The Effect of Situational and Personal Factors on Firm Performance in Emerging Markets
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Abstract

Managers in the dynamic environment of emerging markets have a choice to either conduct

some economic activities in the informal economy or not. This choice is governed by their ability

to take risks. One of the established theories that help explain why some individuals are risk takers

while others are risk averse is the regulatory focus theory (RFT). Prior research has studied the

relationships between RFT and firm performance, RFT and the use of informal economy, and the

use of informal economy and firm performance. In this paper, we bundle all previous findings and

theorize that the use of informal economy partially mediates the relationship between RFT and

firm performance. That is, we fill a gap in the literature by studying the effect of personal and

environmental factors together on firm performance in the dynamic environments of emerging

markets. Using a sample of 362 Lebanese managers, we found support for our theorizing. We

found that the use of informal economy partially mediates the positive relationship between

promotion focus mindset and firm performance, and the negative relationship between prevention

focus mindset and firm performance.

Keywords: RFT, Emerging Markets, Performance, Prevention, Promotion, Formal Economy,

Informal Economy.

Introduction

Emerging markets are marketplaces in which buyers and sellers cannot readily and effectively trade (Khanna & Palepu, 1997), leading to two important consequences: (1) some activities in emerging countries must be carried out in the informal economy, and (2) Western firms do not compete effectively in such areas (Khanna & Palepu, 1997). As a result, the use of the informal economy in emerging markets might have critical implications on the theories of the boundary of the firm and subsequently on firm performance.

In order to describe the impacts of managers on firm strategy and performance, Upper Echelons theory was established by Hambrick and Mason (1984). It forecasts that personalities, values, experiences and other individual elements clearly affect management decisions and choices in order to utilize them to manage their activities (Gerstner, König, Enders, & Hambrick, 2013).

The regulatory focus theory is one of the theories used to explore how varied thinking affects choices and behaviors of people. Regulatory focus theory suggests that people may concentrate on promotion and/or prevention focus mindset, affecting their behaviors and decisions (Brockner, Higgins, & Low, 2004).

Prior research have looked at the effect of RFT on the use of informal economy (Abi Aad & Combs, 2021), and the effect of RFT on firm performance (Gamache, McNamara, Mannor, & Johnson, 2015; Hmieleski & Baron, 2008; Jiang, Wang, Chu, & Zheng, 2020; Wallace, Little, Hill, & Ridge, 2010). Prior research had also studied the effect of the use of informal economy on firm performance (Assenova & Sorenson, 2017; Fredström, Peltonen, & Wincent, 2020). However, prior research has not looked at the effect of personal and environmental factors together on firm performance.

In the dynamic environment of emerging markets, it is crucial to understand what affects firm performance not only at the environmental level (i.e., the use of informal economy), but also at the personal level (i.e. what makes managers more prone to use the informal economy). Understanding the interaction between the personal and environmental factors is important because they affect the boundary of the firm and subsequently its performance.

In this paper, we try to fill in the gap in the literature by studying how environmental factors (i.e., the use of informal economy) mediates the relationships between personal factors (i.e., promotion and prevention focus mindsets) and firm performance. It is very important to study the factors at both levels (personal and environmental) because researchers had studied the effect of these factors on firm performance alone. However, studying the personal and environmental factor in tandem might shed lighter on the understanding of firm performance in emerging markets.

Theory and Hypotheses

Institutional economics approach to understanding emerging markets

The approach of institutional economics stresses a wider perspective of markets than the neoclassical economic one. It stresses that efficient markets are a consequence of complex interactions between different formal and informal institutions (North, 1990).

Political, regulatory, and economic formal institutions

The political, regulatory and economic institutions are likely the most crucial to managers in the country's complex institutional environment since they define "the "rules of the game" for economic transactions (Holmes, Miller, Hitt, & Salmador, 2013).

First of all, political institutions define the balance of power, the participatory criteria and the technique of government involvement, and therefore, processes for establishing and changing

existing institutions by people and governments (Holmes et al., 2013). Secondly, regulatory institutions reflects government-imposed rules and policies to perform economic activities (Holmes et al., 2013). Thirdly, economic institutions regulates the capital resources of the nation (Holmes et al., 2013).

Institutional voids

The roles of institutional intermediaries are nearly invisible while formal institutions are robust in developed economies. Institutional intermediates are market intermediates specializing in the facilitation and enforcement of contractual agreements between purchasers and sellers (Khanna & Palepu, 2010). However, institutional voids would worsen if institutional intermediates do not arise in emerging markets (McMillan, 2007).

The phrase "Institutional voids" is first defined by Khanna and Palepu (1997) to describe the lack of competent institutional mediators to enable successful transactions between buyers and sellers. It should be noted that government and/or private entities may act as institutional intermediates (Khanna & Palepu, 1997, 1999). Government intermediaries, such as internet payments, internet travel firms and certain non-profit organizations, employ arbitration processes to address disputes quickly (Khanna & Palepu, 2010).

Institutional void limits the adequacy of the markets and might cause them to collapse (Khanna & Palepu, 1997; Khanna & Palepu, 2010). There are three main kinds of institutional void that might cause market failure: faulty information, bad regulations, and ineffective justice systems (Khanna & Palepu, 1997). To assess the possible investments, services and items which may be at the center of their economic activity, purchasers must first obtain appropriate and trustworthy information (Khanna & Palepu, 1997). Moreover, regulators in emerging markets might face incorrect rules, which place political objectives above economic efficiency and lead to

a move away from the adequate functioning of effective markets (Khanna & Palepu, 1997). Finally, emerging markets are characterized by inefficient judicial systems that are essential to facilitate trade (Khanna & Palepu, 1997). Therefore, contracts cannot be implemented in a predictable and dependable fashion, which would prevent the contractual parties from doing business (Khanna & Palepu, 1997). Consequently, in emerging countries, the weak judicial system is a sort of institutional void that leads to lack of proper enforcement of contracts.

Upper Echelon Theory

In order to describe the impacts of managers on firm strategy and performance, Upper Echelons theory was established by Hambrick and Mason (1984). Upper Echelon theory posits that managers' values, experiences and other elements influence managers' choices and decisions (Gerstner et al., 2013).

Moreover, Hambrick and Mason (1984) not only believe that managers take all strategic decisions but also, they impact firm strategies and performance by accepting or rejecting other members' project proposals (Gerstner et al., 2013). Additionally, managers play an essential role in persuading people to support ideas and suggestions for projects via employment and recruitment, incentives paid, and structural arrangements (Gerstner et al., 2013). Consequently, managers directly and indirectly influence firms' plans and results.

