**Strategizing in a Focused Context: Managerial Discretion in the Arab World**

**Haj Youssef, M. and Christodoulou, I.**



The final, published version in Journal of Strategy and Management, DOI: 10.1108/JSMA-04-2016-0029, 2017 is available at:

https://dx.doi.org/10.1108/JSMA-04-2016-0029

Journal of Strategy and Management

# Strategizing in a Focused Context: Managerial Discretion in the Arab World.



| | |
|---|---|
| Journal: | *Journal of Strategy and Management* |
| Manuscript ID | JSMA-04-2016-0029.R1 |
| Manuscript Type: | Research Paper |
| Keywords: | managerial discretion, CEOs, cultural practices, GLOBE, Arab countries |

# Strategizing in a Focused Context: Managerial Discretion in the Arab World.


## ABSTRACT

**Purpose:**

The purpose of our study is to broaden the national-level construct of managerial discretion and to investigate the effect of cultural practices on executive discretion.

**Design/methodology/approach:**

Based on a sample of six Arabian countries and using a panel of prominent cross-cultural scholars who provided 262 discretion scores for the sample countries, we replicate and extend the national framework of Crossland and Hambrick (2011) in a new cultural context. The cultural dimensions were measured using survey responses of middle-managers based on House *et al*. (2004) cultural practices scale.

**Findings:**

We extend the national-level framework of managerial discretion and find that an encompassing array of cultural practices play a crucial role in shaping the degree of discretion provided to CEOs. We empirically demonstrate that power distance, future and performance orientation along with gender egalitarianism and assertiveness has positive relationships with managerial discretion. However, institutional collectivism, uncertainty avoidance and humane orientation negatively affect the degree of discretion provided to CEOs.

**Originality/value:**

Our study fills a gap in the literature regarding the national-level framework of managerial discretion. Our results indicate that executives can take idiosyncratic and bold actions to the extent to which the cultural environment allows them to do so. Also, we discover new

national-level antecedents of managerial discretion that haven't been considered in earlier studies and confirm the context dependency of this concept.

**KEYWORDS:** managerial discretion; CEOs; cultural practices; GLOBE; Arab Countries.

**INTRODUCTION**

Managerial discretion, which stands for the latitude of strategic actions (Hambrick and Finkelstein, 1987), has almost achieved its pearl jubilee of resolving the debate between two schools of thoughts. On the one hand, population ecology (Hannan and Freeman, 1977), contingency theory (Lawrence and Lorsch, 1967), resource dependence (Pfeffer and Salancik, 1978), bureaucratic limitations (Blau and Scott, 1962) and neo-institutionalism (DiMaggio and Powell, 1983) postulate evidence asserting that executives are constrained in the way they take strategic choices due to isomorphic, environmental, inertial and relentless forces. On the other hand, work on executive effects (e.g. Hambrick and Quigley, 2014), classic management (e.g. Andrews, 1971) and upper echelons (e.g. Hambrick and Mason, 1984) provide contrasting outputs emphasizing the fundamental importance of top managers in shaping and influencing organizations' outcomes. This has triggered a new stream of research that began to examine the various constructs of managerial discretion.

Discretion antecedents vary from micro to macro levels. On a personal level, executive individualities including locus of control, commitment to the status quo, age, tenure, education and risk taking behavior were identified as proxies of discretion (e.g. Carpenter and Golden, 1997; McClelland et al., 2010; Miller et al., 1982; Roth, 1992). On another level, organizational factors also exhibited significant influence on shaping the degree of managerial discretion. Out of these factors are: organizational and board structure (e.g. Kim, 2013; Quigley and Hambrick, 2012), ownership structure (e.g. Werner and Tosi, 1995), culture (e.g. Key, 2002), strategic orientation (e.g. Boyd and Salamin, 2001), capital intensity and resource availability (Wangrow et al., 2015). At a macro level, industry antecedents were the focus of majority of scholars who have assessed the impact of regulatory conditions, market growth, product differentiability and industry's capital intensity along with demand instability on executives' discretion (e.g. Datta and Rajagopalan, 1998;

Finkelstein, 2009; Haleblian and Finkelstein, 1993; Hambrick and Quigley, 2014; Keegan and Kabanoff, 2008; Magnan and St-Onge, 1997; Peteraf and Reed, 2007).

Though, very little work has considered the impact of national institutions on managerial discretion. Only recently, discretion has been examined on a national-level (Crossland and Hambrick, 2011) by accentuating the impact of cultural values including: individualism, uncertainty tolerance, power distance and cultural looseness on CEOs' discretion of public firms headquartered in several OECD countries. This national-level paradigm represents an important contribution to the discretion field. However, the current discretion research reflects an excessively narrow view of the external environment. Despite, Crossland and Hambrick (2007, 2011) attempts, considerable opportunity still exists to examine the country-level characters that could affect executives' discretion. The current status of such fundamental dimension is similar to what Sonpar and Golden-Biddle (2008) denote as 'adolescent', i.e. not yet fully developed and validated. Wangrow and colleagues (2015) in their review of empirical studies on managerial discretion called for a better conceptualization of the theory and particularly urged researchers to directly assess and test the validity of the discretion constructs. Thus, unless researchers define, validate and directly measure discretion without solely relying on previous indicators, advancement in its theoretical development will be restricted. This motivated us to fill in the wide gap that remains in the national-level construct of discretion. National environment possesses various factors that could play a significant role in shaping executives' discretion. Few studies have considered the relationship between a confined domain of leadership (e.g. CEO discretion) and other national-level factors. We incorporate such consideration by empirically integrating the effect of cultural practices on CEOs' discretion using a contemporary cross-cultural model, the GLOBE (House et al., 2004). Furthermore, the discretion research has strongly focused on US and Western contexts without taking into account other countries' characteristics. Referring to the cross-cultural literature, culturally distant collectives might not recognize, appreciate or validate the effect of national institutions on executives' discretion. Out of the 45 articles reviewed in Wangrow and colleagues' (2015) study, only four examined the antecedents of managerial discretion and only one endeavor has examined discretion at the national-level. More importantly, a handful of other studies have directly assessed and measured managerial discretion. This dearth of research significantly diminishes our understanding of how several internal and external factors influence executives' latitude of actions. Thus, we are attempting to fill in the holes by providing a more concrete set of managerial discretion antecedents. By focusing on the national-level, we explicitly examine the impact of a wide range of cultural practices. Yet, we are assessing the validity of Crossland and Hambrick (2011) findings; we also scrutinize the impact of other cultural dimensions that have not been considered in earlier studies.

Therefore, building on institutional theory, we examine the context dependency of managerial discretion construct by assessing the impact of cultural practices of several Middle Eastern countries on CEOs' discretion. In short, our paper seeks to identify new national-level antecedents of managerial discretion. We anticipate that our paper provides several contributions to this growing and important field of research. Unlike prior research that merely investigated the national-context, our study emphasizes the importance of this macro construct as a crucial determinant of executives' discretion. We extend the development of the national-level dimension by discovering several important societal practices that act as strong enablers/restrictors of managerial discretion. Contrary to prior findings (Crossland and Hambrick, 2011), we emphasize the importance of societal hierarchy labeled as power distance to be a fundamental enabler of CEOs' latitude of actions. Our work helps to broaden the understanding on various cross-cultural business phenomena related to executives' behavior. For instance, CEOs' compensation, which was examined in the literature as an outcome of managerial discretion, showed interesting cross-cultural variations. UK and US CEOs' receive higher incentive-based compensation as opposed to their counter-parts in Japan and South Korea (Tosi and Greckhamer, 2004). Also, CEO accountability (Crossland and Chen, 2013) and executives' departure rates (Lucier et al., 2005) were evidence of cross-cultural variation in executives' status and behavior. Such phenomena could be better understood by considering and widening the range of national-level antecedents of discretion.

Our paper reaches its desired contribution by adopting the following structure. In the next section, using institutional theory, we build our theoretical model of why how culture impacts CEO discretion. We also introduce our main arguments and develop a number of research hypotheses. In the following section, we provide a description of and justification for: our sample, discretion, cultural measures and the analytical technique employed to test our propositions. Following that, we present and discuss our findings. Finally, we highlight the contributions of our work and its implication for theory and practice.

**THEORETICAL BACKGROUND AND RESEARCH HYPOTHESES**

Institutional theory focuses attention on the dependence of firms on the environment. Institutions are the humanly invented restrictions that arrange social interaction, political and economic activities (North, 1990). Scott (2001, p. 49) defined institutions as "multifaceted, durable social structures made up of symbolic elements, social activities and material recourses". Most definitions portray institutions as robust social assemblies that direct human behavior and help to reduce uncertainty. In order to maintain such orderliness and to reduce uncertainty, institutions exert constraints on various societal members (Nelson and Nelson, 2002). National cultures are one of the important institutional constraints that pose strong influence on organizations. Hofstede (1980, p. 25) referred to national cultures as the "collective programing of the mind which distinguishes the members of one human group from another". National culture through normative and institutional pressures significantly shapes organizational actions, and acts as a moderator for management practices (Hofstede, 1993). Similarly, Huang and Van De Vliert (2003) argue that national culture exerts substantial weights on individuals' actions. Executives of firms operating in a particular country are subject to the pressure imposed by that country's national culture. Because, countries differ in their culture, the degree of constraints of those societal norms varies from one country to another (Davis et al., 1997). In this vein, the degree of respect, status, privilege and influence accorded to leaders will correspondingly fluctuate across cultures (House el al., 2004). Culture in its core sense is the general homogeneity that characterizes some group/s and differs between them. It is a combination of institutions, norms and values that govern how societies interact or manage exchanges (Trompenaars and Hampden-Turner, 1998). Culture exerts informal constraints related to taboos, traditions, customs, sanctions and code of conduct (North, 1991). These informal controls are the "socially shared rules, usually unwritten, that are created, communicated and enforced outside official sanctioned channels" (Helmke and Levitsky, 2006, p. 5).

