

CHOOSING BETWEEN THE FORMAL AND INFORMAL ECONOMY:
HOW DO BUSINESS MANAGERS IN EMERGING MARKETS DECIDE?

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A DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in the Department of Management
in the Graduate School of
The University of Alabama

TUSCALOOSA, ALABAMA

2014

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ABSTRACT

Why do managers in emerging markets conduct some activities in the informal economy and others in the formal economy when they have a choice? Using institutional economic theory, previous research shows that, at the country level, weak formal institutions create institutional voids that increase the transaction costs of using the formal economy. To evade high transaction costs, managers in emerging markets use the informal economy. However, previous research does not explain, at the firm level, why managers in emerging markets conduct some activities in the informal economy while conducting others in the formal economy. I theorize that, at the firm level, managers' social ties with formal institutions protect them against being singled out for enforcement and against potential opportunistic behaviors by business partners. In particular, opportunism, which increases transaction costs, might take place in the informal economy because contracting parties cannot be held legally accountable. That is, managers' social ties with formal institutions allow them to keep the transaction costs of using the informal economy lower than the transaction costs of using the formal economy for a specific activity. Moreover, I argue that not all managers who have social ties with formal institutions are

prone to conduct more activities in the informal economy. In particular, based on regulatory focus theory, I argue that managers who have a promotion focus mindset are more prone to use their social ties with formal institutions to conduct activities in the informal economy. Using a sample of 206 Lebanese respondents, I developed two new scales: manager's social ties with formal institutions and manager's propensity to use informal economy. I then used these scales to empirically test my theory. The results of this study support my theory that managers who have social ties with formal institutions are more prone to conduct activities in the informal economy. However, the results of this study did not support the argument that managers who have a promotion focus mindset are more prone to use their social ties with formal institutions to conduct activities in the informal economy.

ACKNOWLEDGMENTS

I am pleased to have this opportunity to thank the many individuals who have helped me with the realization of my dream. For me, the PhD in management was a dream for a brighter and more stable future.

First and foremost, I want to thank the Lebanese American University that made my dream come true by sponsoring my wife and me to study at The University of Alabama.

Second, I want to thank my committee members for their invaluable input and support of both the dissertation and my academic progress. All of you touched my life in a special way and made me a better person. William Jackson, I enjoyed working with you on many research projects. Your wisdom and way of treating people are phenomenal. Jase Ramsey, we published together, we had many papers accepted at conferences, and most importantly, we are friends. Charles Kacmar, you made my life so much easier with your computer programs that transform SPSS descriptive statistics and correlation tables into tables of results and input codes for other programs. You are simply wonderful. Michele Kacmar, where do I start? Not only you are a research guru, but also you are an unbelievable human being. I am very thankful for everything you taught and advised me. But most importantly, I am extremely thankful for our friendship.

Third, thousands of words would not be enough to thank James Combs the chairman of this dissertation. Thousands of words, you made me write too. I can never do you just. You are an incredible mentor and friend. Through your wisdom, vast experience, and dedication you shaped me with precision of a gemologist. Because of you, I became a better writer, thinker, and researcher. What I have learned from you will serve me for the rest of my life. I am a proud Combsian (i.e., James Combs's protégé).

Last but not least, I would not have made it without the support, help, and love of my family. My wife, Jamal Maalouf, my love and respect for you have no ending. We made it. We realized our dream to have a brighter and more stable future. What a roller coaster! Side by side, we overcame many obstacles and emerged stronger, wiser, and more dedicated than ever. I am so proud of you. Antoine, my lovely son, I hope that one day if you read this dissertation you understand what we had and made you go through. You are the bright light of my life. At age three, you moved with us to Alabama. At that age, you did not speak any word of English. Now, at seven, every single day you correct something I say. I am so proud of you. We did all that to offer you and your forthcoming sister, Catherine, a better life.

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CHAPTER ONE: INTRODUCTION

The main research question in strategy, whether strategy is conceptualized as a “definitive field of study” or an “applied arena,” is: “What causes certain firms to outperform their competitors on a sustained basis” (A. Meyer, 1991, p. 828)? One way to answer this question is to study the boundaries of firms (e.g., Conner & Prahalad, 1996; J. Dyer & Singh, 1998), and indeed a great deal of theory and empirical evidence helps explain why managers decide to include some activities but not others inside the firm’s boundaries (Conner & Prahalad, 1996; Sirmon, Hitt, & Ireland, 2007). Almost all of this work, however, has been performed in developed markets (McGahan, 2012).

A developed market is defined by the dominance of its formal economy over its informal economy (Godfrey, 2011). In developed markets, activities in the informal economy account for less than 17 percent of the total economy (F. Schneider & Enste, 2002). One important characteristic of a developed market is its well-developed formal institutions (Khanna & Palepu, 2010; North, 1990). Formal institutions are the written and formally accepted rules, regulations, and standards and the organizations that make, implement, and enforce such rules (Baumol, 1990; Denzau & North, 1994; North, 1990). Well-developed formal institutions increase the chances that most activities will be conducted in the formal economy. That is, the activities that dominate are both legal and legitimate and produce legal and legitimate ends (Webb, Tihanyi, Ireland, & Sirmon, 2009). Accordingly, theories of firm boundaries, such as transaction

costs, gain predictive power by relying on the availability of well-functioning formal institutions (i.e., courts – Williamson, 1991).

The opposite extreme of developed markets is the Base of the Pyramid (BoP) markets, which are defined by the dominance of informal economies over formal economies (Godfrey, 2011). In BoP markets, informal economies account for up to 70 percent of the total economy (Godfrey, 2011). These economies are often characterized by ineffective formal institutions, and because of this, much activity is conducted in the informal economy. Webb et al. (2009, p. 492) define an informal economy “as a set of illegal yet legitimate (to some large groups) activities through which actors recognize and exploit opportunities.” Moreover, activities in the informal economy take place mainly in rural areas, are labor intensive, and are performed at low wages (Godfrey, 2011). Add to that, activities in the informal economy gain legitimacy from informal institutions, which are defined as “enduring systems of shared meanings and collective understanding that, while not codified into documented rules and standards, reflect a socially constructed reality that shapes cohesion and coordination among individuals in a society” (Holmes, Miller, Hitt, & Salmador, 2013, p. 533).

Researchers are beginning to investigate how activities are performed differently when they are mostly supported by informal institutions and must take place in the informal economy. For instance, Webb et al. (2009) theorize that in BoP markets an entrepreneur’s collective identity outside formal institutions may help the entrepreneur better recognize and exploit opportunities. In another example, Kistruck, Webb, Sutter, and Ireland (2011) used an exploratory approach to show that businesses operating in BoP markets may leverage informal lending institutions (microfinance, local cooperatives) to overcome resource scarcity caused by unreliable formal institutions.

Statement of the problem

Much of the world's markets can be defined as emerging in that they are not dominated by strong formal institutions with most activity in the formal economy, nor are they dominated by weak formal institutions with most activity in the informal economy. In emerging markets, up to 40 percent of activity takes place in the informal economy (Bruton, Ireland, & Ketchen, 2012; Godfrey, 2011). In these markets, managers often have a choice regarding whether to conduct each activity in the formal versus informal economy. This is a new boundary decision that is not explained by existing theory. Managers in BoP and developed markets have limited choice: managers in BoP markets must conduct activities mostly in the informal economy, while managers in developed markets must conduct activities mostly in the formal economy.

The lack of choice that is present in BoP and developed markets is not present in emerging markets where managers can choose between conducting activities in the formal and informal economies. For instance, managers in emerging markets can choose to formally document employment for some employees while hiring and compensating others informally. It is common in emerging markets to find some coworkers who are registered with legal authorities while others are not. Likewise, managers in emerging markets can contract formally or use under-the-table agreements to buy from markets.

It is likely that the decision to conduct activities in the informal versus formal economy has direct effects on firms' performance in emerging markets. This is because conducting an activity in the wrong part of the economy could raise transaction costs by increasing exposure to corrupt government officials (in the case of something placed in the formal economy that should have been left informal) or by giving insufficient formal legal protection from corrupt employees or partners (in the case of something that is left informal that should have been placed in the

formal economy). Accordingly, I analyze what factors lead managers to conduct activities in the informal versus formal economy, and how these factors interact to affect the propensity to use an informal economy.

Summary of the study

The purpose of this study is to investigate why managers in emerging markets conduct activities in the informal versus formal economy when they have a choice. Emerging markets are characterized by the presence of institutional voids (Khanna & Palepu, 1997). Institutional voids refer to voids created by the absence of formal specialized market intermediaries that ease business transactions between buyers and sellers by providing information and contract enforcement (Khanna & Palepu, 1997; Khanna & Palepu, 2010). Institutional voids in emerging markets are caused by weak formal institutions (Holmes et al., 2013). That is, institutional voids are created by missing or inefficient and ineffective formal institutions. There are three broad types of formal institutions that affect business transactions: political institutions, regulatory institutions, and economic institutions (Batjargal et al., 2013; Holmes et al., 2013).

Current institutional economics and management research reveals that institutional voids increase transaction costs at the country level (Khanna & Palepu, 2010). To avoid high transaction costs in the formal economy, managers in emerging markets use their social ties (i.e. informal institutions) to conduct more activities in the informal economy (Batjargal et al., 2013; Holmes et al., 2013; Khanna & Palepu, 2010). However, current institutional economics and management research does not explain, at the firm level, managers' choices within the emerging markets. That is, which activities are conducted in the informal economy, which activities are conducted in the formal economy, and how do managers make this choice? I propose to build theory to explain how firms fill institutional voids. Specifically, based on their social ties with

formal institutions, managers vary in the way they fill institutional voids. Managers who can bridge specific institutional voids with informal ties to members of formal institutions will conduct more activities in the informal economy where they have these ties. In those areas where managers lack void-bridging relationships, they must rely more on formal institutions and the formal economy. That is, social ties with formal institutions free managers to ignore the formal economy and its rules and enforcement. Without them, the manager will follow the written rules in order to minimize the probability that officials will single them out for enforcement, and to reduce potential opportunistic behaviors by business partners. In particular, opportunism, which increases transaction costs, might take place in the informal economy because contracting parties cannot be held legally accountable.

I will test this theory by empirically providing evidence about firms' use of the informal economy when confronted with institutional voids. Moreover, I will analyze how managers' regulatory focus might change the predictions of my theory. Regulatory focus theory posits that individuals have either a prevention focus or promotion focus mindset. An individual with prevention-focus mindset has a need for security, is attentive to losses, and has a sense of fulfillment of duties and obligations. An individual with a promotion focus mindset has a need for growth, is attentive to gains, and has a sense of attainment of aspirations and ideals (Higgins et al., 2001; Higgins, Shah, & Friedman, 1997).

From this, I theorize that, in emerging markets, promotion focused managers are more prone (1) to use their social ties with formal institutions (2) to conduct activities in the informal economy. That is, promotion focused managers who are energized by success and de-energized by failure (Idson, Liberman, & Higgins, 2000), and who are motivated by gains (i.e. reduce transaction costs) are more prone to use risky strategies (i.e., conduct activities in the informal

economy). In other words, promotion focused managers, who focus on gains and success, are more prone to assume the risks of conducting activities in the informal economy (i.e., assume the risks of being singled out for enforcement and the risks of potential opportunistic behaviors by business partners) to fill institutional voids.

In sum, prior research indicates that at the country level that economy-wide issues push economic activity either toward or away from informal economy. That is, at the country level, the informal economy is used because the formal economy is costly and ineffective. But prior research has not looked at individual transactions within firms. That is, prior research does not explain individual boundary decisions vis-a-vis conducting activities in the informal versus formal economy.

In particular, we know from institutional economics and management research that emerging markets are characterized by institutional voids (Batjargal et al., 2013; Holmes et al., 2013; Khanna & Palepu, 2010), which are positively related to the overall use of the informal economy. In other words, we know that institutional voids, which increase the transaction costs of using the formal economy, drive managers to use their social ties to conduct activities in the informal economy. We also know from regulatory focus theory that an individual with a promotion focus mindset is more prone to use risky strategies than an individual with a prevention focus mindset (Higgins et al., 2001; Higgins et al., 1997). But we do not know, at the firm level, what drives managers within an emerging market to conduct some activities in the informal economy while conducting others in the formal economy. This study seeks to investigate why managers in emerging markets conduct activities in the informal versus formal economy when they have a choice. That is, I theorize that managers use the informal economy when they have social ties that protect them from the rules and enforcement of weak formal

institutions. In other words, in emerging markets, managers use the formal economy when they are exposed to the arbitrary enforcements of weak formal institutions.

This research project consists of an online survey (using Qualtrics). I collected data from managers in Lebanon, which is an emerging market. The online survey asked participants to respond to a series of questions. The collected data allowed me to measure how managers' social ties with formal institutions affect their propensity to use informal economy. Moreover, the collected data allowed me to measure how a promotion focus mindset affected this relationship.

Contribution

Given that prior theory explaining boundary decisions relies on the presence of formal institutions that managers in emerging markets have the option to ignore, it seems that there is merit in building theory to explain why managers decide to conduct some activities in the formal economy and others in the informal economy when they have a choice (i.e., in emerging markets). Such theory will help explain the use of informal economy at the firm level. Such a theory is potentially important because it might help explain performance differences among firms in emerging markets.

My theory also should have implications for theories of firm boundaries as they are extended to emerging market contexts. In particular, because boundary decisions impact performance, it might help future researchers develop more complete theory about how boundary decisions impact performance in emerging markets. Given the importance of emerging markets, the potential for the formal-informal choice to impact performance, and the potential to give researchers a richer understanding of boundary decisions in those markets wherein managers have choices, research investigating what factors lead managers conduct activities in the informal versus formal economy is both timely and warranted. In summary, my theoretical

contribution is to build theory to explain: first, how filling of institutional voids shapes the informal versus formal economy choice, and second, how managers' promotion focus mindsets might change this prediction. My empirical contribution is to provide evidence about firms' use of informal economy when confronted with institutional voids.

CHAPTER TWO: LITERATURE REVIEW

This chapter provides a more detailed review of institutional economics and management research regarding institutional voids in emerging markets. After discussing why it is important to study emerging markets, I define their basic characteristics. In particular, I use the institutional economics approach to define informal and formal institutions. Then, I define political, regulatory, and economic formal institutions, which are the three formal institutions that dictate the constraints under which managers conduct economic activity. I then define institutional voids, which emerge as a result of weak formal institutions, and I discuss their effects on transaction costs. Next, I describe how the informal economy stems from the interaction of informal and formal institutions. I discuss how managers use the informal economy to fill institutional voids. Finally, I explain the gap in the economics and management research regarding the use of informal versus formal economies. That is, managers conduct activities in the informal versus formal economy when they have a choice.

Why study emerging markets?

Emerging markets are becoming more and more relevant to the world for two reasons. First, emerging markets are becoming a source of world economic growth (Khanna & Palepu, 2010). For instance, the Financial Oakley (2009) reported that while the Financial Times Stock Exchange (FTSE) All World Developed Markets index increased by 7.2 percent, the FTSE International Emerging Markets Index increased by 41.1 percent. Moreover, as predicted by

D. Wilson and Purushothaman (2003), China surpassed Japan as of June 2011 to become the second largest economy next only to the United States (Khanna & Palepu, 2010). Emerging markets also are growth areas for multinationals from developed markets, and are home to local firms that have expanded worldwide (Khanna, 2008). For example, General Electric invested in its largest health care research and development facility in Bangalore, India where CISCO also has its one billion dollar headquarters. China hosts Microsoft's second largest research center and 20 percent of Eli Lilly's scientists reside in China, an operation large enough to warrant the presence of Eli Lilly's CEO for a whole month (Khanna & Palepu, 2010). Examples of firms that originated in emerging markets and expanded worldwide are Lenovo, a Chinese firm that acquired IBM's personal computer business in 2004, and Tata motors, an Indian firm that acquired Jaguar and Land Rover in 2008 (Khanna & Palepu, 2010).

Up until a decade ago, the relationship between the Western world and emerging markets was mainly limited to trade in natural resources and international aid toward poverty-alleviation (Khanna, 2008). As a consequence, economists and business scholars from the Western world, which had dominated the global economy for the last century, paid little attention to emerging markets because they did not need to know much about it (J. P. Johnson, Lenartowicz, & Apud, 2006). Today it is clear that theory and research pertaining to developed markets do not always apply in emerging markets (Godfrey, 2011; McGahan, 2012), and that new knowledge can be gained by investigating the unique circumstances surrounding emerging markets (Bruton et al., 2012; Godfrey, 2011).

What is an emerging market?

In 1981, at the International Finance Corporation (IFC), a group of economists coined the term "emerging markets" to promote the first mutual fund investments in developing countries

(Van Agtmael, 2007). In their book “winning in emerging markets,” Khanna and Palepu (2010) summarized executives’ common knowledge about the characteristics of emerging markets as follows: Emerging markets cannot totally secure firms’ intellectual property rights and are prone to financial crises. It is a hassle to navigate government bureaucracies. Local labor markets are deficient, product markets suffer from a lack of reliable supply, and capital markets lack reliable assessments of credit worthiness. Further, the lack of proper physical infrastructure makes distribution frustrating, and corruption is so prevalent that the risks of conducting business might outweigh potential rewards. Finally, information about investment opportunities or the information required to perform due diligence on potential partners is often not reliable. As a result, investment decision processes are more uncertain. In summary, emerging markets are markets where buyers and sellers cannot transact easily and efficiently (Khanna & Palepu, 1997), and this fact has at least two major implications: (1) in emerging markets some activities must be conducted in the informal economy, and (2) large Western firms are ill suited for competing in these markets.

Institutional economics approach to understanding emerging markets

Institutional economics and neoclassical economics are two approaches that help explain the allocation of resources in markets, and help explain how buyers and sellers transact. The neoclassical economics approach uses the supply and demand equilibrium mechanism to determine the income, outputs, and price distributions in markets. This approach posits that (1) individuals have rational preferences among valued outcomes that they have identified, (2) individuals are utility maximizers and firms are profits maximizers, and (3) individuals have perfect information and act independently (Weintraub, 2007). The institutional economics approach emphasizes a view of markets that is broader than that of the neoclassical economic

approach, and posits that efficient markets are the results of complex interactions between various formal and informal institutions (Hamilton, 1919; North, 1990).

The institutional economics approach is better than the neoclassical economics approach at building a more realistic model of emerging markets (Dhanaraj & Khanna, 2011). The problem with the neoclassical economics approach is that it is based on the assumptions of: frictionless transactions, buyers and sellers having perfect information, and buyers and sellers having unconstrained market access (Alchian & Demsetz, 1972; Coase, 1937). By now, it is well known that these assumptions do not hold true in developed markets, let alone emerging markets where the violation of these assumptions has major implications (Dhanaraj & Khanna, 2011). The advantage of the institutional economics approach is that it highlights the importance of external institutions in shaping organizational actors' incentive and power, and altering internal governance arrangements' costs and benefits (North, 1990; Williamson, 1991). In other words, external institutions provide the rules of the game that govern economic activities in a market. In the case of emerging markets, the institutional approach might highlight the deficient external institutions that prevent efficient exchange between buyers and sellers (Dhanaraj & Khanna, 2011; Khanna & Palepu, 1997; Khanna & Palepu, 2010).

Nobel Laureate Douglas North (1991, p. 97) defined "institutions as the humanly devised constraints that structure political, economic, and social interactions. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, and property rights). Throughout history, institutions have been devised by human beings to create order and, in exchange, reduce uncertainty." Add to that, institutions "evolve incrementally, connecting the past with the present and the future; history in consequence is largely a story of institutional evolution in which the historical performance of

economies can only be understood as a part of a sequential story. Institutions provide the incentive structure of an economy; as that structure evolves, it shapes the direction of economic change towards growth, stagnation, or decline” (North, 1991, p. 97).

