Welter & Smallbone, 2006).

Corruption is characteristic of societies that lack trust. It is, in many ways, the inverse of trust (Uslaner, 2004). Corruption consists of unethical activities like bribing public officials, breaking a contract, or privately appropriating gains that are not one's own (Choi & Thum, 2005). Societal corruption reinforces itself through repeated corrosive and unethical interactions with other actors, which weakens beliefs about their reliability. Thus, trust is eroded where corruption is prevalent. Repeated transaction patterns and experiences throughout society determine whether trust OR corruption becomes institutionalized at a national level (Anokhin & Schulze, 2009). Consequently, national business systems vary to the degree in which corruption is manifested.
In corrupt societies, individuals wishing to invest in a venture seeking to exploit a market opportunity face a substantial risk that suppliers and customers will behave opportunistically, appropriating profits that the entrepreneurship should be entitled (Anokhin & Schulze, 2009). Opportunity entrepreneurship, the desire to create a scalable, growing business requires more commitment and risk than subsistence activities. Thus, corruption is particularly harmful to individuals wishing to engage in opportunity entrepreneurship.

Indeed, past work shows that the presence of trust leads to the absence of corruption, increasing activities central to opportunity entrepreneurship like innovation (Dakhli & De Clercq, 2004). Widespread corruption restricts resource accumulation and recombination (Rose-Ackerman, 2001). Because corruption is particularly damaging to the sophisticated transactions and activities needed for opportunity entrepreneurship. I argue that a country’s level of corruption limits the degree to which individuals are willing to engage in opportunity entrepreneurship. Thus, corruption erodes entrepreneurs’ valuations of potential opportunities because uncertain payoffs reduce the number of both perceived and real opportunities. Conversely, when individuals objectively evaluate opportunities, risks associated with corruption become negligible, and opportunities become observable and real for entrepreneurs to act on. In sum, a country’s corruption levels decreases opportunity entrepreneurship by reducing the number of true, exploitable, and observable opportunities.

Entrepreneurial Culture

Culture is the collection of shared values, beliefs and norms of a group or community (Basu & Altinay, 2002). Hoftstede (1991, p.5) famously defines culture as “a
collective programming of the mind which distinguishes the members of one group or category of people from another.” Exploration of linkages between culture and economic initiative dates back at least as far as Weber’s (1904) work on the Protestant ethic.

Weber’s manifesto fed a stream of entrepreneurship literature focused on the traits of individual entrepreneurs. This line of research argues that cultural contexts help form individual interpretations and beliefs, influencing decisions such as business startups (e.g. Shane, 1993). In this research stream, scholars have explored whether the relationships between cultural traits and entrepreneurship phenomena are universal.

Linkages between Hofstede’s (1980) national cultural dimensions and entrepreneurship has also been addressed in the literature. Shane (1993) found that low power distance, low uncertainty avoidance, and high individualism increases innovation. Their counter-intuitive finding on power distance indirectly contradicted Shane’s country-level observations. Acs, Audretsch, and Evans (1994) added further complications, finding that uncertainty avoidance is positively related to entrepreneurship while individualism decreases it in their sample. Their counter-intuitive finding on power distance contradicted Shane’s country-level observations. Noorderhaven, Wennekers, Hofstede, Thurik and Wildeman (1999) promulgated a satisfaction hypothesis (Noorderhaven et al., 1999; Hofstede et al., 2004) to explain the contradictory findings. They speculated that dissatisfaction with existing organizational culture pushes individuals into self-employment.

Given problems with Hofstede’s program at assessing entrepreneurial culture, I utilize a more direct approach to assessing culture’s impact on entrepreneurship. For instance, Thomas and Mueller (2000) examined cultural variation in entrepreneurship
traits such as innovativeness, locus of control, and risk taking. Additionally, Lynn (1991) linked variation in cultural competitiveness to business ownership rates. Other scholars have examined how the culture of a social class or ethnic group impacts entrepreneurship (Aldrich & Waldinger, 1990; Light & Rosenstein 1995). Reynolds, Hay, & Camp (1999) found some evidence that positive attitudes about entrepreneurs are correlated with the founding of new firms, and that negative judgments towards failed entrepreneurs diminishes the startup rate. Additionally, Wennekers, Uhlaner, and Thurik (2002) suggest that positive social attitudes about entrepreneurship lead to individual level support, increasing the supply of entrepreneurs in a given society. Most recently, Valdez and Richardson’s (2013) used perceptual data from entrepreneurs to assess societal views of entrepreneurs. Results of that study indicated that the linkage between entrepreneurship and a culture that values the traits associated with new venture creation was a strong indicator for entrepreneurial outcomes.

Accordingly, in this study, I argue that in addition to the key cultural elements in Whitley’s conceptualization of the national business system (i.e. trust and authority relations), a thriving entrepreneurial culture is also a key element. Such a culture includes elements of proactiveness, risk-taking, need for achievement, innovation, and creativity. Below, I argue that entrepreneurial culture, along with Whitley’s dimensions both shape and are shaped by one another. In some cases they combine to form societies conducive to opportunity entrepreneurship, while in other cases they do not.

A Configurational Approach to the National Business System and Entrepreneurial Culture
I argue for a gestalt or configurational approach to understanding national contexts for entrepreneurship. Such a conceptualization has strong theoretical backing in the institutional theory literature. For instance, Holmes, Miller, Hitt and Salmador (2013), found evidence that institutions are interdependent. They highlighted how cultural and informal institutions determine formal institutional elements. They showed that formal institutions, once established, are stable however, their establishment is highly dependent on culture. Indeed, several scholars have argued that softer institutional elements, like a society’s culture, may be the true determinants of development-related outcomes (la Porta & Lopez-de-Silanes, 2000; Redding, 2005; Jackson & Deeg, 2008). DiMaggio and Powell (1991) described culture as a society’s toolkit from which they act and draw upon to solve social problems. Whereas cultural values and behaviors by their very nature and definition acquire societal consent, society must view regulative elements as efficacious solutions before they can be adopted (Powell, 1991; Tolbert & Zucker, 1994).

History shows that when societies do not deem codified institutions efficacious, they will discard them and new solutions will be explored (Witt & Redding, 2009). While historical events and living conditions may be the immediate cause of such changes, normative and cultural-cognitive characteristics play a key role in determining both the root and the direction of the change. These elements shape a society’s view of world and national events (Witt & Redding, 2009) and serve as a prism for interpretation (Zilber, 2006). These interpretations, in turn, lead to the development of new formal institutions because they focus a society’s attention on a given issue (Busenitz et al., 2000), determine the weight or value that a society places on the issue (Schwartz, 1999) and lead to the creation of intended remedies (Witt & Redding, 2009). Regulative institutions,
then, are often inorganic solutions that governing bodies enact to confront perceived national problems. Therefore, regulative institutions are, in part, a reaction to normative and cultural-cognitive elements. They reflect and encapsulate softer institutions, codifying their preferences for society (Busenitz et al., 2000).

However, it is wrong to simply conclude that cultural elements are a direct and exogenous antecedent of regulative elements. It is important also to consider historical pathways (North, 1990). As regulative institutions shape global events, a society may completely alter the way it expresses its softer institutions in reaction to the event. In fact, culture to a large degree is determined by history. In turn, regulative elements become the expression of cultural variables in reaction to history (Redding, 2005.) That is, regulative institutions can spark historical events, which, in turn, lead to normative or cultural-cognitive change. England’s Magna Carta altered social hierarchal relations leading to trust and decreased power distance. Increasing social capital then led to development and increased prosperity, feeding more normative and cultural-cognitive changes (North & Weingast, 1989).

In spite of these complex interdependencies, to date scholars have attempted to examine the independent effects of institutions and culture on entrepreneurship (e.g. Busenitz et al., 2000; Spencer & Gomez, 2004; Puffer, McCarthy & Boisot, 2010; Stenholm et al., 2013; Valdez & Richardson, 2013)). Such an approach cannot qualify or quantify how institutions join with culture to form a bundle of mutually reinforcing, or perhaps substitutable, components. I propose there may be multiple cultural-institutional profiles that a country may use utilize to produce a high number of opportunity entrepreneurs.
One example from the literature where a holistic view would be appropriate is the situation where government regulations are unconducive to entrepreneurship, and yet a flourishing entrepreneurial environment still develops. In these societies, informal norms (Ahlstrom, Bruton, & Lui, 2000) or alternative governance mechanisms (Khanna & Palepu, 1997) may act as substitutes. The offshoot is that institutions, i.e. the national business system, and an entrepreneurial culture are intricately wound together and have causally ambiguous origins. The three formal elements of the national business system and entrepreneurial culture coalesce together and influence each other. The informal elements (trust relations and entrepreneurial culture) along with more formal elements (financial capital availability, skill development, and government regulations and quality) all combine together to create a social system that may or may not be conducive for entrepreneurship.

Because the blending of institutional and cultural components is clearly such a complex issue, there may be vast heterogeneity in countries’ profiles, leading to qualitative and quantitative variation in activities and transactions. Countries in which certain aspects of the national business system seem highly conducive to entrepreneurship may struggle if other national business system components or an entrepreneurial culture is not in place (lack of complementariness). Conversely, in other cases, if some institutional causal conditions seem poor, this weakness can be overcome by high levels of other elements of the national business system or entrepreneurial culture (substitution effect). Therefore, for many country-level outcomes, national institutions may act either in concert or as substitutes. Under this perspective, improving a given institution may increase entrepreneurship in some settings but not in others, such that the
marginal benefits of an improvement in any given component depends on the quality of the other components. Furthermore, an institutional component, by itself will not necessarily lead to opportunity entrepreneurship. For instance, policies designed to make starting a business easier may not lead to opportunity entrepreneurship if cultural components are resistant. Undoubtedly, these issues are complex, containing a high degree of interdependency and endogeneity. Therefore, I put forth the following proposition for subsequent analysis:

**Core Proposition:** Each of the elements of the national business system along with entrepreneurial culture in and by itself is not a sufficient condition for high opportunity entrepreneurship; the effectiveness of the national business system and entrepreneurial culture depend on how they interact with each other.

### 3.4 METHODOLOGY

**A Configurational Approach**

In order for theories that approximate the complexities of many social phenomena to emerge, scholars need to apply methods for building typologies and logical combinatorial explanations. A combinatorial perspective stipulates that each institutional facet is only one element of a complex system. The presence or absence of a given element, or casual condition, in a complex system may be either beneficial or detrimental to the outcome depending upon the state of the other causal conditions.

Methodological choice is not a mere matter of preference, or even perceived appropriateness, given the theory at hand. Instead, as Delbridge and Fiss (2013) recently argued, theorizing is tightly bound to methodology such that there is a strong and consistent feedback loop between the two. In fact, scholarly attention to phenomena in which the antecedents "combine, rather than compete, to bring about an outcome where individual causes may be neither necessary nor sufficient by themselves" (Delbridge &
Fiss, 2013, 328) and thus, undetectable to linear methods. Consistent with this perspective, I depart from past prisms and methodologies by examining the national business system and entrepreneurial culture as potential gestalts of different variables.

To do so, I utilize fuzzy-set theory and analysis (Fiss, 2007; Ragin, 2000). Fuzzy-set analysis is a tool for uncovering complex patterns in holistic cases of data and helps in both theory testing and theory building (Ragin, 2000; 2006; 2008). Consistent with this method’s protocol, I used institutional theory and the entrepreneurship literature to deductively identify the causal conditions. I then used fsQCA to determine and inductively identify any interdependencies among these causal mechanisms, exploring how they alternative configurations lead to equifinal entrepreneurship outcomes.

Sample

I explored archival data in order to examine a large array of countries: The sample includes data from 45 countries in 2010. Data come from three primary sources. Data sources include the Global Entrepreneurship Monitor’s country level data (Xavier, Kelley, Kew, Herrington & Vorderwülbecke, 2013). For sources and a succinct description of each causal condition as well as the outcome variable, refer to Table 3.1.

[INSERT TABLE 3.1 ABOUT HERE]

One shortcoming of the institutions and entrepreneurship literature to date is that it has generally focused on highly developed countries like the United States and Western Europe (Thomas & Mueller, 2000; Valdez and Richardson, 2013). Thanks to the Global Entrepreneurship Monitor, The World Bank, and Hofstede’s research agenda, this study covers 45 countries from 5 continents. Notably, a broad diversity of countries is
represented including 7 African, 9 Asian, and 12 Latin American countries. Table 3.2 provides a full list of the countries.

[INSERT TABLE 3.2 ABOUT HERE]

**Outcome Variable**

Accurate and nuanced conceptualization and measurement of most entrepreneurial phenomena is a major concern (Khoury, Webb & Prasad, 2013). The primary basis for this study’s focus on *opportunity entrepreneurship* is the Global Entrepreneurship Monitor’s *Adult Population Survey*’s question for self-identified entrepreneurs, “Are you involved in opportunity early-stage entrepreneurial activity?” This question was one of a series of questions aimed at determining whether an individual was engaged in necessity, lifestyle, or *opportunity entrepreneurship*.