For example, when decision-making and business targets are taken, the choices of managers may vary significantly and thus integrate numerous aspects into decisions (Finkelstein (Finkelstein & Hambrick, 1990). The choice of top managers (e.g., founder, owners, managers) sets the policies, priorities, and culture of the firm, forming the organization in a manner that

matches the framework of management in their own direction (Miller & Dröge, 1986; B. Schneider, 1987). This applies to small, fledgling firms (George, Wiklund, & Zahra, 2005). To understand organizational outcomes, the attitudes, inclinations, and biases of senior managers must be considered (Cannella, Hambrick, Finkelstein, & Cannella, 2009).

Regulatory focus theory

Regulatory focus theory is one of the intriguing theories used to explore how varied thinking affects choices and behaviors of people. The regulatory focus theory posits that people may concentrate their behaviors and decision-making toward promotion and/or prevention focus mindset (Brockner et al., 2004). Regulatory focus theory is based on a deeper knowledge of the behaviors, values and reasons of why managers would succeed or fail in an organization (Brockner et al., 2004).

In other words, regulatory focus theory is based on a deeply ingrained human conduct law that asserts people are prone to seek pleasure by reducing discrepancies among real and desired outcomes, avoiding suffering, and increasing differences between real and unwanted results (Brockner et al., 2004; Higgins, 1998; Higgins, Shah, & Friedman, 1997). In fact, a person with a promotion focus mindset has a direction for pleasure, but a person with prevention focus mindset is focused on pain avoidance (Higgins, 1998; Higgins et al., 1997).

A promotion focus mindset will likely provide more success to the business since the manifestation of a promotion focus mindset results in more successes and advantages for the business as a whole, as managers seek new methods of helping the business prosper (Wallace et al., 2010). That is, a person with promotion focus mindset doesn't focus on errors, but rather gains (Higgins, 2000; Higgins et al., 1997). In addition, a person with promotion focus mindset would be engaged and ready to examine different methods and procedures, such as amending the firm's

approach to resource allocation, to identifying the most suitable option to achieve the goal (Gamache et al., 2015; Johnson, Smith, Wallace, Hill, & Baron, 2015). Moreover, he or she would promote riskier methods in the decision-making process (Crowe & Higgins, 1997).

For instance, Wallace et al. (2010), found that promotion mindset is positively related to firm performance and this relationship is stronger in dynamic environment. Moreover, Jiang et al. (2020) found that prior firm performance negatively moderates the relationship between promotion and the magnitude of strategic change, thus providing more proof that promotion mindset affects firm performance. Lastly, Hmieleski and Baron (2008) found that, in dynamic environment, promotion mindset is positively related to firm performance and that this relationship is partially mediated by deviation from original business opportunity. Based on this, we hypothesize:

Hypothesis 1: Promotion focus mindset is positively related to firm performance in the dynamic environments of emerging markets.

In the case of prevention focus mindset, resources are devoted to tasks and protection, which would emphasize the identification of potential problems and lead to missing out on some chances because prevention focus mindset is very attentive to what had contributed to success in the past (Wallace & Chen, 2006). Managers who have prevention focus mindset are responsible for everything and advocate defensive safety goals (Jiang et al., 2020). They are very careful about their responsibilities and protection and are encouraged to prevent errors (Crowe & Higgins, 1997; Johnson et al., 2015). Second, managers who have prevention focus mindset advocate conservative approaches, rigorous compliance with rules and established practices (Crowe & Higgins, 1997).

For instance, Jiang et al. (2020) found that prior firm performance positively moderates the relationship between prevention and the magnitude of strategic change, thus providing more proof that prevention focus mindset affects firm performance. Moreover, Hmieleski and Baron (2008) found that in dynamic environment prevention focus mindset is negatively related to firm, and that this relationships is partially mediated by deviation from original business opportunity. Based on this, we hypothesize:

Hypothesis 2: Prevention focus mindset is negatively related to firm performance in the dynamic environment emerging markets.

The relationship between the regulatory focus theory and informal economy

Two types of factors affect the regulatory focus of individuals: dispositional and situational. The dispositional factor is affected by the individual's psychological state, early life experience, the psychological condition (Friedman & Förster, 2001; Liberman, Idson, Camacho, & Higgins, 1999). Some situational factors might nonetheless inspire promotion focus mindset when emphasizing the requirements, ambitions and aspirations and benefits to sustain them. Other situational factors may promote prevention focus mindset when safety and safety requirements, regulations and duties and losses are addressed (Higgins, 1998; Neubert, Kacmar, Carlson, Chonko, & Roberts, 2008).

According to Schneider and Enste (2002), emerging markets have situational factors that allow 40 to 60% of all economic activities to be conducted in the informal economy. The informal economy was described by Webb, Tihanyi, Ireland, and Sirmon (2009) as an economy in which all economic activities are illegal but legitimate to a significant number of people, and the formal economy as an economy in which all economic activities are legal and legitimate.

Since informal business activities are illegal yet legitimate, they are thought to be dangerous (Webb et al., 2009).

Managers conducting some economic activities in the informal economy are at risk to being taken advantage of by business partners with whom they undertake informal activities. In particular because courts do not protect informal economic activities which might increase the possibility of opportunistic behaviors by business partners. As a result, manager operating in the informal economy must have strong nutrition requirements, high optimism, and aspirations to conduct hazardous activities in an informal economy.

Thus, in the dynamic environment of emerging markets, managers who have promotion focus mindset are better suited than managers who have prevention focus mindset and who seek protection and security requirements, follow regulations, and avoid losses. In other words, managers who have promotion focus mindset are more likely to take risk and employ informal economic activity to fill the institutional voids in the formal institutions. In addition, managers who have prevention focus mindset are less likely to use the informal economy to fill the institutional voids in the formal institutions. As such, we hypothesize:

Hypothesis 3: Managers who have promotion focus mindset are more prone to use the informal economy

Hypothesis 4: Managers who have prevention focus mindset are less prone to use the informal economy.

Informal economy and firm performance.

Firms engaged in informal economy activities may utilize conventional accounting methods and entrepreneurs frequently combine corporate and personal property (Assenova & Sorenson, 2017). Therefore, firms are frequently unable to assess their own profitability and try

to avoid paying taxes (Assenova & Sorenson, 2017). The extent to which firms function informally varies. For example, a lawfully registered firm may nevertheless bypass taxes or illegally employ employees. However, unregistered firms seldom pay taxes, and employ lawfully (Assenova & Sorenson, 2017). When unregistered firms, that conduct most of their economic activities in the informal economy, grow and accumulate profits, they start shifting their economic activities into the formal economy to leverage on the advantages of being formal (i.e. registration) (Assenova & Sorenson, 2017).

While the presence of a wide range of firms engaged in informal economic activities may provide these firms with certain cognitive credibility, it appears unlikely that resource holders and consumers will place these firms on equal terms with firms operating in the formal economy. Indeed, the results indicate that firms operating in the informal economy do not perform as good as those operating in the formal economy in nations were the majority of firms are operating in the informal economy (Assenova & Sorenson, 2017). In a survey of 18 countries, many statistical techniques of estimates have consistently shown that firms operating in the formal economy have superior performance, in terms of volume of sales, than those operating in the informal economy (De Mel, McKenzie, & Woodruff, 2013; McKenzie & Sakho, 2010; Sharma, 2014).

