THE EFFECT OF HOFSTEDE'S CULTURAL DIMENSIONS ON THE DEGREE OF COMPLIANCE WITH IFRS STANDARDS IN DEVELOPING COUNTRIES

Souad Chaieb

* Laboratory of Governance Finance Accounting, Faculty of Economics and Management, University of Sfax, Tunisia Contact details: University of Sfax, Route de l'Aéroport Km 0.5, BP 1169, 3029 Sfax, Tunisia



How to cite this paper: Chaieb, S. (2021). The effect of Hofstede's cultural dimensions on the degree of compliance with IFRS Standards in developing countries. *Corporate Ownership & Control*, 19(1), 146–158. https://doi.org/10.22495/cocv19ilart11

Copyright © 2021 The Author

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). https://creativecommons.org/licenses/by/ 4.0/

ISSN Online: 1810-3057 ISSN Print: 1727-9232

Received: 10.07.2021 Accepted: 18.10.2021

JEL Classification: M41 DOI: 10.22495/cocv19ilart11

Abstract

This paper aims to highlight the cultural impact of Hofstede (1980) on the degree of compliance with International Financial Reporting Standards (IFRS) in 55 developing countries for the year 2014, based on the method adopted by Elad (2015) in order to identify IFRS Standards. Results show that culture (by means of three components, namely power distance, uncertainty avoidance, and masculinity) does not promote the degree of compliance with IFRS. However, only one significant relationship was found between individualism and the degree of compliance with IFRS Standards. This finding confirms Gray's (1988) observation that individualism fosters a climate of transparency and professionalism.

Keywords: Developing Countries, IFRS, Hofstede's Cultural Dimensions, Corruption, Education, Investor Protection

Authors' individual contribution: The Author is responsible for all the contributions to the paper according to CRediT (Contributor Roles Taxonomy) standards.

Declaration of conflicting interests: The Author declares that there is no conflict of interest.

1. INTRODUCTION

The need to adhere to an international accounting framework has become increasingly important, as the degree of comparability of information in the financial statements continues to rise. Several countries have been aiming to align their accounting practices with the International Accounting Standards IAS/IFRS. Even developing countries have adopted IFRS in recent years (Samaha & Stapleton, 2008; Al-Akra, Eddie, & Ali, 2010). Consequently, several studies have been conducted to examine this trend in developing countries (Zhou, Xiong, & Ganguli, 2009; Kamal Hassan, 2008; Türel, 2009; Adibah Wan Ismail, Anuar Kamarudin, van Zijil, & Dunstan, 2013; Elbannan, 2011; Liu, Yao, Hu, & Liu., 2011; Gordon, Loeb, & Zhu, 2012). It has become important to investigate why this trend has been produced and why certain countries resisted the adoption of IAS/IFRS.

Several researchers such as Gray and Vint (1995), Salter, Sharp, and Chen (2013), Zarzeski (1996), House, Hanges, Javidan, Dorfman, and Gupta (2004) and Stulz and Williamson (2003) consider that any change in a given accounting system is necessarily produced as a result of a change in its environment.

Recently, researchers have started to put greater emphasis on the cultural effect on the adoption of IFRS. For example, Borker (2012) has shown that countries whose accounting cultural values are markedly different from those of the Anglo-Saxon model are faced with the complexity of the process of adopting IAS/IFRS. Borker (2012) shows that culture is only one among many other factors to consider when adopting International Accounting Standards. However, taking into account a country's cultural values will help to better manage its transition to the new system.



Most research focusing on the cultural factor mainly aims to explain the impact of culture on accounting practices while drawing on Hofstede's (1980) work which has laid a theoretical foundation that would be largely adopted later by accounting research. This work has become a bestseller of the studies on the cultural dimensions. These dimensions are uncertainty avoidance, individualism, masculinity, and power distance, and long-term orientation.

These cultural dimensions defined by Hofstede (1980) form a basis for linking culture to the different aspects of social choice. Gray (1988) was one of the first studies to examine the relationship between culture and accounting. The study thereby suggests the extent to which the cultural variables identified by Hofstede (1980) can explain the international differences between accounting systems. Then, he highlights the mechanism by which cultural values are linked to accounting values and examines whether they have a direct influence on the development of accounting systems. To do this, Gray (1988) first identified four accounting values, representing the characteristics of accounting systems, and then proposed four causality hypotheses linking these accounting values to Hofstede's (1980) cultural values.

Hofstede's (1980) and Gray's (1988) models have constituted a theoretical basis for different research on management. In fact, a significant number of studies in the literature have examined one or several aspects of the Hofstede-Gray model in the context of studying the influence of culture on accounting. One can cite the following examples: Eddie (1990), Salter and Niswander (1995), Sudarwan and Fogarty (1996), Gray and Vint (1995), Zarzeski (1996), Wingate (1997), Doupnik and Tsakumis (2004), and Borker (2012).

In this paper and in the light of limited research on the relationship between culture and the adoption of International Accounting Standards, there is an opportunity to join this effort and make up for the shortcomings of research in this area by analyzing data at the national level from a cultural perspective in order to describe and explain the important process of international accounting harmonization. Indeed, this paper will address the following question: *Does culture influence the degree of compliance with IFRS?* To answer this research question, we notice that the cultural dimensions of Hofstede (1980) help explain the extent to which IFRS are adopted in 55 developing countries for the year 2014.