Because there is a structural relationship between GDP per capita and entrepreneurship activity (Wennekers & Thurik, 1999), I transformed the raw data from the survey question by regressing the level of *opportunity entrepreneurship* in a society on GDP per capita. By removing variance in *opportunity entrepreneurship* caused by GDP per capita, I can control for this structural effect and focus on how institutions influence it more directly. To control for their impact on the sample, I regressed *opportunity entrepreneurship* on GDP per capita (2010) data from the World Bank. The resulting residuals make up the dependent variable for the study: *opportunity entrepreneurship* relative to the expected level of *opportunity entrepreneurship* given GDP per capita.³

³ Note that Bowen & De Clercq (2007) attempted to deal with this problem in another way. They examined the proportion of entrepreneurs engaged in high growth ventures. While this approach was considered, it invoked too large a penalty on countries that really do have a large contingent of opportunity entrepreneurs, even if they are greatly outnumbered by necessity and lifestyle entrepreneurs.
Causal Conditions

The Global Entrepreneurship Monitor also measures country-level entrepreneurship variables through its National Expert Survey. The National Expert Survey has created standardized measures of business and government experts’ perceptions of several key indicators of the country’s institutional framework for entrepreneurship. Elements of the national business system, specifically as it relates to entrepreneurship are measured (Bowen & De Clercq, 2007). To do so, I utilize five causal conditions to assess Whitley’s national business system. Four of these indicators (the financial capital availability for new venture, the skill development system’s emphasis on entrepreneurship, property rights protections for proprietary knowledge, and regulatory ease) are taken from the National Expert Survey. A fifth indicator control of corruption is drawn from Transparency International’s Corruption Perception Index and is used to capture trust relations. Finally, items for entrepreneurial culture are also taken from the National Expert Survey.

The degree to which financial capital availability for new ventures can be obtained, the extent to which the skill development system focuses on entrepreneurship, the regulatory ease of launching new ventures, as well as property rights security of entrepreneurs, and entrepreneurial culture, are all measured as the average of several scores (five-point Likert scale) from the National Expert Survey. On the 2010 NES there are six question measuring financial capital availability, six examining the skill development system, seven measuring regulatory ease, a five investigating property rights, and five assessing the entrepreneurial culture.
Survey items measuring financial \textit{capital availability} capture entrepreneurs' access to funding and private equity (Reynolds et al., 1999; Bowen & De Clercq, 2007). Items assessing the \textit{skill development system} queries experts about the degree and effectiveness to which each country's higher educational system targets entrepreneurship. Items examining the ease of getting business licenses, the way in which the tax system treats new ventures, and the helpfulness of government policy in helping entrepreneurs start new ventures are captured by \textit{regulatory ease}. Items assessing the degree to which intellectual property rights, patents, and trademarks were protected were used to capture \textit{property rights} protection.

Finally, I use the Transparency International's \textit{Corruption Perception Index}, an average of thirteen corruption indices worldwide to examine the extent to which the government displays corruption. Those with low corruption have high levels of trust relations. I label this variable \textit{control of corruption}. The cumulative index measures how corrupt a country's public sector is perceived to be.

\textbf{Fuzzy-set Qualitative Comparative Analysis}

Fuzzy-set qualitative comparative analysis (fsQCA) is a combinatory technique (Fiss, 2007; Vis, 2012), which uses Boolean algebra to generate configurations of causal conditions and measure their relation to an outcome variable (Ragin, 2000; Ragin, Drass, & Davey, 2006). Boolean algebra, rather than the linear algebra that OLS and other techniques employ, allows researchers to capture set-theoretic phenomena or typologies instead of each condition's independent effect (Fiss, 2011; Fiss, Cambre, & Marx, 2013). FsQCA treats each observation or case holistically. It is a valuable tool for describing and exploring how differing pathways impact an outcome by grouping these cases based on
the appropriate similarities and differences. According to Ragin (2006), the ability to view cases as configurations allows researchers to study specific empirical cases while counteracting the obscuring of cases in conventional forms of correlational cross-case analysis. Moreover, conventional cross-case analyses may ignore multiple equilibria by veiling case distinctions through their emphasis on the net effects of antecedents (Ragin, 2006). While most cross-case studies, attempt to maximize explained variation (e.g. Eisenhardt, 1989), the goal of fuzzy-set analysis is to make sense of cases with a good degree of detail, not losing information where equifinal successful cases, perhaps, have vast differences.

Some recent work has validated many of the analytical strengths of fsQCA for analysis of country-level outcomes, using institutions-based causal conditions. Pajunen (2008) showed that national configurations of institutions could be used to understand FDI flows to a country. Greckhamer (2011) described configurations of institutions that could increase both national compensation levels and inequality. Vis, Woldendorp, & Kenam (2013) used fuzzy set analysis to examine 19 developed economies to demonstrate that political institutions are interdependent and combine to influence the macroeconomic environment. The two primary advantages of fsQCA are (1) that it allows for the description of each case as a combination or configurations of causal conditions, and (2) enables the exploration of equifinal combinations of outcomes (Fiss, 2011; Ragin, 2008). This analysis uses one outcome condition and six causal conditions. The number of possible configurations is $2^6$ (i.e. 64).

**Consistency and Frequency Thresholds**
I determined that a theoretical configuration should have but one representative case in order to qualify for further analysis. FsQCA mandates that at least 75% of cases must be covered by the analysis. Choosing a higher coverage threshold did not allow this minimum threshold to be met. Additionally, by setting the threshold to one, no data is excluded meaning that any institutional configuration leading to high opportunity entrepreneurship in the sample will be identified.

FsQCA utilizes a consistency score for measuring the extent to which membership in a given configuration is indeed a subset of membership in the outcome in order to make this decision. A coverage score is also used to describe the relevance of a condition or a set of conditions to a particular outcome. Formulas for calculating fuzzy consistency and coverage statistics of cause or causal combination, \( X \), for the outcome, \( Y \), are as follows (Ragin, 2008: 134):

\[
\text{Consistency} (X_i \leq Y_i) = \frac{\sum \min(X_i,Y_i)}{\Sigma(X_i)}
\]

\[
\text{Coverage} (X_i \leq Y_i) = \frac{\sum \min(X_i,Y_i)}{\Sigma(Y_i)}
\]

I use 0.80 as the consistency threshold consistent with prior literature (e.g., Crilly, 2011; Bell et al., 2013; Judge, Fainshmidt, and Brown, 2014) and above the minimum consistency threshold permissible as outlined in Ragin (2006).

Calibration

In order to perform fsQCA, all data must be calibrated to membership scores \([0, 1]\), where a value of 0 indicates complete non-membership and a value of 1 indicates full membership. Data can be calibrated in several ways. Many times, it is preferable to rely completely on theory-driven calibration based on scholarly expertise; however, this is not always possible. Other times, data must be calibrated based on the structure of the data.
For continuous data that does not cluster, a continuous calibration technique is often appropriate (Schneider & Wagemann, 2012). Since all causal conditions in my study exhibited this structure, I used fsQCA’s calibration operation. To use this operation, it was necessary to stipulate a full membership point (i.e. calibration = 1.00), a crossover point, (i.e. calibration = 0.50) above which a condition is determined to be mostly a member, and a complete non-membership point (i.e. calibration = 0.00). I used the same techniques as Fiss (2011) to select these three points, which Ragin (2006) termed the “direct” approach to calibration. Specifically, the 75th percentile for each variable was designated as the full membership threshold, the mean was designated as the crossover point, and the 25th percentile was designated as the full non-membership point.

For the outcome variable, the residual of opportunity entrepreneurship after GDP per capita’s structural component lends itself well to a quartile split (i.e. codes of 0, 0.33, 0.66, and 1) is possible. Accordingly, I split the outcome variable and causal conditions into quartiles. For a full list of the countries included in this study as well as their membership score in the set opportunity entrepreneurship, refer back to Table 3.2.

### 3.5 RESULTS

Results for the fsQCA examination of sufficiency for high opportunity entrepreneurship are presented in Table 3.3. Sufficiency means that each of these configurations, when viewed holistically, should in most cases result in opportunity entrepreneurship. The table displays the intermediate solution, which is more appropriate, when a sample represents a significantly reduced subset of the overall population and when counterfactuals theoretical counterfactuals are introduced into the model. In Table 3.3, I follow past research (e.g., Crilly, 2011; Judge et al., 2014), and
indicate that the presence of a causal condition with a bolded circle ("•") and the absence of a causal condition with a slashed circle ("Ø"). A blank space indicates that a condition does not matter (i.e., can be absent or present) in that given configuration. Consistency statistics, roughly analogous to the t-score for coefficients in OLS regression, describe the extent to which nations that assemble these institutional profiles experience the outcome. Coverage values, on the other hand, roughly analogous to r-squared, denote the empirical relevance or importance of the solution (Schneider & Wagemann, 2012).

Configurations 1, 2, 3 are almost always sufficient for high opportunity entrepreneurship while configurations 4-6 are almost always sufficient for low opportunity entrepreneurship. The three configurations sufficient for high opportunity entrepreneurship demonstrated coverage of 0.47 and a consistency of 0.83. The overall solution consistency of 0.83, for the three high configurations, means that the solution would be expected to lead to opportunity entrepreneurship in roughly 83% of cases. The consistency score of 0.47 indicates that the solution composes 47% of all higher than expected opportunity entrepreneurship outcomes. These values reveal that these three configurations are in fact Boolean subsets of the high performance set, and account for a substantial percentage of the high opportunity entrepreneurship institutional profiles.

Raw coverage scores in the table show the portion of opportunity entrepreneurship that is contained in the indicated configuration, and unique coverage show the portion of opportunity entrepreneurship that is only covered by the indicated configuration and no others. Coverage statistics here are consistent with and even exceed several other studies (e.g., Crilly, 2010; Fiss, 2011; Garcia-Castro et al., 2013). In sum,
these results show that several discrete, discernible national institutional gestalts explain differences in *opportunity entrepreneurship* across the sample.

Configuration 1 contained mainly developed countries: the United Kingdom, Switzerland, Finland, France, Norway, and Chile. In Configuration 1, *regulatory ease, capital availability* for entrepreneurs, and *control of corruption* combine to lead to high levels of *opportunity entrepreneurship*. The other three components: the degree to which the *skill development system* targets entrepreneurship, *property rights* protection, and even an *entrepreneurial culture* are all superfluous.

The causal conditions leading to Configuration 2 are logically consistent with those leading to Configuration 1, but the elements that matter are largely different. Only *regulatory ease* unites the configurations in terms of present conditions. In addition to *regulatory ease*, the *skill development system*’s emphasis on entrepreneurship and *property rights* protection are also present. Interestingly, and in support of Noorderhaven’s (1999) dissatisfaction hypothesis, a lack of *entrepreneurial culture* also contributes to the outcome. Countries within Configuration 2 include Uruguay, Slovenia, and Norway. Note that due to the logical consistency of the two configurations, Norway appears in both Configurations 1 and 2.

Configuration 3 contains Mexico and Peru. In this configuration, in contrast to Configuration 2, a strong *entrepreneurial culture* is a driving force. This configuration relies on both the presence of *capital availability, skill development system* geared towards entrepreneurship as well as *control of corruption*. Surprisingly, the absence of *property rights* was also consistent with high *opportunity entrepreneurship* in this configuration. One explanation is that many of the opportunity entrepreneurs in this
configuration could be attempting to operate in the informal or even renegade economy. While much of the entrepreneurship in these countries is legitimate (Acs & Amoros, 2008), some clearly is not (Webb, Tihanyi, Ireland, & Sirmon, 2009). Another explanation is that informal arrangements and social networks may substitute for more formal property rights in these countries.

Configurations 4-6 are associated with low levels of *opportunity entrepreneurship*. Overall, the presence of elements of the national business system as well as *entrepreneurial culture* are less prominent for countries with low levels of *opportunity entrepreneurship*. However, the fact that these configurations include the presence of conditions that theoretically lead to entrepreneurship shows that even countries with some of the right institutional elements in place can fall short of creating the right recipe for *opportunity entrepreneurship* to flourish.

### 3.6 DISCUSSION

The aim of the analysis was to explore how different combinations of a diverse array of institutional components combine in relation to *opportunity entrepreneurship* by using fsQCA to analyze Whitley’s notion of national business systems (1999) along with entrepreneurial culture across 45 countries. Overall, the analysis yields several key results. First, there are multiple paths leading to high levels of *opportunity entrepreneurship*. Second, none of the components of the national business system nor *entrepreneurial culture* are sufficient by themselves to lead to the outcome. That is, the effectiveness of a society’s institutions depends on how they configure with each other. Third, the analysis identifies three institutional configurations that lead to relatively high
opportunity entrepreneurship. One of these consisting of mostly developed countries, while the other two contain developing countries.

This study further strengthens the established linkage between countries’ institutional components and entrepreneurship. The central finding that emerged is that there are multiple and equifinal institutional combinations of causal conditions that are associated with high levels of opportunity entrepreneurship at a macro-level. Moreover, none of the institutional elements nor entrepreneurial culture were sufficient by themselves to lead to opportunity entrepreneurship. This is consistent with the core proposition.

Interestingly, no configuration contained the presence of all of the entrepreneurship conducive conditions. Instead, some institutions seem to behave synergistically; causal conditions may behave as functional complements or substitutes. Notably, regulatory ease is an important causal condition in Configurations 1 and 2. However, there it combines with capital availability and control of corruption. Conversely, in Configuration 2 it combines with property rights protections and the skill development system. Thus the two configurations each suggest a pair of causal conditions that substitute for one another. That is, results suggest that the presence of high levels of opportunity entrepreneurship can be achieved without a full contingent of conducive causal conditions but rather with complex, intricate, and, at times, non-intuitive gestalts of them.