Our paper is based on the premise that national culture is likely to play a crucial role in shaping the degree of leeway executives have. Going back to the roots of managerial discretion, Hambrick and Finkelstein (1987) argued that executives possess discretion if their actions fall within stakeholder's zone of acceptance (in this case societal culture) and the relative power of these stakeholders to object deviant actions. Building on the former condition, executives are faced with environmental constraints if their actions fall outside of society's zone of acceptance. If executives implement actions that infringe the acceptable practices within a particular society, these actions will be perceived as objectionable. The perception of unacceptability of a certain action is a function of the prevailing societal norms (national culture). As such, societies that differ in their cultural norms will respectively differ in perceiving actions as objectionable. In other words, actions that are deemed acceptable in some societies may well be observed as obnoxious in others. There are indications that national cultural variations have strong influence on executive departure rates (Lucier et al., 2005), CEO strategic motivations (Witt and Redding, 2009) and CEO effect on firm performance (Crossland and Hambrick, 2007). In this vein, Crossland and Hambrick (2011) assessed the impact of culture on CEO discretion in several OECD countries. They operationalized national culture using three societal norms: individualism, uncertainty tolerance and power distance. Findings show that individualism and uncertainty tolerance are positively related to CEO discretion; however, power distance is negatively associated (Crossland and Hambrick, 2011). Other investigations showed the moderating effect of managerial discretion on CEO accountability across several countries. Crossland and Chen (2013) found that in countries characterized by higher discretion, CEOs' dismissal probability due to poor performance increases. Such findings illustrate the importance of managerial discretion to explain various organizational phenomena. However, before moving towards the end of the spectrum (studying the consequences of discretion), there is a constant need to provide validity of the antecedents/sources of this construct. In order to have mature theory, researchers should provide empirical support for earlier propositions. Our goal in this paper is to delineate the national-level foundations of managerial discretion in order to validate its conceptualization and provide construct clarity, which is essential for achieving a mature theory (Bacharach, 1989). Therefore, building on this logic, we investigate the effect of a broader set of cultural norms on CEO discretion operating in new cross-cultural context. In doing so, we discuss in details the mechanisms in which cultural practices influence the degree of managerial discretion provided to CEOs' headquartered in these countries.

**Cultural Practices vis-à-vis Institutional Collectivism**

Individualism and collectivism have been heavily studied in the literature of national culture and cross-cultural studies (House et al., 2004; Segall and Kagitcibasi, 1997). People in individualistic societies tend to favour: self-goals, autonomous actions, personal needs and rational behavior as opposed to their counterparts in collectivistic environments in which they tend to be more: integrated within groups, favour collective behavior and follow a consensus-based decision-making (Hofstede, 2001; House et al., 2004; Smith et al., 1996). Such practice is reflected into organizational behavior in terms of human resource practices, motivation, job satisfaction, accountability, job attitudes, etc. (House et al., 2004). But more important is its implication in relation to leadership. Ali and colleagues (1997) argued that Kuwaiti executives possess stronger attitude towards participative and consultative decision-making due to their high emphasis on collectivism. In contrast, in the United States, a highly individualistic culture, leaders' cognitive base is more independent, forceful and strong willed (Dorfman, 1998), which reflects their cultural foundation. Thus, in individualistic cultures, leaders act in an autonomous way, follow task accomplishment without relying on group harmony and emphasize individual discretion (Erez and Earley, 1993; Hofstede and Bond, 1988; Triandis, 1993). Such societies provide a wider 'zone of acceptance' for executives to idiosyncratically take unilateral decisions, and have greater leeway in deciding the future of their organizations (Crossland and Hambrick, 2007). On the other hand, collective cultures do not tolerate individual initiatives. That being said, executives experience high latitude of actions if their society encourages and accepts unilateral, autonomous and idiosyncratic behavior. Following Crossland and Hambrick (2011) proposition, we posit that collectivist countries impose greater constraints on CEOs' to take consensus-based decisions in which their own interpretation and choices would not be considered important. Thus:

***H1:*** *Institutional collectivism has a negative and significant relationship with managerial discretion.*

**Cultural Practices vis-à-vis Uncertainty Avoidance**

Initially used as an organizational phenomenon, uncertainty avoidance relates to the extent to which ambiguity is tolerated within a society (House et al., 2004). In other words, some environments consider ambiguous events or unpredictable actions as a threat and thus prefer rules and orders to uncontrolled situations. By employing conventions, rituals, rules and orders people in high uncertainty avoidance societies try to minimize unpredictability (Hofstede, 2001). Sully de Luque and Javidan (2004) argued that people in countries characterized by high uncertainty avoidance tend to be resistant to change, more risk averse, and intolerant of rule breaking. In such societies, stakeholders would have less tolerance for unconventional, risky and unexpected actions from executives, which would make it difficult for executives to take bold initiatives that carry substantial ambiguity and risk. Instead executives would be expected to take incremental actions involving less risk and unpredictability. In contrast, societies low on uncertainty avoidance are more malleable to accept radical, uncertain, dramatic and means-end ambiguity actions (Crossland and Hambrick, 2011). In such countries, people are more tolerant to change and are characterized to be more risk takers. Thus, when faced with unpredictable situations, executives will have wider array of actions to choose from in order to face such ambiguity. Crossland and Hambrick (2011) found that CEOs' of firms headquartered in countries scoring low on uncertainty avoidance (based on cultural values) possess higher levels of discretion as opposed to their equivalents in high uncertainty avoidance environments. Accordingly, we argue that:

***H2:*** *Uncertainty avoidance has a negative and significant relationship with managerial discretion.*

**Cultural Practices vis-à-vis Power Distance**.

Some cultural values indicate society's tolerance for inequality or power distribution (Carl *et al.,* 2004). These values include hierarchy (Schwartz, 1994), achievement aspiration (Trompenaars and Hampden-Turner, 1998), moral discipline (Chinese Culture Connection, 1987) and power distance (Hofstede, 2001; House *et al.,* 2004). In the context of this research, the author is interested in the latter norm concerning power distance, which is another fundamental cultural dimension. Despite being more reflective of the acceptance of inequality in a certain society (Hofstede, 2001), it is also suggestive of the status and role of leaders within societies (Crossland and Hambrick, 2011). Power distance is the norm that relates to the social dimension that ratifies and acknowledges power distinction, status, honors and authority (House *et al.,* 2004). Meindl *et al.* (1985) tackled the concept of "Romance of Leadership" in which they argued that the attribution perspective that views leadership as a symbol and associates positive and negative outcomes to it results in giving greater status and profile to leaders. Similarly, Meindl and Ehrlich (1987) showed that performance evaluation is stronger when outcomes are attributed to leadership factors, which reinforces the phenomenological value of leadership. In other words, society itself provides different lenses through which leaders are viewed; in some societies, people romanticize leaders and in others they do not. Overall, this research stream (e.g. Meindl *et al.,* 1985; Meindl and Ehrlich, 1987; Chen and Meindl, 1991) emphasizes that some societies strongly attribute outcomes (either positive or negative) to leaders. In this sense, and because of the culturally contingent base of attribution (Krull *et al.,* 1999), leaders in those countries are seen as having higher power distance and a greater profile.

In general, leadership has been seen as widely influential across countries where some of the leadership characteristics are deemed universal. For instance, charismatic leadership is considered to be a universal feature of successful leadership (Den Hartog *et al.,* 1999).

However, despite such universalism of characteristics, leaders and their status are viewed distinctly across countries. Particularly, leaders' status, role or powers within certain societies vary significantly from one country to another (House and Javidan, 2004). In some societies, leaders are privileged and highly respected for their power and status, which leads them to have a greater influence on their followers and provides them with a wider array of available actions (Crossland and Hambrick, 2011; House *et al.,* 2004). For instance, Adsit *et al*. (1997) found that in high power distance countries, employees are reluctant to challenge their managers and are more likely to follow them, even in the case of disagreement. In other words, in these societies, leaders are considered to possess a greater degree of discretion. In contrast, in countries that do not promote such privileges, leaders' actions can come under scrutiny and they are faced with higher constraints (Crossland and Hambrick, 2011). In these environments, leaders tend to have low levels of discretion and are seen as figureheads or facilitators rather than as empowered decision makers (Crossland and Hambrick, 2011).

However, Crossland and Hambrick (2011) did not find any significant positive relationship between power distance and CEO discretion; in contrast, they found a negative relationship. This means that low discretion countries could stress the symbolic role of leaders, which provides them with some degree of elevated status (Crossland and Hambrick, 2011). However, there is no empirical support for such an argument despite some scholars considering a constitutional monarch as a real illustration of this relationship (Rose and Kavanagh, 1976). Also, due to the sampling and countries being studied in Crossland and Hambrick's (2011) work, the relationship between discretion and power distance was not salient; this might not be the case if the sample of countries was extended. Accordingly, the author reinforces the positive relationship between power distance and discretion. Therefore, the researcher argues that in societies characterized by higher power distance, leaders are more romanticized, have greater acceptance from stakeholders and as such possess greater degree of discretion as opposed to leaders in low power distance societies.