The rest of this paper is structured as follows. Section 2 provides background about IFRS and culture. Section 3 presents developed hypotheses basis to explain the relation between Hofstede's cultural dimensions and the degree of compliance with IFRS Standards. Section 4 explains the research methodology, will focus on statistics and research methodology while referring to the selected sample, the measurement of the different variables, and the different statistics. Section 5 presents the empirical findings and their interpretations. Finally, Section 6 concludes the paper and gathers some remarks while suggesting future lines of research on the treated subject.

2. THEORETICAL DEVELOPMENT

2.1. Background to the IFRS

International Financial Reporting Standards (IFRS) refers to a financial reporting framework for providing financial statements primarily applied by listed entities in more than 120 countries. The Standards and interpretations are developed and updated by the IASB and the IFRS Interpretation Committee. The purpose of IFRS is to provide financial statements about the reporting entity, relevant to investors, lenders, and other current or potential creditors, in order to manage their decision on the allocation of resources to the entity. Similarly, the usefulness of financial statements is enhanced when these statements are credible for comparison, verification, comprehension, and timely convenience (Liao, Sellhorn, & Skaife, 2012; Stecher & Suijs, 2012).

Ramanna and Sletten (2009) evaluate the success level of IASB and deduce the following advantages: simplification of the preparation of consolidated financial statements and improvement of the comparability of financial statements at an international level. Consequently, investment activities avoided the preparation of several accounts by companies seeking to finance their activities from foreign financial markets.

Landsman, Maydew, and Thornock (2012) and Zeff (2007) show that the growth of financing and investment operations at the international level has given rise to the importance of joining efforts to harmonize auditing and accounting standards and to encourage their use at the global level. These Standards can contribute to making international transactions more efficient and facilitating investment transactions and the listing of companies abroad.

According to Riahi-Belkaoui (2002), international accounting harmonization has several advantages. First, this process allows countries lacking fair accounting rules to rely on a set of internationally recognized accounting standards while avoiding the costs necessary for implementing accounting systems. Secondly, the liberalization and diversity of trade between nations in terms of international and investment activities have made trade the application and use of International Accounting necessary. This Standards would facilitate international transactions and contribute to making international financial markets more efficient. Finally, the international accounting harmonization program makes it possible to improve the comparability of the financial situation at an international level.

Borker (2012) studies the new aspects of the accounting system emanating from the culture of BRIC countries (Brazil, Russia, India, and China). The results of this study show that countries whose accounting culture values were markedly different from the values of the Anglo-Saxon model face the complexity of the process of adopting IAS/IFRS Standards. Borker (2012) considers culture as one among several factors to be taken into consideration when adopting International Accounting Standards. However, taking into consideration the cultural values of a country will help to better monitor its transition to the new system.



Similarly, several studies in accounting have focused on the analysis of the pertinence of international norms in developing countries. Some researchers examine that international accounting harmonization facilitates business transactions and promotes the level of economic development of countries at the receiving end.

These studies include Chamisa (2000), where he analysed the relevance of international accounting standards for developing countries by studying companies that comply with international norms. Based on the obtained results, Chamisa (2000) confirms that the relevance of international accounting standards depends on the needs and objectives for which these norms are intended to serve as long as the specific national context in which these standards will be applied.

This research by Chamisa (2000) also proves, on the one hand, that international standards are not relevant for developing countries where the public sector is dominant and where there is no financial market. On the other hand, international standards are considered relevant for developing countries. This is similarly the case in contexts where the private sector dominates the economy, and where the financial market is developed and the idea of presenting a true image to shareholders reciprocally favors the idea of a conservative presentation to creditors and the tax administration.

There are also several studies that were conducted in some Arab countries and have tried to determine the relationship between cultural factors and the accounting system. One can namely cite Noravesh, Dianati Dilami, and Bazaz (2007). In order to the foreground, the relationship between Hofstede's cultural values and Gray's accounting values in the Iranian context, Noravesh et al. (2007) sought to determine the effects of cultural changes on accounting practices. Indeed, after empirical research, they concluded that only eight out of thirteen hypotheses proposed by Gray can be taken into account in the process of explaining the impact of the cultural factor on accounting practices in Iran.

According to Moussa (2009), Libya's adoption of international accounting standards is a necessity to enable it to be fully integrated into the global economic sphere. Indeed, the application of an accounting system inspired by international accounting standards in Libya is, however, confronted by a local culture that is very reluctant to change. Through an empirical study, Moussa analysed the relationship between culture and the accounting system based on Hofstede's (1980) and Gray's (1988) models. He came in his study to conclusion that international accounting the standards are not relevant to the Libyan cultural context. He also considered that culture constitutes barrier hindering the application of these а standards in Libya.

Based on these different studies from different developing countries, we came to conclude that the relevance of international accounting standards in developing countries depends on the environmental and cultural conditions of the country under study. It is for this reason that these developing countries in particular were selected as the target population of this study to examine the impact of Hofstede's (1980) cultural dimensions on the degree of conformity with IFRS norms.