Formal and informal institutions interact to assist in the creation of efficient markets. There are two ways through which informal institutions interact with formal institutions: complementing or substituting (Helmke & Levitsky, 2004; North, 1990; Tonoyan, Strohmeyer, Habib, & Perlitz, 2010). Informal institutions complement formal institutions to enhance the efficiency of the latter, and to provide solutions to the problems of coordination and interaction in society (Axelrod, 1986; Baumol, 1990; March & Olsen, 1989; North, 1991). In order to provide these solutions, complementary informal institutions have to create and strengthen incentives that make citizens comply with the formal rules and regulations (Helmke & Levitsky, 2004). For instance, intellectual property rights are mostly effective in markets in which they are protected by the informal and formal institutions. In particular, the formal intellectual property regime consists of the patents laws that define the inventor’s property rights, patent attorneys, an educational system that supports property rights, and a court and arbitration system that enforces the property rights (Dhanaraj & Khanna, 2011). In addition to these formal institutions, informal institutions, such as social ties among people who share the same norms, values, customs, and traditions, drive individuals and organizations to respect property rights and fight counterfeits help intellectual property rights regimes to thrive (Dhanaraj & Khanna, 2011).

In contrast to complementary informal institutions, substitutive informal institutions create and strengthen incentives that encourage individuals not to comply with formal rules (Tonoyan et al., 2010). Environments where formal institutions are weak, and lack authority and legal enforcement of formal rules and regulations, are breeding grounds for substitutive informal

institutions (Helmke & Levitsky, 2004; North, 1991; Radaev, 2004). Substitutive informal institutions are social ties that bind people who share the same customs, traditions, and codes of conduct, and who have the same sanctions and taboos (Holmes et al., 2013; North, 1990; Tonoyan et al., 2010). Borgatti and Halgin (2011) define networks or social ties as a set of actors or nodes along with a set of ties of specified type (such as friendship) that link them. The ties interconnect through shared endpoints to form paths that indirectly link nodes that are not directly tied. The pattern of ties in a network yields a particular structure, and nodes occupy positions within this structure.

Social network theory deals with the consequences of network variables, such as having many ties or being centrally located (Brass, Galaskiewicz, Greve, & Tsai, 2004). The original work goes back to Burt (1992) who argues and shows that firms occupying the favored network position of bridging structural holes, defined as ‘the gaps between firms otherwise disconnected in the network’, are more likely to have a better performance because of their greater access to resources and information (Burt, 1992). Social network theory views a firm not only as an autonomous entity, but as part of a network among its alters, which are the firms to which the focal firm is tied through its network (Gulati & Gargiulo, 1999). Such a network may offer the firm external resources and information, and through this embeddedness in external relationships with other firms, the focal firm may have significant improvements in its performance (Zaheer & Bell, 2005). Through the ties, the network offers the firm external resources and information, which otherwise it cannot access, and this leads to improvements in focal firm performance (Borgatti & Halgin, 2011). For instance, to find a way around weak formal institutions procedures, such as settling business disputes, postponing payments, cutting queues, speeding up bankers’ operations, or arranging privileged conditions for loans (Guseva, 2007; Radaev, 2004),

managers in post-soviet Russia rely on their social ties that are based on norms of reciprocity (Ledeneva, 1998). Similarly, to obtain market information and plan the allocation of resources and goods, managers in China rely on their social ties to substitute for the weak formal institutions' rules and regulations (Ahlstrom & Bruton, 2002, 2006; Xin & Pearce, 1996). These social ties also protect firms from arbitrary enforcement of formal rules and regulations, contract laws, and weak enforcement of property rights (Ahlstrom & Bruton, 2002; Ahlstrom, Bruton, & Lui, 2000; Bruton, Fried, & Manigart, 2005).

In summary, the institutional economics approach builds a realistic model of emerging markets (Dhanaraj & Khanna, 2011). In particular, this approach highlights the critical roles of formal and informal institutions, whose complex interactions define informal and formal economies in markets (Webb et al., 2009). Next, I describe the formal institutions that matter in the institutional economics approach.

Political, regulatory, and economic formal institutions

Among a country's complex institutional environment, the political, regulatory, and economic formal institutions are probably the most significant to managers because they define the "rules of the game" by which businesses operate (Holmes et al., 2013). Formal institutions fall into three categories (Holmes et al., 2013). First, political institutions define the power balance, participation requirements, and the method of participation in government. As a result, political institutions shape the processes that are used by individuals and governments to create or alter existing institutions (Holmes et al., 2013). Second, regulatory institutions reflect the rules, regulations, and policies created by the government to bound economic activities (Holmes et al., 2013). Third, economic institutions manage the capital resources of a country (Holmes et al., 2013).

Political institutions

The political institutions of a country define the rules, regulations, and policies established by its government (Hillman & Keim, 1995). These institutions specify (1) the distribution of power within the government (Henisz, 2000), (2) who is allowed to participate in the government, and (3) and how this participation is exercised (Persson, 2002). Political institutions distribute power within the society (DiMaggio & Powell, 1991; Henisz, 2000) by defining the power of politicians (Scott, 1995; Zinn, 2003) and citizens (Persson, 2002; Smith, 1776). For example, the extent to which citizens actively participate in building new or altering existing formal institutions and how they do it are defined by their political rights and civil liberties, which are established and maintained by political institutions (Matten & Crane, 2005).

Political institutions, which are “rooted heavily in national culture” (Hillman & Hitt, 1999, p. 830), play a critical role in the stability and predictability of change in the institutional environment (DiMaggio & Powell, 1991). That is, political institutions provide a framework that affects the alteration and development of the institutional environment by influencing society’s perception of possible changes, the importance of needed changes, and how changes might be accomplished (DiMaggio, 1988).

Political institutions can be put on a continuum ranging from autocratic to democratic. Autocratic political institutions have two characteristics: (1) citizens are discouraged from getting involved in politics, and (2) the power is concentrated in the hands of a small number of powerful individuals (Holmes et al., 2013). The fact that few powerful individuals control autocratic political institutions renders the institutional environment unstable and unpredictable (Henisz, 2000). Changes in autocratic political institutions occur mainly through revolutions (Holmes et al., 2013).

On the opposite side, democratic political institutions are characterized by the encouragement of citizens' active involvement, and distribution of power among many individuals (De Mesquita & Siverson, 1995; Fearon, 1994; Holmes et al., 2013; Ross, 2001). Changes in democratic political institutions occur mainly through lobbying, free elections, and pressure from interest groups (Hillman, Keim, & Schuler, 2004).

Regulatory institutions

Regulatory institutions regulate and reduce the uncertainty of the economic activities of foreign and domestic organizations by establishing rules, standardizing practices and demanding conformance (Holmes et al., 2013). Rules and standardized practices reflect the preferences and expectations of a society towards the autonomy and power of organizations (North, 1991; Scott, 1995). For instance, regulatory institutions endorse and enforce rules and standardized practices surrounding property rights, organizing economic activities (Bekaert, Harvey, & Lundblad, 2005; Spicer, McDermott, & Kogut, 2000), and controlling some of the country's resources (Guthrie, 2006). In other words, regulatory institutions fill in any gaps and enforce the rules that are set by the political institutions, thus defining the "rules of the game" for conducting economic activities in a country (Batjargal et al., 2013; Busenitz, Gomez, & Spencer, 2000).

The impact of the regulatory institutions on the economy can be measured by the way firms respond to the enactment and enforcement of rules and standardized practices (Hennart, 1989; Williamson, 1991). On one hand, regulatory institutions can enact and enforce rules and standardized practices that assist economic growth and create a positive institutional environment (Holmes et al., 2013). That is, the regulatory institutions would promote, provide and protect public goods and private property (Holmes et al., 2013).

On the other hand, the regulatory institutions' rules and standardized practices could be ineffective, counterproductive, and could impose undue costs that hurt the economy instead of improving it (Collin, 1998; Hill, 1995). For instance, some regulatory institutions' rules and standardized practices can lead to financial resources' inefficiencies and can distort private incentives (Browning, 1976; Levine & Renelt, 1992). That is, managers conduct less economic activities because of ineffective rules and standardized practices that generate undue costs (e.g., obtaining multiple permits for the same economic activity). Instead, managers search for solutions that circumvent the rules and allow them to conduct economic activities at lower costs (Ballard, Shoven, & Whalley, 1985; Oates, 1999; Trostel, 1993).

Economic institutions

Economic institutions embody the rules and standards that control the economic growth process of the country (Levine & Zervos, 1998) by shaping the availability and value of the country's financial resources (Holmes et al., 2013). That is, economic institutions control the availability of capital and market liquidity (Holmes et al., 2013) by controlling the abilities and incentives of financial intermediaries which, in turn, influence organizations' and individuals' capital investments (Levine, Loayza, & Beck, 2000). Monetary and fiscal mechanisms are the tools used by economic institutions to influence capital investments (Fischer, 1993; Lucas, 2003). Monetary mechanisms, such as central bank's policies that include control over investments through manipulation of interest rates, are used to control the money supply (Bernanke & Reinhart, 2004). Fiscal mechanisms, such as taxation rules that include the increase or decrease of taxes and tax returns, and domestic or foreign borrowing decisions, are used to control demand for and supply of capital (Fischer, 1993).

Economic institutions can increase capital availability, and thus encourage capital investments by maintaining an adequate money supply to fund investments (Holmes et al., 2013). That is, high money supply reduces interest rates (Gali, 1992), which, in turn, reduces the cost of accessing capital and increases the opportunity costs of keeping capital in cash. In turn, that encourages investing cash instead of saving it in banks (Romer, 1992).

Economic institutions also can offset capital shortages (e.g., declines in capital availability due to an economic recession) by pumping more money in the private sector than they remove through taxation, but this creates budget deficits (Holmes et al., 2013). That is, by reducing taxation, economic institutions allow businesses to retain more investment returns, which automatically increase capital availability (Boskin, 1978). However, economic institutions have to cover budget deficits by domestic or foreign borrowing (Edwards, 1984; Feldstein, 1983; Fischer, 1993). In the long term, domestic borrowing or borrowing from local individuals and businesses (i.e. private sector) increases capital availability through the steady supply of money in the markets through governmental interest payouts (Holmstrom & Tirole, 1998). Unlike domestic borrowing, foreign borrowing reduces capital availability because the governmental interest payouts would go to foreign investors (Sachs, 1989). In the short term, however, external borrowing has an advantage over internal borrowing. That is, external borrowing increases capital availability in the country, whereas internal borrowing drains capital availability from the private sector.

In Summary, political, regulatory, and economic formal institutions have direct implications on the way managers conduct business. Next, I define institutional voids.

Institutional voids

In developed markets, where formal institutions are strong, the role played by institutional intermediaries is almost invisible. Institutional intermediaries are specialized market intermediaries that ease economic transactions between buyers and sellers by providing information and contract enforcement (Khanna & Palepu, 2010). However, the absence of institutional intermediaries magnifies institutional voids in emerging markets (McMillan, 2007). Khanna and Palepu (1997) described the absence of proper institutional intermediaries that permit efficient transacting between buyers and sellers as “institutional voids.” That is, institutional voids are created from missing or inefficient and ineffective formal institutions. It should be noted that the institutional intermediaries could be governmental and/or private institutions (Khanna, Palepu, & Sinha, 2005; Miller, Lee, Chang, & Le Breton-Miller, 2009). For instance, governmental institutional intermediaries include arbitration mechanisms that resolve disputes quickly. As for private institutions, they include intermediaries such as credit card payment systems (e.g. online payments), online travel agents (e.g. Expedia), and some non-profit organization (e.g. AAA in the United States of America) (Khanna & Palepu, 2010).

Institutional voids hinder the proper functioning of markets and may lead to their failure (Khanna & Palepu, 1997; Khanna & Palepu, 2010). Information problems, misguided regulations, and inefficient judicial systems are the three main sources of institutional voids that might lead to market failure (Khanna & Palepu, 1997). First, adequate and reliable information is a must for buyers (e.g. investors, employers, and consumers) to evaluate the potential investments, services, and goods that might be at the core of their economic activities (Khanna & Palepu, 1997; C. B. Li & Li, 2008). Second, in emerging markets, regulators may pass misguided regulations that prioritize political goals over economic efficiency, thus derailing the proper

functioning of efficient markets (Khanna & Palepu, 1997). And third, even though emerging markets have developed some of the necessary formal institutions to encourage commerce, these markets are characterized by inefficient judicial systems (Khanna & Palepu, 1997). As a result, contracts may not be enforced in a predictable and reliable way, thus making the contracting parties reluctant to do business (Khanna & Palepu, 1997). In other words, in emerging markets, the weak judicial system is a type of institutional void and the failure to enforce contracts is the outcome.

In summary, institutional voids are the absence of proper markets intermediaries that ease transactions between buyers and sellers. Next, I discuss how the existence of institutional voids affects the quality and reliability of information, the enforcement of contracts (Khanna & Palepu, 1997), and thus increase transaction costs.

Institutional voids and transaction costs

The institutional economics approach emphasizes the important role that strong formal institutions play in reducing transaction costs (North, 1990). Transaction costs arise from drafting, negotiation, and renegotiation of the contracts that govern market transactions and, subsequently, from the costs of living with a contract after conditions have shifted so that abiding by the contract is no longer in the firm's best interests (Williamson, 1973, 1983, 1985). Drafting, negotiation, and renegotiation are necessary because of incomplete contracts and opportunism (Williamson, 1973, 1983, 1991). Contracts are incomplete for two reasons: "many contingencies are unforeseen (and even unforeseeable), and the adaptation of those contingencies that have been recognized and for which adjustments have been agreed to are often mistaken possibly because the parties acquire deeper knowledge of production and demand during contract execution than they possessed at the outset" (Nelson & Winter, 1982, pp. 96-136). In short,

individuals draft incomplete contracts because they have bounded rationality (Simon, 1972). Incomplete contracts allow some opportunistic individuals to take advantage of others (Williamson, 1973, 1991).

In developed markets, the degrees of information transparency are greater, the time to complete transactions is shorter, and the transaction costs are relatively lower than in emerging markets (Khanna & Palepu, 2010). In other words, emerging markets have higher numbers of institutional voids and thus higher transaction costs. That is, more institutional voids translate into less institutional intermediaries that play a critical role in easing economic transactions between buyers and sellers by reducing information asymmetry, enforcing contracts reliably, regulating markets fairly, and thus reducing opportunism and transaction costs (Khanna & Palepu, 2010; Williamson, 1973, 1991).

Political institutions are weak if they lack democratic balance, thus only giving advantage to members of the ruling political parties (Tsai, 2007), and resulting in citizens' distrust in such institutions (Ledeneva, 1998). Weak political institutions create institutional voids that impose restrictions on economic activities, thus creating instability and unpredictability in the institutional environment (Holmes et al., 2013; Puffer, McCarthy, & Boisot, 2010). For instance, weak political institutions weaken judicial authorities (Shleifer, 2005). These conditions increase transaction costs (McMillan & Woodruff, 1999), and foster corruption and bribery (Tonoyan et al., 2010).

Inefficient and weak regulatory institutions create institutional voids that result in insecure property and contractual rights, which increases opportunism and transaction costs (Ardagna & Lusardi, 2010). That is, buyers and sellers limited abilities to access and validate reliable information, transfer products among them, and safeguard their investment, increase

their fear of opportunism. As a result, to offset the increased risk of opportunism, buyers and sellers apply higher premiums that result in higher transaction costs.

Weak economic institutions create institutional voids that generate financial disadvantages (e.g. inability to secure financial resources) and intrusive rules and standards (e.g. stiff requirements to obtain bank loans) (Aldrich & Ruef, 2006; Batjargal, 2006). For instance, weak economic institutions are particularly harmful for start-up ventures because they constrain managers' access to debt and equity capital (Batjargal & Liu, 2004; Malesky & Taussig, 2009). As a result, managers have to pay premiums (e.g. higher interest rates) to access debt and equity capital, and that would automatically result in higher transaction costs.

The confluence of weak and inefficient formal institutions exaggerates conflicts and confusion within an institutional environment (Hancke, 2010; Ostrom, 2005a). That is, weak and inefficient formal institutions reinforce one another's negative effect (B. R. Schneider & Karcher, 2010; R. Wilson & Herzberg, 2000), impose contradictory rules, regulations, and standards on economic activities (Pache & Santos, 2010), lack proper mechanism to resolve conflicts (Ostrom, 2005a), and are mostly not stable (North & Shirley, 2008; Sobel & Coyne, 2011). As a result, the risk of conducting business is high in unstable institutional environments that are full of institutional voids (Acemoglu, Johnson, & Robinson, 2005; North & Shirley, 2008).

In summary, weak formal institutions create institutional voids that increase transaction costs. Before I discuss how managers in emerging markets deal with institutional voids, I first define the informal economy.

Informal economy

Formal and informal institutions are congruent for large groups in a society when formal institutions, which are the rules, regulations, and their supporting apparatuses (North, 1990), are compatible with the informal institutions, which are the values, norms, and beliefs (North, 1990) that define the socially acceptable behaviors of these large groups (Webb et al., 2009). However, individuals have different norms, values, and beliefs because of personal experiences, contextual elements, and dispositional characteristics (Meglino & Ravlin, 1998). As a result, some large groups in a society or entire communities, based on their norms, values, and beliefs, may come to the conclusion that some of their activities are legitimate even though these activities conflict with the dictates of formal institutions (Safran, 2003; Webb et al., 2009). For these large groups or entire communities, the formal and informal institutions are incongruent (Webb et al., 2009). In other words, for these large groups or entire communities, informal institutions substitute instead of complement formal institutions.

As the incongruence between formal and informal institutions increases, so does the gap between what is considered legal and what is considered legitimate, which in turn allows the emergence of informal economy (Webb et al., 2009). Drawing from anthropology, economics, sociology, and other social disciplines, Webb et al. (2009, p. 492) define informal economy “as a set of illegal yet legitimate (to some large groups) activities through which actors recognize and exploit opportunities.” It should be noted that in this definition Webb et al. (2009) refer to legal or illegal as specified by formal institutions, and to legitimate or illegitimate as specified by informal institutions. The illegality of informal economic activities surfaces because the means and/or ends used to conduct these activities do not comply with the mandates of formal institutions (Webb et al., 2009). As for legitimacy, it is defined by (Suchman, 1995, p. 574) as “a

generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions.”

Informal economy is not a transitory phase of emerging markets, but indeed is permanent (Neuwirth, 2011). The variation between formal and informal economy is continuous and not dichotomous as some previously thought (Chen, 2006; Zinnes, 2009). There are at least two factors that help explain the transition from informal to formal economy, where legal and legitimate economic activities dominate (Webb et al., 2009). The first factor is legislative efforts to embrace new technologies by acknowledging and accepting them, thus transitioning opportunities from the informal economy to the formal one (Besley & Burgess, 2004; Webb et al., 2009; Zinnes, 2009). For instance, Sellin (1963) described how lotteries, which were part of the informal economy of the United States, became part of its formal economy as laws became more tolerant to them. The second factor is the lobbying of large interest groups to shift the rules and regulations of formal institutions so that they align with their own norms, values, and beliefs (Aldrich & Fiol, 1994; Webb et al., 2009) An example is the lobbying in the United States to legalize the use of marijuana for medical purposes (Webb et al., 2009).

In summary, complex interactions between formal and informal institutions create a continuum of formal and informal economies in markets. That is, the more the formal and informal institutions are congruent, the more the formal economy prevails. But if formal and informal institutions are incongruent, an informal economy emerges (Webb et al., 2009).