***H3:*** *Power distance has a positive and significant relationship with managerial discretion.*

**Cultural Practices vis-à-vis Future Orientation**

Future orientation is the cultural dimension that characterizes societies in which individuals tend to plan for the future and delay current gratification (House et al., 1999). Put simply, it is the norm, which emphasizes future planned behavior. Societies high on future orientation tend to have greater sense of time urgency and time is a crucial parameter for various events. In essence, time offers differentiated temporal frames that give order, meaning and coherence to objects, events and experiences within a certain societal environment. In contrast, collectives low on future orientation are more lenient towards enjoying current moments or solving current problems without having the willingness to plan for long-term goals (House et al., 2004). As such, individuals try to avoid future anxiety and rely on their past experiences. By doing so, they will be maintaining their status quo (House et al., 2004; Keough et al., 1999). Commitment to the status quo increases the belief of the correctness of current practices and lowers the tendency for change. In discretion terms, commitment to the status quo has showed negative relationship with managerial discretion (e.g. McClelland et al., 2010). Additionally, future orientation allows greater tolerance for innovation (House et al., 2004). Thus, it provides executives with a wider array of actions to be implemented. Executives operating in countries with low future orientation are more constrained in their strategic actions. On the other hand, countries with high future orientation are more interested in planning for long-term goals and willing to foresee those goals. In such societies, shareholders tend to embrace future return on their investments regardless of the means that have been adopted to accomplish those results. Here, CEOs' can formulate strategies from a variety of options where time does not act as a constraint facing their actions. Therefore:

***H4:*** *Future orientation has a positive and significant relationship with managerial discretion*

**Cultural Practices vis-à-vis Humane Orientation**

Humane orientation relates to the level of which a society promotes thoughtful, caring, generous, friendly, kindness and fairness values among society members (House et al., 1999). These individual norms represent salient motivational factors that direct people's behavior. The more benevolence, love and care they show to each other the more they are considered as humane oriented (Triandis, 1995). In these collectives, paternalism plays a crucial role in determining the behavior of people (James et al., 1996; Kanungo and Aycan, 1997). People in possession of power tend to act as parents for their subordinates, care about their personal problems, offer help and have informal relationships with them (House et al., 2004). In other words, executives in humane oriented societies are more indulgent with their employees and care about their own personal problems. Any decisions, such as cutting jobs, that could affect them or any of their relatives (as part of the community) would be discarded. In this vein, society exerts strong pressures on executives to act in favour of the whole collective. On the other extreme, some societies encourage self-fulfillment, material possessions, self-interest, pleasure and power as the dominating factors that motivate individuals' behavior (House et al., 2004). House and colleagues (2004) argue that when the humane orientation increases, the overall society become more collectivistic. In other words, solidarity, benevolence and altruism go hand in hand with promoting collectivism. Thus, executives are constrained in the latitude of actions they can take, implementing bold and turnaround strategies are not favoured in such environments. In contrast, countries low on humane orientation, are more acceptable of eccentric and bold actions. That being said, humane orientation and managerial discretion are negatively related. Consequently:

***H5:*** *Humane orientation has a negative and significant relationship with managerial discretion*

**Cultural Practices vis-à-vis Performance Orientation**

Performance orientation refers to the reward for innovation, performance improvement and high standards (House et al., 2004). In countries high on performance orientation, judgment or evaluation is solely based on results/outcomes. Hambrick and Finkelstein (1987) stated that CEOs' effect on companies' performance go hand in hand with the degree of discretion they have. This proposition has been supported by several empirical studies that showed the moderating role of managerial discretion (e.g. Crossland and Hambrick, 2011). Also, CEO dismissal has been considered to be a result of poor performance only in high discretion countries (Crossland and Chen, 2013). In that sense, judging CEOs' based on their performance would be mediated by managerial discretion. As such, in high performance orientated countries, CEOs' are explicitly judged based on their performance. Another important characteristic of the performance-oriented society is the belief that individuals are in control of the events happening in their lives (locus of control). Locus of control represents individuals' ambitions, higher standards for performance and thirst for advancement (Hofstede and Bond, 1988; Rotter, 1966). Trompenaars and Hampden-Turner (1998) argued that individuals from the US tend to be in control of their lives and people in Venezuela are otherwise. Such distinction represents the variance of the degree of locus of control across societies. In the same vein, internal CEOs' (in control) were found to foresee risk taking, innovative strategies (Miller et al., 1982), generate higher performance (Anderson and Schneier, 1978), be more task oriented (Miles and Snow, 1978) and perceive greater discretion (Carpenter and Golden, 1997); all of which describe cultural characteristics of high performance oriented society. Moreover, performance-based compensation has been significantly and positively associated with greater discretion (e.g. Boyd and Salamin, 2001; Rajagopalan, 1997; Rajagopalan and Finkelstein, 1992). This financial reward also represents an important norm appreciated in countries high on performance orientation (House et al., 2004). In such societies, CEOs' are able to implement a wider array of strategic actions. Accordingly:

***H6:*** *Performance orientation has a positive and significant relationship with managerial discretion*

**Cultural Practices vis-à-vis Gender Egalitarianism**

"Societies that are relatively unconcerned with demarcating men from women are less common than those concerned with affirming men's' masculinity" (Coltrane, 1992, p. 88). One of the most distinguished ways in which societies differ is through their acceptance of gender equality. Each society prescribes and proscribes various roles for men and women (Hofstede, 1998). Societies appreciating gender equality try to minimize gender role differences, whereas others try to increase the gap between genders (House et al., 1999). Masculine countries showed greater achievement motivation and tend to follow a boldness style of management (Triandis, 1994). Such societies appreciate independent behavior over honoring moral obligations and encourage success and competition over nurturance and solidarity (Doney, Canoon and Mullen, 1998). Organizations operating in such cultural environment provide unequal opportunities for men and women particularly in the upper echelons and encourage results over processes and more importantly an adversarial decision-making over negotiation and consensus (Erez, 1994). In that sense, executives are allowed to take quantum rather than incremental strategic initiatives. In organizational words, executive will have more 'technical discretion' (Caza, 2012). Furthermore, discretion is a function of managers' degree of risk tolerance. Executives with high discretion are characterized to be more risk takers (Roth, 1992). Also, environments that encourage risk-taking behavior tend to provide greater degree of managerial discretion (Makhija and Stewart, 2002). Deeming that into consideration, women or female CEOs' exhibited to take strategic actions that do not embrace any risk (Bernasek and Shwiff, 2001). In a study of CEO gender effect on firm performance, Khan and Vieito (2013) argued that when a female CEO leads firm; the risk levels are much smaller than companies headed by male CEOs'. Because of that, female CEOs' are inclined to choose from a narrow set of alternative actions when faced with risky situations, whereas their male counterparts are able to foresee a broader range of alternatives. In comparison to male CEOs', female executives are given less power in their hierarchical position (Muller-Kahle and Schiehll, 2013). As such, power, which is a fundamental element that enhances managerial discretion, is lacking when females achieve the CEO position. Due to gender stereotypes, female CEOs' are not able to take idiosyncratic actions that deviate from the common acceptable behavior, and more importantly they cannot take strategic actions that could harm their atmosphere. Females are nurturance, tender and kind in nature; they could hardly take actions that harm other societal members. When aggregated to the societal level, such characteristics will significantly coerce CEOs' actions. As a result, we hypothesize that:

***H7:*** *Gender egalitarianism has a negative and significant relationship with managerial discretion.*

**Cultural Practices vis-à-vis Assertiveness**

Assertiveness refers to the level of which people within a certain society tend to be forceful, dominant, tough and aggressive in their relationships with other (House et al., 1999). Such norm emphasizes the importance to explicitly exhibit the self or own desire and opinions (Booream and Flowers, 1978). Assertive individuals are more suited to reach higher hierarchical positions compared to their nonassertive counterparts (Judge et al., 1999). This is because individuals in the upper echelon show more forceful and self-confident behavior (Fagenson, 1990; House et al., 2004). Assertive countries tend to appreciate competition and competitive behavior over cooperation (House et al., 2004). Competitiveness exists in countries that implement a free-market economy in which the support is for firms' competition and individual decisions (North, 1990; Reed, 2001). In this vein, Makhija and Stewart (2002) found that executives in free-market economies (e.g. US) have greater sense of power towards decision outcomes, are more comfortable with uncertainty and perceive further outcome accountability. In other words, in free-market economies, executives tend to possess greater level of discretion. Additionally, in the US, a high discretion country, people believe in competition (Kohn, 1986), which is the crucial feature of the human nature (Bonta, 1997). Hence, societies that appreciate competition provide CEOs' with higher degree of discretion. Furthermore, in assertive cultures, people tend to use 'low-context' language, which refers to the use of explicit, clear and direct speeches (Schneider and Barsoux, 1997). The way individuals interpret and see their world is reflected in the language they use (Whorf, 1956). When individuals use direct language, they create impressions to others about their own opinion and how powerful they perceive their logic. As such, by using 'impression management' executives perceive higher degree of discretion (Carpenter and Golden, 1997). Thus, we argue that:

***H8:*** *Assertiveness has a positive and significant relationship with managerial discretion*

INSERT FIGURE 1 ABOUT HERE

Figure 1 portrays our theoretical framework and identifies the relationships amid our variables. Each variable is expected to have a direct relationship (either positive or negative) with managerial discretion.

## METHODOLOGY

### Sample of Countries

Our sample consisted of Middle Eastern particularly Arab countries. This includes: Egypt, Kingdom of Saudi Arabia (KSA), Kuwait, Lebanon, Qatar and United Arab Emirates (UAE). These countries constitute an overwhelming majority of top 100 publicly listed firms in the Arab World (Forbes Middle East, 2014). These nation-states have been heavily ignored by previous research in the broader strategic management field. Besides, managerial discretion has not been studied in such business environments, which makes our attempt an interesting opportunity to discover new insights. More importantly, by using a different sample of countries, we provide construct validity to managerial discretion (Wangrow et al., 2015) and shed the light on new verdicts.