2.2. Background to culture

Hofstede (1980) defines culture as a "collective mental programming and it is this part of our conditioning that we share not only with other members of our nation, but also with our region and group, and not with those of other nations and regions" (p. 25). In fact, his work lays a theoretical foundation that will be widely used in accounting research. Some years later, Gray (1988) departed from the conclusions of this work and linked the accounting values to the cultural dimensions identified by Hofstede (1980).

Several studies like Eddie (1990), Salter and Niswander (1995), Sudarwan and Fogarty (1996), Gray and Vint (1995), Zarzeski (1996), Wingate (1997), Doupnik and Tsakumis (2004), and Borker (2012) are inspired by the work of Hofstede (1980) and Gray (1988) to explain the influence of culture on accounting values and practices. That is why this model will be presented in this part, and this is also the model upon which this study is based.

Cultural context and Hofstede's (1980) work:

The work of Hofstede (1980) provides a theoretical basis that will be widely used in accounting research. However, Baskerville (2003) notes that a 1980 publication is considered a classic when it counts on average 37 to 42 citations per year over a period of 20 years. Between 1985 and 2003, the work by Hofstede (1980) recorded an average number of 94 citations per year. Based on a survey that was conducted between 1967 and 1973 among 116000 IBM employees, Hofstede assigns a score to 40 countries on the four identified cultural dimensions (uncertainty avoidance, individualism, masculinity, and power distance).

Application of Hofstede's work by Gray (1988):

Gray's (1988) study was one of the first to study the relationship between culture and accounting. The consideration of the influence of culture on accounting practices is explained by the interactions of societal values and a nation's institutions with accounting subculture.

The main hypothesis proposed by Gray (1988) postulates that by means of different societal values, the external values and the ecological factors create a favorable environment to give rise to different systems and accounting values. In fact, external factors influence to a great extent the ecological environment and individuals' cultural or societal values. These values influence the institutional structure and contribute to its development. There is therefore a close link between societal values and accounting systems and practices. On the one hand, accounting systems and practices are influenced by societal values whit, at the same time, referring to values related to work. On the other hand, accounting systems and practices contribute to reinforcing societal through values their development and divergence.

Based on the conclusions reached in Hofstede (1980), Gray (1988) identifies four sub-cultural accounting values which, according to him, reflect the typical characteristics of any accounting system. Gray's (1988) accounting values, thus, are professionalism, uniformity conservatism, and discretion.

After the identification of these values, Gray was able to formulate four causal assumptions linking the societal values to the accounting values. This correspondence between these two dimensions is represented in Table 1 below.



Cultural values	Professiona- lism	Uniformity	Conserva- tism	Secret
Power distance	-	+	?	+
Uncertainty avoidance	-	+	+	-
Individualism	+	-	-	-
Masculinity	?	?	-	-

Table 1. Relationship between Hofstede's (1980)cultural values and Gray's (1988) accounting values

Notes: (-) negative relationship; (+) positive relationship; (?) absence of relationship.

Source: Baydoun and Willett (1995, p. 71).

The above table summarizes the correspondence established by Gray between the cultural values and the accounting values that he hypothesized.

Gray's (1988) first hypothesis is as follows: The lower the aversion to uncertainty avoidance and the power distance of a country and the higher the level of individualism, the more likely this country will be to have a high degree of professionalism. According to Gray (1988), professionalism is favorably associated with the value of individualism, as according to him, individualism in a given society is associated with the level of individual judgment in this society. Besides, the judgment of professionals and professional organizations is more meaningful in cultural contexts where individualism is high.

On the other hand, according to Gray (1988), professionalism is negatively associated with uncertainty avoidance and power distance. Gray (1988) shows that professionalism is significantly higher in societies with low power distance where personal competencies and aptitudes determine the distribution of power. This is, indeed, the same with uncertainty avoidance, as Gray (1988) predicts that in societies with low uncertainty avoidance, people are highly self-confident and are likely to tolerate judgment and professionals' practices. This explains, therefore, the absence of the need for detailed and fixed state laws. Gray (1988) also underlines the absence of any significant relation between masculinity and professionalism.

The second hypothesis postulated by Gray (1988) is: *The higher the indices of uncertainty avoidance and power distance and the lower the indices of individualism, the more likely there will be a high degree of uniformity.*

Gray's (1988) study shows that there is a positive relationship between uniform accounting value and hierarchical cultural value, as, in societies with little power distance; people are more connected to each other. This association is specified by mutual respect, fair relations between leaders and subordinates. As opposed to companies with larger power distance, people accept better the fact that their relationship is defined beforehand, and that they would be subject to uniform laws and codes.

The accounting value of uniformity is still positively associated with the value of uncertainty avoidance, as people in societies with low uncertainty avoidance can accept different points of view, which would reduce uniformity. Contrastively, the decline in uncertainty avoidance will result in a reduction in uniformity. Similarly, the uniformity value is negatively associated with the values of individualism, the opposite of collectivism, which refers to a social framework where one believes in order, organization, and respect for the norms of the group, also facilitating the principle of uniformity. Additionally, it is important to inform about the absence of a significant relationship between masculinity and uniformity.