Resource limitations may restrict the frequency of opportunity identification and prosecution in the informal economy (Ardichvili, Cardozo, & Ray, 2003). In particular, the structural constraints of the informal economy are exacerbating the issue and usually restrict access to knowledge-based, and structured financial services, whereas the formal economy provides for such resources (Wiklund & Shepherd, 2003). In formal institutional networks, such as those of universities and businesses, expert and knowledge-based instruments are frequently integrated

(Arenius & De Clercq, 2005; O'shea, Allen, Chevalier, & Roche, 2005; Wiklund & Shepherd, 2003). In addition to human capital, informal institutions provide entrepreneurs with less access to formalized financial and contractual services (Feige, 1990; Webb, Bruton, Tihanyi, & Ireland, 2013). Cumulative resource limitations will restrict the availability at national level of high-quality resources and opportunities (Anokhin, Wincent, & Autio, 2011). Moreover, the informal economy work circumstances, such as income for workers and basic work requirements, are frequently poor (Amorós, Ciravegna, Mandakovic, & Stenholm, 2019; Levie & Autio, 2011).

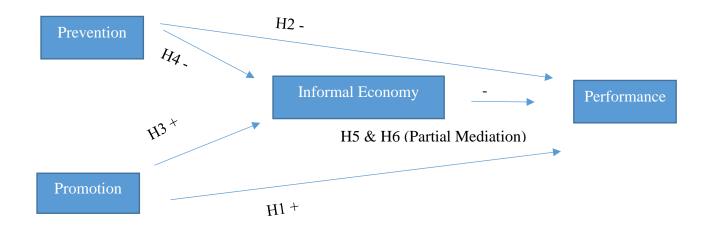
For instance, Assenova and Sorensen 2017 found that formal registration at founding (that is shying away from informal economy) increases firm performance as measure by sales and employment. Moreover, the formal registration at founding is more valuable where citizens placed greater trust in the government and formal institutions. In other words when the incongruence between formal and informal institutions is low. Similarly, Fredstromel et al 2020 found that the bigger the size of the informal economy the lower entrepreneurial productivity would be. Additionally, this relationship is even weakened when the governance quality is bad. That is, the incongruence between formal and informal institutions is high. Based on this, we hypothesize:

Hypothesis 5: Informal economy partially mediates the positive relationship between promotion focus mindset and firm performance

Hypothesis 6: Informal economy partially mediates the negative relationship between prevention focus and firm performance.

The model that we are testing is depicted in Figure 1.

Figure 1: Theoretical Model



METHODS

Sample

For this research, for two reasons we picked Lebanon as the national background. Initially, Lebanon has a complicated republic government with executive, parliamentary and judiciary institutions, each suspected of mild corruption at least. There are also rival religious groups with constitutional functions, mainly Christian Maronite, Moslem Sunni and Shia. Each group seeks to protect its members and exploit, occasionally, members of the other groups. Secondly, Lebanon has a free market economy that is a mixture of formal and informal economies (Bank, 2010). While the government promotes foreign investment, "red cup, corruption, arbitrary licensing, cumbersome customs processes, expensive taxes, tariffs, and charges, antiquated law, and weakened intellectual property rights" affect the institutional environment (Factbook, 2018).

Data Source

The data for this research was acquired through an online survey that asked owners, CEOs, and managers of Lebanese firms to answer a range of questions related to their social connections, their usage of the informal economy, and firm performance. We started by contacting 1.000 business owners by e-mailing a list bought from a Lebanese firm which offers contact information for people and businesses, especially for commercial reasons. At the same time, we sent a survey to business connections of the first author in Lebanon and requested them to transmit the survey to their connections. Because we satisfied the standards for statistical power, they halted the survey after 362 completed answers were received. Respondents were owner with hired CEOs (25.70%), owner/CEOs (21.50%), hired CEO/managers (52.80%). The average respondent was male (87.00%), averaged 43.94 years old, and had a tenure of 9.95 years with the firm.

Measures

Dependent variable. We use (Gupta & Govindarajan, 1986) firm performance scale, with 7-point Likert scales, to rate the firm's overall performance in comparison with other competitors in the same industry. For isntance, the rating is based on growth in sales, market shares, number of employees, and profitability. The rating is also based on ability to fund growth for profits, return on equity, and total assets, as well as profit marging on sales. Scale reliability in our sample was 0.98

Independent variables: The independent variables are promotion focus and prevention focus mindsets. We utilize the WRF (Work Regulatory Focus) scale by (Neubert et al., 2008). We must mention that the original scale had a Likert scale of 5 points, we had rescaled the scale to Likert scale of 7 points. But it should be no issue since the 5- and 7-point scales have the same average,

skewing or kurtosis (Dawes, 2008). In addition, we have modified the language of several of the items in order to adapt them to the Lebanese context. For this purpose, they had received consent from one of the original writers. The reliability for promotion and prevention was respectively 0.98 and 0.98 in their sample.

Mediator: On the notion of the informal economy (i.e. a series of illegal but legitimate economic activities), we drew on Webb et al. (2009) definition of informal economy to construct a measure for the inclination of managers to utilize the informal economy. Because it is contextually sensitive and given the lack of existing scales, they began with deducting items related to various activities that might be performed in the formal or informal economy - e.g., jobs, suppliers, customers. They next carried out a content adequacy test to ensure that the items they generated represent the theoretical structure properly (Schriesheim, Powers, Scandura, Gardiner, & Lankau, 1993). They supplied the newly developed scale to a group of twenty Lebanese owners or managers and asked them to evaluate the extent to which the items represent activities in the formal and informal economy. Finally, they chose seven items after multiple revisions. An example of the item is: how much does your firm work without formal contracts? For the seven items the Cronbach alpha is 0.98. The items of the informal economy scale are summarized in Table 1.

Table 1: Items used to measure manager's propensity to use informal economy.

(7 points Likert scale: very small to very large)

- To what extent does your firm employ without written contracts?
- To what extent does your firm pay taxes on employment?
- To what extent does your firm buy from suppliers without written receipts?
- To what extent does your firm sell to customers without written sales invoice?
- To what extent does your firm conduct business activities without obtaining permits from relevant authorities?
- To what extent does your firm pay illegal fees to avoid or decrease fines?
- To what extent do you have to pay government officials more than the required registration and/ or permits expenses?

Control variables.

Firm age. Firm age is number of years since the establishment date. This helps to manage the macroeconomic swings that might affect the usage of informal economy (Wade, Porac, Pollock, & Graffin, 2006). For example, from 1975 until 1990 there was a civil war in Lebanon. Most firms that have been established during this time have carried on informal economic activities because of the existing macroeconomic constraints. In other words, managers who learnt to operate business throughout the civil war might be different from others who had no such experience.

