

# The Effect of National Culture on Strategic Behavior and Financial Performance: Evidence from the Cement Industry in Morocco and the United States of America

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# **Abstract**

This study investigates the effect of national culture on strategic behavior and financial performance in the cement industry of both Morocco and the United States of America.

Based on the data gathered from cement manufacturers of these two countries, the study found a significant relationship between certain characteristics of national culture of Hofstede (uncertainty avoidance, long- and short-term orientation, collectivism and individualism) and



strategic behavior and financial performance. The research study first investigated the strategic posture of the research domain. The strategic posture aimed to study the readiness for strategic response from managers. Readiness was then correlated with Hofstede's cultural dimensions and financial performance of the cement manufacturers.

**Keywords:** National Culture, Strategic Behavior, Firm Performance, Cement Industry, Morocco.



## Introduction

The success or failure of any organization depends mainly on its business strategies and the resources dedicated to their execution. Since the introduction of the concept of strategic management in the 1950s and early 1960s, researchers and practitioners have modified the concept by integrating forms of analysis and techniques that can make the field of strategic management useful for future generations. In recent decades, research in the field of strategic management took a new direction through the introduction of behavioral reasoning. This new approach revealed the impact of culture on strategy, as actions, responses, and choices were influenced not only by collective culture but also by individual experience (Ayoun, 2006; Daft & Weick, 1984; Bloom et al., 2003; Prahalad & Bettis, 1986; Starbuck & Milliken, 1988).

Strategy implementation, rules, and tactics are the means by which an organization accomplishes its goals. Understanding the mechanisms of how the concepts of strategic behavior, implementation, and formulation work requires a deep comprehension of the factors such as national culture that affect systems. Analyzing strategy and management from the perspective of people and culture allows scholars and professionals to develop an idea of how traditions and national cultures influence the ways in which organizations perform.

The first generation of academic research was reluctant to inquire into the relationship between strategic management and culture. Any kind of connection in early scholarly publications between the two variables was distant. It was not until later, especially in the late 1980s and early 1990s, that the significance of national characteristics in shaping strategy appeared in the literature (Nelson, 1994; Porter, 1990).

Consequently, more research is required to test the mediated effect national culture has on firms' strategic behavior and financial performance. The initial findings revealed in the field of strategic management concerning the effect of national culture on strategy were questionable, since researchers did not fully agree on the impact of culture on strategic behavior (Shenkar, 2001; Brouthers & Brouthers, 2001). In general, cultural explanations and influences have not been critically tested along with strategic aggressiveness, capability, and financial performance. The often-heated debate over this issue continues to this day.

Although some researchers were unsuccessful in identifying significant cross-national differences (Lambert et al., 1979), most researchers have found that culture plays an important role in interpreting and analyzing strategic situations. According to Sims and Gioia (1986), codifying information, even within the same conditions, can result in different perceptions and reactions, as people of different backgrounds have dissimilar values, principles, and assumptions.

Every culture is unique, and people's behaviors differ according to their environments and cultural backgrounds. Hence, it is necessary to trace the role of national culture in shaping managers' attitudes toward strategy and to investigate its effect on organizational performance. This study measured certain dimensions of national culture from Hofstede with strategic behavior in dissimilar cultural settings. It empirically tested whether cultural



differences exist between the U.S. and the Moroccan environments and, if so, whether these variances are related to strategic aggressiveness, organizational capability, and financial performance. The relationship between national culture and the environment-organization fit theory has not been tested before. Therefore, this study fills the gap and shows how cultural dimensions are related to strategic aggressiveness and capability gaps. The lack of strategic management studies in the Middle East and North African (MENA) region necessitates supplementary academic investigation to avoid basing conclusions on westernized managerial stereotypes or generalizations of Arab countries. The concept of strategic management and its usability is still emerging in this specific area and needs further exploration and testing to determine its effect on decision making.

## Research Model

The research model of the present study took into consideration environment-organization alignment theory and followed the same instrumentations and structure as previous studies (Ansoff et al., 1993; Moussetis et al., 1999, 2005). Organization alignment theory calls for alignment between the firm's strategy aggressiveness and capability with the turbulence level of the environment to optimize financial performance (Ansoff et al., 1993; Lamont et al., 1993; Mintzberg, 1979). To illustrate, if a firm wants to be successful and optimize its financial gains, it has to change its competitive posture to match the turbulence level of the environment. Ansoff and McDonnell (1990) asserted that the environment is characterized by constant variation; therefore, conserving stable capabilities, responsive strategies, and aggressiveness will not bring successful results and will create gaps (strategic capability and aggressiveness gaps) between the industry environmental requirements and the actual status of the firm's strategic behavior and capability, which can affect its response and, consequently, negatively affect the firm's financial performance.