The equifinality principle is a central lesson here. Results suggest that rather than one prescription, there are multiple paths for creating opportunity entrepreneurship. Recent examinations (Stenholm, Acs, & Wuebker, 2013; Valdez & Richardson, 2013)
use the usual “net-effects” paradigm, in which independent variables compete to explain variance. Methods like OLS regression assume independence between causal factors and an outcome that is a linear combination of these factors. In those paradigms, there is one optimal solution. These results reveal that there are at least three bundles of institutions that produce higher than expected numbers of entrepreneurs pursuing opportunities.

Support for the Core Proposition should alter the way that scholars theorize about and analyze national institutions in relation to entrepreneurship. Findings indicate that none of the institutional components alone is sufficient for opportunity entrepreneurship. This study’s findings are in line with Hirsch (1997), who argued that institutional components must function as a system. This systems thinking is in line with findings here. Traditionally, scholars such as D’Andrade (1984) have held that these systems are actually over determined in that “social sanctions plus pressure for conformity, plus intrinsic direct reward, plus values, are all likely to act together to give a particular meaning system its directive force.” By operationalizing Whitley (1999) along with entrepreneurial culture as components that can be integrated into configurations or bundles of institutions, I join recent studies analyzing societies as bundles of institutions rather than, methodologically implied, independent institutional variables (Jackson & Deeg, 2008; Pajunen, 2008; Vis, et al., 2013), uncovering the relationships between institutional variables and a highly relevant outcome.

Additionally, two configurations (Configurations 1 and 2) associated with high opportunity entrepreneurship were composed of primarily developed countries, while Configuration 3 was not. This suggests that high levels of opportunity entrepreneurship can be achieved at almost any level of economic development given the right institutions
I also corroborate recent work in development studies (i.e. Williamson, 2009), indicating that scholars focusing on one aspect of institutions (e.g. the legal framework) independent of the others may miss the big picture. Work on *institutional stickiness* criticizes treatments of cultural-cognitive elements alone, because such work does not incorporate the ways in which regulative elements shape culture (Boettke, Coyne & Leeson 2008). Institutional stickiness is the notion conceptualizing the speed at which institutional change can unfold in a society. This concept is particularly important for the enactment of new regulative elements because they are relatively easy to alter, yet may not receive broad public support or buy-in. La Porta and Lopez-de-Silanes (1998) observed that common law, arising endogenously, was far more effective than legislated civil law. Similarly, Scott (2007) and Ostrom (2000) both document how endogenously emergent institutions avoid many undesirable consequences that plague top down artificially imposed solutions. Despite the problems with isolating institutional elements because they shape one another over time, past work on institutions and entrepreneurship has taken exactly that approach. Hopefully, these findings encourage scholars to start viewing institutions in bundles instead. Future research should focus on the complementariness or substitutability of institutions.

**Implications for Policymakers**

Findings here present two major warnings to policymakers wishing to boost entrepreneurial activity within societies. First, these findings should serve caution to policymakers who only wish to target one element of the national business system. When institutional components are not harmonious, public policy may be rendered ineffective. For instance, simply reducing regulatory burdens when other elements of the national
business system are absent, may not be sufficient to increase entrepreneurial outcomes. My approach encourages policymakers to take a step back and recognize that the entirety of the institutional bundle functions together rather than focusing on one institution or type of institution. As scholars and policymakers view institutions as holistic bundles, better and more targeted institutional prescriptions can emerge at the margins. This approach allows policymakers to view existing institutional profiles as laboratories for mixing ingredients together. These policymakers can view the successes of smaller countries as valuable insights about institutional synergies that may work elsewhere.

On the other hand, for the past two and a half decades, the “Washington Consensus” has driven many global economic reforms aiming to increase entrepreneurship and other important macro-level variables. The “Washington Consensus” worked under the assumption that the United States’ regulatory institutional profile, robust enough to win the Cold War, could be transplanted almost anywhere (Black, Kraakman, & Tarassova (2000) to build entrepreneurial economies (Schramm, 2004). Several scholars, however, have bemoaned that the behavior of economic agents is a result of both amenable regulatory conditions and the historical events and social contexts that have shaped them (e.g. Murrell, 1993). These scholars have argued that the “Washington Consensus” may be very successful in some places but not others. For instance, after the Cold War those formerly socialist countries whose cultural and behavioral norms more closely mirror the United States’ have been more successful in adopting American style institutions (Izyumov & Claxon, 2009). This analysis implies equifinal paths in reaching high levels of opportunity entrepreneurship, such that policymakers do not have to follow the Washington consensus but can instead, forge
alternative paths. In the 21st century, where the transition of Africa and Latin America will be of critical importance, it will be critical for policymakers to step back and view each country's entire institutional profile.

**Limitations**

This study does have a few limitations. First, in any kind of institutions-outcome study, it is difficult to completely rule out endogeneity concerns. The theoretical viewpoint of this paper is that institutions impact development via intermediate processes such as entrepreneurship. However, it is difficult to dismiss the notion that there are feedback loops between economic growth and development levels and opportunity entrepreneurship. However, explicitly placing variables such as economic growth in the model is no solution as they may veil the true impact of the institutions in terms of their necessity and sufficiency for entrepreneurship. However, controlling for GDP per capita in the outcome variable does relieve many of these concerns.

A second limitation of cross-country institutional examinations is that it must be assumed that institutions are homogeneous throughout a given society. Most archival institutional data are provided at the national level. In small countries like Switzerland and Israel, this is of little concern. However, in large countries with known regional variation (e.g. China, Russia, and the United States) this may be problematic. The richness of institutional varieties in these large countries are not captured even though distinct "sub" institutions may apply to significantly more people than the society spanning institutions in smaller countries. Conversely, perhaps some of the institutional gestalts the analysis identified are artificially subdivided because they permeate and span several countries, i.e. transnational institutions (Allen & Aldred, 2011).
Finally, a third limitation in this study is that fsQCA does not offer insights into longitudinal changes in the causal conditions or the outcome variable. I attempted to control for this by selecting observations for the causal conditions that occurred either before or concurrent with the outcome. However, when a true longitudinal analysis cannot be conducted, it is impossible to conclusively state the direction of causality or explore changes in the institutional components over time. While, institutions are by nature stable, they do evolve and change over time (North, 1990) and may be partially determined, in the long run by opportunity entrepreneurship.

Conclusion

Results support the literature (i.e. Boettke, Coyne, Leeson, & Sautet, 2005; Holmes et al., 2013) suggesting that institutions are tightly linked. Employing fuzzy-set Qualitative Comparative Analysis (fsQCA) allowed for the identification of institutional and cultural bundles that form synergies enabling opportunity entrepreneurship. This study contributes to a growing body of research that attempts to distinguish impactful entrepreneurship from self-employment.

3.7 REFERENCES


New York: Penguin.


Washington, DC, World Bank.
### 3.8 TABLES AND FIGURES

Table 3.1: Construct Measurement and Data Sources

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measurement</th>
<th>Data Sources</th>
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<td>Average of 13 corruption indices gathered worldwide.</td>
<td>Transparency International’s <em>Corruption Perception Index</em> (2010)</td>
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Table 3.2: Opportunity Entrepreneurship Calibration by Country (N=45)

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<th>Calibration</th>
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Table 3.3: Sufficiency Table for Opportunity Entrepreneurship

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<td>•</td>
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CHAPTER 4
ESSAY III: A CROSS-LEVEL EXAMINATION OF INSTITUTIONS, INCOME, AND ENTREPRENEURIAL INTENTIONS

4.1 ABSTRACT

This essay advances scholarship on the institutions-entrepreneurship relationship. I propose that the dimensions of a country's national business system directly impact individual entrepreneurial intentions and that individual income serves as a contingency factor in this relationship. That is, individuals with higher incomes are better able to deviate from dominant institutional logics. My cross-level analyses of 49,013 individuals from 48 diverse countries supports the notion that institutions have a greater impact on low-income individuals with respect to entrepreneurial outcomes. The study contributes to a more nuanced understanding of embedded agency within the institutional logics perspective. It bridges the literatures on individual entrepreneurship and the institutional logics perspective. Furthermore, the study provides context and evidence on the impact of income on choice and economic well-being.
4.2 INTRODUCTION

Do institutions impact everyone equally? Under what situations will individuals and organizations deviate from dominant institutions? And which individuals are more likely to depart from dominant and institutionalized rules of the game? These are key issues in examining how social, economic, cultural, and technological change occur; yet, the literature is yet to fully address them. Though some scholars have examined which organizations are most likely to deviate from industry norms (e.g. Greenwood & Suddaby, 2006) and a few have investigated which actors will deviate from institutional norms within organizations (e.g. Battilana, 2006) no one has explored which individuals are more likely to deviate from institutional expectations at a societal level. Under the institutional logics perspective, such questions can begin to be answered.

The institutional logics perspective (e.g. Thornton & Ocasio, 1999; Thornton, 2002; Seo & Creed, 2002; Thornton, Ocasio, & Lounsberry, 2012; Pache & Santos, 2012; Friedland, 2013) focuses on how broader belief systems shape the cognition, behavior, identity, and goals of economic actors. Under this view, entrepreneurs demonstrate individual agency subject to complex systems of institutional forces. In most situations, individuals comply and agree with dominant institutional forces which shape their willingness and ability to act; however, in certain situations and contexts, some individuals deviate from established rules, norms, and cognitions and engage in activities that would not be expected under dominant institutional logics conditions (Battilana & D’Aunno, 2009; Lawrence, Suddaby, & Leca, 2009). This notion of real yet limited individual freedom with respect to institutions is known as embedded agency.
(Granovetter, 1985; Seo & Creed, 2002; Garud & Karnoe, 2003; Greenwood & Suddaby, 2006; Green, Li, & Nohria, 2009).

To help address issues relating to embedded agency under the growing institutional logics perspective literature’s view of individuals’ future goals, I examine individuals’ intentions to engage in new venture activity. Under many systems of institutional logics, particularly in societies where market logics are dominant, engaging in new venture activity is perceived as a completely normal and, indeed, laudable pursuit (Greenman, 2013; Watson, 2013). However, in other societies new venture activity runs counter to dominant institutional ideologies and engaging may proves very difficult, if even considered at all (Mair & Marti, 2009).

In this study, I address the role that individual characteristics and resources play in allowing actors to break away from dominant institutional norms and engage in entrepreneurship. I do so by examining whether income level moderates the relationship between dominant institutional logics and entrepreneurial intentions. Entrepreneurial intentions was selected as the appropriate outcome variable because choosing a dependent variable that occurred contemporaneously to the exploitation stage would conflate the relationship between and the decision to start a new venture and individual income. Results indicate that income level weakens the relationship between dominant market institutions, the national business system (Whitley, 1999) and entrepreneurial intentions.

My study has several implications for the understanding of institutions, entrepreneurship, and poverty. First, it further demonstrates the value of the institutional logics perspective in explaining the nature of how institutions impact individuals. By
highlighting a situation in which agents differ in their responses to institutional forces, the
importance of one of the institutional logics perspective’s defining features, embedded
agency, is further validated. Second, this study advances understanding about the
entrepreneurship-opportunity nexus (Shane, 2000). Entrepreneurship scholars have
increasingly grappled with whether personal or contextual characteristics matter most for
successful entrepreneurship. This study argues for a balanced view of supply and demand
side variables that influence entrepreneurial outcomes (Eckhardt & Shane, 2003). Third,
this study has important implications for the study of global poverty. It does so by
highlighting a situation in which dominant institutional logics seem to have a stronger
impact on the global poor than those with higher income. Specifically, lower income
individuals are more impacted and constrained by dominant institutional forces than
higher income individuals. In the future, policymakers and academics that examine the
net effects of institutions on country-level outcomes would do well to explore whether
the poor are disproportionately influenced within each country.

4.3 THEORY DEVELOPMENT

Institutional Logics, Embedded Agency, and Entrepreneurship

The institutional logics perspective views institutions as the results of systems of
inter-connected and logically cohesive ideologies that have taken root within societies
over long periods of time. These systems of institutional logics are “socially constructed,
historical patterns of material practices, assumptions, values, beliefs, and rules by which
individuals produce and reproduce their material subsistence, organize time and space,
and provide meaning to their social reality” (Thornton & Ocasio, 1999). In sum,
institutional logics are the underlying thought patterns and worldviews that support and shape human behavior.

Any given institutional logic is composed of multiple practices, beliefs, values, and rules. By participating with these institutions, agents gain identity, legitimacy, a basis of attention, a basis for strategy, and goals for the future (Ocasio, 1997). These goals may be supported by some institutional logics and contradicted by others. In many cases, institutional logics are at odds with one another. Thus, the central thesis of the institutional logics perspective is that rationality and values vary according to institutional order (Friedland, 2013).

Relatedly, the institutional logics perspective supports the notion that individuals (Thornton et al., 2012) are embedded agents using individual discretion within a complex institutional milieu. That is, individuals are neither under- nor over- socialized (Granovetter, 1985; Zuckin & DiMaggio, 1990; Garud & Karnoe, 2003). People have freedom but in a very constrained manner. At any one time, individuals’ behavior is shaped by multiple pressures according to the different logics in which they are embedded. Individuals end up choosing which goals to pursue based on the institutional logic that shapes their focus of attention (Thornton et al., 2012). Individuals’ focus of attention is shaped by: (a) the degree to which a particular institutional logic has been historically institutionalized within a given society (b) the degree to which agents are embedded in fields consisting of conflicting logics and (c) the situational context(s) (i.e. the immediate time and place) in which individuals find themselves (Thornton, et al., 2012).