Firm size. We also control for the number of registered and non-registered personnel for the size of the firm. The check for the size of the firm is significant because research on base of the pyramid markets shows that tiny firms sneak under the formal institutions' radars, and as a result, they conduct more informal economic activities (Godfrey, 2011; Khanna & Palepu, 2010). Firm size was assessed on a category one to six scale with a total number of registered and non-registered workers: 1 = 1-9 (7.7%), 2 = 10-19 (21.2%), 3 = 20-49 (20.2%), 4 = 50-99 (19.9%), 5 = 100-249 (25.1%) and 6 = above 250 staff (6.9 %).

Manager's age. The age of the manager is measured as years since the birth. For the same reason as firm age, it is vital to monitor the manager's age. That is, managers who have learnt to do business during the Civil War years in Lebanon may be different from those without such experience.

Manager's gender. The gender of the manager is coded using a dummy variable (1 for male and 2 for female). Women cannot work or pursue their professions or own firms in several emerging markets. As a consequence, informal economic activities for women in several emerging countries are necessary to do business (Khanna & Palepu, 2010). Yet, that is not the case in Lebanon, but Lebanon remains an emerging market in which gender might play a role in conducting informal economic activity.

Manager's education. Education of managers is categorized as 1-high school diploma, 2-associate degree, 3-bachelor's degree, 4-master's degree, 5- PhD or MD. We control the education of the managers since it might influence the way a manager runs the business. In other words, managers who have earned higher education are more likely to do work in the formal sector. Managers who have graduated (e.g. masters and PhD) from developed economies not only better comprehend the critical role played by formal institutions and the formal economy, but also are familiar with how activities in developed economies are performed (i.e. in the formal economy). In addition, higher education managers have access to superior posts. Consequently, managers with greater education are more likely to influence their business' strategy.

Manager's tenure. We control for manager's tenure at present firm. With tenure increasing, managers get greater competence and influence, which enhances their decision making (Westphal, 1998). Moreover, managers obtain greater knowledge on how and where business activities are to be carried out as tenure grows.

Manager's position. Managers are at the top of the hierarchies of firms affect their strategies and performances (Hambrick & Mason, 1984; Nadkarni & Herrmann, 2010). We have coded the position of the manager with three dummy variables: the owner alone, owner and CEO, hired manager/CEO.

Manager's religion. It is necessary to control the religion of the manager. In Lebanon, religion plays a big role in the appointment of officials in formal institutions (Factbook, 2010). The President of Lebanon, for example, must be by constitution, Christian Maronite. Secondly, several faiths have distinct regulations on the job of women. Some groups of Muslims, for example, do not let women work.

Industry. We use the two-digit North American Industry Classification system to control for industry. This methodology is used in the classification of businesses functioning in the United States of America by the federal statistics agencies. Industry has been classified from 1 to 10 to control for ten key economic sectors (for example 1- agriculture, forestry, fisheries and hunting, 2- mining, quarry and extraction of oil and gas...). In emerging markets, some businesses are better regulated than others (Batjargal et al., 2013). This means that managers in certain sectors are able to operate more easily in the informal economy.

Environmental dynamism. The rate of change in the environment is referred to as environmental dynamism. The scale of Miller and Friesen (1982) measures the reflection of the environment dynamism which may alter the inclination of managers to conduct informal economic activities (Batjargal et al., 2013). In other words, in dynamic environments, managers might conduct more economic activities in the informal economy.

Human and physical asset specificity. Asset specificity is the degree to which a property may be redeployed after it has been used (Williamson, 1973). We use Klein, Frazier, and Roth (1990) scales to control for asset specificity. It is crucial to control for asset specificity because it influences the boundary of firm by influencing the make or buy choice either in the formal economy or the informal economy.

Manager's networking ability. Networking is described 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." "by Luthans, Hodgetts, and Rosenkrantz (1988, pp. 119-120). We use Ferris et al. (2005) scale to control for manager networking ability. It is crucial to control the networking ability because it affects managers' access to informal institutions that might influence the usage of the informal economy (Holmes et al., 2013).

Data analysis

To test our hypotheses, we ran Model 4 in the PROCESS macro Hayes (2018) to conducted mediated regression using SPSS 27. We evaluated the indirect effects by constructing bias-corrected 95% confidence intervals using the bootstrapped estimates from 10,000 samples (Shrout & Bolger, 2002).

Results

The means, standard deviations, and Pearson correlations among our variables appear in Table 2.

Table 2: Means, standard deviations, and Pearson correlations.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Manager position	4.43	1.09																	
2. Natural Resources and Mining	0.01	0.09	.02																
3. Goods Production	0.12	0.33	04	03															
4. Trade, Transportation, and Utilities	0.29	0.45	08	06	24**														
5. Information	0.10	0.30	.06	03	12*	21**													
6. Financial Activities	0.09	0.28	03	03	115*	19**	10												
7. Professional and Business Services	0.17	0.37	03	04	168**	28**	15**	14**											
8. Education and Health Services	0.06	0.23	01	02	09	158**	08	08	111*										
9. Leisure and Hospitality	0.14	0.35	.141**	04	154**	26**	13*	13*	18**	10									
10. Firm size	3.55	1.43	72**	01	.07	.07	.00	.05	04	.00	14**								
11. Manager age	43.94	11.32	.05	.01	02	.06	14**	.05	.04	07	.00	.01							
12. Firm age	35.38	31.30	03	05	.03	.02	09	.01	01	02	.02	.03	.15**						
13. Gender	1.13	0.34	43**	04	02	.10	.04	.03	11*	.04	09	.35**	08	.06					
14. Christian Maronite	0.25	0.43	31**	05	.06	02	01	.05	.00	03	03	.34**	03	03	.08				
15. Christian Orthodox	0.17	0.37	27**	.04	.01	05	.03	.02	.16**	02	119 [*]	.26**	05	.04	.20**	25**			
16. Christian Others	0.12	0.33	16**	03	.12*	11*	06	05	.02	.13*	.02	.12*	.06	.04	.03	21**	17**		
17. Muslim Sunni	0.19	0.39	.23**	04	12*	.12*	04	04	.00	03	.03	22**	.02	10	12*	27**	21**	18**	
18. Muslim Shia	0.16	0.37	.33**	04	03	.05	04	.11*	20**	.02	.10	40**	02	.05	10*	25**	20**	16**	21**