The research study investigated the strategic posture of the research domain and was then correlated with Hofstede's (1980) cultural dimensions (uncertainty avoidance, long- and short-term orientation, collectivism and individualism, and power distance) and financial performance to detect their correlation degree. Hofstede's work is considered to be a keystone in the study of national cultures and management. His contribution has been widely recognized and mostly used in cross cultural studies. To calculate strategic aggressiveness and capability gaps, the study used the observed turbulence level (exogenous variable) and strategic aggressiveness and managerial capability (endogenous variables) to indicate the environment-organization alignment. Respondents were asked about their perception of the turbulence level (based on a 5-point Likert scale), the divergence from the firm's strategic behavior and capability identified the corresponding strategic aggressiveness gap and the strategic capability gap. Figure 1 represents the research model of the present study and displays the independent, dependent and intervening variables used in the study.



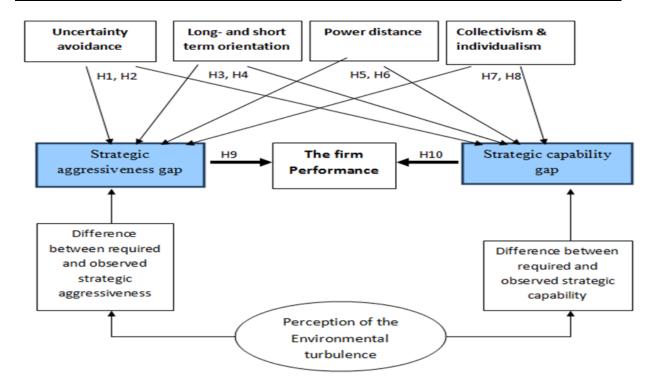


Figure 1. Research Model

## **Related Literature**

Environmental turbulence. This term has been described in many ways, including "megatrends" (Naisbitt, 1982), "the age of discontinuity" (Drucker, 1969), "third wave" (Toffler, 1981), and "turbulent environment" (Ansoff, 1965). Many researchers described the environmental turbulence as stable, uncertain, complex, static, dynamic, discontinuous, and turbulent or surprising (Ansoff, 1979; Emery & Trist, 1965; Moussetis et al., 1999, 2005). According to different empirical studies, performance is optimized when a firm's strategy and capability are aligned with the turbulence level of the environment (Ansoff et al., 1993; Jaworski & Kohli, 1993; Moussetis et al., 1999). Table 1 summarizes the levels of environmental turbulence, strategic aggressiveness, and capability based on the literature and previous studies.



Table 1. Levels of Environmental Turbulence, Strategic Aggressiveness, and Capability

Environmental	Repetitive	Expanding	Changing	Discontinuous	Surpriseful	
turbulence						
		Slow	Fast	Discontinuous	Discontinuous	
	No change	incremental	incremental	predictable	unpredictable	
		change	change	Change	Change	
Strategic						
aggressiveness	Stable	Reactive	Reactive Anticipatory Er		Creative	
Responsiveness of	Precedent	Efficiency	Market driven	Environment	Environment	
capability	driven	driven		driven	creating	
			Seeks familiar			
	Suppresses	Adapts to	change	Seeks related	Seeks novel	
	change	change		change	change	
Turbulence level						
	1	2	3	4	5	