*Market Logics and Entrepreneurship*
The institutional logics' perspective reasons that individuals' cognitions and behaviors are culturally embedded within multiple competing institutional logics. Thornton (2004) identified at least seven types of institutional logics undergirding individuals' intentions: family, religion, the state, community, profession, corporation, and market. Under market logics, embedded agents are more likely to act entrepreneurially and engage in growth oriented entrepreneurship (Miller, Breton-Miller, & Lester, 2011; Thornton et al., 2012). This is because under market logics the goal of the individual is to pursue self-interest by seeking status in the market through competition. Market logics hold that individuals ought to be motivated to pursue perceived profit opportunities in pursuit of personal gain via transactions, innovation, venturing, and risk-taking (Thornton et al., 2005). For instance, Cho and Hambrick (2006) found that as the airline industry activated market logics following deregulation, it began acting more entrepreneurially. Similarly, a shift from a professional to market logics in the publishing industry in the mid-20th century shifted goals from prestige and recognition to profits (Thornton, 2002).

At a societal level, strong market logics increase entrepreneurship. Societies with strong market logics are characterized by compelling market incentives, strong property rights, and widely available capital (Bruton, Ahlstrom, & Li, 2010). Consequently, they increase real entrepreneurial opportunities since they support ventures that would not otherwise be economically viable (i.e. real opportunities). Societies with inadequate market logics based institutions restrict and complicate the exploitation of new ventures (Baumol, Schilling, & Wolff, 2009). "The level of entrepreneurship that develops in a
society is directly related to the society’s regulations and policies governing the allocation of rewards” (Bruton et al., 2010: 425).

**Market Logics, the National Business System, and Entrepreneurial Intentions**

Dominant market logics are reflected in Whitley’s notion of varying national business systems. As illustrated in Bowen and De Clercq (2007) the national business system approach advanced by Whitley (1991, 1994, 1999), provides a theoretical framework that allows scholars to identify the distinctive aspects of a nation’s institutional environment that explains differences in entrepreneurial outcomes. According to Whitley (1999) these systems function in a cohesive, logically consistent manner with the different dimensions reinforcing one another. Thus, it follows that at the root of an entrepreneurship-conducive national business system are strong market logics.

According to Whitley (1999), national business systems are “distinctive configurations of hierarchy–market relations which become institutionalized as relatively successful ways of the organizing economic activities in different institutional environments.” Effectively, Whitley argues that the way a country's economic activities are organized and undertaken reflect the strength and substance of its’ institutionalized market logics. Thus, I take as given that a society with strong and pervasive market logics will express those logics via a strong national business system. This expression will shape actors’ behaviors, perspective, and intentions with respect to entrepreneurship. Thus, the stronger the national business system, the greater the degree that future entrepreneurial intentions will be pervasive within a society.

Whitley (1999: 47) went on to identify four constellations of national institutional elements that influence individual’s economic activities within societies: These elements
are (1) the financial system, (2) the skill development system, (3) the state, and (4) trust/authority relations. I follow Bowen & De Clercq (2007) and use Whitley's four categories to identify important aspects of a society's institutional context explaining why countries differ with respect to their population's intentions to create new venture. I argue that the expression of another important entrepreneurship measure, individuals' entrepreneurial intentions, is probably shaped by:

1. the accessibility of financial capital for new ventures;
2. the degree to which its skill development system focuses on entrepreneurship;
3. the degree to which the state's legal framework supports entrepreneurship as evidenced by,
   a) its regulatory burden for launching new ventures,
   b) property rights protection for both physical and intellectual property;
4. the level of corruption displayed in the interaction of different economic actors (Bowen & De Clercq, 2007).

Below I develop hypotheses regarding each of these dimensions of the national business system by arguing for their significance in shaping individuals' entrepreneurial intentions.

**The Availability of Financial Capital for New Ventures**

The degree to which financial capital is available for new ventures through debt, equity, government subsidies, and venture capitalists for starting new ventures is the first element of the national business system. The availability of funding that a society's
financial system provides significantly determines the rate of new venture activity (Levie & Autio, 2008). This is because young businesses frequently necessitate a considerable level of external funding for startup capital (Bowen & De Clercq, 2008). This startup capital may be comprised of funds obtained from informal investors (Szerb, Rappai, Makra, & Terjesen, 2007), formal venture capital firms (Deeds, Mang, & Frandsen, 2004), or banks (Cetorelli & Strahan, 2006). Thus, in general, entrepreneurs rely on a society having a financial system that considers the detailed requirements of new ventures (De Clercq, Lim, & Oh, 2013).

The degree to which entrepreneurs are able to access capital in order to launch and grow new ventures varies a great deal between countries (Bygrave, Hay, Ng, & Reynolds, 2003; Lim, Morse, Mitchell, & Seawright, 2011). The extent to which the financial capital availability affects entrepreneurial thinking and intentions depends, for one, on the liquidity of capital. In general, equity-based systems tend to be far more liquid than banking systems. That is, capital in societies in which a banking system is dominant tend to provide financial capital to entrepreneurs at higher interest rates (Whitley, 1999). Thus, it seems likely that in societies in which the national business system makes financial capital systematically available to new ventures, entrepreneurial aspirations will increase because individuals know that the resources necessary to launch a new venture are readily obtainable. This leads to my first hypothesis:

**Hypothesis 1a:** The availability of financial capital available for new ventures will be positively associated with individuals’ intentions to start a new business.

**The Skill Development System’s Focus on Entrepreneurship**

According to Whitley (1999) another important feature of the national business system affecting entrepreneurs are the institutions responsible for the development of
human capital (i.e. the skill development system). Whitley, emphasizes that the degree to which practical pedagogy occurs via the cooperation of businesses and post-secondary educational institutions can have a strong influence on individuals’ career and vocational choices. I define the quality of the skill development system aimed at new ventures as the degree to which post-secondary and adult education provide good preparation for starting up and growing new ventures.

Education in general encourages and improves entrepreneurship because it provides individuals with autonomy and self-efficacy, informs them of career choices, and gives them an understanding of the objective social fabric whereby they can recognize market opportunities (Reynolds, Hay, & Camp, 1999). According to Verheul, Wennekers, Audretsch, and Thurik, (2002), it is possible to distinguish between “general education and more specific education focusing on the promotion of entrepreneurship and stimulating entrepreneurial skills and knowledge” (50). The skill development system can target entrepreneurship by encouraging market cognizance, improving the perceived social standing enjoyed by entrepreneurs, and, most importantly, developing crucial entrepreneurial skills (Gavron, Cowling, Holtham, & Westall, 1998). Entrepreneurial characteristics such as innovativeness and risk taking can be developed via projects and assignments throughout the educational process (Van der Kuip, 1998). Furthermore, past studies indicate that tertiary institutions that offer entrepreneurship courses, build students' business acumen (OECD, 1998).

In these ways, a skill development system geared towards introducing students to new venture formation and enhancing entrepreneurship-related skills increases the degree to which individuals aspire to entrepreneurship. Accordingly, I reason, similarly to
Bowen and De Clercq (2007) that the degree to which a country's skill development system addresses and teaches entrepreneurship-related themes, issues, and best practices will influence individuals’ entrepreneurial intentions. Thus, I propose:

**Hypothesis 1b:** The degree to which the skill development system is aimed at entrepreneurship will be positively associated with individuals’ intentions to start a new business.

**The Regulatory Ease of Launching New Ventures**

To create a legitimate business, several legal requirements and hurdles must be navigated (Djankov, La Porta, Lopez-de-Silanes, & Shleifer, 2000). I define the regulatory burden that faces entrepreneurs as the costs imposed through government regulations on individuals wishing to launch a new venture. The degree and extent of these costs and demands varies from country to country (Klapper, Laeven, & Rajan, 2006) and consist of the time, money, and effort required to meet these regulations (Verheul et al., 2002). Such barriers discourage risk-taking and entrepreneurship as a career (OECD, 1998).

Over regulation, for instance dampens the entrepreneurial spirit (Baumol, 1990). It also serves as a significant entry barrier to small business. While larger businesses can afford compliance offices specifically aimed at tackling regulations and dealing with the government in general, small and young ventures struggle to deal with these administrative costs. This distracts them from core exploitation activities. Regulatory complexity also hampers firm growth (Nijsen, 2000). For instance, entrepreneurs may decide not to expand their company and bring on new employees because of the number of procedures and paperwork involved (Niehof, 1999). High transaction costs also accumulate in situations where legislation is unclear (Verheul et al., 2002). Various
government agencies and levels use differing terminology to discuss similar concepts. This obfuscates government regulations and the availability of potential assistance. For instance, national tax systems "often involve written rules, frequent changes, expiration clauses and different layers of taxation (regional and national). Moreover, the 'language of tax' is usually difficult to comprehend" (Verheul et al., 2002: 32).

Djankov et al. (2001), discovered that people in Mozambique are required to accomplish 19 different procedures, taking 149 business days at minimum to create a new business. In comparison, a Canadian can create a new business in two days using just two procedures. Overall, because regulatory burdens reduces the likelihood that individuals will start a new business (Grilo & Thurik, 2005), a complex regulatory environment reflects weak market logics that are unconducive to entrepreneurial aspirations to launch new ventures. Individuals will be far less likely to aspire to engage in entrepreneurship where market logics are thwarted by such burdens. Thus,

**Hypothesis 1c:** The regulatory ease of creating new ventures will be positively associated with individuals’ intentions to start a new business.

*Property Rights Protection*

Perhaps the best documented dimension from Whitley’s (1999) frameworks is the notion that property rights are of substantial importance for incentivizing entrepreneurship (e.g. North, 1986; 1990, La Porta et al., 1997). As it relates to entrepreneurship, property rights refer to the degree to which individuals’ proprietary assets are protected by society so that individuals can capitalize on them. A key institutional aspect governing efficient business transactions is a country’s “rule of law” (La Porta et al., 1997; North, 1986; Whitley, 1999). A lucid and impartial justice system that preserves and protects private property along with a general acceptance and
understanding of transactions that encourage market participation serve to reduce transaction costs such that entrepreneurial activity can thrive (Johnson MacMillan, & Woodruff, 2002). Intellectual property rights are especially important for entrepreneurs as the creation and exploitation of intellectual property is the fundamental motive for innovativeness and, consequently, entrepreneurial action (Schumpeter, 1934). Indeed, U.S. evidence indicates that innovative and talented individuals are more likely to exploit their talents or inventions in the market under conditions of secure intellectual property rights (Sobel, 2008).

Without secure property rights any opportunity that entrepreneurs perceive may be illusory as there are no safeguards that it will not be stolen or duplicated during the exploitation stage. Entrepreneurs in countries with poor property rights protection are often unwilling to reinvest their earnings into productive processes or capital (physical or human) formation activities (Johnson et al., 2002). Baumol (1990) explained centuries of low levels of entrepreneurship in countries such as China by describing how the legal system could not and did not enforce contracts. McMullen, Bagby, & Palich (2006) validated this argument in contemporary times with data from 36 countries. I argue that in addition to prior findings, a country’s property rights protections impact individuals’ ability and willingness to launch new ventures because they believe that the rule of law will safeguard their efforts and creative actions. Thus, strong property rights protection reflect market logics supportive of entrepreneurs’ intentions to engage in entrepreneurship.

**Hypothesis 1d:** Property rights protections for new ventures will be positively associated with individuals’ intentions to start a new business.

*Trust Relations and the Control of Corruption*
Corruption describes the degree to which opportunism occurs in business transactions. Whitley (1994) describes how entrepreneurial behavior is strongly linked to the reliability or trustworthiness of its citizens and organizations. Corruption may include bribing public officials (Choi & Thum, 2005), breaking a contract, or privately appropriating gains that belong to someone else or the business. “When corruption is present, the entrepreneur faces greatly increased risk that those involved in her value chain will be opportunistic and appropriate the profits or rents to which the entrepreneur believes she is entitled” (Anokhin & Schulze, 2009). Corruption occurs, in part, due to information asymmetry that is characteristic of complex and information rich transactions. Past work confirms this, showing that the absence of corruption (presence of trust) positively impacts complex activities such as innovation (Dakhli & De Clercq, 2004).

Pervasive corruption makes investment in resource accumulation and recombination unfeasible (Rose-Ackerman, 2001). Repeated negative encounters with other actors weakens beliefs about their reliability. Thus, trust is eroded where corruption is prevalent. Repeated transaction patterns and experiences throughout society determine whether trust or corruption becomes institutionalized at a national level (Anokhin & Schulze, 2009). Thus, national business systems vary to the degree in which corruption is manifested.

I add to prior literature on corruption by arguing and examining the notion that a country’s level of corruption not only harms the entrepreneurship process but actually limits the degree to which entrepreneurs are willing to launch new ventures. In activities where payment is difficult to monitor due to uncertainty geographic, or temporal
distance, corruption destroys the ability of entrepreneurs to act confidently. Thus, corruption erodes entrepreneurs’ valuations of potential opportunities. Thus, where transaction risks are high due to corruption, uncertain payoffs reduce the number of both perceived and real opportunities. On the other hand, when market opportunities can be evaluated objectively without a high risk of corruption, such costs become negligible, opportunities become observable and real, and entrepreneurs can act. Thus, I argue that in addition to prior findings concerning corruption’s corrosive effects on the entrepreneurship process, a country’s corruption levels actually decreases entrepreneurs’ willingness to launch new ventures because it reduces the number of true, exploitable opportunities that individuals observe.