Informal economy in emerging markets

In emerging markets, a significant amount of economic activities take place in the informal economy. F. Schneider and Enste (2002) estimated that approximately 40 percent of the

economic activities in emerging markets take place in the informal economy. The International Labor Organizations (ILO, 2004) offered similar statistics. For instance, employment in the informal economy constitutes 48 percent of total employment in North Africa, 51 percent of total employment in Latin America, 72 percent of total employment in Sub-Saharan Africa, and 65 percent of total employment in Asia (ILO, 2004).

The importance of the informal economy led some economists and management researchers from developed markets to theorize about the influence of the use of informal economy on the predictions of management theories that were developed and tested in developed markets. That is, management theories that are created in developed markets are based on the assumption that most of the economic activities take place in the formal economy. However, that is not the case in emerging markets, and management theories must be adjusted to reflect the reality that approximately 40 percent of economic activities take place in the informal economy (F. Schneider & Enste, 2002).

For example, “to explain the origin and use of the entrepreneurial process in the informal economy” Webb et al. (2009, p. 504) argue that at the macrolevel the incongruence of informal and formal institutions, and the weak enforcement of the latter’s rules and regulations, drive the informal economy in a given market. In particular, the authors propose that (1) the incongruence between informal and formal institutions strengthen the relationship between the entrepreneurial alertness and opportunity recognition stages of the entrepreneurial process. That is, entrepreneurs have different perspectives on legitimacy because of institutional incongruence. As a result, some entrepreneurs become more alert to and are more willing to recognize opportunities in the informal economy (Webb et al., 2009). Also, (2) the weak enforcement of formal institutions’ rules and regulations strengthen the relationship between opportunity recognition and

opportunity exploitation. That is, some entrepreneurs take advantage of the fact that they are not visible to weak enforcement by formal institutions to exploit their opportunities in the informal economy (Webb et al., 2009; Zimmerman, 2006).

Moreover, Webb et al. (2009) argue that at the mesolevel, the collective identity of cooperative groups strengthens relationships between (1) entrepreneurial alertness and opportunity recognition, and (2) opportunity recognition and opportunity exploitation stages of the entrepreneurial process in an informal economy. That is, the collective identities of cooperative groups, who share norms, values, and beliefs that are incongruent with formal institutions' legal requirement, increase the alertness and the ability of some entrepreneurs to recognize and exploit opportunities in the informal economy (Webb et al., 2009). Cooperative groups form collective identities through shared identification among members or through shared non-identification with formal institutions (Lounsbury & Glynn, 2001; Polletta & Jasper, 2001).

Economists and management researchers from developed markets also have learned relevant lessons about the importance of an informal economy in emerging markets. For instance, trust, a key governance tool used in the informal economy might be a source of competitive advantage in emerging markets (Barney & Hansen, 1994; Hosmer, 1994). Additionally, in emerging markets, firms combine formal and informal economic activities to compensate for the weakness of formal regulatory institutions (Khanna & Rivkin, 2001). Formal firms' desire to be legally protected and safeguarded by contracts does not hamper their abilities to use informal economic activities (Lazzarini, Miller, & Zenger, 2004). In particular, formal firms use their informal social capital and informal social ties to access and acquire resources that help them grow (Acquaah, 2007). Moreover, activities conducted in the informal economy provide flexibility for firms facing severe environmental turbulence (Carrera, Mesquita, Perkins,

& Vassolo, 2003; Saxenian, 2000). Overall, this research shows that factors that influence economic activity in developed markets, such as trust and social capital, take on expanded roles in emerging markets where the informal economy plays a larger role.

Economists and management researchers from developed markets also have learned about some of the reasons why firms conduct activities in the informal economy. From a legal perspective, firms may act informally out of guile (Williamson, 1985), or mere misunderstanding or ignorance (Alchian & Woodward, 1988). For instance, firms might avoid paying taxes because they might receive nothing in return and because there are no reliable tax revenue collection systems in emerging markets (McMillan, 2002; Zinnes, 2009). In this case, firms act informally not simply to avoid compliance but because they do not want to waste money (Godfrey, 2011; Turner, 2004). That is, the lack of tax revenue and the ability to cover up activities conducted in the informal economy by paying bribes (De Soto, 2000; W. G. Dyer & Mortensen, 2005; S. Johnson, Kaufmann, & Zoido-Lobaton, 1998) tempt managers to channel their economic activities to actors in the informal economy (Easterly, 2006). In other words, managers would rather conduct these activities in the informal economy and not pay taxes than conduct these activities in the formal economy. Another reason that might help explain why managers conduct activities in the informal economy is the fact that courts are weak. As a result, it is costly and it takes a long time to enforce contracts. To overcome this hurdle, managers revert to the informal economy because of the self-enforcing characteristic of informal arrangements (Bolton & Dewatripont, 2005) which reduces cost in two ways. First, because informal arrangements are self-enforcing, the parties involved in those arrangements might not have to rely on a third party to solve their dispute. And second, disputes occurring in self-enforcing arrangements might be solved quickly (Godfrey, 2011).

In Summary, in emerging markets, the informal economy constitutes a substantial part of total economy. Next, I discuss how managers use the informal economy to fill institutional voids.

How managers fill institutional voids

Managers fill institutional voids by filling the roles that should have been played by the missing institutional intermediaries. That is, managers rely on informal institutions and informal economy to substitute for information problems, misguided regulation, and inefficient judicial systems, the three sources of institutional voids (Khanna & Palepu, 2010). For instance, in India, many firms rely on traveling salespersons, who promote and sell the firms' products from the back of their trucks to reach remote villages that otherwise are difficult to reach because of limited communication diffusion (e.g. radio and television) (Khanna & Palepu, 2010). Moreover, managers fill institutional voids by conducting activities in the informal economy, knowing that these activities are not under the radar of formal institutions. The required institutional intermediaries that are supposed to control and regulate these activities are missing. For instance, in emerging markets, firms that provide credit scores are missing. As a result, managers rely on informal institutions (e.g. social ties with financial institutions) to acquire financial information that is otherwise not accessible to them. For example, in Lebanon, financial information about potential buyers, sellers, and partners is very hard to obtain due to bank secrecy laws. As a result, managers rely on their social ties with financial institutions to obtain information about potential buyers, sellers, and partners. That is, managers can obtain financial information through "friends" in the bank who secretively release information. "Friends" in the bank may not release financial figures, but they may advise whether or not to work with potential buyers, sellers, and partners. Managers also can obtain financial information through social ties outside of banks. For

example, managers may investigate the reputation and financial information of potential buyers, sellers, and partners through common social ties.

Additionally, managers protect their businesses against the strong, cumulative, and negative effects of weak and inefficient formal institutions by relying on their social ties to fill institutional voids (Holmes et al., 2013). That is, managers use their social ties as informal substitute channels to gain access to resources and non-redundant information (Batjargal, 2006; Kharkhordin & Gerber, 1994; Sedaitis, 1998; Webb et al., 2009), to facilitate transactions (Chang & Choi, 1988; Khanna & Palepu, 1997; Peng, 2003), and to obtain social and financial support (Batjargal, 2007; Burt, 1992; Malesky & Taussig, 2009; McMillan & Woodruff, 1999; Stam & Elfring, 2008). Moreover, managers rely on their social ties to re-enforce contracts, and to avoid rent seeking government officials (Batjargal, 2003a, 2003b; Batjargal et al., 2013; Frye, 2000; Frye & Shleifer, 1997). Another way for managers to protect their businesses against the strong, cumulative, and negative effect of weak and inefficient formal institutions is to engage in corruption (Tonoyan et al., 2010).

Luo and Chung (2013) found that in emerging markets families who combine ownership and strategic control of their firms (1) have better performance relative to non-family firms and other patterns of family control, and (2) are better in filling institutional voids. In particular, these results are more noticeable in industries where formal institutions are weaker (Luo & Chung, 2013) because “with poor investor protection, ownership concentration becomes a substitute for legal protection” (La Porta, Lopez-de-Silanes, Shleifer, & W., 1998, p. 1145). That is, business owners who also have strategic control over their firms conduct activities in the informal economy to reduce agency costs (Luo & Chung, 2013). In another study, Tonoyan et al. (2010) found that institutional voids in formal regulatory and economic institutions increase the

likelihood of getting involved in corruption. In sum, prior research reveals that, at the country level, economy-wide issues push economic activity either toward or away from informal economy. But prior research has not looked at individual transactions within firms. That is, prior research does not deal with the question of individual boundary decisions vis-a-vis placing activities in the informal versus formal economy.

The gap in the institutional economics and management research

Extant economics and management research explains at the country level the relationship between institutional voids and informal institutions and subsequently informal economy. In particular, we know that weak formal institutions create institutional voids (Khanna & Palepu, 1997; Khanna & Palepu, 2010), and institutional voids give room to the informal institutions to substitute for the missing market intermediaries (Batjargal et al., 2013; Chang & Choi, 1988; Khanna & Palepu, 1997; Peng, 2003).

At the country level, we know that institutional voids increase use of the informal economy. That is, we know, at the country level, why informal economies exist in emerging markets, and we know that managers use the informal economy to circumvent or take advantage of the weaknesses of the formal institutions to overcome the high transaction costs of using the formal economy. We also know that managers in emerging markets have the choice to use the formal and informal economy simultaneously. What we do know is what makes managers at the individual level conduct activities in the informal versus formal economy. That is, managers might conduct the same activity (e.g. employment) in the informal and formal economy simultaneously (i.e. some employees would be registered with relevant authorities while others are not). Managers also might conduct some of their activities in the formal economy, while conducting others in the informal economy. For example, a manager might register all of his

employees but at the same time sell and buy products and services without written contracts or receipts.

Therefore, what makes managers choose informal versus formal economy? Is it just a country level phenomenon? Or does it depend on particular managers' social ties and personalities? Prior research has not looked at individual boundary decisions within firms in emerging markets. Given that prior theory explaining boundary decisions relies on the presence of formal institutions that managers in emerging markets have the option to ignore, it seems that there is merit in building theory to explain why managers decide to conduct some activities in the formal versus informal economy when they have a choice. Such theory will help explain the use of informal economy at the firm level. Such theory is potentially important because it might help explain performance differences among firms in emerging markets. That is, it is important to know why managers conduct activities in the informal versus formal economies because this fact has at least two important implications that can help businesses and policy makers. First, in emerging markets some activities must be conducted in the informal economy. Second, large Western firms are ill suited to compete in these markets. That is, the strategies that large Western firms use in their home countries might fail if applied in emerging markets. For instance, large Western firms use strategies that are based on the fact that most activities should be conducted in the formal economy. However, in emerging markets a mix of activities conducted in the informal and formal economies might be required to achieve competitive advantage. As a result, large Western firms have to know (1) what activities they should conduct in the informal versus formal economy, and (2) how to do that.

CHAPTER THREE: THEORY AND HYPOTHESES

In emerging markets, the incongruence between informal and formal institutions creates an institutional environment characterized by ambiguity and uncertainty as to which economy (formal versus informal) managers should use to conduct economic activities (Batjargal et al., 2013; Heberer, 2003; North, 1990; Webb et al., 2009). That is, weak and inefficient formal institutions create institutional voids. Institutional voids render the institutional environment risky, adverse, deteriorating, and prone to conflicts (Batjargal et al., 2013). As a result, the formal economy is costly to use (Bank, 2010; Guseva & Rona-Tas, 2001; Hancke, 2010; North, 1990). For instance, businesses in emerging markets cannot operate effectively and efficiently because burdensome regulations hinder their relative freedom and do not offer them strong legal foundations for conducting activities in the formal economy (Bjørnskov & Foss, 2008; Nee, 2005; North & Shirley, 2008). In sum, institutional voids increase the transaction costs of the formal economy (Batjargal et al., 2013; Holmes et al., 2013; Khanna & Palepu, 1997; Khanna & Palepu, 2010).

Previous economic and management research reveals that, at the country level, weak and inefficient formal institutions create institutional voids that increase the transaction costs of using the formal economy (Batjargal et al., 2013; Holmes et al., 2013; Khanna & Palepu, 2010). As a result, managers in emerging markets use informal institutions to conduct activities in the informal economy at lower transaction costs (Batjargal et al., 2013). In other words, to cope with adversity due to the confluence of weak and inefficient formal institutions, managers in emerging

markets rely on their social ties (i.e. informal institutions) to conduct activities in the informal economy in order to fill institutional voids (Batjargal et al., 2013; North, 1990). That is, social ties free managers to rely less on the formal economy and the rules and enforcement of weak formal institutions. Without social ties to protect them, managers will follow the written rules of the weak formal institutions in order to minimize the probability that officials will single them out for enforcement. In order to be able to ignore the formal economy and to conduct activities in the informal economy, managers use their social ties to achieve legitimacy, and to access informal information and resources holders who operate in the informal economy (Batjargal et al., 2013; Deeg, 2005; Nee, 2005; North, 1990; Ostrom & Ahn, 2009).

In this study, I theorize that, at the firm level, managers in emerging markets use their social ties with formal institutions to protect the activities they conduct in the informal economy. That is, managers use their social ties with formal institutions to keep the transaction costs of the activities in the informal economy lower than the transaction costs would be for the same activities in the formal economy. In particular, social ties with formal economic institutions protect managers against being singled out for enforcement and protect them against potential opportunistic behaviors by business partners. In particular, opportunism, might take place in the informal economy because contracting parties cannot be held legally accountable. Being singled out for enforcement and potential opportunistic behaviors by business partners might increase the transaction costs of activities in the informal economy to the point where they are much higher than the transaction costs would be in the formal economy. Without these social ties, the use of informal economy might be inefficient, which can lead to different predictions from those of the institutional theory at the country level. In particular, we know that, at the country level, managers use informal institutions to conduct activities in the informal economy to fill

institutional voids. However, if managers are not confident that the transaction costs of using the informal economy will remain less than the transaction costs of conducting the same activity in the formal economy, the use of informal economy is not fully justified. To add to the justification of using informal economy, I theorize that, at the firm level, managers who have social ties with formal institutions have a higher propensity to use informal economy (i.e. conduct activities in the informal economy).

Accordingly, I theorize that not all managers who have social ties with formal institutions will use these ties to conduct activities in the informal economy. Further, I argue that managers with a promotion focus mindsets are more prone to use their social ties with formal institutions and to use the informal economy. Figure 1 depicts the model that I am hypothesizing.

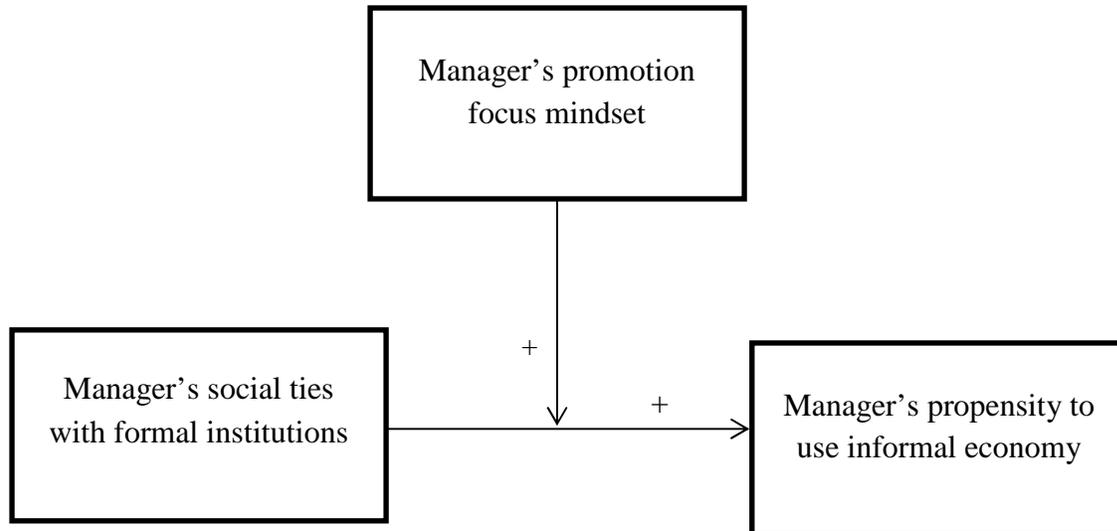


Figure 1: Hypothesized Model

Hypotheses

Problems of institutional voids

In emerging markets, institutional voids hinder economic transactions between buyers and sellers because institutional voids create information and contract enforcement problems (Khanna & Palepu, 2010). That is, reliable information is not easily accessible to buyers and sellers, and misguided regulations and inefficient judicial systems hamper contract enforcement (Khanna & Palepu, 1997). As a result, buyers and sellers in emerging markets distrust the formal institutions.

In particular, autocratic political institutions foster the creation of hostile institutional environments that are full of institutional voids that render the use of formal economy ineffective and inefficient. First, emerging markets are characterized by autocratic political institutions that lack transparency (Holmes et al., 2013). As a result, the relations between governments and businesses are governed by high uncertainty because of the inability of businesses to identify and conform to the unstable demands and priorities of governments (Hillman & Keim, 1995; Orr & Scott, 2008). Second, in autocratic political institutions the concentration of power is in the hands of few individuals, which enable government officials to manipulate these institutions (Holmes et al., 2013). That is, autocratic political institutions lack minimal checks and audit systems, which open the door for corrupt government officials to seek personal gains. Third, autocratic political institutions that can be manipulated by not only the few who hold power, but also by government officials, result in distrust in such institutions (Holmes et al., 2013; Ledeneva, 1998). That is, autocratic political institutions render the judicial authorities weak and inefficient (Shleifer, 2005), often restrict social activities (Batjargal, 2007; Tsai, 2007), tend to

increase corruption and bribery (Tonoyan et al., 2010), and often prioritize the benefits of the ruling political parties members and disadvantage nonmembers (Tsai, 2007).

Similarly, in emerging markets, interventionist regulatory institutions create institutional voids that foster the creation of hostile institutional environments that render the use of the formal economy ineffective and inefficient. That is, the procedures and policies of interventionist regulatory institutions, such as overly bureaucratic registration procedures, increase the transaction costs of the formal economy (Ardagna & Lusardi, 2010; Bank, 2010; Ostrom, 2005b). For instance, interventionist regulatory institutions lack the ability to enact policies to facilitate economic growth because they cannot interpret and enforce laws evenly so that they protect property and contractual rights, and promote public goods (Batjargal et al., 2013; Holmes et al., 2013). As a result, managers' abilities to generate and retain returns from their activities in the formal economy are unsure (Baumol, 1990; Desai, Gompers, & Lerner, 2003; Frye & Shleifer, 1997). Moreover, interventionist regulatory institutions may pass regulations that distort managers' incentives (Browning, 1976; Levine & Renelt, 1992). For example, interventionist regulatory institutions may introduce tight wage and price controls policies that not only introduce direct compliance costs on activities conducted in the formal economy but also (1) limit managers flexibility to adjust to changing markets conditions (Guthrie, 2006; Holmes et al., 2013; Saint-Paul, 2002; Tirole, 2003), and (2) reduce their ability and incentives to innovate (Begley, Tan, & Schoch, 2005; Zapalska & Edwards, 2001).

Finally, in emerging markets, weak economic institutions also create institutional voids that foster the creation of hostile institutional environments that render the use of formal economy ineffective and inefficient. That is, weak economic institutions, which control capital availability and market liquidity through monetary and fiscal policies, directly and indirectly

negatively affect managers' financial decisions (Aldrich & Ruef, 2006; Batjargal, 2006). For instance, weak economic institutions lack the ability to create and enforce fiscal and monetary policies that secure fair and sufficient access to equity (e.g. investment funds) and debt capital (e.g. loans) (Batjargal & Liu, 2004; Malesky & Taussig, 2009). Thus managers' abilities to grow their businesses is weakened because it reduces their working capital (LeLarge, Sraer, & Thesmar, 2010). Add to that, weak economic institutions lack the ability to create and enforce monetary and fiscal policies to balance market liquidity and to regulate foreign currencies and exchange rates (Batjargal et al., 2013; Tsai, 2002). That would simultaneously (1) hamper managers' abilities to grow their businesses, and (2) to import and export new technologies, raw materials, and products (Batjargal et al., 2013; Tsai, 2002).