# Note. Adapted from Ansoff and McDonnell (1990).

Strategic behavior and capability. In a cluttered business environment based on information power and the ability to exploit intangible assets, companies strive to implement strategic management approaches to link today's actions with tomorrow's goals (Kaplan & Norton, 1996). The extent to which a firm can maximize its profitability is a pure strategic management question, and studies conducted in the field have concentrated mainly on the discrepancies in profitability that can be related to industry factors in addition to the firm's strategic decisions. Strategic behavior can lead to different excepted organizational performance goals through customer-oriented behavior, competitor-oriented behavior, innovation-oriented behavior, and cost-oriented behavior (Gatignon & Xuereb, 1997; Olson, Slater, & Hult, 2005). Strategic behavior components have been further extended by Donaldson and Preston (1995) to include supplier-focused behavior, employee-focused behavior, society aspect-focused behavior, and environment-focused behavior. At the present time where important turbulence and discontinuity exist, organizations craft the appropriate strategic behavior approaches to foster innovation and promote new product or service development through matching the firm's current capabilities with tomorrow's goals (Szyliowicz et al., 2004). Based on the review of bodies of research, performance measurement varies from one organization to another because of general management strategic behavior, environment, and variations in organizational structures (Govindarajan & Gupta, 1985; Tan & Litsschert, 1994). Furthermore, market turbulence, competitive intensity, and technological turbulence would also play a notable role in corporate performance measurement. Ansoff and McDonnell (1990) also emphasized that the selection of the right strategic posture by matching the strategic aggressiveness and responsiveness of the firm with its environmental turbulence can maximize the firm's performance. They also asserted that



the firm's failure to match the required strategic behavior in the market could result in a gap that can affect the optimum performance. They further precede their approach by constructing a 5-point scale in which they suggested the appropriate behavior and characteristics to each level of the environmental turbulence.

Hypothesis 1. There is a negative relationship between strategic aggressiveness gap and financial performance.

*Hypothesis* 2. There is a negative relationship between strategic capability gap and financial performance.

Hypothesis 3. The strategic aggressiveness gap of the Moroccan and American managers is different.

Hypothesis 4. The strategic capability gap of the Moroccan and American managers is different.

Hypothesis 5. Return on equity of the Moroccan and American cement manufacturers is different

Uncertainty avoidance. This has been defined by Hofstede (1984) as the extent to which the society feels threatened by uncertain and ambiguous circumstances and tries to evade these situations by providing career stability, establishing formal rules, and creating an environment of absolute truth. Hofstede (1984) revealed that uncertainty avoidance differs from one culture to another and that people try to cope with it differently. Individuals from nations with high uncertainty avoidance search for structure in their organizations and attempt to build a crystal climate to make the environment more predictable and easy to handle. People from such countries believe that ambiguity can be comfortably dealt with if everyone in the society acts in a widely accepted manner. In cultures with low uncertainty avoidance, organizations and individuals accept familiar but also unfamiliar risks including job switching and being open to new ideas and changes. Such societies seek to establish fewer restrictions, laws, and regulations.

Perceptions of environmental uncertainty influence a firm's strategic behavior, and since national culture impacts perceptions, different cultures respond to strategic issues differently (Mousetis et al., 2005; Schneider & De Meyer, 1991). Hofstede (2001) detected a positive relationship between a high uncertainty avoidance index and resistance to innovations. Organizations operating in countries with a high uncertainty avoidance index are characterized by formalized management and risk-averse attitudes that lessen the likelihood of innovation adoption. Indeed, Van Everdingen and Waarts (2003) found that high uncertainty avoidance levels in a country negatively influence innovation adoption.

Hypothesis 6. There is a reliable relationship between uncertainty avoidance and strategic aggressiveness gap.

Hypothesis 7. There is a reliable relationship between uncertainty avoidance and strategic capability gap.



Hypothesis 8. Uncertainty avoidance of the Moroccan and the American managers is different.

**Long-** and short-term orientation. The term indicates the extent to which a society looks to the time horizon—how they perceive the future, the present, and the past in their lives (Hofstede, 2001). Cultures with high long-term orientation ratings are best described as virtuous, long-term goal oriented, and patient. They prefer to solve their problems for the long term rather than look for quick or temporary repairs, and they perceive "the truth" as ambiguous and able to take many forms. Managers from high-scoring countries in long-term orientation are more likely to sacrifice short-term benefits, goals, and profits for the sake of long-term collective goals. Therefore, they should be less attached to following their strategic plans than countries with short-term orientation such as the United States (Chong & Park, 2003). In addition, short-term oriented nations are more likely to search for leisure, to place greater emphasis on short or quick results, and to be more concerned with possessing the truth. The literature also points to the effect that time orientation can have on strategy development and managers' strategic behavior. Abu-Rahma (1999) conducted a study in the banking industry of two distinct cultures, the United States and Jordan. He concluded that managers in the two countries have responded differently when considering cultural characteristics. The researcher found that some national cultural strategic characteristics such as a future time orientation, risk propensity, and openness to change correlate with strategic behavior and financial performance.