For the third hypothesis, Gray (1988) indicates: The higher the level of uncertainty avoidance, the lower will be those of individualism and masculinity and the stronger that of conservatism. According to Gray (1988), there is a significant relationship between conservatism and uncertainty avoidance. In fact, a preference for conservative measures of results is associated with a high level of uncertainty avoidance. This means that investigating companies to guard against the risk of uncertain future events pushes them to adopt some cautious approaches. Each of the cultural values, individualism, and masculinity, are negatively associated with the accounting value of conservatism. In contrast, as far as power distance value is concerned, it should be noted that there is no significant relationship between this cultural value and the conservative accounting value.

Finally, Gray's (1988) fourth hypothesis postulates: The more a country adopts a high index in terms of uncertainty avoidance and of power distance and more reduced in terms of individualism and of masculinity, the more this country will tend towards secrecy.

According to Gray (1988), companies exhibiting a high level of uncertainty avoidance are characterized by a low level of disclosure of information. This tendency towards confidentiality can be explained by the search of these companies to preserve security and avoid competitiveness. The same is for the cultural value of power distance. In fact, the enterprises that manifest a high degree of power distance promote discretion, preserving also the inequalities. As far as individualism and masculinity are concerned, Gray (1988) predicts that they are negatively associated with confidentiality since the societies where these two cultural values exhibit a high level tend towards a preference for disclosure and transparency.

3. DEVELOPMENT OF HYPOTHESES

The theory behind our hypotheses is that culture plays an important role in the development of accounting standards and practices in a particular country. We predict that the culture of a given country will influence the design and implementation of an applied accounting system, resulting in increased compliance of this local system with international accounting standards. Thus, the ownership and application of an accounting system in accordance with IFRS requires a change in the local accounting culture.

3.1. Uncertainty avoidance

The variable of uncertainty avoidance developed by Hofstede (1991, 1994) makes it possible to examine the extent to which individuals feel threatened by ambiguous situations and then try to avoid these situations by seeking a certain professional balance. This is mainly by opting for formalized operating rules while rejecting ideas and behaviors that deviate from the accepted norms, accepting the existence of absolute truths, and while valuing the acquisition of expertise. Thus, strong uncertainty



avoidance is more characteristic of individuals who seek to control their natural environment than of individuals who accept future uncertainty by simply adapting to situations without systematically wanting to anticipate them.

Mayrhofer (2002) indicates that in societies characterized by low uncertainty avoidance, individuals feel relatively secure. They would not hesitate to take risks, and they exhibit a general tendency towards accepting different behaviors and opinions. Contrastively, in societies where uncertainty avoidance is high, individuals do not feel safe and seek to avoid risks.

Some authors consider that the propensity of culture to control uncertainty influences the attitude of leaders towards the risks associated with international operations. For instance, Erramilli (1996) notes that in a situation of low uncertainty avoidance, leaders are more tolerant of other cultures and should therefore more easily agree to share power with local partners.

Additionally, Gray (1988) shows that in societies with low uncertainty avoidance, people have confidence in themselves and tolerate the judgment and practices of professionals, which entails that there is no need for detailed rules set by the state. According to Gray (1988), professionalism is negatively associated with uncertainty avoidance. However, he found that this cultural value is associated positively with the accounting value of uniformity since people in societies with low uncertainty avoidance can accept opposing views and opinions. Therefore, the decrease in uncertainty avoidance will result in a reduction in uniformity.

Gray (1988) also proves that there is a significant relation between conservatism and uncertainty avoidance. In fact, a tendency towards conservative measures of results is associated with a high level of uncertainty avoidance. This means that the prospects of companies to guard against the risk of uncertain future events push them to adopt certain cautious approaches. In the same line of thought, Gray (1988) indicates that secrecy influences in a positive way uncertainty avoidance, as societies exhibiting a high level of uncertainty avoidance are characterized by a low level of disclosure of information. This tendency towards confidentiality can be explained by these societies' aiming to preserve secrecy and avoid competitiveness.

In contrast to the analysis by Gray (1988), Salter and Niswander (1995) find a positive relationship between uncertainty avoidance and professionalism. The study also shows a negative relationship between uniformity and uncertainty avoidance, as conservatism is negatively linked to uncertainty avoidance.

Doupnik and Saler (1995) associate a set of environmental factors in accounting practices. They propose in their study a general model of international accounting development and empirically test its explanatory effectiveness. They found that a higher level of disclosure is compatible with a low level of uncertainty avoidance and that a weak degree of uncertainty avoidance is less conservative. Countries that have a higher level of uncertainty avoidance are thus expected to try to deviate from the IAS/IFRS in order to avoid the high level of disclosure required. Garcia-Sanchez, Rodriguez-Ariza, and Frias-Aceituno (2013) studied the effect of national culture on "integrated reporting" in a sample comprising 1950 of the world's leading companies between 2008 and 2010. They found that uncertainty avoidance is not significantly associated with the same variable and that only the cultural values of collectivism and feminism have a positive and significant effect on integrating reporting.

Ding, Jeanjean, and Stolowy (2005) also found that countries with a high level of uncertainty avoidance do not prefer uniformity and will thus be less likely to be compliant with the IAS/IFRS, since the IAS/IFRS has a tendency towards the approach of transparency in financial reporting, and to be less conservative.

H1: There is a positive relationship between uncertainty avoidance and the degree of conformity with IFRS norms.