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21 2	22	23	24	25	26	27
19. Muslim Druze	0.10	0.30	.26**	.17**	04	01	.14**	10*	.05	04	01	18**	.02	03	10*	19**	15**	13*	16**	15**									
20. Education	3.06	0.57	01	01	01	01	03	.06	.14**	03	08	.00	.05	03	.03	01	07	.11*	05	02	.05								
21. Tenure	9.95	8.48	03	.04	.05	.04	09	.08	.04	11*	08	.08	.61**	.17**	03	.02	.04	.07	02	09	01	.06							
22. Asset	4.76	1.18	06	.03	.04	.13*	02	20**	.07	03	07	.00	03	01	03	.00	.08	06	.03	01	06	08	.03						
Specificity 23. Manager's	4.74	1.24	.745**	.01	07	05	02	05	.04	.00	.10	86**	.00	.05	36**	31**	28**	13*	.20**	.41**	.18**	02	05 -	.03					
Networking Ability 24. Environmenta	1 5.59	0.76	01	04	.03	.06	01	07	.01	11*	.00	.02	.02	.00	.01	.03	01	02	10	.07	.00	.07	.01 -	.03	.02				
Dynamism 25. Manager's		1.57	05	01	02	02	03	.06	.12*	12*	.02	01	.00	06	.10	04	.13*	.03	.09	07	15**	05	07	.05	03	04			
Promotion Mindset 26. Manager's	3.56	1.54	.02	.00	.05	04	02	.01	06	.05	.03	08	03	.09	10	03	02	02	03	.06	.00	10	.04	.01	.09	06	43**		
Prevention Mindset																													
27. Manager's Propensity to Use		1.31	.57**	02	04	12*	01	.00	.10	06	.15**	67**	03	06	26**	25**	18**	06	.21**	.27**	.08	.02	09 -	.03	.66**	.01	.45**	47**	
Informal Economy 28. Firm's		1.06	69**	.00	.02	.07	.02	.00	02	.04	12*	.81**	01	.00	.34**	.28**	.21**	.13*	13*	41**	14**	.04	.04	.05	81**	.03	.02	06	63**
performance			0.43																										

N = 362 *(p<.05); **(p<.01); ***(p<.001)

To test our hypotheses, we ran the PROCESS macro (Model 4) in SPSS 27. Results are presented in Table 3 and 4. Among the control variables, consistently all through the regression analyses, firm size, manager's position, and manager's networking ability were found to be significant. Moreover, in one of the regression analysis, industry was found to be significant. In particular, financial activities and leisure and hospitality had significant effect.

Table 3: Regression Results for Promotion Focus Mindset

Dependent Variable: Manager's Propensity to Use Informal Economy

Variable	В	se	p	LLCI	ULCI				
Constant	.238	.828	.774	-1.392	1.868				
Manager's Promotion Mindset	.392	.026	.000	.334	.443				
Manager's Position	.152	.060	.012	.034	.270				
Natural Resources and Mining	421	.493	.394	-1.390	.550				
Goods Production	.066	.252	.794	430	.562				
Trade, Transportation, and Utilities	118	.237	.619	584	.348				
Information	005	.262	.985	521	.511				
Financial Activities	.039	.265	.885	483	.561				
Professional and Business Services	.067	.252	.791	429	.562				
Education and Health Services	013	.278	.962	560	.534				
Leisure and Hospitality	.207	.248	.406	282	.695				
Firm size	205	.057	.000	316	094				
Manager age	005	.004	.255	014	.004				
Firm age	001	.001	.291	004	.001				
Gender	133	.132	.314	393	.127				
Christian Maronite	.403	.316	.203	218	1.023				
Christian Orthodox	.324	.325	.319	315	.963				
Christian Others	.471	.326	.149	170	1.111				
Muslim Sunni	.512	.323	.113	123	1.147				

Muslim Shia	.528	.325	.106	112	1.168
Muslim Druze	.514	.333	.123	141	1.168
Education	.112	.071	.117	028	.252
Asset Specificity	018	.034	.597	086	.049
Environmental Dynamism	.055	.052	.293	048	.158
Manager's Networking Ability	.363	.068	.000	.230	.497
Tenure	.002	.006	.367	010	.014

Dependent Variable: Performance

Variable	В	se	p	LLCI	ULCI
Constant	5.042	.641	.000	3.780	6.303
Manager's Promotion Mindset	.072	.026	.006	.021	.124
Manager's Propensity to Use Informal Economy	163	.042	.000	246	080
Manager's Position	106	.047	.023	198	015
Natural Resources and Mining	.134	.382	.725	617	.885
Goods Production	041	.195	.834	425	.343
Trade, Transportation, and Utilities	.017	.184	.924	343	.378
Information	.086	.203	.672	313	.485
Financial Activities	041	.205	.843	445	.363
Professional and Business Services	.024	.195	.901	359	.408
Education and Health Services	.228	.215	.291	197	.651
Leisure and Hospitality	.051	.192	.689	327	.430
Firm size	.256	.045	.000	.168	.344
Manager age	002	.003	.667	008	.005
Firm age	.001	.001	.609	002	.003
Gender	.039	.102	.704	162	.240
Christian Maronite	.098	.245	.689	384	.579

Christian Orthodox	.002	.252	.994	493	.467
Christian Others	.133	.253	.599	364	.630
Muslim Sunni	.273	.251	.277	220	.766
Muslim Shia	015	.253	.954	512	.483
Muslim Druze	.206	.258	.423	303	.714
Education	.079	.055	.153	030	.188
Asset Specificity	.026	.027	.326	026	.078
Environmental Dynamism	.067	.041	.100	013	.146
Manager's Networking Ability	254	.055	.000	362	147
Tenure	001	.005	.928	010	.009

 $\overline{N}=362.$ LLCI = Lower-level confidence interval. ULCI = Upper-level confidence interval.

Table 4: Regression Results for Prevention Focus Mindset

Dependent Variable: Manager's Propensity to Use Informal Economy

Variable	В	se	p	LLCI	ULCI
Constant	4.940	.732	.000	3.500	6.379
Manager's Prevention Mindset	456	.022	.000	500	412
Manager's Position	.065	.052	.205	036	.167
Natural Resources and Mining	128	.422	.761	959	.702
Goods Production	.354	.216	.102	071	.778
Trade, Transportation, and Utilities	.061	.203	.765	338	.460
Information	.153	.225	.495	288	.595
Financial Activities	.454	.226	.046	.009	.898
Professional and Business Services	.367	.214	.088	055	.788
Education and Health Services	014	.239	.953	484	.455
Leisure and Hospitality	.474	.212	.026	.057	.891
Firm size	303	.049	.000	399	208
Manager age	005	.004	.217	012	.003

Firm age	001	.001	.469	003	.001
Gender	110	.113	.332	332	.113
Christian Maronite	037	.273	.892	573	.499
Christian Orthodox	.060	.280	.830	490	.610
Christian Others	.133	.280	.636	419	.685
Muslim Sunni	.135	.278	.628	413	.683
Muslim Shia	.017	.281	.951	535	.570
Muslim Druze	166	.287	.563	731	.398
Education	070	.061	.253	190	.050
Asset Specificity	002	.030	.948	060	.056
Environmental Dynamism	016	.045	.722	104	.072
Manager's Networking Ability	.394	.058	.000	.280	.509
Tenure	001	.005	.839	011	.009