Hypothesis 9. There is a reliable relationship between long- and short-term orientation and strategic aggressiveness gap.

Hypothesis 10. There is a reliable relationship between long- and short-term orientation and strategic capability gap.

Hypothesis 11. Long-term orientation of the Moroccan and the American managers is different

**Power distance.** Societies with a high power distance level are predisposed to admit the inequality of power between superiors and subordinates, to attempt to follow a formal code of conduct, and to assume that superiors are given special privileges that make it almost impossible for others to disagree with their decision making (Hofstede, 1983). In contrast, low power distance societies are less likely to accept class distinction, are more apt to prefer democratic participation, and are less afraid of disagreeing with superiors. Hofstede assumed that employees working in high power distance societies would tend to show more dedication and loyalty not only to their superiors but also to their organizations, to closely follow formal rules of ethics, and to be more apt to undervalue themselves and give up their own interests to guarantee their firm's success. Most organizations operating in high power distance societies have hierarchical decision-making systems (Kamoche, 1992). Kamoche noted that in high power distance cultures, employees have a tendency to depend on the most powerful and privileged, which explains the sense of "them and us" often existing between managers and staff. According to Zmud (1982), high power distance societies are characterized by high levels of centralization and formalization that lessen the likelihood of innovation adoption



among such societies. A centralized organization's subordinates are not always apt to take initiatives and wait for top management to determine and solve operational problems. A centralized organization is characterized by low information sharing, as it is constrained by a hierarchy that explains the slow pace of an innovation's adoption by high power distance societies.

Hypothesis 12. There is a reliable relationship between power distance and strategic aggressiveness gap.

Hypothesis 13. There is a reliable relationship between power distance and strategic capability gap.

Hypothesis 14. The power distance degree between superiors and subordinates in the Moroccan and the American cement manufacturers is different.

Collectivism and individualism. This refers to the relationship between an individual and the group he or she belongs to. Individualism and collectivism include values, norms, and beliefs shared by a cultural group; they determine what is considered right or appropriate behavior regarding interpersonal relationships (Hofstede, 1984). Individualistic societies are characterized by certain qualities including fulfillment of personal needs over group needs, focus on benefits when judging relationships, and exploitation of personal attitudes to lead rather than feelings stressed by group norms (Triandis & Trafimow, 2001). Individualists give great esteem to pleasure, individual expression, and personal time (Triandis, 1995). Alternatively, collectivists consider themselves primarily as members of an extended family or organization and hence place group interests first (Hofstede & Bond, 1984). Collectivists esteem reciprocation of favors, they have a strong sense of group belonging, and they convey a deep respect for tradition (Schwartz, 1992). Lee and Rogan (1991) showed that collectivists tend to use a solution-oriented strategy to solve the problem, whereas individualists are more likely to use a direct confrontation style to assert control over the situation. American executives are characterized by their obliging, compromising, and dominating conflict management style in comparison with Arab Middle Eastern executives, who are more likely to prefer an avoiding and integrating style (Elsayed- Ekhouli & Buda, 1996). Studies by Shane (1993) and Lynn and Gelb (1996) have found a positive correlation between individualism and national innovativeness. According to the researchers, individualistic cultures are more apt to adopt innovativeness than collectivist ones. Individualistic cultures believe in individual decisions, so people have more freedom to try new ideas and make their own choices.

Hypothesis 15. There is a reliable relationship between collectivism degree and strategic aggressiveness gap.

Hypothesis 16. There is a reliable relationship between collectivism degree and strategic capability gap.

Hypothesis 17. The collectivism degree of the Moroccan and the American managers is different.



## **Research Method**

This research study is an examination of the effect of national culture on strategic behavior and financial performance. The fit-alignment theory and previous findings were used (Ansoff et al., 1993; Moussetis et al., 1999, 2005) as a foundation to test the multiple variables of the study. The fit-alignment theory emphasizes on the alignment between the firm's strategic behavior and capability (endogenous factors) with the turbulence level of the environment (exogenous factors) to assure an optimum financial performance (dependent variable). Gaps were measured for the present study by identifying the difference between the present or the observed strategic posture of the cement manufacturers and the desired posture with respect to the turbulence level. Those gaps were then correlated with the study variables (uncertainty avoidance, long- and short-term orientation, collectivism and individualism, power distance) and the firm's financial performance (dependent variable). Gaps were measured by the absolute arithmetic difference. Morocco and the United States were chosen for the present study. Surveys were then delivered to the firms' managers, directors, and executives.