3.2. Individualism

Individualism refers to societies in which links between individuals are loose and individuals are expected to care for themselves and their close families. On the contrary, collectivism refers to the societies in which each individual is, from birth, integrated into a strong and resilient group which, throughout the life of the individual, protects him or her in exchange for an unfailing loyalty (Hofstede, 2001). How does Hofstede explain this dimension which is inextricably linked with everyone's selfimage: Does he define it in terms of the "I" or the "we"?

Note that there is a strong link between the level of individualism and the wealth of the country, the richest countries being more individualistic. In countries with a high degree of individualism, relations within the company are engendered on the basis of mutual self-interest, whereas in community countries they are based on loyalty and trust. In these countries, exchanges within companies hide an important part of affective like the importance of causes of general interest in collectivist societies, the fundamental role of the individual, and the respect of one's rights in individualistic societies.

Several studies were conducted on the link between individualism and socially responsible policies of companies such as Ioannou and Serafeim (2012), Peng, Dashdeleg, and Chih (2014), and Liang and Renneboog (2014) who identify a link between a stronger socially responsible commitment and a stronger individualism. Ringov and Zollo (2007) find no significant link and contrary to previous studies, Waldman et al. (2006) show that the socially responsible score tends to increase with the collective character of societies.

Waldman et al. (2006) distinguish between two main types of collectivism: collectivism within a group and institutional collectivism. Institutional collectivism refers to the primary concern of the collective group before individual concerns. On the contrary, collectivism within a group is explained by the expression of pride, loyalty, and cohesion in a family or group such as the company. They find that only institutional collectivism is positively and significantly linked to socially responsible dimensions. Similarly, according to Gray (1988), only the accounting value of professionalism is positively associated with the cultural dimension of individualism, as according to him, the individualism of a society is related to the individual judgment in this same society. By extension, the judgment of professionals and professional organizations is more meaningful in cultural contexts where individualism is high. In contrast, according to Gray (1988), individualism is negatively associated with other accounting values.

H2: There is a positive relation between the level of individualism and the degree of conformity with IFRS Standards.

3.3. Masculinity

Masculinity is contrary to femininity; it is not a biologically determined distinction between men and women, but differentiation of culturally and socially determined roles. "A male-based society is called as such when sexual roles are clearly distinct: men are supposed to be confident, robust, and focused on material success. A society is said to be feminine when affective sexual roles merge: men and women are expected to be modest, tender, and concerned about the quality of life" (Hofstede, 2001, p. 20).

In a men's society, people focus more on values such as career development, competition, and business success. It promotes being the best, and that incentive starts at school. Conversely, in feminine society, individuals do not seek to distinguish themselves, the sign of success being the quality of life. The cultural value of masculinity has several consequences on the management of enterprises. In fact, in male-based societies, leaders are more motivated by salaries, and they place enough interest in performance and competitiveness (Hofstede, 1998).

Accounting practices also provide professionals with opportunities to achieve their objectives. It is in this context that Gray (1988) emphasizes that a negative influence masculinity has on conservatism, therefore resulting in an increase in the quality of accounting practice. Geiger et al. (2006) also found that the cultural dimension of masculinity promotes the use of results management. Moreover, in male companies, the accounting system is a means of achieving purely financial objectives (Hofstede et al. (2005).

According to Kanagaretnam, Lim, and Lobo (2014), an environment where masculinity is highly dominant will lead to higher-risk behavior and less prudent financial reporting, involving more professional and less neutral behavior. As a result, masculinity can also play a key role in the adoption of IFRS.

H3: There is a positive relation between masculinity and the degree of conformity with IFRS Standards.

3.4. Power distance

Power distance refers to the conception of the degree of the power imbalance between those holding the hierarchical power and those who are submitted to it. It is measured by the subordinates' perception of the power of the ones in power. In the context of a mode of family belonging, power distance is generally more important than in a mode of non-family belonging insofar as the will of the group dominates that of the individuals existing in relation to the group and following its law. The comparison of dimensions like power distance does not only make it possible to see the differences in the way leaders and followers think, react and behave in different countries, they also allow us to evaluate the theories adopted in these countries to explain the modes of thought and behaviour (Hofstede, 1994). In cultures with strong distances, power is centralized and the leadership style is autocratic.

Conversely, in companies with short power distances, power and decision-making tend to be decentralized (Mayrhofer, 2002). Besides, Hofstede (2005) showed that in countries where power distance is important, accounting systems are used rather to validate the decisions of superiors and are only used to provide information reflecting superiors' intentions. In this case, if superiors are more inclined to results managing practices, they could easily be able to engage in these practices given the significant power distance.

According to Gray, professionalism conservatism are negatively associated and with the cultural value of power distance. Gray (1988) shows that professionalism is more significant in societies with low power distance where individuals' competencies and aptitudes determine power distribution. Gray's studies also prove that there is a positive relation between the accounting value of uniformity and the cultural value of power distance. In societies with little power distance, people are connected to each other. In companies with long power distance, however, people are more comfortable than their relationships are defined beforehand, and that they are subject to uniform laws and codes. This is also the case with accounting value discretion. In fact, the enterprises that manifest a high degree of power distance preserving also the inequalities and therefore the power of certain parties.