Dependent Variable: Performance

Variable	В	Se	P	LLCI	ULCI
Constant	5.782	.706	.000	4.394	7.170
Manager's Prevention Mindset	067	.030	.026	127	008
Manager's Propensity to Use Informal Economy	171	.049	.001	269	075
Manager's Position	118	.047	.012	210	026
Natural Resources and Mining	.196	.382	.610	556	.947
Goods Production	.017	.196	.931	368	.402
Trade, Transportation, and Utilities	.057	.184	.755	304	.418
Information	.123	.203	.544	276	.523
Financial Activities	.044	.206	.833	361	.448
Professional and Business Services	.092	.195	.637	291	.475
Education and Health Services	.226	.216	.296	199	.651

.110	.193	.571	271	.490
.237	.046	.000	.146	.328
001	.003	.727	008	.006
.001	.001	.591	001	.003
.052	.102	.611	150	.254
.045	.247	.855	440	.530
018	.253	.943	516	.480
.102	.254	.687	397	.602
.235	.252	.351	260	.731
081	.254	.749	581	.418
.106	.260	.685	406	.617
.050	.056	.367	059	.159
.029	.027	.272	023	.082
.056	.041	.170	024	.136
247	.056	.000	358	137
001	.005	.765	011	.008
	.237001 .001 .052 .045018 .102 .235081 .106 .050 .029 .056247	.237 .046001 .003 .001 .001 .052 .102 .045 .247018 .253 .102 .254 .235 .252081 .254 .106 .260 .050 .056 .029 .027 .056 .041247 .056	.237 .046 .000 001 .003 .727 .001 .001 .591 .052 .102 .611 .045 .247 .855 018 .253 .943 .102 .254 .687 .235 .252 .351 081 .254 .749 .106 .260 .685 .050 .056 .367 .029 .027 .272 .056 .041 .170 247 .056 .000	.237 .046 .000 .146 001 .003 .727 008 .001 .001 .591 001 .052 .102 .611 150 .045 .247 .855 440 018 .253 .943 516 .102 .254 .687 397 .235 .252 .351 260 081 .254 .749 581 .106 .260 .685 406 .050 .056 .367 059 .029 .027 .272 023 .056 .041 .170 024 247 .056 .000 358

N = 362. LLCI = Lower-level confidence interval. ULCI = Upper-level confidence interval.

Hypothesis 1 predicted that there is a positive relationship between manager's promotion focus mindset and firm performance in the context of the dynamic environment in emerging markets. Hypothesis 1 was supported, as the 95% confidence interval (.021, .124) for the bootstrapped estimate (.073), does not contain zero. Hypothesis 2 predicted that there is a negative relationship between manager's prevention focus mindset and firm performance in the context of the dynamic environment in emerging markets. Hypothesis 2 was supported, as the 95% confidence interval (-.128, -.008) for the bootstrapped estimate (-.067), does not contain zero.

Hypothesis 3 predicted that managers who have promotion focus mindset are more prone

to use the informal economy. Hypothesis 3 was supported, as the 95% confidence interval (.340, .443) for the bootstrapped estimate (.392), does not contain zero. Hypothesis 4 predicted that managers who have prevention focus mindset are less prone to use the informal economy. Hypothesis 4 was supported, as the 95% confidence interval (-.500, -.412) for the bootstrapped estimate (-.456), does not contain zero.

Finally, hypothesis 5 predicted that manager's propensity to use informal economy partially mediates the positive relationship between manager's promotion focus mindset and firm performance. This hypothesis was supported as the 95% confidence interval (.021, .124) for the bootstrapped estimate (.072), of the relationship between manager's propensity to use informal economy and firm performance, does not contain zero. Moreover, the 95% confidence interval for the bootstrapped indirect effect (-.064) did not contain zero (-.099, -.031). Hypothesis 6 predicted that manager's propensity to use informal economy partially mediates the negative relationship between manager's prevention focus mindset and firm performance. This hypothesis was supported as the 95% confidence interval (-.127, -.008) for the bootstrapped estimate (-.067), of the relationship between manager's propensity to use informal economy and firm performance, does not contain zero. Moreover, the 95% confidence interval for the bootstrapped indirect effect (.078) did not contain zero (.032, .126).

DISCUSSION

Managers in emerging markets have a choice that neither managers in developed markets nor managers in underdeveloped BoP markets have. In developed markets, managers must conduct most of their economic activities in the formal economy, whereas in underdeveloped BoP markets, managers must conduct most of their economic activities in the informal economy.

However, managers in emerging markets must choose to either conduct economic activities in the formal and/or informal economy, and this choice might affect their firms' performances. We develop initial theory to help explain how managers' choices in emerging markets affect their firms 'performances.

We theorized that managers' individual differences not only affect their firms' performances but also affect their willingness to use the informal economy, which in turn affects the firms' performances. Consistent with our theorizing, we found that managers who have a promotion focus mindsets not only lead their firms to higher performances in dynamic environments, but also are more prone to use the informal economy. However, when managers who have promotion focus mindsets decide to use the informal economy, their firms' performances got hurt. Moreover, and consistent with our theorizing, we found that managers who have a prevention focus mindset not only lead their firms to lower performances in dynamic environments, but also are less prone to use the informal economy. However, when managers who have prevention focus mindsets decide to use the informal economy, their firms' performances got hurt.

Our findings are important because they are based on both personal and environmental factors as determinants of firm performance in emerging markets. In particular, at the country level in the dynamic environments of emerging markets, institutional voids in formal institutions push managers to use the informal economy. However, the use of informal economy hurts firm performance on the long run. It appears that the decision to use the informal economy is also influenced by individual differences.

In particular, the difference between promotion and prevention focus mindsets plays a crucial role in the decision to use the informal economy. In the dynamic environments of

emerging markets, managers who have promotion focus mindset are more prone to use the informal economy, while managers who have a prevention focus mindset are less prone to use the informal economy. Nonetheless, managers who have promotion focus mindset lead their firms to higher performances while managers who have prevention focus mindset lead their firms to lower performances. As such, having a promotion focus mindset might lead to contradictory results because it might increase firm performance in dynamic environments, and increase the use of informal economy which decrease firm performance. In other words, promotion focus mindset is a double-edged sword, if used properly it might increase firm performance, and if used in the wrong way (i.e., more use of informal economy) it might decrease firm performance. In the same token, having a prevention focus mindset might lead to contradictory results because it might decrease firm performance in dynamic environments, and decrease the use of informal economy which increases firm performance. In other words, prevention focus mindset is a double-edged sword as well, if used properly (i.e., less use of informal economy) it might increase firm performance, and if used wrongly it might decrease firm performance.