Coping with the problems of institutional voids

Economic and management researchers have shown that, at the country level, managers in emerging markets rely on their social ties to overcome many deficiencies of formal institutions (i.e. to fill institutional voids). For instance, managers rely on their personal social ties to find alternative resources to increase revenue since the available support from formal institutions is deficient (Boettke, Coyne, & Leeson, 2008; Heberer, 2003). That is, managers mobilize their social ties to conduct activities in the informal economy to reduce transaction costs, to access financial resources, and to recognize new and efficient revenue opportunities (Aidis, Estrin, & Mickiewicz, 2008; Aoki, 1994; Batjargal, 2010; Granovetter, 1995; Tsai, 2002; Webb, Kistruck, Ireland, & Ketchen Jr, 2010).

Managers also revert to their social ties when their goals, intentions, and expectations do not line up with those of the formal institutional officials (Estrin & Prevezer, 2011). That is, in emerging markets formal institutional officials might become rent seekers since corruption is

prevalent (Baumol, 1990; Boettke et al., 2008). In order to evade the probable negative consequences of antagonistic and corrupt formal institutional officials, managers rely on their trusted social ties to conduct activities in the informal economy (Batjargal et al., 2013; Helmke & Levitsky, 2004; Ostrom & Ahn, 2009). For instance, managers may use their social ties to avoid paying illegal fees and bribes to corrupt formal institutional officials as long as the costs of using their social ties is lower than the potential cost of illegal fees and bribes (Batjargal, 2003b; H. Li, Meng, Wang, & Zhou, 2008; Volkov, 2002). Managers also rely on their trusted social ties to break barriers to entry (Guseva, 2007). For example, “whom you know” determines managers’ financial success and resource acquisition because personal loyalties, social ties and reciprocity take precedence in emerging markets (Guseva, 2007, p. 2; Tonoyan et al., 2010).

In summary, at the country level, the discrimination of and the mistrust in the autocratic political institutions make managers rely on their diverse private social ties to conduct activities in the informal economy (Batjargal, 2003b; McMillan & Woodruff, 1999; Ostrom, 2005a; Tsai, 2002). Moreover, to fill the institutional voids of interventionist regulatory institutions, managers in emerging markets rely on their diverse private social ties to conduct activities in the informal economy at lower transaction cost (Ardagna & Lusardi, 2010; Bank, 2010; McMillan & Woodruff, 1999; Ostrom, 2005b). Last, in emerging markets, managers rely on their diverse private social ties to access financial resources that are otherwise unavailable due to the inefficiencies and ineffectiveness of weak economic institutions (Batjargal, 2005; McMillan & Woodruff, 1999; Stam & Elfring, 2008).

Affiliations with formal institutions

However, at the firm level, managers who conduct activities in the informal economy might face higher transaction costs than what they would incur conducting the same transaction

in the formal economy. For instance, some economic and management researchers argue that opportunism (Williamson, 1973) is more likely to take place in an informal economy than in a formal economy for two reasons (Tonoyan et al., 2010). First, if corrupt formal institutional officials identify activities in the informal economy, the managers responsible for conducting these activities might have to pay bribes in order to keep the corrupt officials from charging them for violating rules, and potentially creating fines and penalties that are very steep (Tonoyan et al., 2010). However, in many instances the bribes might increase the transaction costs of activities conducted in the informal economy to the point where they become larger than the transaction costs of conducting the same activities in the formal economy (Della Porta & Vannucci, 1999), thus rendering the use of informal economy less profitable. Second, transaction costs in the informal economy might be higher than those in the formal economy because contracts are not legally enforceable, which increases the risks of opportunism (Husted, 1994; Lambsdorff, 2002b; Rose-Ackerman, 1999; Williamson, 1973). That is, the costs incurred by operating in the informal economy might turn into sunk costs (i.e. costs that cannot be recuperated) because the formal institutions do not back up activities conducted in the informal economy and thus the contracting parties cannot be legally held accountable.

In order for managers in emerging markets to accrue bigger profits from conducting activities in the informal economy, my theory is that managers have to have social ties with the political, regulatory, and economic formal institutions. Intuitively, one would think that managers who have social ties with formal institutions tend to conduct more activities in the formal economy. However, in emerging markets the reality is counterintuitive. That is, managers who have social ties with formal institutions tend to conduct more activities in the informal economy. In other words, managers mobilize their social ties with the formal institutions (1) to

protect the activities they conduct in the informal economy from corrupt officials, (2) to reduce the opportunistic behaviors of their counterparts (e.g. people with whom they conduct business), and (3) to access information and resources otherwise not accessible through formal institutions. As a result, managers are able to keep the transaction costs of the activities they conduct in the informal economy lower than the transaction costs would be in the formal economy.

I argue that, in emerging markets, social ties with autocratic political institutions increase the probability that managers would fill institutional voids by conducting activities in the informal economy. That is, managers would use their connections with autocratic political institutions (1) to protect the activities they conduct in the informal economy from the opportunistic behaviors of governmental officials and their counterparts (i.e. people with whom they conduct business), and (2) to access information and resources otherwise not accessible. Moreover, I argue that, in emerging markets, social ties with interventionist regulatory institutions increase the propensity that managers would fill institutional voids by conducting activities in the informal economy. That is, managers who have social ties with interventionist regulatory institutions, not only curb the latter's predatory prerogatives, but also gain access to resources and information (e.g. permissions and quotas) otherwise not accessible (Batjargal, 2003a, 2003b, 2010; Frye & Shleifer, 1997). Last, I argue that in emerging markets, social ties with economic institutions increase the propensity that managers would fill institutional voids by conducting activities in the informal economy. That is, managers would mobilize their social ties with economic institutions to have preferential treatments (i.e. get priority to governmental loans) and to protect the activities they conduct in the informal economy.

In summary, I argue that in emerging markets, managers' social ties with formal institutions (political, regulatory, and economic) increase the propensity that managers would conduct activities in the informal economy. That would lead to the first hypothesis:

Hypothesis 1: Managers who have social ties with formal institutions have a higher propensity to use the informal economy to fill institutional voids.

Managers' personalities

Nevertheless, not all managers, who have social ties with formal institutions, use these social ties to conduct activities in the informal economy to fill institutional voids. Indeed, managers' personalities likely play a role as to whether they would mobilize their social ties with formal institutions. There is abundance of evidence that managers have a profound impact on firms' strategies and performances (Child, 1972; Hambrick & Mason, 1984; Nadkarni & Herrmann, 2010; Peterson, Smith, Martorana, & Owens, 2003). Actually, understanding managers' effects on firms' strategies and performances is fundamental to organizational science because managers sit at the top of firms' hierarchies, and their actions affect entire firms (Bertrand & Schoar, 2003; Hambrick & Quigley, 2014; Lieberman & O'Connor, 1972; Mackey, 2008; Rumelt, 2011).

Hambrick and Mason (1984) introduced Upper Echelons Theory to describe how managers impact firms' strategies and performance. In this theory, Hambrick and Mason (1984) propose that personalities, values, experiences, and other individual factors affect managers' actions and choices. That is, managers interpret their situations through lenses formed by highly personalized attributes, and they use these interpretations to guide their actions (Gerstner, König, Enders, & Hambrick, 2013). It should be noted that upper echelon researchers do not assume that managers single-handedly make all strategic decisions, but these researchers particularly focus

on managers' effects on firms' strategies and performances (Gerstner et al., 2013). That is, aside from helping to formulate strategic ideas, managers also accept or reject initiatives and project proposals advanced by other members of the firm (Burgelman, 1983). Moreover, through hiring and firing of employees, paying incentives, and changing the firms' structural arrangements, managers either encourage or discourage others to generate and promote initiatives and project proposals (Bower, 1970; Burgelman, 2002; Gerstner et al., 2013). In sum, according to upper echelon theory, managers directly and indirectly influence the strategies and performances of firms.

Regulatory focus theory

One particularly intriguing personality dimension that has been theorized to influence managers' actions and decisions is the promotion versus prevention focus mindset (Brockner, Higgins, & Low, 2004). Indeed, Brockner et al. (2004) argue that the regulatory focus theory offers a framework to better understand the behaviors, beliefs, and motives that ultimately dictate when and why managers would be more or less successful. The regulatory focus theory (RFT) departs from a well-established law of human behavior that posits that people have a tendency to seek pleasure and avoid pain (Brockner et al., 2004; Higgins, 1998; Higgins et al., 1997). J. P. Meyer, Becker, and Vandenberghe (2004, p. 996) explain that RFT stems from the "notion that people are motivated to minimize discrepancies between actual and desired end states (i.e., seek pleasure) and maximize the discrepancies between actual and undesired end states (i.e., avoid pain)". Specifically, an individual with a promotion focus has an orientation toward seeking pleasure, whereas an individual with a prevention focus has an orientation toward avoiding pain (Higgins, 1998; Higgins et al., 1997). Promotion focus and prevention focus are two orthogonal

mindsets; they stem from different causes and result in different behaviors (Brockner & Higgins, 2001; Higgins, 1998; Higgins et al., 1997; Neubert, Kacmar, Carlson, Chonko, & Roberts, 2008).

Promotion focus and prevention focus mindsets differ along three dimensions: “(1) the underlying motives people are trying to satisfy, (2) the nature of the goals or standards that they are trying to attain, and (3) the types of outcomes that are salient to people” (Brockner et al., 2004, p. 204). That is, on one extreme, promotion focused individuals are more likely to focus attention on (1) nurturance needs (e.g. growth and advancement needs), (2) hopes and aspirations, and (3) gains (Higgins, Roney, Crowe, & Hymes, 1994; Shah, Higgins, & Friedman, 1998). On the other extreme, prevention focused individuals are more likely to focus attention on (1) security and safety needs, (2) rules and responsibilities, and (3) losses (Higgins et al., 1994; Shah et al., 1998).

The regulatory focus orientations of individuals are contingent on dispositional and situational factors (Brockner et al., 2004; Higgins, 1998; Higgins et al., 1997). Dispositional factors are influenced by the individual’s psychological state (Friedman & Förster, 2001; Liberman, Idson, Camacho, & Higgins, 1999), early life experiences (Higgins, 1998; Higgins et al., 1997), and personality (Wallace & Chen, 2006). As for situational factors, some situational cues may induce a promotion mindset when these cues emphasize nurturance needs, hopes and aspiration, and gains. Other situational cues may induce a prevention focus mindset when these cues emphasize security and safety needs, rules and responsibilities, and losses (Higgins, 1998; Higgins et al., 1997; Neubert et al., 2008). For instance, emerging markets constitute a situational factor where between 40 and 70 percent of all economic activities are informal (F. Schneider & Enste, 2002). Informal economic activities are risky since they are illegal but legitimate (Webb et al., 2009). As a result, managers who conduct activities in the informal economy are at risk of

being singled out for enforcement and of potential opportunistic behaviors by business partners. Consequently, manager who conduct risky activities in the informal economy have to have high nurturance needs, high hopes and aspiration, and have to be enticed by gains. In other words, in emerging markets, managers who have a promotion focus mindset have a better situational fit to conduct activities in the informal economy.

In sum, I theorize that, in emerging markets, promotion-focused managers are more prone (1) to use their social ties with formal institutions and (2) to conduct activities in the informal economy. That is, promotion-focused managers, who are energized by success and de-energized by failure (Idson et al., 2000), and who are motivated by gains (i.e. reduce transaction costs), are more prone to use risky strategies (i.e. conduct activities in the informal economy). In other words, promotion-focused managers, who focus on gains and success, are more prone to assume the risks of conducting activities in the informal economy (i.e. being singled out for enforcement and the potential opportunistic behaviors by business partners) to fill institutional voids.

Based on that, I hypothesize the following:

Hypothesis 2: Promotion focus mindset moderates the relationship between manager's social ties with formal institutions(a-political, b-regulatory, c-economic) and manager's propensity to use informal economy such that the relationship between having social ties with formal institutions and using the informal economy is stronger for managers who have a promotion focus mindset.

In this chapter, I propose to build theory to explain how managers fill institutional voids. In particular, I argue that managers who have social ties with formal institutions have a higher propensity to fill the institutional voids with activities conducted in the informal economy.

Moreover, I hypothesize about how managers' regulatory focus might change the predictions of my theory.

CHAPTER FOUR: METHODS

In this chapter, I set forth the procedures to test the hypotheses. In the first section, I describe the data source and the recommended sample size. In the second section, I describe and explain the data collection strategy. In the third section, I describe the measures of the dependent variable, the independent variable, the moderator, and the control variables. In the final section, I propose methods to validate the scales, to test for non-response bias, to test for common method variance, and to test for the main and interaction effects.

Data Source and Sample Size

I chose Lebanon as the country context for this study for three reasons. First, Lebanon is an emerging country (Bank, 2010). Second, Lebanon has a republic government type that has an executive branch, legislative branch, and judicial branch (Factbook, 2010). The executive branch is the chief of the state (the Lebanese president), the head of the government (Prime minister), and cabinet members (ministers chosen by the prime minister in consultation with members of the National Assembly and the president of Lebanon) (Factbook, 2010). The legislative branch is the National Assembly or the Lebanese parliament. Members of the Lebanese parliament are elected by popular vote (Factbook, 2010). The judicial branch is the Court of Cassation or Supreme Court and the Constitutional Council (Factbook, 2010). Third, Lebanon has a free-market economy and strong commercial tradition of laissez-faire (Factbook, 2010). That is, Lebanon's overall economy is a mix of formal economy and informal economy. For instance, the

government encourages foreign investment. However, the institutional environment suffers from “red tape, corruption, arbitrary licensing decisions, complex customs procedures, high taxes, tariffs, and fees, archaic legislation, and weak intellectual property rights” (Factbook, 2010).

Data Source

The data for this study was collected in Lebanon using an online survey. The online survey asked managers of businesses to respond to a series of questions about their businesses using validated scales, new items intended to develop into new scales, and demographic questions. Data collected through the survey allowed me to analyze the relationship between manager’s social ties with formal institutions and manager’s propensity to use informal economy. Moreover, the data allowed me to analyze how manager’s promotion-focused mindset affects this relationship.

Sample Size

I conduct this study with the hope on finding evidence that suggests I should reject the null hypothesis (H_0) that there is no significant relationship between manager’s social ties with formal institutions and manager’s propensity to use the informal economy. Thus, I could conclude in favor of the alternative hypothesis (H_a) that there is a significant relationship between manager’s social ties with formal institutions and manager’s propensity to use informal economy. In order to reject (H_0) and accept (H_a) with confidence, I need a sample size that is sufficient to generate enough statistical power.

In this study, I used hierarchical moderated regression to analyze the interaction of manager’s social ties with formal institutions and manager’s promotion focus mindset on manager’s propensity to use informal economy. I also used structural equation modeling (SEM) to conduct a confirmatory factor analysis (CFA) on the items of two constructs: manager’s social

ties with formal institutions and manager's propensity to use informal economy. I also used SEM to test for common method variance. Next, I discuss the sample requirement for each analysis

Required sample size for regression

Three factors should be taken into consideration to compute the required sample size for regressions: power, alpha level, and effect size. Power is probability of rejecting H_0 in favor of H_a when H_a is true. Power is $(1-\beta)$, in which β is the probability of Type II error. That is, the probability of accepting a false null hypothesis. Conventionally, the standard power is set to 0.80 (Cohen, 1988) in behavioral studies. The significance level, Alpha (α), is the level of acceptable risk of making Type I error (rejecting H_0 when it is true). In organizational research, $\alpha = .05$ is commonly used (Ferguson & Ketchen Jr, 1999). The effect size is the extent to which the independent and dependent variables are related. In this study, I am being conservative. Thus, I assume a small effect size (i.e. $r = 0.15$). Cohen (1988) suggests that an effect size of .20 ($r = .2$) is small, but he also acknowledges that this number is arbitrary.

Accordingly, when the number of predictors is known along with power, alpha, and effect size, the required sample size can be computed (Cohen, 1988; Green, 1991). For this study, I have 32 predictors: 17 dummy variables for control variables, 12 control variables, one independent variable, one moderator, and one interaction term. As a result the minimum required sample size is 192.

Required sample size for SEM

Since I am using formative items to measure manager's propensity to use informal economy, and reflective items to measure manager's social ties with formal institutions, and since I am not aware of any established scales to measure these constructs I started with thirteen items for informal economy (representing four facets: employment, suppliers, customers, and

government), nine items for political institutions, six items for regulatory institutions and four items for economic institutions. As a result, the minimum required sample sizes to conduct exploratory factor analysis and confirmatory factor analysis on the 13 items of the manager's propensity to use informal economy scale and on the 19 items of the manager's social ties with formal institutions scale are 65 and 95 respectively. Therefore, the minimum required sample size to conduct all required analyses (regression and SEM) is 352. Of the 352 cases, a sample of 192 will be drawn to run the regression analyses; another sample of 65 will be drawn to run the EFA and CFA analyses for the items associated with the manager's propensity to use informal economy scale. A final sample of 95 will be drawn to run an EFA and CFA on the items associated with the manager's social ties with formal institutions scale.

A total of 206 observations were collected from owners and managers that engage in business activities in Lebanon. Of the 206 respondents, 62.1% are males; the average age is 38.68 years. Although not ideal, a sample size of 206 allowed me to conduct all the analyses. That is, I randomly split my sample of 206 Lebanese respondents into two samples: sample 1 consisting of 102 responses and sample 2 consisting of 104 responses. For the 102 respondents from sample 1, 68.6% are males, and the average age is 40.45 years. For the 104 respondents from sample 2, 55.8% are males, and the average age is 36.94 years. Samples 1 and 2 meet the minimum required sample sizes to run the EFAs and CFAs on the items of the two scales. Moreover, I used the whole sample (N=206) to run the regression analysis.

Data Collection Strategy

I solicited responses from managers of businesses in Lebanon. This study was open to all Lebanese managers age 19 and over regardless of their gender, ethnic backgrounds, social status, religion, health status, etc. Vulnerable populations were not targeted. I sent emails to managers in

Lebanon informing them about the purpose of the project and directing them to the Qualtrics online survey. All email, consent information, and surveys were sent in English and all participants completed the surveys in English. Upon reading the informed consent and before starting the survey, respondents were asked to select “Agree.” I did not collect identifying information and I do not have access to the identity of the respondent during this project. The survey should take approximately 10-15 minutes to complete. The respondents will remain anonymous.

Measures

Dependent variable. I use the manager’s propensity to use informal economy to capture which activities in the informal economy managers conduct at the firm level. Guided by Webb et al. (2009)’s definition of an informal economy (e.g., set of illegal yet legitimate economic activities); I used a deductive approach to generate items for activities conducted in the informal economy pertaining to employment, suppliers, customers, and government. Next, with the help of two management professors at the University of Alabama, we adjusted the wording until we believed the items reflected these four categories of activities conducted in the informal economy of Lebanon. It should be noted that by definition the informal economy is context dependent. That is, what is illegal and legitimate in one country might not be the same in another country. For example, alcohol trading is legal and legitimate in Lebanon; it is illegal and legitimate in some Gulf countries, and illegal and illegitimate in other countries.

Content adequacy. At this stage, it was important to undertake a content adequacy test to make sure that the items I have developed adequately reflect the theoretical construct (Schriesheim, Powers, Scandura, Gardiner, & Lankau, 1993). I provided a group of twenty managers from Lebanon with the definition of informal economy. I then gave them the items that

I developed and asked them to read each item and to determine which of the four categories (employment, suppliers, customers, and government) into the construct it represents. I dropped items that did not fit into any of the four categories (employment, suppliers, customers, and government). After several iterations, I ended up with thirteen items. The use of managers as content adequacy raters is acceptable because they are free from potential bias and they possess sufficient intellectual ability (Schriesheim et al., 1993). Table 1 summarizes the items representing the four categories of informal economic activities. Note: In the methods section I discuss the remaining steps associated with validating this scale.