**Hypothesis 1e:** The degree to which the societal corruption level is controlled will be positively associated with individuals’ intentions to start a new business.

**Weak Market Logics, Low Income, and Entrepreneurial Intentions**

I argue here, that while weak market logics adversely impact all individuals via the national business system, they have a far stronger adverse impact on lower income individuals than higher income individuals. That is, in institutional environments with weak market logics, wealthier individuals are in better position to deviate from dominant institutional practices, behaviors and thought patterns and begin creating identities and goals consistent with entrepreneurship. Therefore, I hypothesize that the societal level institutional environment will interact with individual income level such that the effects of institutions on intentions to launch a new venture will be far stronger for low income individuals than for high income individuals. That is income levels moderate the institutions to entrepreneurial intentions relationship in such a way that the wealthy are
better able to practice agency in the face of inclement institutions. This effect occurs for three major reasons:

1. Market logics are unequally distributed within a society. The powerful may have them but do not grant them to the poor. Thus, capabilities associated with market logics are unobtainable for the poor.

2. The cognitive accessibility of market logics is lower where other institutional logics (family, religion) dominate. Any market logics cognitions the poor may have are crowded out by cultural embeddedness or are not accessed due to day to day social situations in which the poor normally participate.

3. The costs of engaging in entrepreneurship are higher in societies without strong market logics due to lack of available capital and resource scarcity. This disproportionately effects the poor because they simply cannot afford to act entrepreneurially due to poverty and the consequences of failure.

There are several reasons underlying the above assertions. With regards to the first assertion, in many situations the powerful set up the rules of the game such that the poor do not have access to market logics. Unfortunately, dominant institutional ideologies are accompanied by a set of templates, rules and practices that are not universally applied (Battilana, 2006). Differences in socioeconomic status often leads to different levels of access to and power over both important resources and decision making processes within society. As North (1993, p. 3) observed, “[I]nstitutions are not necessarily or even usually created to be socially efficient; rather they, or at least the formal rules, are created to serve the interests of those with the bargaining power to create new rules.” In societies with weak market logics, individuals with power and
wealth may purposefully block, crowd out, and deny startup resources to lower income individuals. These individuals impose more hierarchal institutional structures, which are designed to maintain power.

Moreover, wealthier individuals have more experience with market capabilities and knowledge, which gives them greater freedom to use market logics and ignore other dominant institutional logics. The poor, on the other hand, may be deprived of education and consequently not be exposed to ideas associated with business and entrepreneurship in contexts where market logics are less prevalent. Thus, capabilities associated with market behaviors are unobtainable to them. A shortage of quality skill development institutions greatly limits the poor's knowledge in how to form and exploit new ventures (Acs & Virgill, 2009). For instance, Elkan (1988) found that African entrepreneurs were more likely to engage in the market if they were more educated and more likely to launch their own venture if they had prior experience with large expatriate organizations.

With respect to the second assertion, even low income individuals who could be strongly influenced by market logics may not utilize them due to cultural embedded and common situational contexts, which determine the accessibility of possessed knowledge associated with a given logic. “People who are deeply embedded in a particular institutional logic through identification and socialization are more likely to invoke knowledge that is part of the institutional logic” (Thornton et al., 2012: 84). If the poor are deeply embedded in family, cultural, and cognitive institutions that ignore or reject market logics, they will be less likely to embrace market logics even when such logics are available. Urban settings, which are associated with higher incomes, decrease family and cultural embeddedness.
Besides cultural embeddedness, proximal situational contexts also affect the temporary accessibility of market logics-related cognitions “by cueing associations between the situation and available knowledge structures (Thornton et al., 2012: 84).” Poor individuals will be less likely to encounter situations in which market logics are expressed. Wealthier individuals on the other hand are more likely to be exposed to market logics on a daily basis due to more interaction with media, internet sources, or other individuals engaging with the market.

Regarding the third assertion, when institutions are unconducive in general to the actions required to start a new venture, the poor are further disadvantaged. This is because the costs of engaging in entrepreneurship are higher in societies without strong market oriented institutions (North, 1990). Bounded rationality and opportunism prevail in such societies. In such situations, entrepreneurial actions become far more costly as individuals have no institutional guarantees that their efforts, even if economically sound and wise, will be rewarded (North, 1990; 1993). This happens for a variety of reasons. First, in societies with weak institutions there is a lack of information concerning what goods or services to produce. Where there are high opportunity search and recognition costs, agents may not attempt to be innovative or transformative. They may stick with economic activities they are familiar with and avoid seeking new production possibilities and market niches. (Mambula, 2002). For the very poor, this effect is amplified (Acs & Virgill, 2009). Often, low income individuals simply cannot afford to abandon subsistence activities to pursue new ventures. Thus, a combination of low income and a poorly developed institutional framework have a profound negative impact amongst embedded agents’ willingness and ability to launch new ventures. This is indeed an
unfortunate poverty trap unfortunate because weak institutions and extremely low incomes tend to be highly correlated.

In sum the notions of embedded agency coupled with the heterogeneous impacts of institutions on individuals in the same society imply that the decision to engage in entrepreneurship will be a function of institutions that are then moderated by individuals' socio-economic status. That is, ceteris paribus, weaker institutions increase agents' intentions to launch new ventures. However, the impact of weak institutions have a far stronger impact on lower income individuals' intentions to start a new business than higher income individuals.

Financial Capital Availability and Low Income

I hypothesized above that the availability of financial capital for entrepreneurship is linked to entrepreneurial intentions. I add to this argument by hypothesizing that this relationship is moderated by income level. That is, in institutional environments marked by a financial system that does not target new venture activity, wealthier individuals are in better position to deviate from institutional norms and pursue entrepreneurship.

The individual income level of people can signal credibility and preparedness to providers of external finance (Stuart, Hoang, & Hubels, 1999; Arthurs, Busenitz, Hoskisson, & Johnson, 2009). Individuals who have only been exposed to subsistence economic activities may lack skills needed to successfully present a compelling business model to more skeptical capital even if their idea and opportunity are legitimately profitable. Similarly, in societies with more expensive and less available financial capital aimed at entrepreneurship, lenders and investors may discriminate against low income individuals. Finally, in contexts with weaker market logics, if the poor are deeply
embedded in family, cultural, and cognitive institutions that run counter to the notion of obtaining financial capital from lenders and investors the poor will be less likely to access financial capital. This suggests the following hypothesis:

**Hypothesis 2a:** The availability of financial capital for new ventures will be more strongly positively associated with lower income individuals' intentions to start a new business than higher income individuals.

**The Skill Development System and Low Income**

Above, I hypothesized that the degree to which the skill development system is geared towards entrepreneurship leads to entrepreneurial intentions. Here, I argue that this relationship is moderated by income level. That is, for the poor, it is more important to be embedded in a society dominated by strong market logics in which the skill development system supports entrepreneurship. Conversely, in institutional environments in which the skill development system is not geared towards entrepreneurship, wealthier individuals are in better position to deviate from institutional regularities and engage the entrepreneurship process. The arguments here, echo the above arguments regarding the financial system.

First, in societies in which entrepreneurial education is weak, understanding of entrepreneurial skills and processes are heterogeneous because only those individuals with direct experience and exposure to other entrepreneurs and new venture activity gain exposure to these skills. The wealthy are more likely to be engaged with the market and acquire these skills because wealth determines the degree to which one buys goods and services. Thus, because of poverty, the poor will be less likely to engage with entrepreneurs and become familiar with entrepreneurial processes.

The poor are more likely to be deeply embedded in local and family logics (Ansari, Munir, & Gregg, 2012). If the skill development system does not focus on
entrepreneurship, low income individuals will be less able to ignore dominant local logics and pursue entrepreneurship. Additionally, the opportunity cost of acquiring information about entrepreneurial skills may be prohibitive in societies where such skills are not offered and promoted by the skill development system. Low income individuals may be unable or unwilling to invest in education because they must work hard each day to provide food and basic necessities to their families. Particularly, in rural situations where geographic proximity to advanced education is great, low income individuals may be unable to afford to leave home. Extremely low income individuals simply face an existential threat when they forsake subsistence activities. Thus, I hypothesize:

**Hypothesis 2b:** The degree to which the skill development system is aimed at entrepreneurship will be more strongly positively associated with lower income individuals’ intentions to start a new business than higher income individuals.

**Regulatory Ease and Low Income**

Under Hypothesis 1, I argued that clear and easy to navigate government regulations towards entrepreneurship increase individuals’ entrepreneurial intentions. I now extend this argument by proposing that this relationship is moderated by income level. In institutional environments marked by complex regulations, wealthier individuals are in better position to deviate from institutional logics that stifle new venture activity and make entrepreneurship a goal. The poor on the other hand will be far less likely to deviate from dominant institutional logics.

Regulatory burdens inordinately effects the poor for several reasons. First, the poor are more likely to have less experience with more sophisticated economic regulations and transactions and less likely to know others who understand them. Thus, they may lack the capabilities and understanding necessary for compliance. Second, and
perhaps most importantly, complex regulatory environments impose significant costs. These are costs that the poor are unable to afford because it may include time, resources, and attention necessary for subsistence activities. The time, number of tasks, and costs of compliance may be prohibitive for the poor. This leads to Hypothesis 2c:

**Hypothesis 2c:** The regulatory ease of creating new ventures will be more strongly positively associated with lower income individuals’ intentions to start a new business than higher income individuals.

*Property Rights Protection and Low Income*

Above, I hypothesized that secure property rights promote individuals’ entrepreneurial intentions. Here, I argue that the relationship between property rights and individuals intentions regarding new venture activity is moderated by income level. Weak property rights will have a far greater impact on lower versus higher income individuals. Wealthier individuals are in better position to deviate from institutional pressures because they have the resources to protect their intellectual and physical property.

The poor are ill-equipped to deviate from societal norms and become entrepreneurs for several reasons. First, property right protections may be unequally distributed throughout a society such that only the physical and intellectual property of the wealthy are protected. Second, the poor are more likely to be embedded in ideologies, whether they be political, familial, communal, religious, or otherwise that run contrary to ideas that support individual property rights. The notion of developing and exploiting a profit-opportunity for individual gain may be anathema to logics that promote shared property and activities. Third, the costs associated with lost property cannot be easily shouldered by the poor. Leaving subsistence activities only to have the property at the
core of their business model stolen is ruinous for the poor. For these three reasons, I hypothesize:

**Hypothesis 2d:** Property rights protections for new ventures will be more strongly positively associated with lower income individuals’ intentions to start a new business than higher income individuals.

**Control of Corruption and Low Income**

Finally, I argued in Hypothesis 1e. that societal corruption decreases entrepreneurial intentions, ceteris paribus. I again, extend this argument here, by proposing that corruption’s dampening impact on entrepreneurial intentions is particularly toxic to the poor. That is, in environments in which corruption eats away at market logics, wealthier individuals are better able to diverge from institutional norms and pursue entrepreneurship than the poor.

The poor are disadvantaged for a handful of reasons related to the nature of corruption within a society. First, of all weak members of society are more likely to be the victims of corruption. The poor are far more likely to fall prey to opportunism due to inexperience and ignorance with market activities. Corrupt individuals in power can take advantage of their naiveté with regards to complex and difficult to monitor transactions. Secondly, wealthier individuals can take steps to avoid corruption utilizing financial resources. They can afford security. They can afford to better monitor transactions. And they have the resources to obtain information and connections regarding the trustworthiness of other actors. For these reasons, personal financial resources enable individuals to overcome dominant institutional forces and become entrepreneurs. Thus, I hypothesize:
**Hypothesis 2e:** The degree to which the societal corruption level is controlled will be more strongly positively associated with lower income individuals’ intentions to start a new business than higher income individuals.

Figure 1 displays the relationships subsumed by Hypotheses 1 and 2. In the model, there is a direct relationship between market logics as manifested by the national business system. This relationship is positively moderated by low income. That is, the relationship between institutions and entrepreneurial intentions is stronger for low income individuals.

[INSERT FIGURE 4.1 ABOUT HERE]

### 4.4 METHODOLOGY

Data for this study were taken from several sources. Data for entrepreneurial intentions (dependent variable) were taken from the 2010 Global Entrepreneurship Model (GEM) *Adult Population Survey*. The GEM includes standardized measures for various aspects of each surveyed country's entrepreneurial activities. In 2010 the GEM interviewed almost 180,000 people from 59 geographically and economically dispersed economies. Of these observations, much was not useable for this study. Observations with missing data were removed. Additionally, countries in which income data were not provided was also removed. I also removed countries for which there was incomplete institutions’ data. Finally, due to the nature of the income variable, the income group in each country containing the cutoff income level ($12,500) were excluded (see footnote on income level below). I was able to retain 49,013 observations from 48 different economies. Individual level from the GEM’s 2010 *Adult Population Survey*, were combined with data from archival sources the GEM’s 2010 *National Expert Survey*, data
on corruption from the World Economic Forum’s Executive Opinion Survey, and macroeconomic level from the World Bank.