At the environmental level, our theorizing and results hold in the dynamic environments of emerging markets, which has been proven to affect firm performance (Wallace et al., 2010). Future research might benefit from testing how the use of formal economy and/or informal economy might affect firm performance in other types of environments like hostile or stable environments. Environmental factors are important to study because they might push economic actors to use the informal economy (Assenova & Sorenson, 2017).

At the personal level, future research might benefit from studying other personal factors that might affect directly or indirectly the use of informal economy and firm performance. For instance, there are an abundance of theories and constructs such as need for achievement (McClelland & Boyatzis, 1982) and sensation seeking (Zuckerman, 2007) that are associated with risk taking. We have chosen regulatory focus theory because of its proven implications on risk taking (i.e., the use of informal economy).

Combining personal and environmental factors in our theorizing might have implications for the theory of the firm body of research, in particular, in emerging markets. The theory of the firm has been extensively researched in developed markets where managers must conduct most of their economic activities in the formal economy. However, managers in emerging markets, and based on personal differences, might chose to conduct some economic activities in the informal economy and this choice not only affects the boundary of the firm (i.e. make or buy decision) (Zenger, Felin, & Bigelow, 2011) but also affects firm performance (Jiang et al., 2020; Wallace et al., 2010). The availability of the use of the informal economy in emerging markets add to the complexity of the make or buy decision which in turn might affect firm performance.

Our theorizing has also some practical implications. In particular, in the dynamic environments of emerging markets, it seems that managers who have a promotion focus mindset are better off to shy away from the use of the informal economy, unless they have social ties with actors in formal institutions who would protect them (Abi Aad & Combs, 2021), because it might hurt their firms' performances. Instead, managers must capitalize on their risk-taking abilities due to their promotion focus mindsets to better navigate the dynamic environments of emerging markets and lead their firms to higher performance. Nevertheless, managers who have a prevention focus mindset are at a less risk of using the informal economy which might hurt

their firms' performances even more. The latter have a lower ability to navigate the highly dynamic environments than managers who have a promotion focus mindset and this might hurt their firms' performances (Wallace et al., 2010).

No research is without limitations and ours has limitations that could be overcome in future research. First, the data was collected in Lebanon for it being an emerging market with a highly dynamic environment. Consequently, our results might not be generalizable to other context of emerging markets where different sets of economic activities, that might affect firm performance, are conducted in the informal economy. Second, the data was collected at the same time and place from the same actors. As a result, there might be a problem of multicollinearity. Lastly, although the sample size was big enough to warrant statistical power to test our hypotheses, it would have been better to have a bigger sample size that is collected from different emerging markets.

Conclusion

To conclude, the purpose of this study is trying to understand how personal and environmental factors directly or indirectly affect firm performance. We started by looking at how personal differences, based on regulatory focus theory, affect firm performance. Indeed, our results are consistent with previous studies that showed that promotion focus mindset positively affects firm performance in the dynamic environments of emerging markets while prevention focus mindset negatively affects firm performance in the dynamic environments of emerging markets (Wallace et al., 2010). We then looked at how regulatory focus theory would affect the propensity to use the informal economy. Again consistently with the literature, we found that managers who have promotion focus mindsets are more prone to use the informal economy that mangers who have prevention focus mindsets (Abi Aad & Combs, 2021). Lastly, we checked

how the use of informal economy, which is the result of the environmental factors of emerging markets, would mediate the relationship between RFT (a personal factor) and firm performance. Our results show that RFT partially mediates both the positive relationship between promotion focus mindset and firm performance, and negative relationship between prevention focus mindset and firm performance. Thus, indicating that the use of informal economy is bad for firm performance irrespective of personality differences. That is, it might offset the positive outcomes of a promotion focus mindset and might worsen the negative outcome of prevention focus mindset. We hope that this study would spurs researchers to further investigate how other personal and environmental factors would affect firm performance in emerging markets.

References

- Abi Aad, A., & Combs, J. G. (2021). Choosing between the formal and informal economy: how do managers decide? *Cross Cultural & Strategic Management*.
- Amorós, J. E., Ciravegna, L., Mandakovic, V., & Stenholm, P. (2019). Necessity or opportunity? The effects of state fragility and economic development on entrepreneurial efforts. *Entrepreneurship Theory and Practice*, 43(4), 725-750.
- Anokhin, S., Wincent, J., & Autio, E. (2011). Operationalizing opportunities in entrepreneurship research: use of data envelopment analysis. *Small Business Economics*, *37*(1), 39-57.
- Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18(1), 105-123.
- Arenius, P., & De Clercq, D. (2005). A network-based approach on opportunity recognition. Small Business Economics, 24(3), 249-265.
- Assenova, V. A., & Sorenson, O. (2017). Legitimacy and the benefits of firm formalization. *Organization Science*, 28(5), 804-818.
- Bank, W. (2010). Doing Business 2011: Making a Difference for Entrepreneurs. Retrieved 27 April 2018, from http://www.doingbusiness.org/reports/global-reports/doing-business-2011
- Batjargal, B., Hitt, M., Tsui, A., Arregle, J.-L., Webb, J., & Miller, T. (2013). Institutional polycentrism, entrepreneurs' social networks, and new venture growth. *Academy of Management Journal*, 56(4), 1024-1049.
- Brockner, J., Higgins, E. T., & Low, M. B. (2004). Regulatory focus theory and the entrepreneurial process. *Journal of Business Venturing*, 19(2), 203-220.
- Crowe, E., & Higgins, E. T. (1997). Regulatory focus and strategic inclinations: Promotion and prevention in decision-making. *Organizational behavior and human decision processes*, 69(2), 117-132.
- Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5 point, 7 point and 10 point scales. *International Journal of Market Research*, 51(1).
- De Mel, S., McKenzie, D., & Woodruff, C. (2013). The demand for, and consequences of, formalization among informal firms in Sri Lanka. *American Economic Journal: Applied Economics*, 5(2), 122-150.
- Factbook, C. (2010). The World Factbook. Washington, DC: Central Intelligence Agency.
- Factbook, C. (2018). The World Factbook. Retrieved 27 April 2018, from https://www.cia.gov/library/publications/the-world-factbook
- Feige, E. L. (1990). Defining and estimating underground and informal economies: The new institutional economics approach. *World development*, *18*(7), 989-1002.
- Ferris, G. R., Treadway, D. C., Kolodinsky, R. W., Hochwarter, W. A., Kacmar, C. J., Douglas, C., & Frink, D. D. (2005). Development and validation of the political skill inventory. *Journal of Management*, 31(1), 126-152.
- Fredström, A., Peltonen, J., & Wincent, J. (2020). A country-level institutional perspective on entrepreneurship productivity: The effects of informal economy and regulation. *Journal of Business Venturing*, 106002.
- Friedman, R. S., & Förster, J. (2001). The effects of promotion and prevention cues on creativity. *Journal of Personality and Social Psychology*, 81(6), 1001.