Chan, Lin, and Mo (2003) suppose that power distance indicates the degree of confidence characterizing an organization. Indeed, in societies power characterized by strong distance. interpersonal confidence would be weaker and the need for organizational control mechanisms would be more significant. Consequently, executives should higher transaction costs than see those characterized by a culture of low power distance and a preference direct for foreign investment.

H4: There is a positive relation between power distance and the degree of conformity with IFRS Standards.

4. RESEARCH METHODOLOGY

4.1. Sample presentation

We selected developing countries as our target population to examine the impact of Hofstede's (1980) cultural dimensions on the degree of compliance with IFRS. By extension, and after eliminating countries that have data unavailable,



we selected a sample of 55 countries (classified according to the World Bank country classifications).

Table 2 shows the countries covered in the present research.

Table 2. List of developing	countries	(N =	55)
-----------------------------	-----------	------	-----

Albania	Iran	Panama
Angola	Ireland	Peru
Argentina	Jamaica	Romania
Brazil	Jordan	Saudi Arabi
Bulgaria	Kenya	Senegal
Colombia	Kuwait	Serbia
Costa Rica	Latvia	Sri Lanka
Dominican Republic	Lebanon	South Africa
Egypt	Libya	Tanzania
El Salvador	Malawi	Taiwan
Emirates	Malta	Trinidad
Finland	Mexico	Turkey
Ghana	Morocco	Ukraine
Greece	Mozambique	Uruguay
Guatemela	Namibia	Venezuela
Honduras	Netherlands	Vietnam
Hungary	Nigeria	Zambia
Iceland	Pakistan	
Indonesia	Philippines	

4.2. Measurement of variables

4.2.1. Dependent variables

In this research, the source of our dependent variable is "IFRS adoption by country" which is a report containing information summarizing data collected from various sources during June and July 2014 regarding the use of International Financial Reporting (IFRS) by listed and Standards non-listed companies by country. This report, published by PricewaterhouseCoopers (PwC), is a network of American companies specializing in audit, accounting, and advisory engagements for companies. It is one of four large audit and consulting firms (Big 4) with Deloitte, Ernst & Young, and KPMG. In this research, the measurement of compliance with IFRS is consistent with that of Elad (2015), who tested the classification of IFRS Standards on a sample of 30 African countries. Each of these countries has been assigned an IFRS adoption score, based on information from the PwC survey.

The countries are classified into three categories as shown in Table 3.

Table 3. National reactions to IFRS

	IFRS are prohibited for the preparation of financial statements for any listed companies		
Listed companies	IFRS are permitted for the preparation of financial statements of listed companies	1 point	
•	IFRS are required for the preparation of financial statements of listed companies	2 points	
	None	0 point	
Version of IFRS	Country adaptation of IFRS	1 point	
	Only IFRS as published by the IASB are allowed	2 points	
	IFRS are prohibited for statutory filings	0 point	
Listed and non-listed companies	IFRS are permitted for statutory filings	1 point	
-	IFRS are required for statutory filings	2 points	
Maximum possible IFRS adoption score for the country			

Source: Elad (2015, p. 14)

This variable, we label as the adoption of IFRS, took one of three statements to examine the degree of adoption of IFRS by a national economy. When a country is coded "0", it means that IFRS Standards are prohibited.

On the other hand, when a country is coded by "1", it means that IFRS Standards are permitted, and those that have been coded by "2" indicated that adoption of IFRS is required. With our specific coding of the dependent variable, we were able to examine the impact of Hofstede's (1980) cultural dimensions on the degree of compliance with IFRS.

4.2.2. Independent variables

This work is mainly centered around Hofstede's (1980) cultural dimensions as independent variables, and this is for two reasons: first, many studies have shown the validity and effectiveness of these dimensions (Barkema & Vermeulen, 1997; Beugelsdijk, Van Schaik, & Arts, 2006; Yang, Wang, & Wang Drewey, 2009). Second, this model is identified by many previous studies as the most used model in accounting (Laínez & Gasca, 2006; Tsakumis, Curatola, & Porcano, 2007), Hofstede's (1980) study on culture being the most important.

These cultural values proposed by Hofstede (1980) were originally developed to calculate indices at a national level that presents coded data regarding differences that are possible to be found within countries with different cultural dimensions.

In fact, it is possible to find national indices for each of the cultural dimensions identified by Hofstede in 69 countries and regions. This does not only provide a precise representation of the type of culture present in a given country, but it also makes a comparison between different countries in relation to their positioning on these dimensions possible.

According to McLeod et al. (1996), Hofstede (1980) succeeded in empirically proving that in the workplace, cultural differences can lead to differences in perspectives, attitudes, and behaviors. The analysis of the data revealed four dimensions on which the bases of the different national cultures can position themselves. These four dimensions constitute the independent variables of the present research. These are power distance (*PD*), individualism (*IND*), masculinity (*MASC*), and uncertainty avoidance (*UA*).

These four different dimensions are thoroughly presented in Section 2 of this paper as well as in the detection of hypotheses part.

4.2.3. Control variables

Since this study is conducted at the national level, it is necessary to monitor the effects for these different countries (Richardson, 2006). From this part onwards, three economic control variables are included in the empirical analysis, which is: corruption, investor protection, and education. The data is provided by "The Global Competitiveness



Report 2014–2015", which is a report prepared annually by the World Economic Forum (WEF). Based on data collected from 15,000 business leaders in 144 countries, the Global Report on Country Competitiveness at the global level provides a clear focus on the most competitive countries across the world and by region (WEF, 2014).