**Dependent Variable: Entrepreneurial Intentions**

The GEM Adult Population Survey contains data on individuals’ *entrepreneurial intentions*. The survey asks the question “Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?” Answers take a binary form: yes or no. Prior literature has validated this measure as a means of capturing *entrepreneurial intentions* (e.g. Klyver & Thornton, 2010; Vinogradov & Gabelko, 2010; Klyver & Schott, 2011; Ashourizadeh, Chavoushi, & Schott, 2014). Using *entrepreneurial intentions* rather than a more active (present-tense) form of entrepreneurial activity as the dependent variable was important because of the nature of the key variable of interest: the level of income. By utilizing the future *entrepreneurial intentions* of individuals regarding entrepreneurship rather than current participation, income data are not contaminated by the entrepreneurship decision of interest.

**Individual Level Independent Variables**

Individual level independent and control variables are also taken from the GEM Adult Population Survey. The primary individual-level variable of interest is *income*. I created the income variable using the CIA World Factbook’s estimate for global mean income of $12,500 dollars. Since I am primarily interested in how institutions affect the poor, a value of greater than $12,500 was coded as 0 and a value less than $12,500 was coded as 1.⁴

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⁴ In many countries the income variable is divided into thirds: high, medium and, low income groups. In other countries it is divided at the median, into high and low income groups. These data were compared to
Additional data were taken from the Adult Population Survey as controls. Age in years, a binary variable for sex (female=1), a binary variable for whether the individual is employed (employed=1), and binary indicators for the highest level of education (high school, college and graduate degrees), and, finally, household size (number of family members in the household) (e.g. Verheul & Van Mil, 2011; Ashourizadeh et al., 2014; Jensen, Rezaei, & Wherry, 2014).

Country Level Independent Variables

GEM has also developed country-level entrepreneurship variables through its National Expert Survey. That survey has developed standardized measures of business and government experts’ perceptions of several key indicators of the country’s entrepreneurial framework. The expert questionnaire assesses the institutional environment, including elements of the national business system, specifically as it relates to entrepreneurship. Several of the survey’s constructs contain multiple items. These constructs have been demonstrated to be valid and reliable (Bowen & Clercq, 2007). Here, I follow Bowen & De Clercq (2007) and utilize those elements consistent with Whitley’s (1999) framework. Accordingly, I use five independent variables to assess Whitley’s national business system. Four of these indicators (capital availability, the skill development system, property rights protection, and the regulatory ease of creating new ventures) come from the National Expert Survey. The final indicator, control of corruption, is drawn from the World Economic Forum’s Executive Opinion Survey.

World Bank Data on income deciles in order to approximate the dividing dollar amount between categories in each country. To construct a sample around income level, one income grouping (e.g. high, medium, or low) in each country had to be excluded from the analysis in order to assure that there was no income overlap between the high and low group variable that I constructed for the sample.
Financial *capital availability* for new ventures, the degree to which the *skill development system* focuses on entrepreneurship, *lack of regulatory complexity* of launching new ventures, and the *property rights* security of entrepreneurs are all measured as the average of several scores (five-point Likert scale) from the *National Expert Survey*. Survey questions in that survey are based on five-point Likert scale. On the 2010 NES there are six questions measuring *capital availability*, six examining the *skill development system*, seven measuring, and five that investigate *property rights*.

Questions measuring *capital availability* capture entrepreneurs' access to funding and private equity (Reynolds et al., 2005; Bowen & De Clercq, 2007). Questions assessing the *skill development system* survey experts regarding the degree and effectiveness to which each country's higher educational system targets entrepreneurship. Questions examining the ease of getting business licenses, the way in which the tax system treats new ventures, and the helpfulness of government policy in helping entrepreneurs start new ventures are captured by *regulatory ease*. Finally, questions assessing the degree to which intellectual property rights, patents, and trademarks were protected were used to capture *property rights* protection.

I use the *World Economic Forum's* average of nine questions (using a seven-point Likert scale) that investigate the degree to which both public officials and other economic actors exhibit corrupt business practices (to measure Whitley's (1999) final dimension: *control of corruption*). The index measures how corrupt a country's public and private sector are perceived to be by business leaders in that country. Survey items used to formulate each of the five constructs representing the national business system are listed in Table 4.1.
GDP (ppp) per capita was taken from the World Bank. This is because past work has identified a structural relationship between an economy’s level of development and its key entrepreneurship rates (Wennekers, Wennekers, Thurik, & Reynolds, 2005). Similarly, there is a complex relationship between growth and new venture activity (Wennekers et al., 2005). It is very likely that growth in GDP can pull entrepreneurial intentions, particularly over a short period of time. If an economy is booming, individuals, who would not otherwise decide to pursue entrepreneurship, will. Thus, GDP growth was also used as an important control. As a final macroeconomic control, I calculated the interaction between (low) income level and GDP per capita. Being low income in more wealthy countries may provide a more easily accessible market for low income entrepreneurship. There may also be other structural constraints and enablers outside the national business system that systematically impact entrepreneurial intentions. Due to the highly significant impact that wealth effects have on economic activity (Wennekers et al., 2005), the GDP per capita, individual level income interaction term allowed me to control for many of these effects. The means, standard deviation, and correlations of the individual and country level variables included in the study are displayed in Table 4.2.

Analysis Technique

To test the above hypotheses, I use Hierarchical Generalized Linear Modeling (HGLM) with robust standard errors. HGLM is appropriate for research designs where the data for participants is organized at more than one level and the dependent variable displays a binomial distribution. HGLM models can decompose and analyze the variance
in the dependent variable that occurs both between groups and within each group. Distinguishing within and between group variation can provide analysis of which level most of the variation in the dependent variable comes from: individual or country. Additionally, it is possible to interact individual and group level variable to ascertain those effects. At a conceptual level, HGLM first analyzes separate regression equations within units and summarizes them with intercepts and slopes. In step two, HGLM uses the intercepts and slopes of the within unit relationships as an outcome variables and regresses them on level II characteristics. So the within group average is regressed on the level II variables (Hoffmann, 1997). Finally, HGLM uses the logit function to predict the outcome of a categorical dependent variable based on the predictor variables. As such HGLM is the most appropriate technique for testing the hypotheses.

4.5 RESULTS

Results of the analyses suggest that elements of the national business system impact entrepreneurial intentions differently for high and low income individuals. In the interests of establishing a baseline for comparison across models, I first review the results of the Null Model and Model 1 before proceeding to a presentation of the results for my hypotheses tests. Examination of the Null Model indicated that multilevel modeling approach is appropriate for this data. Further, 75.1% of variation in entrepreneurial intentions occurs at the individual level while 24.9% of variation occurs at Level 2. The remaining three two-level HGLM models with robust standard are presented in Table 4.3.

Model 1, the Control Model, significantly improved the level of variance explained. In line with past work, age, being male, having a high school degree, having a college degree, and lower country-level GDP per capita (PPP) all increased the
likelihood that an individual will choose entrepreneurship. Household size, employment status, having a graduate degree, country GDP growth rate, and the GDP per capita-individual income (reverse coded) interaction were all not significant. Individual level income was only significant at the 10% level with higher income individuals more likely to become entrepreneurs within each country.

Model 2 in Table 4.3 tests the main effect hypotheses for dimensions within the national business system surrounding the entrepreneur. Results of that analysis indicate that only the relationship between regulatory ease and entrepreneurial intentions was significant at the p < 0.05 level. However, there were no significant relationships among the other four elements of the national business system. Hypothesis 1c was supported, while hypotheses 1a, 1b, 1d, and 1e were not supported. Thus, it appears that for the general population, the notion that the national business system matters for individuals’ entrepreneurial intentions is largely unsubstantiated.

Model 3 present the results for Hypotheses 2a-2e, the contingency effect of individual income. In contrast to hypotheses for the effects of the national business system in general, results for these hypotheses were largely supported. Results indicate that four of the five institutional-income level interactions were highly significant in the predicted direction. The relationship of capital availability for entrepreneurs, regulatory ease for venture creation, property rights protections for entrepreneurs, and control of corruption with entrepreneurial intentions were all positively moderated by income level (reverse coded). That is, these four elements of the national business system are more important for the entrepreneurial intentions of low income individuals than for wealthy individuals. Somewhat surprisingly, the impact of the skill development system’s focus on
entrepreneurship on entrepreneurial intentions (H2b) had a significantly stronger impact among high income individuals than low income individuals. As I discuss below, this is likely because most countries' skill development systems, particularly post-secondary education, disproportionately serve the wealthy.

Overall, Hypothesis 1, which argued for direct effects between institutions and entrepreneurial intentions received little empirical support by our multi-country data, while Hypothesis 2, which argued for the moderating effect of individual income was generally supported. Below, I discuss the ramifications of these findings. Graphs of the individual institutions-income interactions are depicted in Figures 4.2-4.6. Note that in all cases but the skill development system-income interaction, the relationship between institutions and entrepreneurship is stronger for low income individuals.

[INSERT FIGURES 4.2-4.6 ABOUT HERE]

4.6 DISCUSSION AND CONCLUSIONS

This study sheds light on the importance of market logics, as expressed through the national business system, for the entrepreneurial intentions of individuals with low income. While the findings do not support the notion that the national business system has a strong direct impact on entrepreneurial intentions, it largely does have an impact on the future intentions of low income individuals. Specifically, Model 2 indicates that if policy-makers are seeking to simply increase the rate of entrepreneurial activity in a country for the entire population, their emphasis should be on simplifying regulations and lowering the tax burden on new businesses. However, the implications of Model 3 are more profound and speak to the variation in impact that institutions have within countries. Implications fall under three major categories: institutional logics, entrepreneurship, and poverty.
Contribution to the Institutional Logics Literature

The finding that agents differ in their responses to institutional forces according to income level supports the institutional logics perspective. According to Thornton and Ocasio (2008) cross-level effects between the institutional and individual level are critical because actors and institutions interact and influence one another. Given this meta-theoretical framework, it is important to account for the characteristics and situations that account for deviation from expected behaviors and practices when under a given institutional regime. By doing so, this study supports the overall institutional logics framework.

Particularly, results support the notion of embedded agency as a more accurate view than pure agency from neoclassical economics and pure embeddedness from disciplines like anthropology and history. In societies where family, the community, and tradition are strongly entrenched, I expect that the creation of new social structures (i.e. entrepreneurship), while real, is more challenging and novel. Such behaviors are not rooted in dominant institutional logics, and, at times, these behaviors even run counter to them. Given the impact that counter-institutional behavior can have (e.g. Schumpeter, 1934), it is important to understand the individual characteristics responsible for behavior that deviates from those logics. This study begins to fill this gap by fleshing out details with regards to individual level income.

The fact that personal resources and social position determine the extent of institutional logics' influence is very much in line with expectations one would have using the work of sociologist Pierre Bourdieu on fields. According to Bourdieu different individuals embedded in the same institutional/social field act differently in response to
the same institutional forces. Variation in these responses is caused by both their social position (whether viewed hierarchically or relationally) within the institutional/social field as well as their ability to access resources in the field (Bourdieu, 1988).

Results are further in line with Battilana’s (2006) examination of how individuals’ ability and willingness to conduct institutional entrepreneurship within organizations. Battilana’s piece represents a growing stream of literature that uses an institutional logics perspective to examine how and why institutional change arises. However, researchers should not be limited in applying the institutional logics perspective only to entrepreneurs seeking to transform the rules of the game. Institutional logics are appropriate any time individuals act in ways that run counter to prevalent institutional logics. Consequently, when individuals attempt to launch new scalable ventures in regions where subsistence activities are the norm, they are, in effect, moving the meter on the institutional climate. By applying the institutional logics perspective to “run-of-the mill” new venture creation, my study helps to expand the use of the institutional logics perspective in entrepreneurship scholarship.

Contribution to the Entrepreneurship Literature

Indeed, the notion of embedded agency fits quite well with extant theory and empirical findings regarding entrepreneurship (Garud & Karnoe, 2003). Entrepreneurship scholars argue that there are both a supply (individual) and a demand (contextual) side to entrepreneurship (e.g. Eckhardt & Shane, 2003). This idea echoes Shane and Venkataraman’s (2000) seminal piece that viewed entrepreneurship as the intersection of agents’ entrepreneurial actions and objective opportunities existing in the market and institutional environments. Sarason, Dean and Dillard (2006:286) explain, entrepreneurs
are "reflexive agents engaging in purposeful action. Sources of opportunities are extant features that provide the context for creating entrepreneurial ventures. The act of entrepreneurship occurs as the agent specifies, interprets, and acts upon the sources of opportunity. This is a dynamic process whereby the sources of opportunity are acted on by the agent, and the agent is affected by the sources of opportunity." Thus the linkages between a vibrant institutional environment and an actor with important characteristics are both vital for new venture activity (Thornton, 1999). By arguing from an institutional logics perspective that broader societal institutions matter but that their impact is subject to individual characteristics, my study grounds itself deeply in the entrepreneurship literature which has suggested balance in explaining the individual-opportunity nexus (Shane, 2000).

**Contribution toward Global Poverty Scholarship and Policy**

Finally, this study aids in understanding the nature and effects of poverty. Results indicate that a lack of individual level resources constrain agency in a very real sense. Societal level institutions are more important for the poor than the wealthy in shaping goals and aspirations. Such a framework echoes Amartya Sen’s (1983; 1985) Nobel Prize winning notion of poverty as the absence of positive individual capabilities. For Sen, capabilities rather than purchasing power or economic utility are the true measures of poverty and wellbeing (Sen, 1993). Sen argues that in considering poverty, the ability to achieve a certain level of utility or "functioning" should be weighed heavily (Sen, 1985).