- Gamache, D. L., McNamara, G., Mannor, M. J., & Johnson, R. E. (2015). Motivated to acquire? The impact of CEO regulatory focus on firm acquisitions. *Academy of Management Journal*, 58(4), 1261-1282.
- Gerstner, W.-C., König, A., Enders, A., & Hambrick, D. C. (2013). CEO narcissism, audience engagement, and organizational adoption of technological discontinuities. *Administrative Science Quarterly*, 58(2), 257-291.
- Godfrey, P. C. (2011). Toward a Theory of the Informal Economy. *The Academy of Management Annals*, *5*(1), 231.
- Gupta, A. K., & Govindarajan, V. (1986). Resource sharing among SBUs: Strategic antecedents and administrative implications. *Academy of Management Journal*, 29(4), 695-714.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, *9*(2), 193-206.
- Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication monographs*, 85(1), 4-40.
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 30, pp. 1-46). New York: Academic Press.
- Higgins, E. T. (2000). Making a good decision: value from fit. *American psychologist*, 55(11), 1217.
- Higgins, E. T., Shah, J., & Friedman, R. (1997). Emotional responses to goal attainment: strength of regulatory focus as moderator. *Journal of Personality and Social Psychology*, 72(3), 515.
- Hmieleski, K. M., & Baron, R. A. (2008). Regulatory focus and new venture performance: A study of entrepreneurial opportunity exploitation under conditions of risk versus uncertainty. *Strategic Entrepreneurship Journal*, 2(4), 285-299.
- Holmes, R. M., Miller, T., Hitt, M. A., & Salmador, M. P. (2013). The interrelationships among informal institutions, formal institutions, and inward foreign direct investment. *Journal of Management*, 39(2), 531-566.
- Jiang, W., Wang, L., Chu, Z., & Zheng, C. (2020). How does CEO regulatory focus matter? The impacts of CEO promotion and prevention focus on firm strategic change. *Group & Organization Management*, 45(3), 386-416.
- Johnson, P. D., Smith, M. B., Wallace, J. C., Hill, A. D., & Baron, R. A. (2015). A review of multilevel regulatory focus in organizations. *Journal of Management*, 41(5), 1501-1529.
- Khanna, T., & Palepu, K. (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, 75(4), 41-48.
- Khanna, T., & Palepu, K. (1999). Policy shocks, market intermediaries, and corporate strategy: The evolution of business groups in Chile and India. *Journal of Economics & Management Strategy*, 8(2), 271-310.
- Khanna, T., & Palepu, K. (2010). Winning in Emerging Markets: A Road Map for Strategy and Execution: Harvard Business Press.
- Klein, S., Frazier, G. L., & Roth, V. J. (1990). A transaction cost analysis model of channel integration in international markets. *Journal of Marketing Research*, 27(2), 196-208.
- Levie, J., & Autio, E. (2011). Regulatory burden, rule of law, and entry of strategic entrepreneurs: An international panel study. *Journal of Management Studies*, 48(6), 1392-1419.

- Liberman, N., Idson, L. C., Camacho, C. J., & Higgins, E. T. (1999). Promotion and prevention choices between stability and change. *Journal of Personality and Social Psychology*, 77(6), 1135.
- Luthans, F., Hodgetts, R. M., & Rosenkrantz, S. A. (1988). *Real Managers*. Cambridge, MA: Ballinger
- McClelland, D. C., & Boyatzis, R. E. (1982). Leadership motive pattern and long-term success in management. *Journal of Applied Psychology*, 67(6), 737.
- McKenzie, D., & Sakho, Y. S. (2010). Does it pay firms to register for taxes? The impact of formality on firm profitability. *Journal of Development Economics*, 91(1), 15-24.
- McMillan, J. (2007). Market Institutions (2nd ed.). London: Palgrave.
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: two models of strategic momentum. *Strategic management journal*, *3*(1), 1-25.
- Nadkarni, S., & Herrmann, P. (2010). CEO personality, strategic flexibility, and firm performance: the case of the Indian business process outsourcing industry. *Academy of Management Journal*, 53(5), 1050-1073.
- Neubert, M. J., Kacmar, K. M., Carlson, D. S., Chonko, L. B., & Roberts, J. A. (2008). Regulatory focus as a mediator of the influence of initiating structure and servant leadership on employee behavior. *Journal of Applied Psychology*, 93(6), 1220.
- North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*: Cambridge university press.
- O'shea, R. P., Allen, T. J., Chevalier, A., & Roche, F. (2005). Entrepreneurial orientation, technology transfer and spinoff performance of US universities. *Research policy*, *34*(7), 994-1009.
- Schneider, F., & Enste, D. (2002). *The Shadow Economy: An International Survey*. New York: Cambridge University Press.
- Schriesheim, C. A., Powers, K. J., Scandura, T. A., Gardiner, C. C., & Lankau, M. J. (1993). Improving construct measurement in management research: Comments and a quantitative approach for assessing the theoretical content adequacy of paper-and-pencil survey-type instruments. *Journal of Management*, 19(2), 385-417.
- Sharma, S. (2014). Benefits of a registration policy for microenterprise performance in India. *Small Business Economics*, 42(1), 153-164.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: new procedures and recommendations. *Psychological methods*, 7(4), 422.
- Wade, J. B., Porac, J. F., Pollock, T. G., & Graffin, S. D. (2006). The burden of celebrity: The impact of CEO certification contests on CEO pay and performance. *Academy of Management Journal*, 49(4), 643-660.
- Wallace, J. C., & Chen, G. (2006). A multilevel integration of personality, climate, self-regulation, and performance. *Personnel psychology*, 59(3), 529-557.
- Wallace, J. C., Little, L. M., Hill, A. D., & Ridge, J. W. (2010). CEO regulatory foci, environmental dynamism, and small firm performance. *Journal of Small Business Management*, 48(4), 580-604.
- Webb, J. W., Bruton, G. D., Tihanyi, L., & Ireland, R. D. (2013). Research on entrepreneurship in the informal economy: Framing a research agenda. *Journal of Business Venturing*, 28(5), 598-614.

- Webb, J. W., Tihanyi, L., Ireland, R. D., & Sirmon, D. G. (2009). You say illegal, I say legitimate: Entrepreneurship in the informal economy. *Academy of Management Review*, 34(3), 492-510.
- Westphal, J. D. (1998). Board games: How CEOs adapt to increases in structural board independence from management. *Administrative Science Quarterly*, 511-537.
- Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic management journal*, 24(13), 1307-1314.
- Williamson, O. E. (1973). Markets and hierarchies: Some elementary considerations. *The American economic review*, 63(2), 316-325.
- Zenger, T. R., Felin, T., & Bigelow, L. (2011). Theories of the firm–market boundary. *Academy of Management Annals*, 5(1), 89-133.
- Zuckerman, M. (2007). The sensation seeking scale V (SSS-V): Still reliable and valid. *Personality and Individual Differences*, 43(5), 1303-1305.