**Measures**

*Dependent Variable: Managerial Discretion*

In empirical studies, so far, scholars have looked at theorized antecedents of discretion such as: organizational level antecedents including: sales, size, slack, R&D intensity, company structure, advertising intensity, volatility and firms' strategic orientation (e.g. Boyd and Salamin, 2001; Finkelstein and Boyd, 1998; Kim, 2013; Quigley and Hambrick, 2012; Rajagopalan, 1997; Roth and O'Donnell, 1996). Others have used industry (or task environment) level variables such as: regulatory conditions, demand instability, market growth, product differentiability, attentional homogeneity and industry capital intensity (e.g. Datta and Rajagopalan, 1998; Finkelstein, 2009; Haleblian and Finkelstein, 1993; Hambrick and Quigley, 2014; Keegan and Kabanoff, 2008; Magnan and St-Onge, 1997; Peteraf and Reed, 2007). Another cluster of researchers employed individual executives' characteristics measuring variables such as: locus of control, perception, commitment to the status quo, tenure, age, education and risk taking behavior (e.g. McClelland et al., 2010; Miller et al., 1982; Roth, 1992). All these measures represent an indirect approach for assessing the degree of managerial discretion. These studies have preserved/treated discretion as a "black box", whereby it was associated with various individual, organizational and/or industry specific variables. As Wangrow et al. (2015, p. 124) mentioned: "future research could pilot…industry experts, academics and managers to assess the level of discretion in firms…and nations". Such call represents a need to assess discretion in a direct manner without relying on proxy measures.

Using expert panel rating, some scholars (e.g. Crossland and Hambrick, 2011; Hambrick and Abrahamson, 1995) attempted to directly measure the degree of discretion. Expert panel, if appropriately chosen, provide consistent and valid assessments of organizational phenomena including business strategies (Snow and Hambrick, 1980), and strategic decision processes (Fredrickson, 1986). Notwithstanding, its probable perceptual bias, expert panel possesses an advantage for rating discretion directly and more closely than other measures. Additionally, the use of expert panel provides scores with minimum bias compared to other techniques. Panelists possess better knowledge in multiple contexts due to their exposure to several environments, and more importantly the relative objectivity of their answers (Hambrick and Abrahamson, 1995). Following this direct technique, we sought discretion ratings from a panel of prominent cross-cultural scholars.

*Selection of Expert Panel*

We searched the social science citation index for recent studies (from 2008 to 2015) published in 3 and 4 stars' business and management journals based on the Association of Business Schools' Academic Journal Guide, with terms such as: "Cross-Cultural", "Arab", Middle-East", "Arabian Countries", "the Arab World", "Arabic Culture" in titles, keywords and abstracts. The search resulted in 158 articles. Around hundred and thirty-seven scholars (panelists) have authored or co-authored at least two of these studies. Each panelist (scholar) has been contacted by electronic mail requesting his/her participation. If the recipient accepts to participate, he/she receives our survey by email and asked to give consent in order to complete the questionnaire. Before presenting the question, panelists were given a description about the project and the confidentiality consideration for their responses. Later, they have been provided with a brief explanation of managerial discretion based on Hambrick and

Finkelstein (1987) original description. Following Crossland and Hambrick (2011), we asked our panelists to rate on a 7 points Likert-scale, varying from *'to a very small extent'* to *'to a very large extent'*, their perception of the degree of discretion provided to CEOs' in Egypt, Kingdom of Saudi Arabia, Kuwait, Lebanon, Qatar and United Arab Emirates. Of the 137 panelists, 54 (32.4%) granted participation and provided utilizable responses. These scholars generated 262 ratings, with each country receiving between 38 and 50 ratings (overall mean of 43.67 scores per country).

As these raters compromise the entire sample, and country discretion scores was rated by the same k panelists (Shrout and Fleiss, 1979), we computed ICC (3,k) to assess the inter-rater reliability. The ICC (3,k) by consistency instead of agreement was computed as the survey question asked raters to make comparative rather than absolute judgments in regards to CEOs' discretion in several countries (McGraw and Wong, 1996). ICC (3,k) coefficient was 0.86 indicating high inter-rater reliability (e.g. Chen et al., 1993; Taggar, 2002) and agreement of ratings among scholars (James, 1982).

*Independent Variables: Cultural Practices*

Consistent with earlier research (e.g. Basuil and Datta, 2015); we derived cultural dimensions scores from GLOBE cross-cultural model (House et al., 2004). GLOBE introduced two cultural measures for each dimension, values and practices. The former, what House et al. (2004) labeled 'should be', relates to the perception of respondents about cultural preferences, whereas, practices 'as is' relate to how people perceive the behavior of other members within a particular society. GLOBE distinction between values and practices has led to a better assessment of the cultural environment and overcome some of the limitations in other cross-cultural models (e.g. Hofstede). Scholars argue that Hofstede's model suffer from homogenous sampling, time relevancy, corporate culture impact and factor structure problems (Orr and Hauser, 2008). Hofstede used only cultural values to operationalize cultural dimensions. However, self-rating of values does not reflect national culture characteristics (Fischer, 2006). Such approach is accompanied with several problems (e.g. Bierbrauer et al., 1994; Oyserman et al., 2002) and yield ambiguous cross-cultural comparison (Heine et al., 2001). An alternative to that is asking individuals to rate behavior within a certain culture (e.g. Peterson and Fischer, 2004), by doing that individuals would be able to report on descriptive norms related to a particular society (Cialdini and Trost, 1998; Ehrhart and Naumann, 2004). These two methods differ significantly in their measurement of national culture. Self-rating eliminates the objectivity associated with assessing cultural norms (Fischer, 2006). In that sense people would subjectively rate cultural dimensions deeming their own individual preferences into consideration. On the other hand, if individuals rate how their collective behave this would therefore yield objective scores excluded from personal inclinations. As such respondents become observers of their own society. Therefore, we operationalize our independent variables using GLOBE practices scores for all countries except KSA, Lebanon and UAE. These countries were excluded in GLOBE sampling. In order to avoid using geographical proximity and have more accurate measures, we employed GLOBE Beta questionnaire and followed similar approach used by House et al. (2004). We identified five distinct industries: Fast Moving Consumer Goods, Medial Appliances and Equipment, Banking, Retail (Fashion and Accessories) and Real Estate and Construction. We approached middle managers of domestic firms (57 firms in total) operating in these industries. Participants had an average age between 30 to 34 years old, highly educated with majority (83.7%) having an undergraduate university degree or higher and have a position tenure of more than 3 years. Out of the 600 surveys sent, we received 375 completed and usable responses.

*Response Bias Procedure*

Several authors in the cross-cultural literature have flagged a response bias problem when surveying individuals from different cultures (e.g. Stening and Everett, 1984; Triandis, 1994). Using mean scores for raw data will lead to problematic interpretation. We followed GLOBE response bias procedure and generated corrected scores for each cultural dimension. To assess the extent to which the importance that cultural-response bias play in this cultural scale, a bivariate correlation procedure was performed. The correlation between the uncorrected scores (raw data) and the corrected scores (unstandardized regression values) ranges from 0.84 to 0.94 with an average of 0.90. This correlation coefficient shows that the cultural response bias has a minor role in the present scale.

*Aggregation Verification, Reliability and Consistency*

To verify the aggregation of individual scores to the societal level, we computed rwg (j) according to James et al. (1984). The average rwg (j) for our respondents was 0.80 indicating strong inter-rater agreement and larger reduction of error variance. This is higher than the traditional cut point of 0.70 (Lance et al., 2006; LeBreton et al., 2003). Also, we computed ICC (1) for all society cultural norms, which was 0.16. Such value indicates that only 16% of variance is attributable to between society differences. It is not surprising that with all the differences between the studied societies only 16% is related to variance between societies. Accordingly, these statistical measures strongly support and justify the aggregation of our respondents' ratings to represent the society level. Furthermore, average Cronbach's Alpha for the 375 participants was 0.88 indicating high internal consistency and strong relationship among the items constituting the scales used in this study. Also, the average ICC (2) two-way random effect measure (Shrout and Fleiss, 1979) was 0.96 suggesting a strong inter-rater reliability. Consequently, these results indicate that our study participants were highly reliable, consistent in their society ratings and provided valid responses to be used for society level of analysis.

Table I depicts mean managerial discretion and cultural practices scores for each country in our sample.

INSERT TABLE I ABOUT HERE

**ANALYSIS**

In order to test the proposed hypotheses (1-9), we performed fixed-effect regression analysis in which country level discretion scores generated from the scholar panel were the dependent variables (262 diverse ratings), and culture scores were the independent variables. We used such technique because each scholar is distinct from the other in terms of the number of countries he/she rates and the tendency of his/her rating. Not all panelists provided scores for all countries and each gave distinct score (either low or high). Thus, fixed-effect regression in this context takes into account the inter-rater differences (Green, 1997) and treats each scholar as a fixed-effect. As opposed to ordinary least square (OLS), fixed-effect regression addresses the heterogeneity between raters along with controlling for the distinctive panelists' rating pattern (Hsiao, 2003). This enables more accurate analysis that illustrates each scholar exclusive intercept and control for unobserved heterogeneity between raters (Kennedy, 2008, p. 282).

**FINDINGS**

Table II illustrates the bivariate correlations between discretion and the eight cultural practices. At this simple level and as illustrated below there exist some correlation between discretion and majority of the examined cultural practices. Such relationships indicate that cultural dimensions are not fully distinctive from each other and that they cohere in a way that suppresses statistical effects of individual dimension. For that reason, each variable was regressed against discretion ratings simultaneously. By doing that, we avoided the multi-collinearity among the variables and illustrate solely each cultural dimension effect on discretion.