Corruption

In any society, a significant number of people have the power to change the structure of property rights outside the exchange of goods that they personally own. Technically, corruption occurs as soon as the person directly responsible for a change in this structure obtains a personal benefit, monetary or not, from the beneficiaries (Grochová & Otáhal, 2013).

Corruption, therefore, concerns all types of organizations, private and public. In fact, any individual who has inside information, any agent whose function is to define or apply a system of potentially penalties/rewards is corruptible. According to Leuz, Nanda, and Wysocki (2003), one of the characteristics that, according to the literature, influences the accounting system and the quality of financial statements is the general culture of the country and the level of corruption and legal compliance. Kythreotis (2010) predicts that the level of reliability of financial statements in each country depends not only on the adoption of IFRS but also on the degree of corruption in each country.

As IAS/IFRS is an accounting system founded upon the freedom to choose an accounting treatment, this freedom ideally has, therefore, the fair representation of economic transactions and other events, in financial situations. In other words, economic events are accounted for and presented in accordance with their nature and economic reality, and not simply their legal form. However, this is not always the case in countries where the level of corruption is high and imposing conformity with the laws is rather difficult. More specifically, in countries with such characteristics, management is not afraid of legal sanction, and it can choose the particular accounting treatments in order to manipulate financial statements into reducing to reliable representation some extent the of the financial statements.

• Protection of investors

Investment protection provisions, including the settlement of investor-state contradictions, are important for investment flows. This means finding a better balance between the right of states to regulate and the need to protect investors. This also entails ensuring that the arbitration system is above any uncertainty, for example in terms of transparency, the designation of intermediaries, and procedural costs.

Through investments, companies create global value chains which occupy a growing place in the modern international economy. Investments make it possible to generate new business opportunities but also added value, jobs, and income. For this reason, trade agreements should promote investment and offer new opportunities to companies in order to invest across the world.

Societies that invest abroad face problems that, for several reasons, cannot always be solved through the bias of the national judicial system. These problems include forced expropriation by the host country, discrimination, expropriation without proper compensation, revocation of licenses and permits, and abuses by the host country, such as the lack of proper procedure, and the impossibility of international capital transfers. It is precisely because of these risks that investment protection provisions are an integral part of the 1,400 bilateral agreements concluded by the EU member states since the late 1960s. Across the world too, there are over 3,400 such bilateral or multi-stakeholder agreements in force, including investment protection provisions. These guarantee companies that their investments will be fairly treated and on an equal footing with those of national companies. By creating legal certainty and a predictable business environment for companies, investment protection also provides a way for states around the world to attract and retain foreign direct investment to support their economies.

• Education

Education is essential for individuals, on the one hand, to develop self-respect, and on the other hand, to reinforce self-autonomy which is also essential to promote human capacities and individual liberties (Poirot, 2005).

Poirot (2005) also proves that education is one of the major fundamental foundations of any society, as it allows individuals to play an active role in their society. According to him, "the role of education is so important in order to enable a person to taste what a society is like, to play a role in it, and in this way, to give each individual the assurance of his/her own value" (Poirot, 2005, p. 30). He also highlights the importance of education as an instrument of economic development. In this regard, it would seem possible to reconcile, to some extent, equity and efficiency, as it is more likely for this to be economically effective, particularly for developing countries.

Nowadays, education occupies a fundamental place in the various policies adopted by most countries. It forms the basis for the sustainable development of a nation in its three dimensions: economic, social, and environmental. Education must be considered as a creative element of the right to a decent life and individual development, and as a determining factor in reducing poverty and inequality. As studies by the United Nations Educational, Scientific and Cultural Organization (UNESCO) show, education is a foundational basis for achieving other development goals at several (health, environment, and levels citizenship. The quality of teaching is also crucial for the economies that want to move up the value chain. Today's globalized economy requires countries to maintain well-educated workers who are able to perform complex tasks and adapt quickly to the changing work environment and changing needs of the system of production.

4.3. Statistical methods

A statistical method will be used in this analysis through the Stata software. This software is the multiple linear regression which takes the following form:

$$DEFRS_t = \beta_0 + \beta_1 UA_t + \beta_2 IND_t + \beta_3 MASC_t + + \beta_4 PD_t + \beta_5 CORE_t + \beta_6 EDUC_t + \beta_7 INVP_t + \varepsilon_t$$
(1)

where,

• *DEFRS*: the level of adoption of IFRS Standards. The source of this variable is PwC (2014), and it is based on Elad's (2015) article.

• UA: the level of uncertainty avoidance measured by the Hofstede (2001) index;

• IND: refers to the level of individualism measured by the Hofstede (2001) index;

• MASC: the level of masculinity measured by the Hofstede (2001) index;

• PD: the power distance measured by the Hofstede (2001) index;

• CORE: the level of corruption measured by the Global Competitiveness Report indicator (2014–2015).

• EDUC: the level of education (the quality of school management) measured by the overall competitiveness reporting indicator (2014-2015).