My findings resonate with these ideas. Poor institutions, it seems, exacerbate poverty and deny the poor the ability to achieve for themselves. That is, they diminish capacity for change among the poor. The poor are more constrained (i.e. less free) than
wealthier individuals due to dominant institutional logics. When policymakers seek to address global poverty, they need to understand that examining the societal impact of institutions is not enough. Poor institutions have a disproportionate negative impact on low-income individuals and policy aimed at shoring up elements of the national business system with respect to entrepreneurship must take this into account.

**Explanations for Non-Findings**

Four of the five hypotheses examining the direct effects of general institutional context on *entrepreneurial intentions* were unsupported. This is inconsistent with theory that suggests that institutions, particularly those aimed at entrepreneurship, should have a strong impact on people’s intentions to launch new ventures. While surprising, there are a few things that should be noted. First, the broad range of individual level variables that I controlled for, goes beyond most past work. By controlling for individuals’ age, sex, employment status, household size, education level, many of the traits that past studies have ignored (particularly employment and household size) are controlled for. Thus, my findings lean towards an individual rather than institutional explanation for entrepreneurial intentions.

Another reason that only one strong direct linkage between the national business system and *entrepreneurial intentions* was found is likely because of the need to control for the impact of GDP per capita and growth. Institutional work indicates that *both* GDP and growth as well as entrepreneurial phenomena are determined by institutions (Wennekers et al., 2005). While GDP and growth are used in most studies as important controls that have systematic structural effects on entrepreneurship by themselves, their presence as independent variables can certainly be sources of type 2 errors with respect to
institutions. Unfortunately, few instruments for these important variables are available. Regressing entrepreneurial intentions on the institutional variables without these controls yielded significant results. In cross-country studies, however, one must balance concerns for endogeneity between macro-level variables and institutional components against the need to control for the structural effects that income and growth levels may have on the relationship of interest. In this case, I deemed type 1 error a more major concern than type 2 error, choosing to err on the side of controls.

The second unforeseen finding perhaps should not have come as a surprise. The skill development system-income interaction had the opposite relationship with opportunity entrepreneurship that I expected. Instead of weak skill development institutions having a disproportionately strong impact on low income individuals, results indicated the exact opposite. Higher income and a skill development system aimed at entrepreneurship appear to serve as complements with respect to entrepreneurial intentions. My interpretation of this finding is that wealthier individuals are in better position to take advantage of the upper echelons of the skill development systems, which make up several items in the construct. More so than the other elements of the national business system, the financial system, even in countries where it is strong, is very unequally distributed.

Limitations and Future Research

The use of more exact individual income data would also improve the research design. The variable for income is a dichotomous variable partitioned at 2010 world mean GDP. A clearer picture of individual income’s impact on entrepreneurial intentions
and its interaction with the institutional environment could be presented with more fine-grained data.

Second, my data is a cross-sectional analysis. Future research could examine the impact of institutional change on the same individuals over time. Such a research design would greatly increase confidence in the implications of this study. If changes in institutions and income were shown to increase entrepreneurial intentions, policymakers could be far more confident in developing remedies. Moreover, future research that could examine individuals over time could gather income data before entrepreneurial activity takes place but then measure more kinetic entrepreneurial outcomes than intentions as the dependent variable. Such a program of study would significantly improve upon this one.

Third, while institutional data are gathered at the country level, this is not always the way in which institutions manifest their effects. As Stenholm et al., (2013: 190) notes, “an increasing amount economic development is ‘spiky,’ concentrating in particular geographic regions and often without regard to borders.” Within, countries as large as China and India there is significant variation in the strength of market logics. In places such as Beijing and Mumbai, these logics are quite strong. Yet in Calcutta and regions of western China, they are quite weak. While these measures are not systematically skewed (i.e. biased) for the individuals within each country, geography may improve the reliability of their application to each individual in the sample.

Of course such nuance is in keeping with the overall framework of this paper: institutions within countries do not impact all individuals evenly. Future research could take the idea that the institutional framework has uneven effects and apply that to other meaningful individual characteristics. For instance, individuals that are in the majority
racial group may need increased institutional protection in order to act entrepreneurially. Individuals who live in urban settings may not be as well insulated from novel ideas and institutions as individuals from rural settings. From a practical policymaking point of view, it would be very interesting to see if internet use mitigates or circumvents institutions' impact on entrepreneurship.

Conclusions

Despite these limitations, this study provides rigorous and relevant empirical insights into how national institutions influence entrepreneurial intentions. This study sheds light on the importance of market logics, as expressed through the national business system, for the entrepreneurial intentions of individuals with low income. Results of the analyses suggest that elements of the national business system impact entrepreneurial intentions differently for high and low income individuals. Findings expand knowledge about the role of embedded agency within society by highlighting a key variable in determining when individuals will deviate from dominant institutional logics. Furthermore, by interacting individual income with institutional profile, findings add nuance to knowledge on the individual characteristics associated with entrepreneurship participation. Finally, results buttress understanding of the nature of poverty and its impact on individuals' ability to act as autonomous economic agents.

4.7 REFERENCES


Djankov, S., La Porta, R., Lopez-de Silanes, F. & Shleifer, A. (2002). The regulation of


Grilo, I., & Thurik, R. (2005). Latent and actual entrepreneurship in Europe and the US:


4.8 TABLES AND FIGURES

Table 4.1: Survey Items for the National Business System

<table>
<thead>
<tr>
<th>Questions from GEM's Expert Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Availability (targeted at entrepreneurship)</td>
</tr>
<tr>
<td>In my country:</td>
</tr>
<tr>
<td>1. There is sufficient equity funding available for new and growing firms.</td>
</tr>
<tr>
<td>2. There is sufficient debt funding available for new and growing firms.</td>
</tr>
<tr>
<td>3. There are sufficient government subsidies available for new and growing firms.</td>
</tr>
<tr>
<td>4. There is sufficient funding available from private individuals (other than founders) for new and growing firms.</td>
</tr>
<tr>
<td>5. There is sufficient venture capitalist funding available for new and growing firms.</td>
</tr>
<tr>
<td>6. There is sufficient funding available through initial public offerings (IPOs) for new and growing firms</td>
</tr>
<tr>
<td>Skill Development System (targeted at entrepreneurship)</td>
</tr>
<tr>
<td>In my country:</td>
</tr>
<tr>
<td>1. Government policies (e.g. public procurement) consistently favor new firms.</td>
</tr>
<tr>
<td>2. The support for new and growing firms is a high priority for policy at the national government level.</td>
</tr>
<tr>
<td>3. The support for new and growing firms is a high priority for policy at the local government level.</td>
</tr>
<tr>
<td>4. New firms can get most of the required permits and licenses in about a week.</td>
</tr>
<tr>
<td>5. The amount of taxes is NOT a burden for new and growing firms.</td>
</tr>
<tr>
<td>6. Taxes and other government regulations are applied to new and growing firms in a predictable and consistent way.</td>
</tr>
<tr>
<td>Regulatory Ease of Creating New Ventures</td>
</tr>
<tr>
<td>In my country:</td>
</tr>
<tr>
<td>1. Government programs aimed at supporting new and growing firms are effective.</td>
</tr>
<tr>
<td>2. Teaching in primary and secondary education encourages creativity, self-sufficiency, and personal initiative.</td>
</tr>
<tr>
<td>3. Teaching in primary and secondary education provides adequate instruction in market economic principles.</td>
</tr>
<tr>
<td>4. Teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation.</td>
</tr>
<tr>
<td>5. Colleges and universities provide good and adequate preparation for starting up and growing new firms.</td>
</tr>
<tr>
<td>6. The level of business and management education provide good and adequate preparation for starting up and growing new firms.</td>
</tr>
<tr>
<td>Property Rights Protection</td>
</tr>
<tr>
<td>In my country:</td>
</tr>
<tr>
<td>1. The intellectual property rights (IPR) legislation is comprehensive.</td>
</tr>
<tr>
<td>2. The intellectual property rights (IPR) legislation is efficiently enforced.</td>
</tr>
<tr>
<td>3. The illegal sale of &quot;pirated&quot; software, videos, CDs, and other copyrighted or trademarked products is not extensive.</td>
</tr>
<tr>
<td>4. New and growing firms can trust that their patents, copyrights, and trademarks will be respected.</td>
</tr>
<tr>
<td>5. It is widely recognized that inventors' rights for their inventions should be respected.</td>
</tr>
<tr>
<td>Questions from WEF Executive Opinion Survey</td>
</tr>
<tr>
<td>Control of Corruption</td>
</tr>
<tr>
<td>1. The corporate ethics (ethical behavior in interactions with public officials, politicians, and other enterprises) of my country's firms in my industry are among the world's worst (best).</td>
</tr>
<tr>
<td>2. Government subsidies to business in my country keep uncompetitive industries alive artificially (improve the productivity of industries).</td>
</tr>
<tr>
<td>3. When deciding upon policies and contracts, government officials usually favor well-connected firms and individuals (are neutral among firms and individuals).</td>
</tr>
<tr>
<td>4. How commonly do firms in my industry give irregular extra payments or bribes connected with import and export permits? Common (Never).</td>
</tr>
<tr>
<td>5. How commonly do firms in my industry give irregular extra payments or bribes when getting connected to public utilities? Common (Never).</td>
</tr>
<tr>
<td>6. How commonly do firms in my industry give irregular extra payments or bribes connected with annual tax payments? Common (Never).</td>
</tr>
<tr>
<td>7. In my country, how commonly are public funds to companies, individuals, or groups diverted due to corruption? Common (Never).</td>
</tr>
<tr>
<td>8. Public trust in the honesty of politicians is very low (very high).</td>
</tr>
<tr>
<td>9. Do unfair or corrupt activities of other firms impose costs on my firm? Impose large costs (Impose no costs/not relevant).</td>
</tr>
</tbody>
</table>
Figure 4.1: Market Logics, Poverty, and Entrepreneurial Intentions
### Table 4.2: Variable Means, Standard Deviations, and Correlation Matrix, n=49,013

| Variable                        | Mean  | S.D.  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
|---------------------------------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1. Entrepreneurial Intentions  | 0.29  | 0.45  | 1    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2. Poverty                     | 0.58  | 0.49  | 0.30 | 1    |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 3. Sex                          | 0.52  | 0.5   | -0.06| 0.07 | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 4. Age                         | 39.4  | 12.1  | -0.20| -0.19| -0.01| 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 5. Employed                    | 0.72  | 0.45  | -0.05| -0.29| -0.29| 0.08 | 1    |      |      |      |      |      |      |      |      |      |      |      |      |
| 6. Grad. Degree                | 0.04  | 0.19  | -0.04| -0.17| -0.0 | 0.03 | 0.07 | 1    |      |      |      |      |      |      |      |      |      |      |      |
| 7. College Degree              | 0.29  | 0.45  | -0.11| -0.37| -0.02| 0.05 | 0.18 | 0.30 | 1    |      |      |      |      |      |      |      |      |      |      |
| 8. HS Degree                   | 0.63  | 0.48  | -0.10| -0.35| -0.05| -0.02| 0.19 | 0.15 | 0.49 | 1    |      |      |      |      |      |      |      |      |      |
| 9. Household Size              | 4.22  | 5.86  | 0.06 | 0.01 | -0.02| -0.05| -0.04| -0.02| -0.07| -0.10| 1    |      |      |      |      |      |      |      |      |
| 10. GDP Per Capita             | 18,998| 13,930| -0.35| -0.83| -0.04| 0.23 | 0.25 | 0.17 | 0.37 | 0.38 | -0.14| 1    |      |      |      |      |      |      |      |
| 11. GDP Growth                 | 3.54  | 4.08  | 0.18 | 0.40 | 0.02 | -0.12| -0.09| -0.14| -0.22| -0.23| 0.04 | -0.44| 1    |      |      |      |      |      |      |
| 12. Capital Availability (NBS) | 2.40  | 0.35  | -0.14| -0.26| -0.06| 0.10 | 0.16 | -0.03| 0.10 | 0.15 | -0.02| 0.40 | 0.20 | 1    |      |      |      |      |      |
| 13. Skill Dev. (NBS)           | 2.41  | 0.24  | 0.10 | -0.18| -0.02| 0.05 | 0.14 | 0.01 | 0.07 | 0.13 | -0.04| 0.13 | -0.13| 0.16 | 1    |      |      |      |
| 14. Regulatory Ease (NBS)      | 2.32  | 0.39  | -0.11| -0.32| -0.02| 0.11 | 0.11 | -0.03| 0.11 | 0.14 | -0.06| 0.38 | 0.01 | 0.45 | 0.45 | 1    |      |      |
| 15. Property Rights (NBS)      | 2.72  | 0.55  | -0.29| -0.65| -0.05| 0.20 | 0.26 | 0.06 | 0.27 | 0.34 | -0.14| 0.77 | -0.28| 0.53 | 0.41 | 0.67 | 1    |      |
| 16. Control of Corruption (NBS)| 4.38  | 0.88  | -0.27| -0.60| -0.05| 0.19 | 0.26 | 0.05 | 0.26 | 0.31 | -0.13| 0.75 | -0.18| 0.57 | 0.16 | 0.54 | 0.82 | 1    |
### Table 4.3: HLM Results for Entrepreneurial Intentions