Table 1: Items Used to Measure Manager’s Propensity to Use Informal Economy

1. To what extent does your company employ without written contracts? (Employment)
2. To what extent does your company pay taxes on employment? (Employment)
3. To what extent does your company register employees with the social security? (Employment)
4. To what extent does your company buy from suppliers without written receipts? (Suppliers)
5. To what extent does your company buy from suppliers without written purchase invoice? (Suppliers)
6. To what extent does your company buy illegal yet legitimate products (example: copies of software...)? (Suppliers)
7. To what extent does your company sell to customers without written receipts? (Customers)
8. To what extent does your company sell to customers without written sales invoice? (Customers)
9. To what extent does your company sell illegal yet legitimate products (example: copies of software...)? (Customers)
10. To what extent does your company conduct business activities without obtaining permits from relevant authorities? (Government)
11. To what extent does your company conduct business activities that are not registered with the relevant authorities? (Government)
12. To what extent does your company pay illegal fees to receive business permits from governmental institutions? (Government)
13. To what extent do you have to pay government officials more than the required registration and/ or permits expenses? (Government)

7 points Likert scale: very small to very large

Independent variable. I use manager's social ties with formal institutions to capture managers' perceptions of social ties with major personnel in political, regulatory, and economic formal institutions. Guided by the categorization of Holmes et al. (2013) of the formal institutions, I used a deductive approach to generate items that represent manager's social ties with the political, regulatory, and economic institutions. Next, with the help of two management professors at the University of Alabama, we adjusted the wording until we believed the items reflected the managers' social ties with formal institutions construct. It should be noted that by definition the formal institutions are context dependent. That is, depending on the country's government type and legal system, the political, regulatory and economic institutions might have different roles.

Content adequacy. At this stage, it was important to undertake a content adequacy test to make sure that the items I developed adequately compose the theoretical construct (Schriesheim et al., 1993). I provided a group of five lawyers from Lebanon with the categorization of formal institutions. I got their agreement that the Lebanese formal institutions fall within Holmes et al. (2013) categorization of political, regulatory, and economic institutions. I then gave them the items I developed and asked them to read each item and to determine which of the three categories it represents. I dropped items that could not be classified into one of the three formal institutions (i.e. the lawyers had to agree on matching of all the items). After several iterations, the breakdown of items to category is as follows: nine items for political institutions, six items for regulatory institutions and four items for economic institutions. The use of lawyers as content adequacy raters is acceptable because they possess sufficient knowledge about the content and context areas for the study (Schriesheim et al., 1993). Table 2 summarizes the items representing

manager's social ties as classified within the three categories of formal institutions. Note: In the methods section I discuss the remaining steps associated with validating this scale.

Table 2: Items Used to Measure Manager's Social Ties with Political, Regulatory, and Economic Institutions

To what extent do you or a member(s) of the top management team believe that you have social and/ or personal relationships with?
<ol style="list-style-type: none"> 1. A member of the Lebanese parliament. (Political institutions) 2. The Speaker of the Lebanese parliament. (Political institutions) 3. A Lebanese politician. (political institutions) 4. A highly ranked member of an influential Lebanese political party. (Political institutions) 5. A highly ranked member of a powerful Lebanese union (example: labor union). (Political institutions) 6. The president of Lebanon. (Political institutions) 7. The prime minister of Lebanon. (Political institutions) 8. Commander of the Lebanese armed forces. (Political institutions) 9. Commander of the Lebanese internal security forces. (Political institutions)
<ol style="list-style-type: none"> 10. A highly ranked member at one of the councils of the prime minister of Lebanon (examples: economic and social council, investment development authority of Lebanon...). (Regulatory institutions) 11. A Lebanese minister. (Regulatory institutions) 12. A highly ranked member at a Lebanese ministry. (Regulatory institutions) 13. A highly ranked member at the council for development and reconstruction. (Regulatory institutions) 14. One of the deputies of the governor of the central bank of Lebanon. (Regulatory institutions) 15. The governor of the central bank of Lebanon. (Regulatory institutions)
<ol style="list-style-type: none"> 16. A highly ranked member at the chamber of commerce of Lebanon. (Economic institutions) 17. A highly ranked member at the association of Lebanese industrialists. (Economic institutions) 18. A highly ranked member at the association of banks in Lebanon. (Economic institutions) 19. A highly ranked member at a Lebanese banker. (Economic institutions)

7 points Likert scale: very small to very large

Moderator. I use manager's promotion focus mindset as a moderator of the relationship between manager's social ties with formal institutions and the manager's propensity to use informal economy. I use the validated Work Regulatory Focus (WRF) scale (Neubert et al.,

2008). I should be noted that the original scale is a 5-point Likert scale, but in this study I rescaled it to 7-point Likert scale. Following the guidelines recommended by (Dawes, 2008), rescaling is not a problem since 5 and 7-point scales produce the mean, skewness, or kurtosis. Additionally, through personal communication and approval from one of the original authors on the Neubert et al. (2008) manuscript, I was further able to adjust the wording of some items to the Lebanese context. Table 3 summarizes the items of the WRF scale.

Table 3: Work Regulatory Focus (WRF) Scale

Select the best answer that BEST describes you AS YOU REALLY ARE (7 points Likert scale: strongly disagree to strongly agree)
<ol style="list-style-type: none"> 1. I concentrate on completing my work correctly to increase my business' security. (Security) 2. I focus my attention on completing my responsibilities. (Oughts) 3. Fulfilling my work is very important to me. (Oughts) 4. I strive to live up to my responsibilities and duties. (Oughts) 5. I am often focused on accomplishing tasks that will support my need for security. (Security) 6. I do everything I can to avoid loss. (Losses) 7. Smooth and regular cash flows are important to me than when assessing ways to grow my business. (Security) 8. I focus my attention on avoiding failure. (Losses) 9. I am very careful to avoid exposing myself to potential losses. (Losses) 10. I take chances to maximize my business goals. (Gains) 11. I tend to take business risks in order to achieve success. (Gains) 12. If I had an opportunity to participate on a high-risk, high-reward project I would definitely take it. (Gains) 13. If my business did not allow for advancement, I would likely start a new one. (Achievement) 14. A chance to grow is an important factor for me when looking for a new business. (Achievement) 15. I focus on accomplishing business tasks that will further my business growth. (Achievement) 16. I spend a great deal of time envisioning how to fulfill my aspirations. (Ideals) 17. My business priorities are impacted by a clear picture of what I aspire to be. (Ideals) 18. I am motivated by my hopes and aspirations. (Ideals)

Control variables.

Firm age. I control for firm age measured as number of years since the date of founding. This helps control for the fluctuations in macroeconomic conditions that might affect the use of an informal economy tactics (Wade, Porac, Pollock, & Graffin, 2006). For instance, a civil war took place in Lebanon between 1975 and 1990. Most firms that were founded during that period of time conducted activities in the informal economy as a result of the prevailing macroeconomic conditions. This means that managers who started or learned to do business during the civil war might have a different way of conducting business than those who do not have this experience.

Firm size. I also control for firm size measured as the number of registered and not registered employees. It is important to control for firm size because the literature on the base of the pyramid (BoP) markets suggests that small firms slip under the radar of formal institutions and thus conduct more activities in the informal economy (Godfrey, 2011; Khanna & Palepu, 2010).

Manager's age. Manager's age is measured as years since he/she was born. It is important to control for manager's age for the same reason as a firm's age. That is, managers who learned to do business during the civil war years of Lebanon might have a different way of conducting business than those who do not have this experience.

Manager's gender. Manager's gender is coded using a categorical variable (1 for male and 2 for female). In some emerging markets, women are not allowed to work, advance their careers, or own businesses. As a result, in some emerging markets, women are restricted to conduct activities in the informal economy in order to do business (Khanna & Palepu, 2010).

Manager's education. Manager's education is coded as 1-high school diploma, 2-associate degree, 3-bachelor's degree, 4-master's degree, 5- PhD or MD. I control for manager's

education because it might affect the way a manager conducts economic activities. That is, managers who received higher education are more prone to conduct activities in the formal economy. For example, managers, who obtained higher education degrees (e.g. masters and PhD) from developed markets, not only better understand the crucial role of formal institutions and economy, but also they get accustomed to the way activities are conducted in developed markets (i.e. in the formal economy). Moreover, managers who have higher education have access to higher positions. As a result, managers who have higher education have higher propensities to affect the strategies of their firms (i.e. like where to conduct economic activities)

Manager's fluency in English. I control for fluency in English because English is not the primary language of Lebanon. That is, I control for fluency in English to make sure that managers comprehend the survey.

Manager's tenure. I control for manager's tenure in the current job and manager's tenure in the current firm (both measured as number of years). As tenure increases, managers gain more expertise and influence, making the firm more dependent on them (Hill & Phan, 1991; Westphal, 1998). Moreover, as tenure increases, managers gain more expertise as to how and where their firms should conduct economic activities.

Manager's position. Originally, manager's position was coded as one dummy for owner or not, and one variable that takes the values 1- other, 2- administrative assistant, 3- manager, and 4- CEO. Managers sit at the top of firms' hierarchies and they have a profound impact on firms' strategies and performances (Child, 1972; Hambrick & Mason, 1984; Nadkarni & Herrmann, 2010; Peterson et al., 2003). After conducting preliminary analysis, I recoded manager's position as six dummy variables: Owner, CEO, owner and CEO, manager, administrative assistant, and others.

Manager's religion. It is important to control for manager's religion for two reasons. First, in Lebanon the positions in the formal institutions are directly related to religion (*Factbook, 2010*). For instance, the president of Lebanon has to be Christian Maronite by the constitution. Second, different religions have different rules regarding women's work. For instance, some sects of Muslim do not allow women to work.

Industry. I control for it using the North American Industry Classification system. This system is used by federal statistical agencies in classifying business establishments operating in the United States business economy. Industry is coded from 1 to 10 to capture the 10 major industry sectors in the economy (e.g. 1- Agriculture, Forestry, Fishing and Hunting, and 2- Mining, Quarrying, and Oil and Gas Extraction...). In emerging markets, some industries are better regulated than others (Batjargal et al., 2013; Holmes et al., 2013; Khanna & Palepu, 2010). That is, in some industries, managers have more flexibility to conduct activities in the informal economy.

Environmental dynamism. Environmental dynamism represents the rate of change in the environment. I control for environmental dynamism using Miller and Friesen (1982) scale because it reflects the industry environment (Batjargal et al., 2013), which might affect manager's propensity to use the informal economy. That is, managers might conduct more activities in the informal economy in dynamic environments.

Environmental hostility. Environmental hostility represents the rate of hostility of the environment. That is, the rate of difficulty to thrive in a particular environment. I control for environmental hostility using Miller and Friesen (1982) scale because it reflects the industry environment (Batjargal et al., 2013), which might affect manager's propensity to use the informal economy. For instance, aggressive government intervention contributes to

environmental hostility. In particular, aggressive government intervention creates and imposes stiff rules and regulations. To evade the latter, managers might conduct activities in the informal economy.

Human and physical asset specificity. Asset specificity is the degree to which an asset can be redeployed once it is already in use (Williamson, 1973). I control for assets specificity using Klein, Frazier, and Roth (1990) scale. It is important to control for assets specificity because it affects the boundary of firms by affecting the make or buy decisions. Make or buy can both be conducted in the informal and formal economy simultaneously. For instance, managers can use formal and informal employment, and they can buy products from the formal or informal economy.

Manager's networking ability. Luthans, Hodgetts, and Rosenkrantz (1988, pp. 119-120) defined networking as “a system of interconnected or cooperating individuals. It is closely associated with the dynamics of power and the use of social and political skills.” I control for manager's networking ability using Ferris et al. (2005) scale. It is important to control for manager's networking ability because it affects a manager's access to informal institutions, which affects the use of informal economy at the country level (Batjargal et al., 2013; Holmes et al., 2013). Table 4 summarizes the asset specificity, environmental dynamism and hostility, and networking ability scales.

Table 4: Asset Specificity, Environmental Dynamism, Environmental Hostility, and Networking Ability Scales

<p><i>Asset specificity (Human and physical) Scale (Klein et al., 1990)</i> Six items, 7-point scale (1 = strongly disagree, 7 = strongly agree) Do you agree that?</p> <ol style="list-style-type: none">1. It is difficult for an outsider to learn our ways of doing things. (Human)2. In your business, a salesman has to take a lot of time to get to know the customers. (Human)
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<ol style="list-style-type: none"> 3. It takes a long time for a salesman to learn about our product thoroughly. (Human) 4. A salesman's inside information on our procedures would be very helpful to our competitors. (Human) 5. Specialized facilities are needed to market our product. (physical) 6. A large investment in equipment and facilities is needed to market our product. (Physical)
<p><i>Environmental dynamism scale (Miller & Friesen, 1982)</i> 7-point scale (1 = strongly disagree, 7 = strongly agree) In your main industry, do you agree that:</p> <ol style="list-style-type: none"> 1. Your firm rarely changes its marketing practices to keep up with the market and competitors. 2. The rate at which products/services are becoming obsolete in the industry is very slow. 3. Actions of competitors are quite easy to predict. 4. Demand and consumer tastes are fairly easy to forecast. 5. The production/service technology is not subject to very much change and is well established.
<p><i>Environmental hostility scale (Miller & Friesen, 1982)</i> 7-points Likert scale (1 = strongly disagree, 7 = strongly agree) In your main industry, do you agree that:</p> <ol style="list-style-type: none"> 1. The environment causes a great deal of threat to the survival of your firm. 2. There is tough price competition. 3. There is competition in product quality or novelty. 4. There are declining markets for products. 5. There is scarce supply for labor/material. 6. There is government interference.
<p><i>Networking ability (alpha= 0.87) (Ferris et al., 2005)</i> 7-points Likert scale (1 = strongly disagree, 7 = strongly agree)</p> <ol style="list-style-type: none"> 1. I spend a lot of time and effort networking with others. 2. I am good at building relationships with influential people. 3. I have developed a large network of colleagues and associates whom I can call on for support when I really need to get things done. 4. I know a lot of important people and am well connected. 5. I spend a lot of time developing connections with others. 6. I am good at using my connections and network to make things happen.

Methods

Scale Validation. The third step of the scale development process is to assess the validity of the scale. This was done in SPSS 22 using sample 1 dataset. The process involved, first performing an exploratory factor analysis (EFA) with principal axis factor (PAF) constrained

with an Oblimin rotation to determine the underlying composition of the items that make up the constructs manager's social ties with formal institutions. I used PAF because it assumes measurement errors, includes only the variance that is shared by all indicators, and treats items as reflective indicators. I used an Oblimin rotation because it was expected that factors would correlate within this study. Using sample 2 and SPSS 22, I ran an exploratory factor analysis (EFA) with principal components (PC) constrained with an Oblimin rotation to determine the underlying composition of the items that make up the constructs manager's propensity to use informal economy. I used PC because it assumes factoring facets of the same construct rather than items that tap an overall general factor. It also assumes that the items are formative. Moreover, I also used PC because my purpose was to reduce the data to locate the minimum number of items and factors that explains the most variance. I used oblimin rotation because it assumes that the factors are correlated. Then, I ran reliability analysis (Cronbach's alpha).

The fourth step is to run a confirmatory factor analysis (CFA). Gaining an *a priori* notion of the factor structure of the constructs by having run an EFA, I then ran a confirmatory factor analysis (CFA) to confirm the results. Using LISREL 8.8 and the means, standard deviations, and correlations as input, I examined the factor structures that compose the two constructs (manager's propensity to use informal economy and manager's social ties with formal institutions). In particular, using sample 2 I ran a CFA on manager's social ties with formal institutions scale, and using sample 1 I ran a CFA on manager's propensity to use informal economy. Moreover, I reported the reliability of the newly developed scales, typically Cronbach alpha higher than 0.75 is acceptable (Schwab, 1980, 2005).

The final step in the scale development involves scale evaluation to demonstrate the validity of the newly developed scale. In order to do that, I conducted convergent, discriminant

and predictive validities of the scales. Convergent validity is used to test if different scales of the same construct converge. In order to demonstrate the discriminant validities of manager's propensity to use informal economy and manager's social ties with formal institutions, I used the Fornell and Larcker (1981) methodology. This involves calculating the square root of the average variance explained (AVE) for all the variables and them along the diagonal of the construct correlations table. The square root of the average variance explained represents the variance accounted for by the items that compose the scale. To demonstrate discriminant validity, this value should be greater than the latent variable correlations in the same row and column. For instance, if it is greater, there is a strong indication that the amount of variance within the scale (explained by the items) is greater than the amount of variance between two variables (the correlation). And last, predictive validity is used to test how well a scale predicts other key variables. The correlations should give a good indication whether predictive validity exists because correlations will tell how linearly related the scales are.

Non-response bias. One way to assess non-response is to compare early respondents to late respondents' answers (Schwab, 1999). This method assumes that late respondents are more representative of non-respondents because they would not have taken the survey without an additional prompting (Schwab, 1999). Specifically, in this study, two waves of emails were sent one week apart. Using the sent date as criteria, I split the sample into two samples: early respondents and late respondents. I then conducted means comparison test to check for non-response bias.

Common Method Variance (CMV). In this study, I face the threat of common method variance. CMV occurs when the measures of the independent variables and the dependent variables are collected in the same way, or at the same time, or from the same source and the

results are analyzed using techniques that have correlations as the base (like regression which I used)(Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). As a result, I tested for it using the marker variable method (Lindell & Whitney, 2001). This method suggests that if CMV is present then it will affect all variables in the same way. The goal of this assessment is to isolate the effect of CMV, partial it out, and then check to see if the results are still significant. The marker variable that I used in this study is made up of three items: Do you value car racing? Do you value sports? Do you value speed? The items composing the marker variable have a Cronbach alpha of 0.628.

Hierarchical moderated regression. I conducted a hierarchical moderated regression analysis (Cohen & Cohen, 1983) to test the moderating effect of manager's promotion focus mindset on the relationship between manager's social ties with formal institutions and manager's propensity to use informal economy. As recommended by Aiken and West (1991), I mean centered the interaction variables before conducting the analysis. In the first step, I entered the controlling variables. In the second step, I entered the mean centered independent variable (manager's social ties with formal economy). In the third step, I entered the mean centered moderating variable (manager's promotion focus mindset). And in the last step, I entered the interaction between the mean centered independent variable and the mean centered moderating variable.

Since the interaction between the mean centered independent variable and the mean centered moderating variable was not significant, I did not plot the two slopes of the interaction: one at one standard deviation above the mean and one at one standard deviation below the mean as recommended by Stone and Hollenbeck (1989). Subsequently I did not conduct simple slope tests.

CHAPTER FIVE: RESULTS

In this chapter, I provide an overview of the methodology and statistics used to develop new scales, to test for non-response bias, to test for common method variance, and to test the hypotheses presented in Chapter 3. In the first section, I discuss the descriptive statistics. In the second section, I describe and present the results of two scale development efforts, tests for non-response bias, and the common method variable. In the last section, I present and discuss the results of the regression analysis.

Descriptive Statistics

I started by reverse coding two of the newly developed items from the manager's propensity to use informal economy, and all items of the established environmental dynamism scale. Then, I replaced all the non-recoded items with recoded items. The next step was to verify that all the items composing the variables are in proper range. Indeed, none of the items was out of range since I had forced the responses to be in range using the online Qualtrics survey. Then, I computed the variables from the items, and I ran reliabilities on the established scales. With the exception of environmental dynamism scale (Cronbach alpha = .517) and environmental hostility scale (Cronbach alpha = .449) all the established scales have Cronbach alphas greater than .70. Last, I mean substituted 25 missing values across the items in the following scales: manager's propensity to use informal economy, marker, environmental

dynamism, and environmental hostility. Table 5 shows the means, standards deviations and correlations of the all the variables used in the analyses of this study.