After running eight separate fixed-effect models, results are presented in Table III. We argued in Hypothesis 1 that the more that a society practices encourage collectivistic behavior the lower the discretion available to CEOs' of firms' headquartered in that society. Model (1) shows strong negative and significant relationship between institutional collectivism and managerial discretion ($p<0.001$), thus supporting H1. Model (2) which illustrates the relationship between uncertainty avoidance and managerial discretion, indicate a significant negative relationship ($p<0.001$) providing strong support for H2. H3, which postulates that higher power distance practices have a positive relationship with CEOs' discretion, has been strongly supported as illustrated in Model (3) ($p<0.001$). As opposed to Crossland and Hambrick (2011), power distance in this contextual environment has yielded positive impact on managerial discretion. Moreover, H4, which argued that the more a society endorses future oriented behavior the higher the CEO discretion would be, was also supported as per Model (4) ($p<0.05$). Model (5) proves that the prediction concerning the impact of humane orientation practices on discretion was in the same hypothesized direction. This provides strong support for H5 ($p<0.001$), which contended that in societies where humane orientation behavior is promoted, CEOs' would have lower leeway over their firms' faith and form. H6 debated that the higher the performance orientation practices in a society the greater the CEO discretion would be. Model (6) proves this proposition ($p<0.001$). However, Model (7) exhibited opposite relationship. H7, which argues that the more that a society encourages equality among genders, the lower the discretion available to CEOs' of firm headquartered in that society, shows contrasting outcomes. Indeed, the relationship is positive and strong ($p<0.01$), but in the opposite anticipated direction. Lastly, H8, which argued that the more a society values assertive behavior, the higher the discretion available to CEOs' headquartered in that society, was positively supported as per Model (8), ($p<0.001$).

INSERT TABLE II ABOUT HERE

INSERT TABLE III ABOUT HERE

**DISCUSSION**

In this study we drew on the institutional theory to depict that managerial discretion is not only a function of executive individualities, organizational and industry characteristics, but also dependent on the national culture. We assured that some countries enable executives to take idiosyncratic actions, whereas, others confer little latitude of actions. For nearly three decades focusing mainly on: the industry (e.g. Abrahamson and Hambrick, 1997; Finkelstein, 2009; Hambrick and Quigley, 2014), organizational (e.g. Boyd and Salamin, 2001; Kim, 2013) and individual (e.g. Carpenter and Golden, 1997; McClelland et al., 2010) contexts, we built upon Crossland and Hambrick (2011) framework and broadened the milieu in which executives matter. Our results extended the institutional framework of managerial discretion by unleashing the cover on new national-level antecedents that have a strong impact on CEO discretion. In an examination of six Middle Eastern countries, we found that an encompassing array of societal practices were significantly associated with the degree of discretion available to CEOs' of public firms headquartered in these nation-states. A total of eight cultural practices exhibited high bivariate associations with discretion.

While managerial discretion has indicated high context dependency, we observed that few cultural dimensions exhibited similar effect. Institutional collectivism and uncertainty avoidance were in the same direction of earlier findings. In this vein, we have been able to empirically validate the national-level construct of managerial discretion. More importantly, we extended the task environment and moved beyond the organizational direct competitive domain. Such effort, contributes toward enhancing the discretion concept and shifting the theory to a more mature level. We showed through our theoretical model that culture does not stop at individualism/collectivism and uncertainty avoidance dimensions, but also an important collection of other cultural constructs play a fundamental role in influencing the degree of leeway executive can have.

Findings provided strong support for our hypotheses that cultural dimension play a crucial role in shaping CEO discretion. But more importantly, these results are consistent with the tenets of institutional theory and previous discretion studies. We demonstrated that societies high on power distance, future and performance orientation, gender egalitarianism and assertiveness provide CEOs' with greater latitude of actions. However, countries high on institutional collectivism, uncertainty avoidance and humane orientation limit CEOs' discretion. Although Crossland and Hambrick (2011) found a negative relationship between power distance and managerial discretion, our findings demonstrated the contrary. Societies that appreciate and encourage inequality amongst its members, accord executives more status and privilege. In such cultural environments, executives are not accorded with high status as a form of emotional compensation (Crossland and Hambrick, 2011), rather they exert the power assigned to them and enjoy wider array of actions to be implemented. Because, subordinates are not able to confer higher hierarchical decisions, CEOs' are afforded with enough discretion to take bold and idiosyncratic actions. These societies tend to romanticize leaders (Krull et al., 1999) and by doing that these latter would be able to exert power and take subjective decisions. Again this redirects to the context in which discretion is studied. In Middle Eastern countries, executives in position of power exert and continuously seek to enlarge the gap with their subordinates. In contrast, European and Anglo American countries may not experience the same hierarchical power. As per Crossland and Hambrick (2011), these collectives accord executives status and respect but perceive them as figureheads rather than bold decisions-makers.

Furthermore, we failed to find empirical support for our proposition concerning the relationship between gender egalitarianism and managerial discretion. We argued that masculine societies, which appreciate results and competition over collaboration and solidarity, provide greater discretion to CEOs'. We anticipated a negative relationship between gender equality and discretion; however, our findings indicate the opposite. In fact, the bivariate correlation was strong and positive. There is no obvious or explicit explanation for this, however an intriguing possibility is that societies that accord women more status try to expand stakeholder's zone of acceptance. In other words, when female achieve higher positions in a certain society, people will broaden their attitude toward gender differences and will tolerate or accept others within the same environment. By doing that, societies are expanding their zone of acceptance in terms of behavior and practices generated from another societal group. In that case, seeing females in position of CEOs' would not be objectionable and accordingly will have similar discretion as their male counterparts. For instance, the greatest number of women reaching the chief executive position is from high discretion countries such as the US. Perhaps gender equality makes people more acceptable of others and in such way; the stakeholder's 'zone of acceptance' becomes larger. Another possible explanation can come from the process of breaking the 'glass ceiling' and reaching the CEO position. Ragins and colleagues (1998) in a survey of fortune 1,000 CEOs' illustrated the various strategies women implement in order to reach the top. One of those strategies is developing a similar style and attitude as their men equivalents. That being said, societies that tolerate equality between genders might not envision the stereotype differences when having women in high position, thus will provide them with similar discretion. Although, there is no evidence or support for such explanation, it is an interesting likelihood.

**Research Contributions and Limitations**

Our study has answered the question of when executives matter from a national perspective. We reaffirm that CEOs' are able to pursue idiosyncratic, bold and deviant strategies only in countries where cultural practices allow them to do so. Therefore, we were able to validate

Crossland and Hambrick (2011) propositions in relation to individualism and uncertainty avoidance in new cross-cultural contexts. However, by empirically testing the impact of power distance on discretion, we confirm its positive relationship and contradict previous findings. Despite the context dependency of managerial discretion, the relationship exhibited between discretion and individualism/collectivism and uncertainty avoidance cultural norms contradicted this assertion. Thus, it could be argued that these cultural norms are universal in their effect on managerial discretion. Additionally, by substantially examining the national-level manifestations of managerial discretion, we have discovered new national-level antecedents. By doing so, we broadened the scope of managerial discretion by assessing its indicators in new, non-western cross-cultural contexts. Finally, another useful contribution is the development of a robust and more reliable expert panel that allows better operationalization of managerial discretion.

Results presented in this paper could shed the light on a variety of cross-cultural differences. For instance, national-level of managerial discretion could have an important implication on the CEO appointment process. Despite relying on the national pool (DiNardo et al., 1996), CEO labor market in our current globalized world could be affected by the cross-national differences in managerial discretion. For instance, transferring a CEO from low to a high discretion country may lead to substantial negative effects on firm performance. CEOs' in high discretion countries are used to take bold strategic actions that do not necessarily comply with the overall cultural norms. When such CEO moves to a low discretion setting, implementing idiosyncratic actions is objectionable, thus any decisions that deviate from the cultural boundaries will lead to negative results on firm performance.

Also, discretion might have an important implication on several other strategic decisions. As executives in low discretion environments have fewer sets of strategic actions, there may be high tendency towards discarding significant strategic initiatives (e.g. large merger and acquisitions). In such environments, executives tend to focus more on implementing symbolic actions based on market signaling. Moreover, discretion could play an important factor/indicator for cross-border merger and acquisitions failure or success (e.g. Daimler and Chrysler case). Another important implication of cross-national differences in managerial discretion is the explanation of the variation in terms of competitive dynamism. Porter and colleagues (2000) argued that Japanese firms (low discretion country) are homogenous in their strategic orientation. As such, firms in low discretion countries might be more homogenous in terms of their strategic orientation, whereas firms in high discretion environments may well foresee differentiation strategies.

Similar to any other study, our paper has some limitations. We tested our hypothesis using a small/moderate size sample of countries. We restricted our sample to countries containing the largest firms in the Arab world; this has resulted in omitting other Arabian and Middle Eastern countries (e.g. Turkey, Jordan, Bahrain, Oman, etc.) which also have an important financial/business power in that region. Similar to what we have done, future work, should consider broadening the geographical scope of managerial discretion. Additionally, we explored the nature and antecedents of managerial discretion at the national-level but its consequences were beyond the scope of our study. As stated in Crossland and Hambrick (2011), is high discretion a good thing. Cross-cultural scholars argue that culture has an impact on the economic development of countries (e.g. House et al., 2004). As such, what is the role of managerial discretion in economic development? Does high discretion lead to better economic performance, or does it harm the economic development of countries? Researchers are encouraged to consider such link in future attempts.

**REFERENCES**

Abrahamson, E., and Hambrick, D. C. (1997). 'Attentional homogeneity in industries: The effect of discretion'. *Journal of Organizational Behavior*, **18**, 513-532.

Adsit, D. J., London, M., Crom, S., and Jones, D. (1997). 'Cross-cultural differences in upward ratings in a multinational company'. *The International Journal of Human Resource Management*, **8**, 385-401.