The cement-manufacturing firms have been chosen to conduct the present study. No restrictions have been made concerning the size or the capital of the selected firms. All five manufacturing companies that exist in Morocco have been selected. The same is true for the United States, as all 39 cement manufacturers operating 113 cement plants in 36 states have been chosen to participate in the present study. The target population for this research study included managers, directors, and executives of the chosen cement-manufacturing firms. The samples for this study were collected from a total of 44 cement-manufacturing firms in Morocco and the United States (all five companies in Morocco and 39 across the United States). Surveys distributed in Morocco were translated to French by a professional translator, and were reviewed by the researchers and translator many times to assure their accuracy with the English version before sending it to respondents.

## **Data Collection**

The survey was delivered to all cement manufacturers in the United States and Morocco. The research study was analyzed and based on 135 returned surveys out of 385. Seventy-four questionnaires were received from Morocco out of 80 delivered and 61 from the United States out of 305 delivered. The response rate was 92% in Morocco and 20% in the United States. Overall, 17 firms out of 44 cement manufacturers in Morocco and the United States were able to fully complete the questionnaires with a response rate of 38% in both countries.

#### **Instruments**

The data was collected through questionnaire. The instrument included 40 questions that were divided into 7 parts. The first part of the questionnaire included structured questions to measure and assesses the turbulence level in the cement industry and was composed of questions 1 through 5. The second part assessed the observed strategic aggressiveness of the firms under study and was composed of questions 6 through 14. The third part measured managerial capability observed within the cement-manufacturing firms and was composed of questions 15 through 24. Questions 25 to 40 measured the cultural characteristics (uncertainty



avoidance, long- and short-term orientation, individualism and collectivism, and power distance).

# Validity and Reliability

A reliability test was conducted for the study variables using Cronbach's alpha coefficient. Internal reliability test shows how closely related a set of items are as a group. Table 2 shows the corresponding values that are considered as suitable for purpose of the present study.

Table 2. Cronbach's Alpha Coefficients

Variables	Number of items	Cronbach's alpha
Turbulence	5	.6140
Strategic aggressiveness	9	.8002
Strategic capability	10	.8247
Uncertainty avoidance	4	.6389
Long- and short-term orientation	4	.6392
Power distance	4	.7055
Individualism and collectivism	4	.7321

#### **Research variables and Definitions**

This section provides all independents variables used and their conceptual definitions. The following independent variables were employed:

- 1. National culture characteristics: uncertainty avoidance, short- and long-term orientation, collectivism and individualism, and power distance.
- 2. Required and observed strategic capability and aggressiveness of the cement-manufacturing firms. The corresponding capability and aggressiveness are measured based on the volatility of the environment (Ansoff et al., 1993; Moussetis et al., 1999, 2005).
- 3. Management perception of environmental turbulence level.

# **Intervening Variables**

Strategic aggressiveness gap and strategic capability gap.

# **Dependent Variable**

The cement firms' financial performance is the dependent variable in the following study. Financial performance of the cement manufacturers was calculated using the return on equity ratio. The average return on equity for the 2009–2011 period was used.



Conceptual definitions of the study variables are as follow;

- 1- **Environmental turbulence:** Refers to the level of changeability and predictability of the environment. It is described using four characteristics: complexity, novelty of change, visibility, and rapidity of change (Ansoff & McDonnell, 1990; Kipley & Lewis, 2011).
- 2- **Strategic capability:** Defined as the organization's propensity and its ability to engage in behavior that will optimize the attainment of the firm's short- and long-term objectives. It includes both the manager's capabilities and those of the organization (system) as a whole (Ansoff & Antonious, 2005; Ansoff & McDonnell, 1990; Kipley & Lewis, 2011).
- 3- **Strategic aggressiveness:** A strategic condition that is described by two characteristics: the degree of discontinuity and the timeliness of introduction of the firm's new products or services relative to new products or services that have appeared on the market. Timeliness ranges from reactive to anticipatory to innovative to creative.
- 4- **Strategic capability gap:** Measured by the absolute difference between the cement manufacturers' observed strategic capability and the required capability responsiveness.
- 5- **Strategic aggressiveness gap:** Measured by the absolute difference between the cement manufacturers' observed strategic aggressiveness and the required strategic aggressiveness.