Table 5: Means, Standard Deviations, and Pearson’s Correlations of Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Firm’s Age	32.83	31.43																		
2. Firm’s Size	3.64	2.00	.47***																	
3. Manager’s Age	38.68	10.22	.16*	-.03																
4. Manager’s Gender	1.38	0.49	.06	.11	-.23***															
5. Manager’s Education	3.59	0.74	-.08	-.00	-.00	.13														
6. Manager’s Fluency in English	6.13	0.93	-.08	.10	-.28***	.07	.29***													
7. Manager’s Tenure Current Position	8.23	7.86	.17*	-.13	.61***	-.05	.02	-.38***												
8. Manager’s Tenure Current Firm	8.05	7.19	.25***	-.14*	.56***	-.04	-.03	-.42***	.82***											
9. CEO	0.03	0.18	.04	.03	.17*	-.09	-.00	-.11	.22***	.22**										
1. Manager	0.43	0.50	.09	.31***	.01	-.11	.01	.26***	-.18**	-.11	-.16*									
11. Administrative Assistant	0.06	0.23	.09	.12	-.08	.28***	.03	-.12	.01	.02	-.05	-.22**								
12. Owner and CEO	0.17	0.37	-.25***	-.38***	.09	-.19**	.03	-.08	.08	.11	-.08	-.38***	-.11							
13. Owner	0.14	0.34	-.16*	-.40***	.01	.04	-.01	-.10	.11	.06	-.07	-.34***	-.10	-.18*						
14. Other Title	0.18	0.38	.20**	.24***	-.14*	.16*	-.05	-.04	-.06	-.14*	-.09	-.40***	-.12	-.21**	-.19**					
15. Christian Maronite	0.49	0.50	.02	-.01	-.10	.12	.05	-.05	-.07	-.09	-.08	-.07	-.08	.14*	.01	.03				
16. Christian Orthodox	0.14	0.35	.11	.10	.04	.03	-.06	.03	.12	.11	.08	.02	.08	-.14*	.00	.03	-.39***			
17. Christian Others	0.16	0.37	-.01	-.12	.11	-.09	.01	-.09	.06	.17*	-.01	-.06	.12	.09	-.06	-.03	-.42***	-.18*		
18. Muslim Sunni	0.10	0.30	-.03	.04	.03	-.09	.03	.13	-.02	-.10	-.06	.08	-.08	-.10	.11	-.03	-.32***	-.13	-.14*	

N = 206 *(p<.05); **(p<.01); ***(p<.001)

Table 5: Means, Standard Deviations, and Pearson’s Correlations of Study Variables (continued)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
19. Muslim Shia	0.04	0.19	-.10	-.13	-.17*	.05	-.03	.13	-.12	-.13	-.04	.08	-.05	-.09	-.01	.04	-.19**	-.08	-.09	-.07																
20. Muslim Druze	0.03	0.18	.02	.12	-.05	-.04	-.08	.06	-.10	-.10	-.04	.05	.07	-.08	-.07	.05	-.18**	-.08	-.08	-.06	-.04															
21. Other Religions	0.04	0.20	-.09	.04	.17*	-.07	.02	-.13	.09	.09	.22***	.01	-.05	.03	-.01	-.10	-.21**	-.09	-.09	-.07	-.04	-.04														
22. Natural Resources and Mining	0.01	0.10	.14*	.09	.09	-.08	.05	-.01	.05	.06	.25***	.01	-.03	-.04	-.04	-.05	.00	-.04	.09	-.03	-.02	-.02	-.02													
23. Goods Production	0.15	0.36	-.04	.02	.09	-.05	.03	-.05	.19**	.14	.15*	.13	-.05	-.00	-.09	-.13	-.11	.14*	.04	-.09	-.01	-.08	.18*	-.04												
24. Trade, Transportation, and Utilities	0.18	0.38	.12	.06	.02	-.10	-.05	.10	-.09	-.00	-.09	.03	-.12	.06	.04	-.02	.00	-.01	-.03	.10	-.03	.05	-.10	-.05	-.20**											
25. Information	0.04	0.20	-.00	-.02	-.07	.03	.02	-.00	-.05	-.06	.09	-.04	.05	-.03	-.09	.09	.08	.05	-.09	-.07	.08	-.04	-.05	-.02	-.09	-.10										
26. Financial Activities	0.12	0.32	-.02	-.03	.03	.09	-.09	-.07	.03	-.01	.01	.05	.10	-.04	-.01	-.09	-.02	-.10	.05	.03	.08	.10	-.08	-.04	-.15*	-.17*	-.08									
27. Professional and Business Services	0.15	0.35	-.10	-.11	-.02	-.15*	-.09	-.01	-.02	-.01	-.00	.00	.01	.08	-.04	-.05	-.15*	-.01	.12	.05	.06	-.08	.11	-.04	-.17*	-.19**	-.09	-.15*								
28. Education and Health Services	0.12	0.32	.11	.07	.09	.18**	.24***	-.05	.09	.04	-.07	-.13	.17*	-.08	.08	.11	.10	.03	-.12	-.02	-.07	.01	-.00	-.04	-.15*	-.17*	-.08	-.13	-.15*							
29. Leisure and Hospitality	0.09	0.29	-.16*	-.03	-.15*	.13	-.07	.06	-.10	-.14*	-.06	-.00	-.01	.04	.02	-.02	.13	-.03	-.09	.01	-.06	.03	-.07	-.03	-.13	-.15*	-.07	-.12	-.13	-.12						
30. Other Services	0.15	0.35	.03	-.01	-.06	-.04	.00	.02	-.08	-.02	-.08	-.08	-.10	-.04	.08	.17*	.04	-.05	.05	-.04	-.01	-.00	-.02	-.04	-.17*	-.19**	-.09	-.15*	-.17*	-.15*	-.13					

N = 206 *(p<.05); **(p<.01); ***(p<.001)

Table 5: Means, Standard Deviations, and Pearson's Correlations of Study Variables (continued)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37		
31. Environmental Dynamism	3.72	0.91	-.01	.05	.02	-.06	.11	.14*	-.14*	-.14*	.07	-.04	-.08	.16*	-.11	.01	.04	-.06	.01	.01	.04	-.05	-.03	-.00	-.13	.15*	-.00	.06	.01	-.05	.12	-.15*									
32. Environmental Hostility	4.61	0.84	.02	-.01	.12	.06	-.03	-.08	.19**	.18**	-.08	-.07	-.08	.13	-.06	.10	.04	-.07	-.04	.04	-.13	-.00	.16*	-.02	.05	.02	.01	-.12	-.01	.00	-.06	.10	-.24***								
33. Human and Physical Asset Specificity	4.66	1.05	.10	.11	-.03	.04	-.07	-.09	.08	.14*	-.01	.11	-.06	.01	-.05	-.06	.17*	-.05	-.12	-.07	.04	-.02	-.03	.06	-.10	-.05	.10	.04	-.06	.03	.07	.02	-.26***	.16*							
34. Manager's Networking Ability	5.46	1.09	-.06	.00	-.18**	.10	-.05	.14*	-.10	-.03	-.05	.06	-.10	.11	-.06	-.05	.12	-.03	-.16*	-.01	.14*	.04	-.09	-.04	-.01	.05	.03	-.14*	-.07	-.04	.09	.11	-.07	.11	.38***						
35. Manager's Social Ties with Formal Institutions	3.19	1.67	-.04	.03	-.12	.03	.14*	.02	.01	.02	.01	-.09	.03	.06	.00	.04	.10	.06	-.06	-.14*	.05	-.00	-.07	-.09	-.12	.09	.12	.03	-.15*	.00	.10	.03	-.15*	.09	.15*	.19**					
36. Manager's Promotion Focus Mindset	5.74	0.69	-.21**	-.02	-.14*	.02	.02	.23***	-.07	-.13	-.11	.09	-.13	-.01	.01	.01	-.03	-.08	-.11	.08	.24***	.08	-.01	.04	-.06	.05	-.03	-.07	.03	-.10	.11	.05	-.05	.10	.28***	.44***	.07				
37. Manager's Prevention Focus Mindset	6.06	0.62	-.11	-.05	.08	-.01	-.12	-.01	.00	.01	-.05	.11	-.14*	-.12	.06	.02	-.03	-.05	-.00	-.03	.08	.10	.05	-.03	.02	-.01	.01	-.10	.02	-.12	-.02	.19**	-.14	.07	.18**	.24**	-.14*	.46***			
38. Manager's Propensity to Use Informal Economy	1.70	0.79	-.16*	-.17*	-.12	-.00	.02	.05	-.07	-.09	-.14*	-.15*	-.02	.15*	.10	.04	.10	-.08	-.02	-.02	-.05	.01	-.01	.03	-.02	.07	.07	-.01	-.06	-.06	.12	-.08	-.05	.08	-.01	.03	.22**	.01	-.18*		

N = 206 *(p<.05); **(p<.01); ***(p<.001)

Initial Analyses

Scales development

This section starts at the third step (exploratory factor analysis) of the scale development procedure since I had discussed the first two steps (step 1: items generation, and step 2: content adequacy) in Chapter 4.

Using the random number generator in Microsoft Excel 2010, I generated random numbers (between 0 and 1) for the 206 observations in my sample. Then, I split my sample of 206 Lebanese manager respondents into two samples using 0.5 as a cutoff. That is, I grouped all generated random numbers that are less 0.5 into one sample and the remaining generated random numbers into another sample. Sample 1 has 102 responses and sample 2 has 104 responses. Of the 102 respondents of sample 1, 68.6% are male, and the average age is 40.45 years. Of the 104 respondents of sample 2, 55.8% are male, and the average age is 36.94 years.

Manager's Social Ties with Formal Institutions Scale

Exploratory factor analysis (EFA). Respondents from sample 1 provided their agreement with each of the 19 newly developed items reflecting manager's social ties with formal institutions on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Using SPSS version 22, I conducted four exploratory factor analyses for the 19 items reflecting manager's social ties with formal institutions to ensure an acceptable response to item ratio, and to isolate the items that performed best (Hair, Black, Babin, Anderson, & Tatham, 2006). For each of the four EFAs, I used one of the following combinations: principal axis factor (PAF) and Oblimin rotation, PAF and Varimax rotation, principal components (PC) and oblimin rotation, and PC and Varimax rotation.

Following the recommendation of Hair et al. (2006), I chose 0.55 as a factor loading cut off since the size of sample 1 is 102. The four EFAs each using one of the four combinations with no requested number of factors resulted in pattern matrices (for oblimin) and rotated component matrices (for Varimax) that did not converge in 1000 iterations. Moreover, the scree plots of the four EFAs using each of the four combinations showed a steep drop from 1 to 2 then a slight drop from 2 to 3 after which the slope almost flattens. As a result, I ran eight EFAs: four EFAs each is using one of the four combinations with 2 forced factors, and four EFAs each is using one of the four combinations with 1 forced factor. The results of the four EFAs were better for one forced factor than for two forced factors. In particular, the two factors of the four EFAs, each using one of the four combinations, had mixed items reflecting political, regulatory and economic institutions that loaded randomly on factors 1 and 2. After inspecting the items, I could not justify the use of two factors since I could not find a common characteristic for every factor. As a result, I decided to force one factor. Moreover, I decided to use the Oblimin instead of the Varimax rotation since the oblimin rotation assumes that the items are correlated. Indeed, the remaining items are 4 of the 9 items reflecting the political institutions. I chose PAF over PC because PAF treats the items as reflective and this is how I initially developed them to be.

In sum, the exploratory factor analysis using the principal axis factor (PAF), an oblimin rotation, and one forced factor resulted in 4 items that have loadings greater than 0.55 and communalities higher than 0.5. Table 6 shows the final four items with their factor loadings. This four items factor explains 61.038% of the variance and has an eigenvalue of 2.442. The Cronbach alpha for manager's social ties with formal institutions scale is 0.857. The wording in the items clearly and consistently reflects manager's social tie with formal (i.e., political) institutions.

Table 6: Exploratory Factor Analysis of Manager’s Social Ties with Formal Institutions Scale

	Social Ties with Formal Institutions
The speaker of the Lebanese parliament.	.818
Commander of the Lebanese armed forces.	.811
The president of Lebanon.	.780
A Lebanese politician.	.712

N= 102, Principal Axis Factoring, Oblimin rotation, 0.55 is the cut off value for significant factor loadings.

Confirmatory factor analysis. Gaining an a priori notion of the factor structure of the variable “manager’s social ties with formal institutions” by having run an EFA on sample 1, a confirmatory factor analysis (CFA) was appropriate to run on sample 2 to confirm the results. Using LISREL 8.8 and the means, standard deviations, and correlations as input, I conducted a CFA to examine the one factor structure of the 4 items that compose the independent variable. The CFA results indicated acceptable model fit (CFI= 0.990, NFI= 0.981 and RMSEA= 0.100) for the one-factor model. Moreover all the paths are significant ($p < 0.01$) with strong path loadings (ranging from 0.65 to 0.88).

Scale evaluation. To ensure the validity of manager’s social ties with formal institutions scale, I tested the convergent, discriminant, and predictive validity of the scale. First, to test the convergent validity, I had to check whether manager’s social ties with formal institutions scale is related to a scale I suspect will be related to it. In particular, I suspected that manager’s social ties with formal institutions scale would be related to manager’s networking ability scale. That is, managers who have social and political skills might use these skills to initiate connections with formal institutions. As shown in Table 7 the correlations between manager’s social ties with

formal institutions and manager's networking ability is significant and moderate. As a result, the scale "manager's social ties with formal institutions" has convergent validity.

Second, to test the discriminant validity of manager's social ties with formal institutions scale, I followed the procedure outlined by Fornell and Larcker (1981). This involves calculating the square root of the average variance explained for: manager's social ties with formal institutions, manager's networking ability, human and physical asset specificity, and environmental hostility scales. This value, which I represent in italic and bold in the diagonal in Table 7, represents the total measured variance accounted for by the scale's items. To demonstrate discriminant validity these values should be larger than all zero-order correlations in the column and row in which they appear (Fornell & Larcker, 1981). As show in Table 7, this condition is met. As a result, I have evidence that the average variance explained by the scale's items is larger than the variance shared between any two constructs. Thus, the scale "manager's social ties with formal institutions" has discriminant validity

Finally, to test the predictive validity of manager's social ties with formal institutions scale, I had to check whether the manager's social ties with formal institutions scale predicts others key variables or to find variables that predict it. As shown in Table 7, manager's social tie with formal institutions is significantly and positively related to human and physical asset specificity. That is, manager's social ties with formal institutions are forms of human capital, and thus should be related to my measure for human and asset specificity. As a result, the scale "manager's social ties with formal institutions" has predictive validity.

Table 7: Means, Standard Deviations, and Pearson’s Correlations ^afor Manager’s Social Ties with Formal Institutions

	Mean	SD	1	2	3
Manager’s Social Ties with Formal Institutions	3.19	1.67	<i>0.78</i>		
Manager’s Networking Ability	5.46	1.09	0.19**	<i>0.76</i>	
Human and Physical Asset Specificity	4.66	1.05	0.15*	0.38***	<i>0.58</i>
Environmental Hostility	4.61	0.84	0.09	0.11	0.16* <i>0.38</i>

^aN = 206 *(p<.05); **(p<.01); ***(p<.001) Italic and bold values on the diagonal are the square root of the average variance explained. To demonstrate discriminant validity these values should be larger than all zero-order correlations in the column and row in which they appear (Fornell & Larcker, 1981).

Manager’s Propensity to Use Informal Economy Scale

Exploratory factor analysis. Respondents from sample 2 provided their agreement with each of the 13 newly developed items forming manager’s propensity to use informal economy on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Using SPSS version 22, I conducted four exploratory factor analysis using the principal axis factor (PAF) and principal components (PC) and an Oblimin and Varimax rotations for the 13 items reflecting manager’s propensity to use informal economy to ensure an acceptable response to item ratio, and to isolate the items that performed best (Hair et al., 2006). Following the recommendation of Hair et al. (2006), I chose 0.55 as a factor loading cut off since the size of sample 1 is 104. The pattern matrix and the rotated components matrix of the two EFAs using PAF and oblimin rotation, and PAF and Varimax rotations did not converge in 1000 rotations. However, the pattern matrix and the rotated components matrix of the two EFAs using PC and oblimin rotation, and PC and Varimax rotations did converge. I chose the oblimin rotation because it assumes that the items are correlated. Results of the EFA using PC and oblimin rotation suggested that I eliminate 8 items from the two factor dimensions because of low factors loadings (i.e. less than 0.55), double loadings, and low communalities (i.e. less than 0.5). Table 8 shows the final six items with their factor loadings on their respective factors. The first factor “informal no proof” represents all the

activities conducted in the informal economy that are not documented (i.e. not registered or no written proof). The second factor “informal cash” represents all the activities conducted in the informal economy that involve illegal transfer of cash. The two three items factors explain 68.279% of the variance and have an eigenvalues of 2.572 and 1.525 respectively. Moreover the Cronbach alpha of all the items of the variable manager’s propensity to use informal economy is 0.692. Whereas, the Cronbach alpha of the items composing the “informal cash” factor is 0.67, and the Cronbach alpha of the items composing the “informal no proof” factor is 0.802. For this study, I decided to collapse the 6 items and use the construct manager’s propensity to use informal economy instead of using the two factors “informal no proof” and “informal cash” for two reasons. First, using data from sample 2 the reliability (Cronbach alpha of .692) of the 6 items composing the construct is higher than the reliability (Cronbach alpha of .67) of the three items composing the “informal cash” factor. Second, using the whole sample of 206 observations, the reliability (Cronbach alpha of .637) of the 6 items composing the construct becomes much higher than the reliability (Cronbach alpha of .566) of the three items composing the “informal cash” factor. Since I am using the whole sample of 206 observations to run the regression, I chose to stick with manager’s propensity to use informal economy as the dependent variable because it has the higher reliabilities than “informal cash” factor both for data from sample 2 and the whole sample.

Table 8: Exploratory Factor Analysis of Manager’s Propensity to Use Informal Economy Scale

	Informal No Proof	Informal Cash
Does your company sell to customers without written receipts?	.895	
Does your company sell to customers without written sales invoices?	.881	
Does your company buy from suppliers without written purchase invoice?	.752	
Does your company pay illegal fees to receive business		.889

permits from governmental institutions?	
Do you have to pay government officials more than the required registration and/or permits expenses?	.832
Does your company sell illegal yet legitimate products (example: copies of software...)?	.623

N= 104, Principal Components, Oblimin rotation, 0.55 is the cut off value for significant factor loadings.

Confirmatory factor analysis. Gaining an a priori notion of the factor structure of the variable “manager’s propensity to use informal economy” by having run an EFA on sample 2, a confirmatory factor analysis (CFA) was appropriate to run on sample 1 to confirm the results. Using LISREL 8.8 and the means, standard deviations, and correlations as input, I conducted a CFA to examine the two factor structure of the 6 items that compose the dependent variable. The CFA results indicated acceptable model fit (CFI= 0.972, NFI= 0.867 and RMSEA= 0.0449) for the two-factor model. Moreover, five out of the six paths are significant ($p < 0.01$) with strong path loadings (ranging from 0.36 to 0.98). The path from the observed variable representing the question does your company sell illegal yet legitimate products to the latent variable “informal cash” is not significant. I decided to keep this item because the reliability (Cronbach alpha of .637 computed with 206 observations) of the 6 items composing the construct manager’s propensity to use informal economy is higher than the reliability (Cronbach alpha of .625 computed with 206 observations) of the 5 remaining items after removing it.