Ali, A. J., Taqi, A. A., and Krishnan, K. (1997). 'Individualism, collectivism and decision styles of managers in Kuwait'. *Journal of Social Psychology*, **137**, 629-637.

Anderson, C. R., and Schneier, C. E. (1978). 'Locus of control, leader behavior and leader performance among management students'. *Academy of Management Journal*, **21**, 690-698.

Andrews, K. (1971). *The concept of corporate strategy*. Homewood, IL: Dow Jones-Irwin, Inc.

Bacharach, S. B. (1989). 'Organizational theories: some criteria for evaluation'. *Academy of Management Review*, **14**, 496-515.

Basuil, D. A., and Datta, D. K. (2015). 'Effects of Industry- and Region-Specific Acquisition Experience on Value Creation in Cross-Border Acquisitions: The Moderating Role of Cultural Similarity'. *Journal of Management Studies*, **52**, 766-795.

Bernasek, A., and Shwiff, S. (2001). 'Gender, Risk and Retirement'. *Journal of Economic Issues*, **35**, 345-356.

Bierbrauer, G., Meyer, H., and Wolfardt, U. (1994). Measurement of normative and evaluative aspects in individualistic and collectivistic orientations: The cultural orientation scale (COS). In U. Kim and H. C. Triandis (Ed.), *Individualism and collectivism: Theory, method and applications*. Thousand Oaks, CA: Sage.

Blau, P., and Scott, R. (1962). *Formal organizations: A comparative approach*. San Francisco: Chandler.

Bonta, B. D. (1997). ‘Cooperation and competition in peaceful societies’. *Psychological Bulletin*, **121**, 299-320.

Booream, C. D., and Flowers, J. V. (1978). A procedural model for training of assertive behvaior. In J. M Whitely and J. V. Flowers (Ed.), *Approaches to assertion training.* Monterey, CA: Brooks/Cole.

Boyd, B. K., and Gove, S. (2006). Managerial constraint: The intersection between organizational task environment and discretion. In D. Ketchen, and D. D. Bergh (Eds.), *Research methodology in strategy and management*. New York: JAI Press.

Boyd, B. K., and Salamin, A. (2001). ‘Strategic reward systems: A contingency model of pay system design’. *Strategic Management Journal*, **22**, 777-792.

Campbell, J. T., Campbell, T. C., Sirmon, D. G., Bierman, L., and Tuggle, C. S. (2012). ‘Shareholder influence over director nomination via proxy access: Implications for agency conflict and stakeholder value’. *Strategic Management Journal*, **33**, 1431-1451.

Carl, D., Gupta, V., and Javidan, M. (2004). Power distance. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, and V. Gupta (Eds.), Culture, leadership, and organizations: *The GLOBE study of 62 societies*. Thousand Oaks, CA: Sage.

Carpenter, M. A., and Golden, B. R. (1997). ‘Perceived managerial discretion: A study of cause and effect’. *Strategic Management Journal*, **18**, 187-206.

Caza, A. (2012). ‘Typology of the eight domains of discretion in organizations’. *Journal of Management Studies*, **49**, 144-177.

Chen, C., and Meindl, J. (1991). ‘The construction of leadership images in the popular press: The case of Donald Burr and People Express’. *Administrative Science Quarterly*, **36**, 521-551.

Chen, M. J., Farr, J. L., and MacMillan, I. C. (1993). ‘An exploration of the expertness of outside informants’. *Academy of Management Journal*, **36**, 1614-1632.

Child, J. (1997). ‘Strategic choice in the analysis of action, structure, organizations and environment:

Retrospect and prospect'. *Organization Studies*, **18**, 43-76.

Chinese Culture Connection. (1987). 'Chinese values and the search for culture-free dimensions of culture'. *Journal of Cross-Cultural Psychology*, **18**, 143-164.

Cialdini, R. B., and Trost, M. R. (1998). Social influence: social norms, conformity, and compliance. In D. T. Gilbert, S. T. Fiske and G. Lindzey. *The Handbook of Social Psychology*, (Ed.). Boston: McGraw-Hill.

Coltrane, S. (1992). 'The micropolitics of gender in nonindustrial societies'. *Gender and Society*, **6**, 86-107.

Crossland, C., and Chen, G. (2013). 'Executive accountability around the world: Sources of cross-national variation in firm performance–CEO dismissal sensitivity'. *Strategic Organization*, **11**, 78-109.

Crossland, C., and Hambrick, D. C. (2007). 'How national systems differ in their constraints on corporate executives: A study of CEO effects in three countries'. *Strategic Management Journal*, **28**, 767-789.

Crossland, C., and Hambrick, D. C. (2011). 'Differences in managerial discretion across countries: How nation-level institutions affect the degree to which CEOs' matter'. *Strategic Management Journal*, **32**, 797-819.

Datta, D. K., and Rajagopalan, N. (1998). 'Industry structure and CEO characteristics: An empirical study of succession events'. *Strategic Management Journal*, **19**, 833-852.

Davis J, Schoorman F, and Donaldson L. (1997). 'Toward a stewardship theory of management'. *Academy of Management Review*, **22**, 20–47.

Den Hartog, D., House, R., Hanges, P., and Ruiz-Quintanilla, S. 1999. Culture specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? Leadership Quarterly, 10: 219-256.

DiMaggio, P., and Powell, W. (1983). 'The iron cage revisited: institutional isomorphism and collective rationality in organizational fields'. *American Sociological Review*, **48**, 147–160.

DiNardo, J., Fortin, N., and Lemieux, T. (1996). 'Labor market institutions and the distribution of wages, 1973-1992: A semiparametric approach'. *Econometrica*, **64**, 1001–1044.

Doney, P. M., Cannon, J. P., and Mullen, M. R. (1998). 'Understanding the influence of national culture on the development of trust'. *Academy of Management Review*, **23**, 601-620.

Dorfman, P. W. (1998). Implications of vertical and horizontal individualism and collectivism for leadership effectiveness. In J. L. C. Cheng and R. B. Peterson (Ed.), *Advances in international comparative management*. Stamford, CT: JAI Press.

Ehrhart, M. G., and Naumann, S. E. (2004). 'Organizational citizenship behavior in work groups: A group norms approach'. *Journal of Applied Psychology*, **89**, 960-974.

Erez, M. (1994). Toward a model of cross-cultural industrial and organizational psychology. In H. C. Triandis, M. D. Dunnette, and L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*. Plato Alto, CA: Consulting Psychologists Press.

Erez, M., and Earley, P. C. (1993). *Culture, self-identity, and work*. New York: Oxford University Press.

Fagenson, E. (1990). 'Perceived masculine and feminine attributes examined as a function of individuals' sex and level in the organizational power hierarchy: A test of four theoretical perspectives'. *Journal of Applied Psychology*, **75**, 204–211.

Finkelstein, S. (2009). 'Why is industry related to CEO compensation? A managerial discretion explanation'. *Open Ethics Journal*, **3**, 42-56.

Finkelstein, S., and Boyd, B. K. (1998). 'How much does the CEO matter? The role of managerial discretion in the setting of CEO compensation'. *Academy of Management Journal*, **41**, 179-199.

Finkelstein, S., and Boyd, B. K. (1998). 'How much does the CEO matter? The role of managerial discretion in the setting of CEO compensation'. *Academy of Management Journal*, **41**, 179-199.

Fischer, R. (2006). 'Congruence and Functions of Personal and Cultural Values: Do My Values Reflect My Culture's Values?'. *Personality and Social Psychology Bulletin*, **32**, 1419-1431.

Forbes Middle East (2014). Top 500 Companies in the Arab World. Available at: http://www.forbesmiddleeast.com/en/lists/read/2014/top-companies-in-the-arab-world/listid/177 (assessed 22 September 2015).

Fredrickson, J.W. (1986). 'The strategic decision process and the organizational structure'. *Academy of Management Review*, **11**, 280-297.

Green, W. H. (Eds.). (1997). *Econometric Analysis*. 3rd edition. Upper Saddle River, NJ: Prentice-Hall.

Haleblian, J., and Finkelstein, S. (1993). 'Top management team size, CEO dominance, and firm performance: The moderating roles of environmental turbulence and discretion'. *Academy of Management Journal*, **36**, 844-863.

Hambrick, D. C. (2007). 'Upper echelons theory: An update'. *Academy of Management Review*, **32**, 334-343.

Hambrick, D. C., and Abrahamson, E. (1995). 'Assessing managerial discretion across industries: A multi-method approach'. *Academy of Management Journal*, **38**, 1427-1441.

Hambrick, D. C., and Finkelstein, S. (1987). 'Managerial discretion: A bridge between polar views of organizational outcomes'. *Research in Organizational Behavior*, **9**, 369-406.

Hambrick, D. C., and Mason, A. P. (1984). 'Upper echelons: the organization as a reflection of its top managers'. *The Academy of Management Review*, **9**, 193-206.

Hambrick, D. C., and Quigley, T. J. (2014). 'Toward more accurate contextualization of the CEO effect on firm performance'. *Strategic Management Journal*, **35**, 473-491.

Hannan, M. T., and Freeman, J. (1977). 'The population ecology of organizations'. *American Journal of Sociology*, **82**, 929-964.

Heine, S. J., Kitayama, S., Lehman, D. R., Takata, T., Ide, E., Leung, C., and Matsumoto, H. (2001). 'Divergent consequences of success and failure in Japan and North America: An investigation of self-improving motivations and malleable selves'. *Journal of Personality and Social Psychology*, **81**, 599-615.

Helmke, G., and Levitsky, S. (Eds.). (2006). *Informal institutions and democracy: Lessons from Latin America*. 2nd edition. Baltimore, MD: Johns Hopkins University Press.