# **Data Analysis**

Pearson's correlation coefficient and t tests were used during this study to determine the significance and strengths of the relationships between the proposed variables. Respondents were requested to assess the turbulence level in the environment. Based on that assessment and from previous research (Ansoff et al., 1993; Moussetis et al., 1999, 2005), the required degree of strategic aggressiveness and capability was recognized. Then respondents were asked to perceive and assess their firm's strategic aggressiveness and capability. The difference between the required and the observed (strategic aggressiveness and capability) resulted in the respective gaps. Those gaps were then correlated with others variables and the firm's performance. Gaps were measured by the absolute arithmetic difference.

Pearson's r was used to measure the strength and the direction of linear dependence between two or more variables and it ranges from -1 to 1. The magnitude of the number represents the strength of the correlation. Additionally, this study also utilized the t test to measure the differences between groups presented in the study and correlation (Pearson's r) to detect relationships between national culture characteristics and strategic aggressiveness and capability gaps.

# Research Findings

The statistical analyses of the present research were conducted using Pearson's *r* correlation and *t*-test comparison of means. The following section shows the results of data analysis. Tables 3, 4, and 5 present the summary of the research findings.

Table 3 shows how the gaps are correlated with national culture characteristics and financial performance. The most significant relationships are those that tested the relationships



between financial performance and strategic aggressiveness and capability gaps. Also, variables like individualism and collectivism, uncertainty avoidance and Long- and short-term orientation showed significant relations with strategic aggressiveness and capability gaps.

Table 4 reveals that strategic aggressiveness gap and capability gap of the Moroccan cement manufacturers were smaller than the American firms. These smaller gaps reveal a better financial performance. Table 5 shows significant differences between the Moroccan and the American managers in term of power distance, uncertainty avoidance, individualism and collectivism and long and short term orientation.

Table 3. Cultural Characteristics in Terms of Their Correlation with the Strategic Aggressiveness and Capability Gap

Correlations between variables	Pearson's	P
(Number of cases $N = 135$ )	r	
H1: Financial performance and strategic aggressiveness gap	605	.000
H2: Financial performance and strategic capability gap	583	.000
<b>H6:</b> Uncertainty avoidance and strategic aggressiveness gap	336	.000
H7: Uncertainty avoidance and strategic capability gap	219	.005
<b>H9:</b> Long- and short-term orientation and strategic aggressiveness gap	298	.000
H10: Long- and short-term orientation and strategic capability gap	180	.018
H12: Power Distance and strategic aggressiveness gap	009	.458
H13: Power distance and strategic capability gap	059	.248
H15: Individualism and collectivism behavior and strategic aggressiveness gap	398	.000
H16: Individualism and collectivist behavior and strategic capability gap	344	.000



Table 4. The Difference Between the Moroccan and the American Managers in Terms of Strategic Aggressiveness and Capability Gaps

							95% CI	
	N	М	SD		t	<i>p</i> -value	Lower	Upper
Aggressiveness gap		he differentic aggressiv		the	Moroccan	and Americ	can manager	s in terms of
Morocco	74	.6888	.53382					
					-5.094	.000	61889	27269
USA	61	1.1346	.47007					
Capability gap		he differen		the	Moroccan	and Americ	can manager	s in terms of
Morocco	74	.8369	.53727					
					-4.208	.000	56512	20372
USA	61	1.2213	.51708					



Table 5. The Difference Between the Moroccan and American Managers in Terms of National Culture Dimensions and Financial Performance