Scale evaluation. To ensure the validity of manager’s propensity to use informal economy scale, I tested the convergent, discriminant, and predictive validity of the scale. First, to test the convergent validity, I had to check whether the two factors of manager’s propensity to use informal economy scale are related to one another. In particular, the two factors “informal cash” and “informal no proof” represent the same construct “manager’s propensity to use informal economy,” and I suspect them to be related. As shown in Table 9 the correlations

between “informal cash” and “informal no proof” significant and moderate. As a result, the scale “manager’s propensity to use informal economy” has convergent validity.

Second, to test the discriminant validity of manager’s propensity to use informal economy scale, I followed the procedure outlined by Fornell and Larcker (1981). That is, I calculated the square root of the average variance explained for: manager’s propensity to use informal economy scale’s two factors: “informal cash” and “informal no proof”, manager’s prevention focus mindset, and environmental hostility scales. This value, which I represent in italic and bold in the diagonal in Table 9, represents the variance accounted for by the scale’s items. To demonstrate discriminant validity these values should be larger than all zero-order correlations in the column and row in which they appear (Fornell & Larcker, 1981). As shown in Table 9, this condition is met. As a result, I have evidence that the average variance explained by the scale’s items is larger than the variance shared between any two constructs. Thus, the scale “manager’s propensity to use informal economy” has discriminant validity

Finally, to test the predictive validity of manager’s propensity to use informal economy scale, I had to check whether manager’s propensity to use informal economy scale predicts others key variables or to find variables that predict it. As shown in Table 9, the two factors of manager’s propensity to use informal economy scale are significantly and negatively related to manager’s prevention focus mindset. That is, managers who have a prevention focus mindset are less likely to conduct activities in the informal economy. As a result, manager’s propensity to use informal economy scale has predictive validity.

Table 9: Means, Standard Deviations, and Pearson’s Correlations ^a for Manager’s Propensity to Use Informal Economy

	Mean	SD	1	2	3
Informal Cash	1.93	1.09	<i>0.61</i>		
Informal No Proof	1.47	0.89	0.26***	<i>0.68</i>	
Manager’s Prevention Focus Mindset	6.06	0.62	-0.14*	-0.15***	<i>0.57</i>
Environmental Hostility	4.61	0.84	0.10	0.02	0.07 <i>0.41</i>

^aN = 206 *(p<.05); **(p<.01); ***(p<.001) Italic and bold values on the diagonal are the square root of the average variance explained. To demonstrate discriminant validity these values should be larger than all zero-order correlations in the column and row in which they appear (Fornell & Larcker, 1981).

Non-response Bias

One way to assess non-response is to compare early respondents to late respondents’ answers (Schwab, 1999). This method assumes that late respondents are more representative of non-respondents because they would not have taken the survey without the prompting by a second email (Schwab, 1999). In this study, two waves of emails were sent one week apart. Using the sent date as criteria, I split the sample into two samples: early respondents and late respondents. The number of early respondents is 157, and the number of late respondents is 49. Table 10 shows that there are no significant differences found between early and late respondents on the independent, moderator and dependent variables. Moreover, there is a significant difference between early and late respondents on two of the suggested control variables: manager’s age and firm’s age. This is not a problem, since as per the recommendation of Becker (2005) I had to drop both control variables from the regression analysis as discussed in the regression analysis section.

Table 10: Comparison of Early versus Late Respondents ^a

	Early Respondents (N=157)		Late Respondents (N=49)		t-test (2-tailed) difference
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	
Manager's social ties with formal institutions	3.13	1.62	3.37	1.82	-0.89
Manager's propensity to use informal economy	1.65	0.70	1.85	1.01	-1.53
Manager's promotion focus mindset	5.78	0.66	5.62	0.76	1.41
Human and physical asset specificity	4.67	1.04	4.6	1.08	0.42
Manager's networking ability	5.43	1.12	5.54	1.00	-0.60
Environmental dynamism	3.70	0.88	3.78	1.02	-0.47
Environmental hostility	4.60	0.84	4.63	0.86	-0.22
Manager's tenure current position	8.50	8.41	7.37	5.74	0.88
Manager's tenure current firm	8.27	7.58	7.35	5.78	0.79
Manager's age	39.69	11.02	35.43	6.12	2.58**
Firm's age	30.13	28.50	41.51	38.44	-2.23*

^a*(p<.05); **(p<.01);

Common Method Variance

Phase-1 Model Comparison

I followed Williams, Hartman, and Cavazotte (2010) outline of a multi-phase procedure using structural equation modeling (SEM) to conduct a marker variable analysis. First, I ran using LISREL 8.8 a confirmatory factor analysis (CFA) model that includes the marker, independent (manager's social ties with formal institutions), moderator (manager's promotion focus mindset), and the dependent variable (manager's propensity to use informal economy). In the CFA model, the marker variable is allowed to correlate with the substantive variables (independent, moderator, and dependent variables). The results of the CFA are shown in Table 11. Second, I ran the baseline model. In this model, the substantive variables are allowed to correlate while the marker variable is not allowed to correlate with them. Moreover, the paths loadings and error variances for the marker variable are set to those I found in the CFA model.

The results of the baseline model are shown in Table 11. Third, I ran the constrained model: Method-C model. In this model, along with constraining the paths loading and error variances for the marker variable to be equal to those of the CFA model, I constrained the paths between the marker variable and the items of the substantive variables to be equal. This model allows all of the items to load on the marker variable to best represent the equal predicted effect that CMV might have on all substantive variables. The results of Method-C are shown in Table 11. Fourth, I ran the unconstrained model: Method-U model. This model is exactly the same as Method-C model but the paths between the marker variable and the items of the substantive variables are not constrained to be equal. The results of Method-U model are shown in Table 11. Finally, I ran the restricted model: Method-R model. To estimate this model, I had first to determine the “winner” between Method-C model and Method-U model via a chi-square difference test. As shown in Table 11, Method-U won the test since the chi-square difference test is significant and the model with the lowest chi-square wins. As a result, Method-R model is Method-U model after setting the factors correlations between the substantive variables equal to their correlations from the baseline model. The results of Method-R model are shown in Table 11.

Table 11: Marker Variable CMV

Model	X^2	df	GFI^a	CFI^b	NFI^c	$RMSEA^d$
1.CFA	404.43***	203	0.85	0.87	0.76	0.07
2. Baseline	422.12***	211	0.84	0.86	0.75	0.07
3. Method-C	405.07***	210	0.85	0.87	0.76	0.07
4. Method-U	352.64***	192	0.87	0.89	0.79	0.06
5.Method-R	353.98***	195	0.86	0.89	0.79	0.06
Chi-Square Model Comparison Tests						
Δ Models	ΔX^2	Δ df	Chi-Square Critical value:.05			
1.Baseline vs. Method-C	17.07*	1	3.84			
2.Method-C vs. Method-U	52.43*	18	28.87			
3.Method-U vs. Method-R	1.34	3	7.81			

^a Goodness of Fit Index, ^bComparative Fit Index, ^c Normed Fit Index, ^d Root Mean Square Error of Approximation,

To test whether the marker variable is significantly related to the substantive variables, I conducted a chi-square difference test between the baseline model and Method-C model. The results shown in Table 11 indicate that the chi-square difference test is significant and that Method-C model is the winner (lowest chi-square). As a result, CMV might be an issue in my data. Moreover, the results shown in Table 11 indicate that the chi-square difference test between Method-C model and Method-U model is significant and that Method-U model is the winner. That is, the effect of the method marker variable is not equal for all the items of the substantive variables. In other words, I can conclude that allowing the loadings of the paths between the marker variable and the items of the substantive variables to vary rather than being forced to be equal is a better representation of my data. Finally, to test whether the correlations between the substantive variables are significantly affected by the CMV attributed to the marker variable, I conducted a chi-square difference test between Method-U and Method-R models. The results shown in Table 11 indicate that the chi-square difference test is not significant. That is, the CMV attributed to the marker variable did not bias the correlations among the substantive variables.

Phase-1 Reliability Decomposition

After conducting a statistical test to determine whether the CMV attributed to the marker variable biased the relationships among the substantive variables, the next step is to quantify the amount of method variance associated with the substantive variables' measurements. That is, impact of the CMV attributed to the marker variable is reflected in its factor loadings, and these loading can be used to determine the extent of CMV. To achieve that, the reliability of each factor or scale can be decomposed into the amount due to CMV and the amount due to substantive variables. Table 12 shows the reliability decomposition of the winning Method-U

model. These results suggest that nearly 12 % of the reliability in manager’s promotion focus mindset is due to CMV. Moreover, nearly 19 % and 25% of the reliabilities in manager’s social ties with formal institutions and manager’s propensity to use informal economy respectively are due to CMV. The 25 % is an acceptable percentage since it is equal to the threshold reported by Williams, Cote, and Buckley (1989). However, Williams et al. (1989) threshold is for the factor method whereby the factor doesn't have its own items but rather uses the substantive variables. The marker variable is a more stringent test of CMV. If 25 % is acceptable for the factor method, then it is an appropriate standard for the marker variable method. Based on these results, I conclude that CMV is not a significant threat in my data.

Table 12: Reliability Decomposition

Latent Variable	Reliability Baseline Model	Decomposed Reliability Method-U Model		
	Total Reliability	Substantive Reliability	Method reliability	% Reliability Marker Variable
Manager’s promotion focus mindset	0.84	0.74	0.10	11.90
Manager’s social ties with formal institutions	0.99	0.80	0.19	19.19
Manager’s propensity to use informal economy	0.72	0.54	0.18	25
Marker Variable	0.66	0.66	0	

Regression analysis

In the initial hierarchical moderated regression, I entered all the control variables that I have justified the use of in Chapter 4 in the first step. In the second step, I entered the mean centered independent variable. In the third step, I entered the mean centered moderator. In the fourth step, I entered the mean centered interaction term (Aiken & West, 1991; Cohen & Cohen, 1983). The results of the initial hierarchical moderated regression are show in Table 13. Having all the controls in the initial hierarchical moderated regression used a lot of degrees of freedom.

As a results, and as depicted by the F-values in Tables 13 none of the hierarchical moderated regression steps are significant. The only significant change in R square is between step 1 and step 2.

Table 13: Initial Hierarchical Moderated Regression Analyses of the Interaction between Manager’s Social Ties with Formal Institutions and Manager’s Promotion Focus Mindset with all Controls

Dependent variable: Manager’s Propensity to Use Informal Economy ^a			
Variables	<i>B^b</i>	<i>R²</i>	ΔR^2
Step 1 : Control Variables All Included		.005	.005
<i>F</i> (28,177)=1.037			
Step 2: Manager’s Social Ties with Formal Institutions	.100**	.039	.034**
<i>F</i> (29,176)=1.285			
Step 3: Manager’s Promotion Focus Mindset	-.062	.035	.004
<i>F</i> (30,175)=1.249			
Step 4: Manager’s Social Ties with Formal Institutions X Manager’s Promotion Focus Mindset	-.026	.031	.004
<i>F</i> (31,174)=1.212			

^a N = 206. ^b unstandardized regression coefficients from the last step of the hierarchical regression.

Note: * $p < 0.1$. ** $p < .05$.

To remedy the problem of non-significant hierarchical moderated regression models, I followed Becker (2005) recommendation. That is, to drop control variables that are not significant. The rationale behind that is to free crucial degree of freedom since my sample size is just above the minimum required sample size (192). In order to free as many as possible degrees of freedom without having to drop theoretically important control variables, I started by dropping the control variables that were coded with dummy variables. As a result, I dropped manager’s religion, which was originally coded with six dummy variables. At this stage, I ran another

hierarchical moderated regression and some or all of the models were not significant. Then, I dropped industry, which was originally coded with eight dummy variables. Although I decided to drop industry, I kept environmental dynamism and environmental hostility, which should capture many of the important industry differences that might influence the relationships I investigate. That is, environmental dynamism and hostility are measurements of firms' environments and can be considered as proxy measurements of industry. At this stage, I ran another hierarchical moderated regression and some or all of the models were not significant. Then I dropped the following controls: firm size, manager's tenure in current position, manager's tenure in current firm, manager's age, firm's age, manager's fluency in English. None of these had been significant in any model. After dropping each of those control variables, I ran another hierarchical moderated regression and some or all of the models were not significant. Last, I dropped manager's gender, which was also not. I ran another hierarchical moderated regression and all of the models were significant. In total, I freed 21 degrees of freedom to obtain a significant hierarchical moderated regression models.

In the first step of the final hierarchical moderated regression, I entered the remaining control variables: job titles (represented by two dummy variables for CEO and owner), human and asset specificity, manager's networking ability, environmental dynamism, environmental hostility and manager's education. The control variable CEO is significantly and negatively related to manager's propensity to use informal economy, while the control variable Owner, which captures whether the respondent is the owner or the owner and CEO, is significantly and positively related to manager's propensity to use informal economy. All other control variables are not significant. In total, the amount of variance explained by the control variables is approximately 2.6%.

In step 2, I entered the mean centered independent variable: manager's social ties with formal institutions. The result shows that independent variable (manager's social ties with formal institutions) is significantly and positively related to the dependent variable (manager's propensity to use informal economy) thus supporting Hypothesis 1. Manager's social ties with formal institutions explained an additional 3.9% of the variance explained.

In step 3, I entered the mean centered moderating variable: manager's promotion focus mindset. The result shows that the moderating variable (manager's promotion focus mindset) is not significantly related to the dependent variable (manager's propensity to use informal economy). Manager's promotion mindset did not add anything to the variance explained.

In step 4, I entered the mean centered interaction term: manager's social ties with formal institutions X manager's promotion focus mindset. The result shows that the interaction term is not significantly related to the dependent variable (manager's propensity to use informal economy). Thus, the hypothesis 2 is not supported.

Table 14: Final Hierarchical Moderated Regression Analyses of the Interaction between Manager's Social Ties with Formal Institutions and Manager's Promotion Focus Mindset

Dependent variable: Manager's Propensity to Use Informal Economy ^a			
Variables	<i>B</i> ^b	<i>R</i> ²	ΔR^2
Step 1 : Control Variables		.026	.026**
Owner	.287**		
CEO	-.526*		
Human and Asset Specificity	-.043		
Manager's Networking Ability	-.001		
Environmental Dynamism	-.016		
Environmental Hostility	.047		
Manager's Education	-.008		
<i>F</i> (7,198)=1.788, <i>p</i> < .1			
Step 2: Manager's Social Ties with Formal Institutions	.102**	.065	.039**
<i>F</i> (8,197)=2.772, <i>p</i> < .05			
Step 3: Manager's Promotion Focus Mindset	-.009	.060	.005

$F(9,196)=2.451, p < .05$

Step 4: Manager's Social Ties with Formal Institutions X	-0.036	.058	.002
Manager's Promotion Focus Mindset			

$F(10,195)=2.255, p < .05$

^a N = 206. ^b unstandardized regression coefficients from the last step of the hierarchical regression. Note: * p < 0.1. ** p < .05.

In this chapter, I presented the results of the scales development, the non-response bias, the common method variance, and the regression analyses. In particular, I developed two new scales. The first, manager's social ties with formal institutions, is a one factor scale and has a Cronbach alpha of 0.857. Whereas the second, manager's propensity to use informal economy is a two factors ("informal cash" and "informal no proof") scale and has a Cronbach alpha of 0.692. Whereas, the Cronbach alpha of the items composing the "informal cash" factor is 0.67, and the Cronbach alpha of the items composing the "informal no proof" factor is 0.802. I then tested and found no non-response bias and no common method variance threat. Finally, I used the newly developed scales to test my hypotheses. The results from the hierarchical moderated regression support hypothesis 1. That is, managers who have social ties with formal institutions are more prone to conduct activities in the informal economy. However, the results from the hierarchical moderated regression did not support hypothesis 2. That is, managers who have a promotion focus mindset are not more prone to use their social ties with formal institutions to conduct activities in the informal economy.

CHAPTER SIX: DISCUSSION AND CONCLUSION

The main research question of this study is: Why do managers in emerging markets conduct some activities in the informal economy and others in the formal economy when they have a choice? Using institutional economics theory, previous research shows that, at the country level, weak formal institutions create institutional voids that increase the transaction costs of using the formal economy. To evade high transaction costs, managers in emerging markets use the informal economy. However, previous research does not explain, at the firm level, why managers in emerging markets conduct some activities in the informal economy while conducting others in the formal economy. For instance, managers in emerging markets can choose to formally document employment for some employees while hiring and compensating others informally. It is common in emerging markets to find some workers who are registered with legal authorities while others are not. Likewise, managers in emerging markets can contract formally or use under-the-table agreements to buy from markets. The purpose of this study is to answer the above research question by developing theory to explain, at the firm level, how managers in emerging markets choose to conduct some activities in the informal economy while conducting others in the formal economy. This chapter contains three sections. In the first section, I summarize the results pertaining to the main research questions and I discuss their contributions to theory and practice and their implications on future research. In the second section, I address the limitations of this study. Finally, I conclude this study.

Discussion of Results

Manager's social ties with formal institutions scale. In the initial analyses of this study, I have developed a scale to measure the extent of manager's social ties with formal institutions. I started this scale development procedure with 9 items reflecting political institutions, 6 items reflecting regulatory institutions, and 4 items reflecting economics institutions. Unfortunately, the three-factor solution depicting political, regulatory, and economic institutions did not emerge. The results of the EFA and CFA conducted on the 19 items indicated that only four of the items reflecting political institutions loaded together. Although this one factor scale was used to conduct the remaining analyses within this study, results may not be generalizable across different contexts. That is, the items composing this scale specifically measure the extent of manager's social ties with Lebanese political institutions.

However, the use of one factor for measuring the extent of manager's social ties with political institutions can be used as a representation of manager's social ties with formal institutions for two reasons. First, among the political, regulatory, and economic institutions, the political institutions are the most important. That is, political institutions define power, i.e., the requirements and methods of participation in the government, and also create and modify other formal institutions (Holmes et al., 2013). As a result, the political institutions can be considered a good representation for formal institutions. Second, it should not be surprising that the Lebanese managers' social ties with political institutions were the only significant factor. In Lebanon, whenever a political party wins the elections of the members of the parliament or when a member of that political party gets appointed as a minister, all the members of that political party who are part of formal institutions (in the political, regulatory, and economic institutions) get preferential treatment. That is, these members gain power over their cohorts (e.g. they get

promoted first; they are protected from prosecution...). In sum, the influence of political institutions is not limited to the elected official, but spreads to cover all other formal institutions, including the regulatory and economic ones.

On one hand, future research might develop a scale that has more generic items that capture manager's social ties with political, regulatory, and economic institutions and can be applied to other contexts. On the other hand, measuring manager's social ties with formal institutions might involve developing scales in each country that pertain to the most important formal institutions in that country. For instance, future research might examine whether economy and regulatory institutions really matter. Perhaps it is only politicians who wield arbitrary power. Subsequently, future research might examine which of managers' social ties with formal institutions have the most influence on the ways managers conduct economic activities.

In sum, despite the fact that the items composing this scale are context dependent (i.e. developed to reflect social ties with Lebanese formal institutions), the construct manager's social ties with formal institutions is universal.

Manager's propensity to use informal economy scale. In the initial analyses of this study, I have developed a scale to measure the extent of manager's propensity to use informal economy. Besides being an integral part of this study since manager's propensity to use informal economy is the dependent variable, this scale may be used in other studies and thus it is a contribution to the institutional economics literature in general and the informal economy research stream in particular. That is, despite the fact that the items composing this scale are context dependent (i.e. developed to reflect activities conducted in the informal economy of Lebanon), the construct manager's propensity to use informal economy is universal. For instance, even in developed markets, some activities are conducted in the informal economy.