Hofstede G. (1980). *Culture' s Consequences: International Differences in Work-Related Values*. Thousand Oaks, CA: Sage.

Hofstede, G. (1998). *Masculinity and Femininity: The taboo dimension of national cultures*. Thousand Oaks, CA: Sage.

Hofstede, G. (Eds.). (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations.* 2nd edition. Thousand Oaks, CA: Sage.

Hofstede, G., (1993). 'Cultural constraints in management theories'. *Academy of Management Executive*, **7**, 81-94.

Hofstede, G., and Bond, M. H. (1988). 'The Confucius connection: From cultural roots to economic growth'. *Organizational Dynamics*, **16**, 4-21.

House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P. W., Javidan, M., Dickson, M., et al. (1999). Cultural influences on leadership and organizations: Project GLOBE. In W. Mobley (Ed.), *Advances in global leadership*. Greenwich, CT: JAI Press.

House, R., Hanges, P., Javidan, M., Dorfman, P., and Gupta, V. (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*. Thousand Oaks, CA: Sage.

House, R., and Javidan, M. 2004. Overview of GLOBE. In R. House, P. Hanges, M. Javidan, P. Dorfman, and V. Gupta (Eds). Culture, leadership, and organizations: The GLOBE study of 62 societies. Thousand Oaks, CA: Sage, 9-28.

Hsiao, C. (Eds.). (2003). *Analysis of Panel Data*. 2nd edition. Cambridge: Cambridge University Press

Huang, X., and Van de Vliert, E. (2003). 'Where intrinsic job satisfaction fails to work: national moderators of intrinsic motivation'. *Journal of Organizational Behavior*, **24**, 159-179.

James, K., Chen, D. L., and Corpanzano, R. (1996). Culture and leadership among Taiwanese and U.S. workers: Do values influence leadership ideas? In M. N. Ruderman, M. W. Hughes-James, and S. E. Jackson (Ed.), *Selected research on work team diversity*. Greensboro, NC: Centre for Creative Leadership.

James, L. R. (l982). 'Aggregation bias in estimates of perceptual agreement'. *Journal of Applied Psychology*, **67**, 2l9-229.

James, L. R., Demaree, R. G., and Wolf, G. (1984). 'Estimating within group interrater reliability with and without response bias'. *Journal of Applied Psychology*, **69**, 85-98.

Judge, T. A., Higgins, C. A., Thoresen, C. J., and Barrick, M. R. (1999). 'The Big Five personality traits, general mental ability, and career success across the life span'. *Personnel Psychology*, **53**, 621-652.

Kanungo, R. N., and Aycan, Z. (1997). 'Organizational culture and humane resource practices from a cross-cultural perspective'. In *Proceedings of Canadian Psychological Association*, Toronto, 4-6 June.

Keegan, J., and Kabanoff, B. (2008). 'Indirect industry- and sub-industry-level managerial discretion measurement'. *Organizational Research Methods*, **11**, 682-694.

Kennedy, P. (Eds.). (2008). *A Guide to Econometrics*. 6th edition. Malden, MA: Blackwell.

Keough, K. A., Zimbardo, P. G., and Boyd, J. N. (1999). 'Who's smoking, drinking and using drugs? Time perspective as a predictor of substance use'. *Basic and Applied Social Psychology*, **21**, 149-164.

Key, S. (2002). 'Perceived managerial discretion: An analysis of individual ethical intentions'. *Journal of Managerial Issues*, **14**, 218-233.

Khan, W. A., and Vieito, J. P. (2013). 'CEO gender and firm performance'. *Journal of Economics and Business*, **67**, 55-66.

Kim, E. H. (2013). 'Deregulation and differentiation: Incumbent investment in green technologies'. *Strategic Management Journal*, **34**, 1162-1185.

Kohn, A. (1986). *No-contest: The case against competition*. Boston: Houghton Mifflin.

Krull, D., Loy, M., Lin, J., Wang, C. F., Chen, S., and Zhao, X. (1999). 'The fundamental attribution error: Correspondence bias in individualist and collectivist cultures'. *Personality and Social Psychology Bulletin*, **25**, 1208-1219.

Lance, C. E., Butts, M. M., and Michels, L. C. (2006). 'The sources of four commonly reported cutoff criteria. What did they really say?'. *Organizational Research Methods*, **9**, 202-220.

Lawrence, P., and Lorsch, J. (1967). 'Differentiation and integration in complex organizations'. *Administrative Science Quarterly*, **12**, 1-47.

LeBreton, J. M., Burgess, J. R. D., Kaiser, R. B., Atchley, E. K., and James, L. R. (2003). 'The restriction of variance hypothesis and interrater reliability and agreement: Are ratings from multiple sources really dissimilar?'. *Organizational Research Methods*, **6**, 80-128.

Lucier, C., Schuyt, R., and Tse, E. (2005). 'CEO succession 2004: The world's most prominent temp workers'. *Strategy + business*. Winter: 1-16.

Magnan, M. L., and St. Onge, S. (1997). 'Bank performance and executive compensation: A managerial discretion perspective'. *Strategic Management Journal*, **18**, 573-581.

Makhija, M., and Stewart, A. (2002). 'The effect of national context on perceptions of risk: A comparison of planned versus free-market managers'. *Journal of International Business Studies*, **33**, 737-756.

McClelland, P. L., Liang, X., and Barker, V. L. (2010). ‘CEO commitment to the status quo: Replication and extension using content analysis’. *Journal of Management*, **36**, 1251-1277.

McGraw, K. O., and Wong, S. P. (1996). ‘Forming inferences about some intraclass correlation coefficients’. *Psychological Methods*, **1**, 30-46.

Meindl, J., and Ehrlich, S. 1987. The romance of leadership and the evaluation of organizational performance. Academy of Management Journal, 30: 91-109.

Meindl, J., Ehrlich, S., and Dukerich, J. 1985. The romance of leadership. Administrative Science Quarterly, 30: 78-102.

Miles, R. E., and Snow, C. C. (1978). *Organizational Strategy, Structure, and Process*. New York: McGraw-Hill.

Miller, D. T., Kets De Vries, M. F. R., and Toulouse, J.-M. (1982). Top executive locus of control and its relationship to strategy making, structure, and environment. *Academy of Management Journal*, **25**, 237-253.

Muller-Kahle, M., and Schiehll, E. (2013). ‘Gaining the ultimate power edge: Women in the dual role of CEO and chair’. *The Leadership Quarterly*, **24**, 666-679.

Nelson, R. R., and Nelson, K. (2002). ‘Technology, institutions, and innovation systems’. *Research Policy*, **31**, 256-272.

North, D. C. (1990). *Institutions, institutional change and economic performance*. New York: Cambridge University Press.

North, D. C. (1991). ‘Institutions’. *Journal of Economic Perspectives*, **5**, 97-112.

Orr, L. M., and Hauser, W. J. (2008). ‘A re-inquiry of Hofstede's cultural dimensions: a call for 21st century cross-cultural research’. *Marketing Management Journal*, **18**, 1-19.

Oyserman, D., Coon, H. M., and Kemmelmeier, M. (2002). ‘Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses’. *Psychological Bulletin*, **128**, 3-72.

Peteraf, M., and Reed, R. (2007). 'Managerial discretion and internal alignment under regulatory constraints and change'. *Strategic Management Journal*, **28**, 1089-1112.

Peterson, M. F., and Fischer, R. (2004). Organizational culture and cli- mate. In C. Spielberger (Ed.), *Encyclopaedia for applied psychology*. New York: Elsevier.

Pfeffer, J., and Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper and Row.

Porter, M., Takeuchi, H., and Sakakibara, M. (2000). *Can Japan compete?* Cambridge, MA: Perseus Publishing.

Quigley, T. J., and Hambrick, D. C. (2012). 'When the former CEO stays on as board chair: Effects on successor discretion, strategic change, and performance'. *Strategic Management Journal*, **33**, 834-859.

Ragins, B. R., Townsend, B., and Mattis, M. (1998). 'Gender gap in the executive suite: CEOs' and female executives report on breaking the glass ceiling'. *Academy of Management Executive*, **12**, 28-42.

Ragins, B. R., Townsend, B., and Mattis, M. (1998). *Academy of Management Executive*, 12: 28-42

Rajagopalan, N. (1997). 'Strategic orientations, incentive plan adoptions, and firm performance: Evidence from electric utility firms'. *Strategic Management Journal*, **18**, 761-785.

Rajagopalan, N., and Finkelstein, S. (1992). 'Effects of strategic orientation and environmental change on senior management reward systems'. *Strategic Management Journal*, **13**, 127-141.

Reed, O. L. (2001). 'Law, the Rule of Law, and Property: A Foundation for the Private Market and Business Study'. *American Business Law Journal*, **38**, 441-473.

Rose, R., and Kavanagh, D. 1976. The monarchy in contemporary political culture. Comparative Politics, 8: 548-576.

Roth, K. (1992). 'Implementing international strategy at the business unit level: The role of managerial decision-making characteristics'. *Journal of Management*, **18**, 769-789.

Roth, K., and O'Donnell, S. (1996). 'Foreign subsidiary compensation strategy: An agency theory perspective'. *Academy of Management Journal*, **39**, 678-703.

Rotter, J. B. (1966). 'Generalized expectancies for internal versus external control of reinforcement: Psychological Monographs'. *General and Applied*, **80**, 1-28.

Schneider, S. C., and Barsoux, J. L. (1997). *Managing across cultures*. London: Prentice Hall Europe.

Schwartz, S. H. (1994). Beyond individualism/collectivism: New cultural dimensions of values. In U. Kim, H. Triandis, C. Kagitcibasi, S.-C. Choi, and G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications*. Thousand Oaks, CA: Sage.

Scott, W. R. (Eds.) (2001). *Institution and Organizations*. 2nd edition. Thousand Oaks, CA: Sage.