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>S.E.</td>
<td>B</td>
</tr>
<tr>
<td>Age</td>
<td>-0.02**</td>
<td>0.001</td>
<td>-0.02**</td>
</tr>
<tr>
<td>Female</td>
<td>-0.41**</td>
<td>0.02</td>
<td>-0.41**</td>
</tr>
<tr>
<td>Household Size</td>
<td>0.002</td>
<td>0.002</td>
<td>0.002</td>
</tr>
<tr>
<td>Employed</td>
<td>0.04</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>High School Degree</td>
<td>0.12**</td>
<td>0.03</td>
<td>0.12*</td>
</tr>
<tr>
<td>College Degree</td>
<td>0.09**</td>
<td>0.03</td>
<td>0.09*</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>0.08</td>
<td>0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>GDP Growth Rate</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>GDP per Capita (thousands)</td>
<td>-0.06**</td>
<td>0.01</td>
<td>0.05**</td>
</tr>
<tr>
<td>Income (reverse-coded)*</td>
<td>-0.26</td>
<td>0.16</td>
<td>-0.22</td>
</tr>
<tr>
<td>GDP per Capita X Income*</td>
<td>-0.01</td>
<td>0.03</td>
<td>-0.0002</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Main Effects</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Availability</td>
<td>-0.25</td>
<td>0.27</td>
<td>-0.25</td>
</tr>
<tr>
<td>Skill Development System</td>
<td>0.61</td>
<td>0.41</td>
<td>0.61</td>
</tr>
<tr>
<td>Lack of Regulatory Burden</td>
<td>0.42*</td>
<td>0.21</td>
<td>0.42*</td>
</tr>
<tr>
<td>Property Rights</td>
<td>-0.69</td>
<td>0.39</td>
<td>-0.69</td>
</tr>
<tr>
<td>Control of Corruption</td>
<td>0.15</td>
<td>0.16</td>
<td>0.15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interaction Effects</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Availability X Income*</td>
<td>0.51**</td>
<td>0.03</td>
<td></td>
</tr>
<tr>
<td>Skill Development X Income*</td>
<td></td>
<td>-1.23**</td>
<td>0.16</td>
</tr>
<tr>
<td>Regulatory Ease X Income*</td>
<td>0.79**</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Property Rights X Income*</td>
<td>0.33**</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>Control of Corruption X Income*</td>
<td>0.22**</td>
<td>0.07**</td>
<td></td>
</tr>
</tbody>
</table>

Deviance (-2 log likelihood) 132,360 132,801 135,061
Deviance Difference (Chi-square) 6,804** 6,363** 4,103**
Individual-level n = 49,013; country-level n = 48. Unstandardized regression coefficients and robust standard errors reported.
* = p < .05, ** = p < .01
± = reverse coded.
Figure 4.2: Capital Availability-Income Interaction

![Diagram showing the interaction between capital availability and income levels on entrepreneurial intentions. The x-axis represents low and high financial capital availability, while the y-axis represents entrepreneurial intentions. The graph shows that high-income groups tend to have higher entrepreneurial intentions when capital availability is high, and lower intentions when it is low, while the opposite trend holds for low-income groups.](image-url)
Figure 4.3: Skill Development System-Income Interaction
Figure 4.4: Regulatory Ease-Income Interaction
Figure 4.5: Property Rights-Income Interaction
Figure 4.6: Control of Corruption-Income Interaction
CHAPTER 5

5. CONCLUSION

In conclusion, I wish to briefly recount the contributions that each of my three essays make. Each of the three essays took a slightly different approach to exploring the institutions-entrepreneurship relationship and how that relationship relates to poverty and development in low income countries. Essay I examined solutions that organizations can offer to weak informal institutions. Essay II examined countries' institutional profiles as complex gestalts and detailed how even lower income countries can create opportunity entrepreneurship. Essay III explored the income-institutions-entrepreneurship nexus, and described how poor institutions and low income negatively reinforce one another, resulting in a poverty trap. Below I briefly summarize the contributions of each of these three essays.

Essay I explored how a lack of expert venture scripts within societies constitutes an institutional void and how those voids might be addressed by entrepreneurship-enabling organizations (EEOs). It further proposed a network-based means by which EEOs provides expert venture scripts to increase venture quality in subsistence economies. By doing so, EEOs play a key role in the institutionalization of important entrepreneurial cognitions.

I theorized that for EEOs to thrive and achieve their objectives, the proper social dimensions, social bridges and local embeddedness, must be in place. Accordingly, Essay I contribute to the literature on the establishment of proto-institutions in contexts where regulated market-based economic transactions are counter-institutional. The cases of
Milma and Dastkar provide important examples of how entrepreneurship-enabling organizations have been able to implement the model I propose in such contexts.

Indeed, subsistence markets are chronically sub-optimal spaces for the development of opportunity entrepreneurship. In these settings different institutions may compete for the allegiance of or dominance over the reigning social order. Deterministic paradigms like institutional economics, which generally explores the linkages between faulty (and good) formal institutions and economic activity (e.g. La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1997) does not explain how markets can emerge in non-conducive equilibria, although such emergence is a historical reality. I argue as an alternative that EEOs must attempt to institutionalize the informal institutions conducive to the development of new ventures. Essay I, therefore, contributes to the literature on the establishment of new informal institutions in contexts where market-based economic transactions are counter-institutional.

One key area where my model has wide application to current development practices, namely microfinance, is that venture scripts aid in the evaluation of the quality of new ventures. Organizations that do not provide entrepreneurial expertise may engender “false positive” creation decisions, leaving individuals in deep debt with no viable business and jeopardizing their family’s wellbeing when they are already living hand to mouth. A failed business venture will threaten their existence because there are no safety nets to rely upon if the venture goes bad.

Unfortunately, many microfinance institutions provide few if any venture scripts. My model suggests that EEOs that do not provide access to new markets or information, and who are not deeply involved with nascent entrepreneurs as they implement their new
venture will fund ventures of low quality. Many microfinance institutions evaluate, on some level, the business plans submitted for potential loans. But they do not help improve them or guide the entrepreneur as he tries to exploit it without the proper knowledge, and they certainly do not institutionalize entrepreneurial expertise. Consequently, many fail because the individuals receiving the loans are simply not prepared to be entrepreneurs.

As an alternative, organizations that improve individuals' ability to found and run successful businesses promote self-determination and foster a sense of accomplishment lacking in many other poverty alleviation strategies. EEOs can enhance the capabilities of the poor by giving them access to both general business and specialized venture specific knowledge, improving their ability to learn about productive enterprises by exposing them to new scientific and organizational concepts, fostering the ability to innovate via this same exposure, increasing their incentives to develop more human capital, and removing prohibitive transaction costs by forging cooperative relationships in a hierarchal organization (Smith & Pezeshkan, 2013).

In Essay II, I hypothesized that the national business system (Whitley, 1999) combines with entrepreneurial culture in equifinal ways to lead to high growth opportunity entrepreneurship. The central finding that emerged is that there are multiple and equifinal institutional combinations that are associated with high levels of opportunity entrepreneurship at a societal level. Further, empirical support for the Core Proposition indicate that none of the institutional components are sufficient by themselves for opportunity entrepreneurship. Instead, institutions combine to form multi-component gestalts.
A primary contribution of Essay II is the notion of equifinality of three different sufficient institutional bundles for opportunity entrepreneurship. That is, there are at least three different institutional pathways for achieving high levels of opportunity entrepreneurship. This is an argument consistent with, for instance, the varieties of capitalism literature (Hall & Soskice, 2001), that argues that there is more than one path to economic competitiveness. Since the end of the Cold War, however, the "Washington Consensus" has more or less argued that good governance with regards to government policy, only one of Whitley's four elements, is key to transformative economic activity. However, my results imply that the "Washington Consensus" is not the only path and, indeed, may not be appropriate given the status of the society's entrepreneurial culture and other elements of the national business system (particularly the skill development system and trust relations) within a country. In fact, it seems likely that the "Washington Consensus" can be very successful in some places but not others. My approach, in contrast, encourages policymakers to take a step back and recognize the strengths and weaknesses of their economy and, given these strengths and weaknesses, to determine how best to accomplish key outcomes, like opportunity entrepreneurship.

Further, my approach in Essay II argues that institutions bundle together rather than focusing on fixing one institution or type of institution. As scholars and policymakers view institutions as holistic bundles, better and more targeted institutional prescriptions can emerge. This approach allows policymakers to view existing institutional profiles as laboratories for mixing ingredients together in order to increase opportunity entrepreneurship. Even the successes of smaller countries may provide valuable insights about institutional synergies that may work elsewhere.
In this way, Essay II findings agree with recent work in development studies on institutional stickiness (i.e. Williamson, 2009). Institutional stickiness is the notion conceptualizing the speed at which institutional change can unfold in a society. This concept is particularly important for the enactment of new regulative elements because they are relatively easy to alter, yet may not receive broad public support or buy-in. Consequently, in societies in which culture is ill-conducive to entrepreneurship, elements of the national business system will not stick. This indicates that scholars focusing on only one aspect of institutions independent of the others may miss the big picture. In this vein La Porta et al (1998) observed that common law, arising endogenously, was far more effective that legislated civil law. This occurs because endogenously emergent institutions avoid many undesirable consequences that plague inorganic imposed solutions. Despite the problems with isolating institutional elements due to the fact that they shape one another over time, past work on institutions and entrepreneurship has taken exactly that approach. Hopefully, my findings encourage scholars to start viewing institutions in bundles instead. Future research should focus on the complementariness or substitutability of institutions.

While Essay II provides evidence that the effect of the national business system’s components are contingent on the other components as well as entrepreneurial culture, Essay III provides evidence that the effects of these components are contingent on individual level income. Essay III highlights that individual income level interacts with elements of the national business system to determine entrepreneurial intentions. The finding that agents differ in their responses to institutional forces according to income level supports the institutional logics perspective. According to Thornton and Ocasio
(2008) cross-level effects between the institutional and individual level are critical because actors and institutions interact and influence one another. Given this metatheoretical framework, it is important to account for the characteristics and situations that account for deviation from expected behaviors and practices when under a given institutional regime. By doing so, this study supports the overall institutional logics framework.

Overall, results support one of the Institutional Logics Perspective’s central tenets: embedded agency. Individuals are not purely atomistic agents with perfect free will but neither are their actions completely determined by institutional forces. An apt analogy is that of individuals being like sailboats. The prevailing winds of institutional logics have a strong impact on the course of behavior. One can either go with the winds of dominant institutional logics or fight against them. How individuals adjust their own sails, however, is up to them. Consequently, in societies where the prevailing winds of family, the community, and tradition blow strongly, going against them through the creation of new social structures (i.e. entrepreneurship), while real, is more challenging and novel. Such a course is not being pushed by prevailing institutional logic. Indeed at times, these behaviors even run counter to them.

Given the history-shaping impact that counter-institutional behavior (e.g. entrepreneurship in places that are not entrepreneurial) can have it is important to understand the individual characteristics responsible for behavior that deviates from those logics. Such behaviors can help alter the prevailing winds within pockets of societies, as the model and cases of Milma and Dastkar detail in Essay I. They can produce new and beneficial winds associated with creative destruction (Schumpeter, 1934). Unfortunately,
As Essay III details, those who need the prevailing winds to change most, low income individuals, are least capable of fighting against them. The biggest contribution of Essay III, therefore, is in fleshing out details with regards to individual income.

In fact there is a growing stream of literature that uses the institutional logics perspective to examine institutional entrepreneurship (e.g. Battilana, 2006). Findings and implications of Essay III imply, however, that researchers should not be limited in applying the institutional logics perspective only to institutional entrepreneurs seeking to directly transform the rules of the game. Instead, the perspective is appropriate any time individuals act in ways that run counter to prevalent institutional logics. So, for instance, when individuals or organizations, attempt to launch new ventures in subsistence markets, they are in actuality altering the institutional climate. Milma and Dastkar, in Essay I do exactly that. By applying the institutional logics perspective to every day entrepreneurship in contexts where it is not normative, Essay III helps to expand the use of the institutional logics perspective to areas of entrepreneurship besides institutional entrepreneurship proper.

Essay III also enhances the discussion on entrepreneurship and development by shedding additional light on the nature and effects of poverty. Results indicate that a lack of individual level resources constrain agency. Lack of agency implies lack of freedom and lack of capabilities. These ideas echo and perhaps enhance famed economist Amartya Sen's assertion that at the root of poverty is the absence of positive individual capabilities. For Sen, it is capabilities and not consumption that is the true measure of poverty and wellbeing (Sen, 1985). Results in Essay III indicate that poor institutions constrain lower income individuals in ways that they do not constrain wealthier
individuals. They reduce capacity for change among the poor. Therefore, policymakers need to understand that examining the net societal impact of institutions may not always be enough. Poor institutions have a disproportionate negative impact on low-income individuals.

Overall, this dissertation offers some new theoretical insights to the literature exploring the complex relationships between institutions and entrepreneurship. This relationship, as all three essays attest, is not linear and straightforward. And there is plenty of space for individuals and organizations to act and foster meaningful opportunity entrepreneurship. As such, I hope that this dissertation spurs new and better research examining these very important issues.

REFERENCES


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