I had started this scale development procedure with 13 items reflecting activities conducted in the informal economy pertaining to employment, customers, suppliers and government. The results of the EFA and CFA conducted on the 13 items of this scale indicated that 6 items loaded on two factors: “informal no proof” and “informal cash”. The first factor “informal no proof” represents all the activities conducted in the informal economy that are not documented (i.e. not registered or no written proof). The second factor “informal cash” represents all the activities conducted in the informal economy that involve illegal transfer of cash. As a result, despite the fact that the items generated to develop this scale are context dependent (i.e. reflects the informal economy of Lebanon), the factors “informal no proof” and “informal cash” as well as the construct manager’s propensity to use informal economy are generalizable. That is, in every informal economy some activities involve the transfer of illegal cash while other activities are not documented. Moreover, even developed markets have informal economies.

In this study, instead of using the two factors, I decided to collapse the 6 items and use the construct manager’s propensity to use informal economy instead of using the two factors. However, future research might attempt to validate the scale and/or build on it to develop a scale that has more generic items that applies to different contexts. Moreover, future research might theorize at the factors level instead of the construct level, and might validate the use of the factors. That is, the two factors might offer more flexibility to use the scale in different contexts.

Job Title. Job title is the only control variable that is significantly related to manager’s propensity to use informal economy. In particular, CEOs are less inclined to use informal economy, while owners have propensity to use informal economy. That is, this finding pinpoints

a potential problem (i.e. the decision to use informal economy) that may affect the principle-agent relationship.

Future research might study how the use of informal economy affects the relationship between owners and CEOs. For instance, future research might study family influence on CEOs decisions to conduct activities in the informal economy.

Main effect. In this study, I theorize and find empirical evidence that, at the firm level, managers' social ties with formal institutions is positively related to manager's propensity to use the informal economy. My theory is that this is because managers' social ties with formal institutions protect them against being singled out for enforcement, and protect them against potential opportunistic behaviors by business partners. In particular, opportunism, which increases transaction costs, might take place in the informal economy because contracting parties cannot be held legally accountable. That is, managers' social ties with formal institutions allow them to keep the transaction costs of using the informal economy lower than the transaction costs of using the formal economy for a specific activity. This finding has theoretical and practical contributions.

On the theoretical front, this finding contributes to the institutional economic theory by offering theory to explain, at the firm level, manager's propensity to use informal economy. That is, based on this finding we can now argue that not only managers in emerging markets conduct activities in the informal economy to evade the high transaction costs of the formal economy, but also managers use their social ties with formal institutions to conduct some activities in the informal economy while conducting others in the formal economy. That is, at the firm level, managers' social ties with formal institutions protect them against being singled out for enforcement and against potential opportunistic behaviors by business partners. In particular,

opportunism, which increases transaction costs, might take place in the informal economy because contracting parties cannot be held legally accountable. In other words, managers' social ties with formal institutions allow them to keep the transaction costs of using the informal economy lower than the transaction costs of using the formal economy for a specific activity. As a result, based on this finding, we have a theory that explains, at the country level, manager's choice in emerging markets to conduct some activities in the informal economy while conducting others in the formal economy.

On the practical front, this finding might help Lebanese companies to better understanding the choice between conducting some activities in the informal economy while conducting others in the formal economy. That is, this finding suggests that managers would conduct activities in the informal economy when managers have social ties with Lebanese political institutions. In particular, managers' social ties with Lebanese political institutions are protected against being singled out for enforcement and against opportunistic behaviors of business partners. As a result, managers who have social ties with Lebanese political institutions have a competitive advantage over managers who do not have these ties. That is, managers who have social ties with Lebanese political institutions conduct some activities in the informal economy at lower transaction costs than the transaction costs of similar activities conducted by managers who don't have social ties with Lebanese political institutions. This is true for two reasons. First, managers who do not have social ties with Lebanese political institutions might take the risk of conducting activities in the informal economy. However, that increases the transaction costs of these activities since those managers might apply higher premiums to account for the risk of and costs of potential opportunistic behaviors by business partners. Second, managers who do not have social ties with Lebanese political institutions might avoid

the risk of conducting activities in the informal economy, and conduct these activities in the formal economy at higher costs.

Future research might study how the predictions of management theories might be affected when these theories are applied in emerging markets. For instance, the predictions of transaction cost economics depend on strong legal institutions that enforce contracts in knowledgeable, sophisticated, and low-cost ways (McGahan, 2012; Williamson, 1983). In particular, from a transaction cost economics point of view, the boundary of the firm is defined by “make” within the firm versus “buy” on the market decisions (Williamson, 1973). The make versus buy decision is based on minimization of transaction costs (Williamson, 1973, 1991). Transaction costs arise from drafting, negotiation, and renegotiation of the contracts that govern market transactions and, subsequently, from the costs of living with a contract after conditions have shifted so that abiding by the contract is no longer in the firm’s best interests (Williamson, 1973, 1983, 1985). Drafting, negotiation, and renegotiation are necessary because of incomplete contracts and opportunism (Williamson, 1973, 1983, 1991). Contracts are incomplete for two reasons: “many contingencies are unforeseen (and even unforeseeable), and the adaptation of those contingencies that have been recognized and for which adjustments have been agreed to are often mistaken possibly because the parties acquire deeper knowledge of production and demand during contract execution than they possessed at the outset” (Nelson & Winter, 1982, pp. 96-136). In short, individuals draft incomplete contracts because they have bounded rationality (Simon, 1972). Incomplete contracts allow some opportunistic individuals to take advantage of others (Williamson, 1973, 1991).

However, a strong legal enforcement system is not the norm in emerging markets (Bruton et al., 2012; Godfrey, 2011; Khanna & Palepu, 1997). Indeed, in emerging markets, opportunism

can take place in the formal economy as well as in the informal economy. Moreover, managers in emerging market have to conduct some activities in the informal economy while conducting others in the formal economy. For instance, managers in emerging markets can choose to formally document employment for some employees while hiring and compensating others informally. It is common in emerging markets to find some coworkers who are registered with legal authorities while others are not. Likewise, managers in emerging markets can contract formally or use under-the-table agreements to buy from markets. In sum, managers in emerging markets not only have to decide whether to make or buy in the formal economy but also have to decide whether to make or buy in the informal economy. Based on my finding, managers who have social ties with Lebanese political institutions are more suited to conducting activities in the informal economy at lower transaction costs than similar activities conducted in the formal economy. As results, manager who have social ties with Lebanese political institutions are more suited to make or buy in the informal economy. Subsequently, It is interesting to study how the interaction between the make or buy in the formal economy and informal economy affects the market, hybrid, and hierarchy governance mechanisms that govern transactions to control their costs (Williamson, 1973, 1991).

Interaction effect. In this study, I also theorize that not all managers who have social ties with formal institutions are prone to conduct more activities in the informal economy. In particular, based on regulatory focus theory, I argue that managers who have a promotion focus mindset are more prone to use their social ties with formal institutions to conduct activities in the informal economy. However, I did not find empirical evidence for this argument. Future research might study how other personal characteristics might moderate the relationship between

manager's social ties with formal institutions and manager's propensity to use informal economy.

Limitation of this study

There is no study without limitations and this study is no exception.

The first limitation is regarding sample size. Although the sample size of 206 exceeds the minimum sample size of 192 that I have required in Chapter 4, it would have been better to have a larger sample size. In particular, I had to mean substitute for 25 missing values across the items of the following variables: manager's propensity to use informal economy, market, environmental dynamism, and environmental hostility. Moreover, I had to drop control variables to free degrees of freedom in order to obtain significant results.

The second limitation is regarding manager's social ties with formal institutions scale. Ultimately, instead of having to randomly split the sample of 206 into sample 1 (102 observations) and sample 2 (104 observations), it would have been more reliable to collect three samples that have sufficient observations to conduct two exploratory factor analysis (on two different samples) and one confirmatory factor analysis (on the third sample). Moreover, although the construct manager's social ties with formal institutions is generalizable across different contexts (i.e. applicable universally), the items of the one factor scale are context depend and might not be generalizable. That is, the items of the scale are specific to the political formal institutions of Lebanon.

The third limitation is regarding manager's propensity to use informal economy scale. Ultimately, instead of having to randomly split the sample of 206 into sample 1 (102 observations) and sample 2 (104 observations), It would have been more reliable to collect three samples that have sufficient observations to conduct two exploratory factor analysis (on two

different samples) and one confirmatory factor analysis (on the third sample). Moreover, although the construct manager's propensity to use informal economy is generalizable across different contexts (i.e. applicable universally), the items of the scale are context depend and might not be generalizable. That is, the items of the scale are specific to the informal economy of Lebanon. However, the two factors "informal no proof" and "informal cash" as well as the construct manager's propensity to use informal economy are generalizable.

The fourth limitation is regarding Job Title. The sample of 206 has the following job title breakdown: 28 owners, 7 CEO, 34 owners and CEOs, 88 managers, 12 administrative assistants, and 37 others. A better sample would have a majority of owners, CEOs and Owners and CEOs.

The final limitation is regarding common method variance. Although I took some preventive measures (outlined in Chapter 4) following Podsakoff et al. (2003) recommendations, it would have been better to collect the independent variable, moderator, and the dependent variable at different times, from different sources, and using different methods. However, the test for common method variance showed that there is no threat for common method variance in my data.

Conclusion

The purpose of this study is to answer the question: Why do managers in emerging markets conduct some activities in the informal economy and others in the formal economy when they have a choice? In particular, I designed this study to develop a theory that explains, at the firm level, how managers in emerging markets choose to conduct some activities in the informal economy while conducting others in the formal economy. That is, using institutional economic theory previous research had justified the use of informal economy, at the country level, as an evasion of high transaction costs of the formal economy. However, previous research

does not explain, at the firm level, why managers in emerging markets conduct some activities in the informal economy while conducting others in the formal economy. That is, previous research did not justify how managers keep the transaction costs of the activities they conduct in the informal economy lower than the transaction cost of the formal economy for the same activities.

The results of this study suggest that managers in emerging markets use their social ties with formal institutions to keep the transaction costs of the activities they conduct in the informal economy lower than the transaction costs of the formal economy. That is, managers' social ties with formal institutions will protect them against being single out for enforcement and against the potential opportunistic behaviors of their business partners.

The results of this study also offer two newly developed scales: manager's social ties with formal institutions scale, and manager's propensity to use informal economy. "Manager's social ties with formal institutions" scale is a single factor scale that measures the extent of managers' social ties with formal institutions. As for the manager's propensity to use informal economy, it is a two factors scale. The first factor "informal cash" measures the extent of managers' use of informal activities involving illegal transfer of cash (e.g. paying bribes). The second factor "informal no proof" measures the extent of managers' use of informal activities without leaving a trace for those activities (e.g. selling products without written receipts).

Finally, I hope that the results of this study offer a better understanding and a better justification for the use of informal economy in emerging markets. Moreover, I hope that future research will build on the results of this study to offer a better understanding for the applicability of management theories in emerging markets.

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APPENDIX A: SURVEY QUESTIONS

- **What is your current job title?** 1-Owner, 2- CEO, 3- Owner and CEO, 4-Manager, 5-Administrative Assistant, 6-Other
- **For how long have you been working in your current job or position?** (Please indicate the approximate number of years)
- **For how long have you been working in your current company?** (Please indicate the approximate number of years)
- **Select the industry that best describes your primary business:** North American Industry Classification System (Reduced classification)
- **How big is your company?** (Total number of registered and not registered employees)
- **What year was your company founded?**
- **What year were you born?**
- **What is your gender?**
- **What is your religion?** (Specify sect)
- **How fluent are you in English Language?** (Extremely poor to Excellent) 7 points Likert
- **The highest educational degree that I have attained is:** 1-High school diploma 2-Associate Degree 3-Bachelor degree 4-Master degree 5- PhD or MD
- **Work Regulatory Focus (WRF) scale (Neubert et al., 2008) (7 points Likert scale: strongly disagree to strongly agree)**

Select the best answer that BEST describes you AS YOU REALLY ARE

1. I concentrate on completing my work correctly to increase my business' security.
(Security)
2. I focus my attention on completing my responsibilities. (Oughts)
3. Fulfilling my work is very important to me. (Oughts)
4. I strive to live up to my responsibilities and duties. (Oughts)
5. I am often focused on accomplishing tasks that will support my need for security.
(Security)
6. I do everything I can to avoid loss. (Losses)
7. Smooth and regular cash flows are important to me than when assessing ways to
grow my business. (Security)
8. I focus my attention on avoiding failure. (Losses)
9. I am very careful to avoid exposing myself to potential losses. (Losses)
10. I take chances to maximize my business goals. (Gains)
11. I tend to take business risks in order to achieve success. (Gains)
12. If I had an opportunity to participate on a high-risk, high-reward project I would
definitely take it. (Gains)
13. If my business did not allow for advancement, I would likely start a new one.
(Achievement)
14. A chance to grow is an important factor for me when looking for a new business.
(Achievement)
15. I focus on accomplishing business tasks that will further my business growth.
(Achievement)

16. I spend a great deal of time envisioning how to fulfill my aspirations. (Ideals)

17. My business priorities are impacted by a clear picture of what I aspire to be.

(Ideals)

18. I am motivated by my hopes and aspirations. (Ideals)

- **Items used to measure perceptions of affiliations with political institutions. (7 points**

Likert scale: very small to very large

To what extent do you or a member(s) of the top management team believe that you have social and/ or personal relationships with?

1. A member of the Lebanese parliament.
2. The Speaker of the Lebanese parliament.
3. A Lebanese politician.
4. A highly ranked member of an influential Lebanese political party.
5. A highly ranked member of a powerful Lebanese union (example: labor union).
6. The president of Lebanon.
7. The prime minister of Lebanon.
8. Commander of the Lebanese armed forces.
9. Commander of the Lebanese internal security forces.

- **Items used to measure perceptions of affiliations with regulatory institutions. (7 points Likert scale: very small to very large)**

To what extent do you or a member(s) of the top management team believe that you have social and/ or personal relationships with?

1. A highly ranked member at one of the councils of the prime minister of Lebanon (examples: economic and social council, investment development authority of Lebanon...).
 2. A Lebanese minister.
 3. A highly ranked member at a Lebanese ministry.
 4. A highly ranked member at the council for development and reconstruction.
 5. One of the deputies of the governor of the central bank of Lebanon.
 6. The governor of the central bank of Lebanon.
- **Items used to measure perceptions of affiliations with economic institutions. (7 points Likert scale: very small to very large)**

To what extent do you or a member(s) of the top management team believe that you have social and/ or personal relationships with?

1. A highly ranked member at the chamber of commerce of Lebanon.
 2. A highly ranked member at the association of Lebanese industrialists.
 3. A highly ranked member at the association of banks in Lebanon.
 4. A highly ranked member at a Lebanese banker.
- **Items used to measure propensity to use informal economy. (7 points Likert scale: very small to very large)**
1. To what extent does your company employ without written contracts?(employment)
 2. To what extent does your company pay taxes on employment? (employment)
 3. To what extent does your company register employees with the social security? (employment)

4. To what extent does your company buy from suppliers without written receipts?(suppliers)
 5. To what extent does your company buy from suppliers without written purchase invoice? (suppliers)
 6. To what extent does your company buy illegal products (example: copies of software...)? (Suppliers)
 7. To what extent does your company sell to customers without written receipts?(Customers)
 8. To what extent does your company sell to customers without written sales invoice? (Customers)
 9. To what extent does your company sell illegal products (example: copies of software...)? (Customers)
 10. To what extent does your company conduct business activities without obtaining permits from relevant authorities? (Government)
 11. To what extent does your company conduct business activities that are not registered with the relevant authorities? (Government)
 12. To what extent does your company pay illegal fees to receive business permits from governmental institutions? (Government)
 13. To what extent do you have to pay government officials more than the required registration and/ or permits expenses? (Government)
- **Survey questions related to common method variance (7 points Likert scale: very small to very large)**
 1. Please select Very Large for this row

2. Please select Agree for this row
 3. To what extent do you value car racing?
 4. To what extent do you value sports?
 5. To what extent do you value speed?
- **Asset specificity (Human and physical) Scale (Klein et al., 1990)**

Six items, 7-point scale (1 = strongly disagree, 7 = strongly agree)

Do you agree that?

1. It is difficult for an outsider to learn our ways of doing things. (Human)
 2. In your business, a salesman has to take a lot of time to get to know the customers. (Human)
 3. It takes a long time for a salesman to learn about our product thoroughly. (Human)
 4. A salesman's inside information on our procedures would be very helpful to our competitors. (Human)
 5. Specialized facilities are needed to market our product. (physical)
 6. A large investment in equipment and facilities is needed to market our product (Physical)
- **Environmental dynamism scale (Miller & Friesen, 1982)**

7-point scale (1 = strongly disagree, 7 = strongly agree)

In your main industry, do you agree that:

1. Your company rarely changes its marketing practices to keep up with the market and competitors.
2. The rate at which products/services are becoming obsolete in the industry is very slow.
3. Actions of competitors are quite easy to predict.
4. Demand and consumer tastes are fairly easy to forecast.
5. The production/service technology is not subject to very much change and is well established.

- **Environmental hostility scale (Miller & Friesen, 1982)**

7-points Likert scale (1 = strongly disagree, 7 = strongly agree)

In your main industry, do you agree that:

1. The environment causes a great deal of threat to the survival of your firm.
2. There is tough price competition.
3. There is competition in product quality or novelty.
4. There are declining markets for products.
5. There is scarce supply for labor/material.
6. There is government interference

- **Networking ability (alpha= 0.87) (Ferris et al., 2005)**

7-points Likert scale (1 = strongly disagree, 7 = strongly agree)

1. I spend a lot of time and effort networking with others.
2. I am good at building relationships with influential people.

3. I have developed a large network of colleagues and associates whom I can call on for support when I really need to get things done.
4. I know a lot of important people and am well connected.
5. I spend a lot of time developing connections with others.
6. I am good at using my connections and network to make things happen.

APPENDIX B: THE UNIVERSITY OF ALABAMA IRB APPROVAL



January 9, 2014

Amine Abi Aad
Dept. of Management
College of Commerce & Business Admin.
Box 870225

Re: IRB # 14-OR-007, "Choosing between the Formal and Informal Economy: How do Business Owners in Emerging Markets Make It?"

Dear Mr. Aad:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of written documentation of informed consent. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Your application will expire on December 16, 2014. If your research will continue beyond this date, please complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, please complete the Modification of an Approved Protocol form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Request for Study Closure form.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Sincerely,



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Carpaneto T. Myles, MSM, CIM, CIP
Director & Research Compliance Officer
Office for Research Compliance
The University of Alabama

IRB Project #:

UNIVERSITY OF ALABAMA

INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS
REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

I. Identifying information

	Principal Investigator	Second Investigator
Name:	Amine Abi Aad	Dr. James Combs
Department:	Management	Management
College:	C&BA	C&BA
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Title of Research Project: Choosing between the Formal and Informal Economy: How do Business Owners in Emerging Markets make it?

Date Printed: 11/22/2013 Funding Source: N/A

Type of Proposal: New Revision Renewal Completed Exempt

Attach a renewal application

Attach a continuing review of studies form

Please enter the original IRB # at the top of the page

UA faculty or staff member signature:

II. NOTIFICATION OF IRB ACTION (to be completed by IRB):

Type of Review: Full board Expedited

IRB Action:

Rejected Date: _____

Tabled Pending Revisions Date: _____

Approved Pending Revisions Date: _____

Approved—this proposal complies with University and federal regulations for the protection of human subject

Approval is effective until the following date: 12-16-14

Items approved:

<input checked="" type="checkbox"/>	Research protocol:	dated 12/17/13
<input checked="" type="checkbox"/>	Informed consent:	dated 12/17/13
<input type="checkbox"/>	Recruitment materials:	dated
<input type="checkbox"/>	Other:	dated

Approval signature

Date 1/9/2014