Segall, M. H., and Kagitcibasi, C. (1997). Introduction. In J. W. Berry, M. H. Segall, and K. Kagitcibasi (Ed.), *Handbook of cross-cultural psychology*. Needham, MA: Allyn and Bacon.

Shrout, P. E., and Fleiss, J. L. (1979). 'Intraclass correlations: Uses in assessing rater reliability'. *Psychological Bulletin*, **86**, 420-428.

Smith, P. B., Dugan, S., and Trompenaars, F., (1996). 'National culture and the values of organizational employees'. *Journal of Cross-Cultural Psychology*, **27**, 231-265.

Snow, C. C., and Hambrick, D. C. (1980). 'Measuring Organizational Strategies: Some Theoretical and Methodological Problems'. *Academy of Management Review*, **5**, 527-538.

Sonpar, K., and Golden-Biddle, K. (2008). 'Using content analysis to elaborate adolescent theories of organization'. *Organizational Research Methods*, **11**, 795-814.

Stening, B. W., and Everett, J. E. (1984). 'Response styles in a cross-cultural managerial study'. *Journal of Social Psychology,* **122**, 151-156.

Sully de Luque, M., and Javidan, M. (2004). 'Uncertainty Avoidance. In *Culture, Leadership and Organizations: The GLOBE Study of 62 Societies*, House R, Hanges P, Javidan M, Dorfman P, Gupta V (eds).' Sage: Thousand Oaks, CA: 602-653.

Taggar, S. (2002). 'Individual creativity and group ability to utilize individual creative resources: a multi-level model'. *Academy of Management Journal*, **45**, 315-330.

Tosi, H. L., and Greckhamer, T. (2004). 'Culture and CEO compensation'. *Organization Science*, **15**, 657-670.

Triandis, H. C. (1993). 'Collectivism and individualism as cultural syndromes'. *Cross-Cultural Research*, **27**, 155-180.

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview.

Trompenaars, A., and Hampden-Turner, C. (Eds.) (1998). *Riding the waves of culture: Understanding cultural diversity in global business*. 2nd edition. New York: McGraw Hill.

Wangrow, B. D., Schepker, J. D., Barker III, L. V. (2015). 'Managerial Discretion: An Empirical Review and Focus on Future Research Directions'. *Journal of Management*, **41**, 99-135.

Wasserman, N., Anand, B., and Nohria, N. (2010). 'When does leadership matter? A contingent opportunities view of CEO leadership'. In N. Nohria and R. Khurana (Eds.), *Handbook of leadership theory and practice*. Boston, MA: Harvard Business Press.

Werner, S., and Tosi, H. L. (1995). 'Other people's money: The effects of ownership on compensation strategy and managerial pay'. *Academy of Management Journal*, **38**, 1672-1691.

Whorf, B. L. (1956). *Language, Thought and Reality: Selected Writings of Benjamin Lee Whorf*. Cambridge, MA: MIT Press.

Witt, M. A., and Redding, G. (2009). 'Culture, meaning, and institutions: executive rationale in Germany and Japan'. *Journal of International Business Studies*, **40**, 859-885.

**TABLES AND FIGURES**

Figure 1. Theoretical Framework

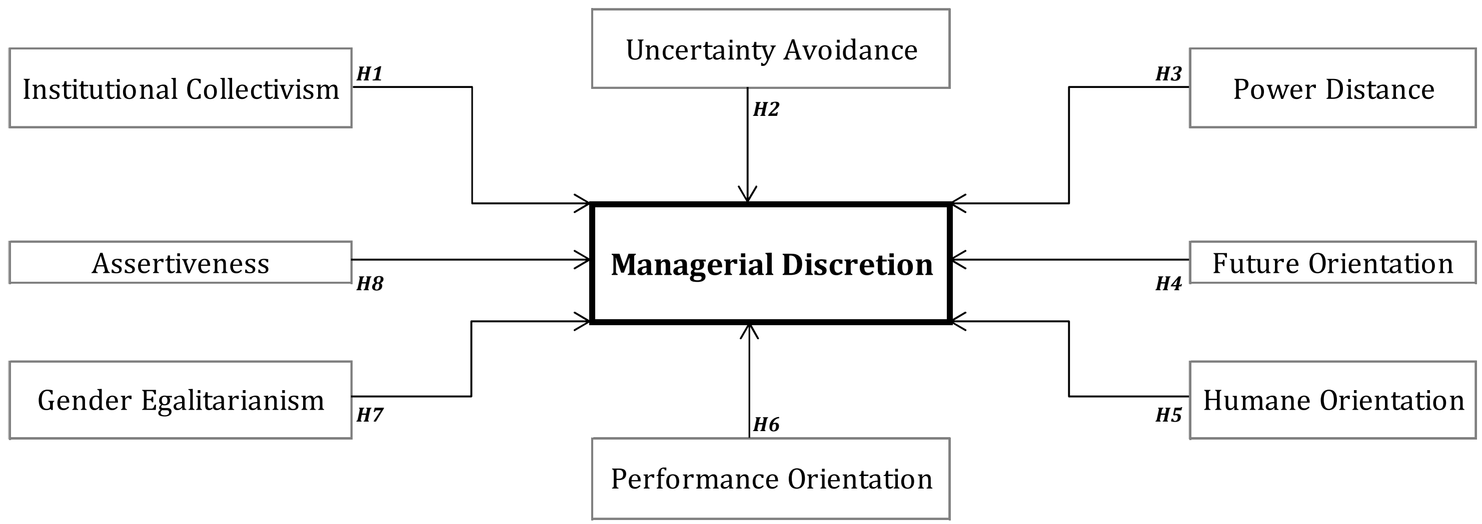

Table I. Managerial Discretion and Cultural Practices Country Mean Scores

| **Country** | **Managerial Discretion** | **Cultural Practices** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | IC | UA | PD | FO | HO | PO | GENDERE | AA |
| Egypt | 4.0 | 4.36 | 3.97 | 4.76 | 3.80 | 4.60 | 4.15 | 2.90 | 3.91 |
| Kingdom of Saudi Arabia | 4.2 | 4.68 | 4.68 | 4.88 | 3.98 | 4.49 | 4.24 | 2.71 | 4.47 |
| Kuwait | 3.8 | 4.32 | 4.02 | 4.97 | 3.18 | 4.44 | 3.79 | 2.59 | 3.56 |
| Lebanon | 4.7 | 4.14 | 3.36 | 5.50 | 3.30 | 3.98 | 3.82 | 3.45 | 4.01 |
| Qatar | 4.1 | 4.78 | 4.26 | 5.05 | 4.08 | 4.79 | 3.76 | 3.86 | 4.39 |
| United Arab Emirates | 5.0 | 3.06 | 3.00 | 5.46 | 4.15 | 4.12 | 4.70 | 3.45 | 4.99 |

Table II. Descriptive Statistics & Bivariate Correlations

| | Mean | S.d | Model (1) | Model (2) | Model (3) | Model (4) | Model (5) | Model (6) | Model (7) | Model (8) |
|---|---|---|---|---|---|---|---|---|---|---|
| Managerial Discretion[1] | 4.3 | 1.74 | - | | | | | | | |
| Institutional Collectivism[2] | 4.2 | 0.62 | -.79* | - | | | | | | |
| Uncertainty Avoidance[2] | 3.9 | 0.61 | -.79* | .89** | - | | | | | |
| Power Distance[2] | 5.1 | 0.31 | .84* | -0.67 | -.82* | - | | | | |
| Future Orientation[2] | 3.7 | 0.41 | 0.32 | -0.14 | 0.09 | -0.07 | - | | | |
| Humane Orientation[2] | 4.4 | 0.30 | -.75* | 0.70 | 0.77* | -.82* | 0.35 | - | | |
| Performance Orientation[2] | 4.0 | 0.37 | 0.63 | -0.73 | -0.40 | 0.20 | 0.62 | -0.30 | - | |
| Gender Egalitarianism[2] | 3.2 | 0.50 | 0.51 | -0.17 | -0.39 | 0.58 | 0.40 | -0.06 | -0.05 | - |
| Assertiveness[2] | 4.2 | 0.50 | 0.72 | -0.50 | -0.27 | 0.41 | .85* | -0.16 | .75* | 0.49 |

[1]N = 262; [2]N = 6; *p < 0.05, ** p <0.01.

Table III. Fixed-effect regression: The effect of informal institutions on managerial discretion

| | Model (1) | Model (2) | Model (3) | Model (4) | Model (5) | Model (6) | Model (7) | Model (8) |
|---|---|---|---|---|---|---|---|---|
| Constant | 6.90*** | 6.68*** | -2.80 | 2.34* | 9.36*** | 0.62 | 2.64*** | 0.97 |
| Institutional Collectivism | -0.61***<br>(0.15) | | | | | | | |
| Uncertainty Avoidance | | -0.60***<br>(0.15) | | | | | | |
| Power Distance | | | 1.40***<br>(0.32) | | | | | |
| Future Orientation | | | | 0.53*<br>(0.25) | | | | |
| Humane Orientation | | | | | -1.14***<br>(0.33) | | | |
| Performance Orientation | | | | | | 0.91***<br>(0.26) | | |
| Gender Egalitarianism | | | | | | | 0.54**<br>(0.20) | |
| Assertiveness | | | | | | | | 0.79***<br>(0.19) |
| F | 16.37*** | 15.18*** | 18.59*** | 4.47* | 12.04*** | 11.73*** | 7.34** | 16.09*** |
| **$R^2$** | 0.47 | 0.47 | 0.48 | 0.44 | 0.46 | 0.46 | 0.45 | 0.47 |

*N = 262; * p<0.05; ** p<0.01; *** p<0.001*