	3.7		ar.			95% CI		
	N	M	SD	t	<i>p</i> -value	Lower	– Upper	
Uncertainty	H8:	The difference	ce between	the More	occan and Ame	erican manage	ers in terms of	
avoidance	unce	ertainty avoida	nce					
Morocco	74	3.3311	.81836					
USA	61	3.0328	.81327	2.11	4 .036	.01915	.57744	
Long-term orientation		The difference		the More	occan and Amo	erican manage	ers in terms of	
Morocco	74	3.0068	.9463	2.106	5 .037	.0184	.5853	
USA	61	2.7049	.6575					
Power distance	H14: The difference between the Moroccan and American cement manufacturers in							
	term	s of power dis	stance					
Morocco	74	2.7872	.86175	-2.13	2 .035	.02220	.59311	
USA	61	2.4795	.80012	2.10	050	.0222	.0,011	
Individualism and	H17	: The differen	nce between	the Moi	occan and Am	erican manage	ers in terms of	
collectivism	indi	vidualism and	collectivism	1				
Morocco	74	3.3412	.90241					
				2.53	6 .012	.08585	.69494	
USA	61	2.9508	.87538					
Return on equity	H5: The difference between the Moroccan and American cement manufacturers in terms of return on equity							
Morocco	74	26.619	6.8274					
				22.07	2 .000	21.1807	25.3505	
USA	61	3.353	5.0633					

# **Discussion**

The study found a significant relationship between certain national culture characteristics, strategic behavior, and financial performance. This research study found that culture plays an important role in interpreting and analyzing strategic situations and that the cultural dimension of individuals can have important insights and influence into managers' strategic behavior and business performance. Therefore, managers should be aware of the cultural backgrounds of their employees and subordinates and understand that adapting long-term orientation and encouraging employees for more collectivism is likely to improve the firm's



profitability. The Moroccan managers were shown to have better strategic controls and a better understanding of the environment and orientation than their American counterparts, which resulted in stronger financial performance. The study identified that the Moroccan cement manufacturers had a better understanding of their environmental turbulence level and that their exhibited strategic behavior and capability are better suited than the American cement manufacturers for their environments. The results also concluded that managers in both countries had different cultural characteristics. Surprisingly, power distance did not show any correlation with strategic behavior and therefore was not a factor that can explain differences between the Moroccan and American managers but was consistent with some previous studies (Francesco & Chen, 2000).

The research study found that alignment between the environmental turbulence level and strategic aggressiveness and capability would result in good financial performance. Therefore, optimum financial performance occurs when turbulence level, aggressiveness of strategy, and openness of capability match one other. This finding suggests that a decrease in the gaps of strategic aggressiveness and capability will elicit an increase in the firm's financial performance. This finding supports the environment-organization fit-alignment theory, Ansoff's strategic success paradigm, and some other previous findings such as Carmen (2006), Loebbaka (2008) and Abu-Rahma (1999). The Moroccan cement manufacturers had smaller gaps and therefore higher return on equity than their American counterparts. These results are also consistent with hypotheses 5, 6, 9, 10, 16, and 17. Moroccan managers were shown to have more long-term orientation and higher collectivism degree than American managers.

The present study also found that Morocco has a higher preference for uncertainty avoidance, power distance, and collectivism than the United States. These findings are similar to the Hofstede (1980) study in which Morocco was considered as similar to the scores of other Arab countries. Moroccan organizations accept hierarchical classification: subordinates expect to be assigned what to do, and the ideal manager is the one with an autocratic management style. Morocco also exhibits a high inclination for uncertainty avoidance and collectivism, which reveals high needs for rigid codes of belief, security, and precision and are more apt to management of group.

There is also a significant difference between Moroccan and American managers in terms of their financial performance. These findings are consistent with the results shown in hypotheses 11 and 12 in which the Moroccan cement manufacturers had a lower strategic aggressiveness gap and strategic capability gap and therefore better return on equity, as shown in the findings of hypothesis 17.

#### **Conclusion and Future Recommendations**

The present study was able to provide empirical support for the relationship between national culture, strategic behavior, and financial performance. The research study emphasized that the applicability of any managerial approach is conditioned with cultural components and how it is adapted to a country's cultural context and therefore should be considered an important factor in corporate strategic diagnosis. This study successfully provided additional support



and validation to the environment-organization alignment theory and its applicability and enhanced previous findings on how cultural factors can impact a firm's strategic behavior and financial performance (Ansoff et al., 1993; Hofstede, 1980; Moussetis et al., 2005). It can be vague to assume that national culture is the only important factor that can affect strategic behavior. The present study did not include other individual and organizational variables (i.e., education, age, company size, experience, and personality). Therefore, further research is required to test the effects of individual and organizational characters with national culture on managers' strategic behavior and their relative explanatory power to the present issue. Supplementary focus should also be given in investigating the effect of national culture on other components of management such as information technology, human resources, or organizational resistance to change.

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