• *INVP*: refers to the level of investor protection measured by the overall competitiveness report indicator (2014-2015).

Verification of the condition of absence of multicollinearity. In order to ensure the absence or existence of this problem, we refer to the variance inflation factor (VIF) test. This variance inflation factor is an effective means to detect multicollinearity between the variables of a given model.

According to Groebner, Shannon, Fry, and Smith (2008), a serious multicollinearity problem exists between the independent variables of a model when VIF values exceed 10.

By applying the VIF test to the variables selected in this study, we found values that do not exceed 2.94. These results, signaling the presence of relatively low multicollinearity, support the introduction of all the explanatory variables during statistical regression.

4.3.1. Descriptive statistics of variables

Table 4 summarizes the major descriptive statistics of variables selected in this study.

Table 4.	Descriptive	statistics
----------	-------------	------------

Variable ^a	Obs	Mean	SD	Min	Max
DEFRS	55	4.200	1.809	0	6
UA	55	67.727	20.030	13	100
IND	55	30.418	16.087	6	80
MASC	55	47.054	16.247	9	88
PD	55	69.581	16.907	28	95
CORE	55	11.654	5.619	4	21.4
EDUC	55	4.194	0.713	2	5.3
INVP	55	5.149	1.368	1.7	8.3

Notes: a description of variables. DEFRS is the level of adoption of IFRS Standards. The source of this variable is PwC (2014), and it is based on Elad's (2015) article. UA is the level of uncertainty avoidance measured by the Hofstede (2001) index. IND refers to the level of individualism measured by the Hofstede (2001) index. MASC is the level of masculinity measured by the Hofstede (2001) index. PD is the power distance measured by the Hofstede (2001) index. CORE is the level of corruption measured by the Global Competitiveness Report indicator (2014–2015). EDUC is the level of education (the quality of school management) measured by the overall competitiveness reporting indicator (2014-2015). INVP refers to the level of investor protection measured by the overall competitiveness report indicator (2014-2015).

Descriptive statistics show that the degree of conformity with IFRS (DEFRS) varies between 0 and 6. Its average and standard deviation are respectively 4.2 and 1.809. We note, therefore, that the adoption of IFRS Standards varies between the countries included in the sample.

As for independent variables, it is to be noted that the uncertainty avoidance (UA) varies between 13 and 100 with an average of 67,727 and a standard deviation equal to 20,030. Thus, individualism (IND) is on average 30.418 with a maximum of 80 and a minimum of 6. Its standard deviation is 16.087. For masculinity (MASC) is on average 47.054. It varies between 9 and 88 with a standard deviation of 16,247. Finally, the power distance (*PD*) varies between 28 and 95. Its average and standard deviation are respectively 69,581 and 16,907.

For control variables, it is noted that corruption (CORE) has an average of 11.654 and a standard deviation of 5.619 and evolves between 0.4 and 21.4. Education (EDUC) varies between 2 and 5.3. The average and the standard deviation are respectively 4,194 and 0,713. Investor protection (INVP) is on average 5,149 with a maximum of 8.3 and a minimum of 1.7. Its standard deviation is 1,368.

4.3.2. Correlation between explanatory variables

Table 5 summarizes the relations between the different variables. For the explanatory variables of the model defined above, it can be noted that the highest correlation coefficient (0.564) lies between the individualism indicator (IND) and the degree of conformity with IFRS (DEFRS).

Table 5. Correlation matrix between vari	iables
--	--------

	DEFRS	UA	IND	MASC	PD	CORE	EDUC
DEFRS	1.000						
UA	-0.003	1.000					
IND	(0.564) ^b	-0.157	1.000				
MASC	0.038	-0.065	0.049	1.000			
PD	-0.467	0.150	-0.801	0.060	1.000		
CORE	-0.147	-0.151	-0.171	0.166	0.211	1.000	
EDUC	0.385	-0.012	0.240	0.044	-0.232	-0.218	1.000
INVP	0.063	-0.117	0.068	0.061	-0.097	0.057	0.283
INVP 0.063 -0.117 0.068 0.061 -0.097 0.057 0.283 Notes: "see Table 4 for the descriptive statistics. N = 55 for all variables. " the highest correlation coefficient is expressed between the parenthesis.							

5. RESULTS

This section provides the empirical findings and their interpretations.

Table 6. Regression analysis

DEFRS	Coeff.	Std. Err.	t	P > [t]	[95% conf. interval]	
UA	0.007	0.010	0.680	0.500	-0.014	0.028
IND	0.039	0.015	2.560	0.014 ^c	0.008	0.070
MASC	0.000	0.013	0.070	0.947	-0.025	0.027
PD	-0.002	0.174	-0.130	0.898	-0.037	0.032
CORE	0.005	0.039	0.140	0.890	-0.073	0.084
EDUC	0.701	0.316	2.220	0.032 ^c	0.064	1.338
INVP	-0.057	0.159	-0.360	0.718	-0.377	0.262
Cons	-0.515	2.333	-0.220	0.826	-5.210	4.178

Notes: " see Table 4 for the descriptive statistics. N = 55. F = 4.36, p < 0.05, adjusted $R^2 = 0.3032$. " except IND (0.014 < 0.05) and EDUC (0.032 < 0.05) which have a positive and significant effect on DEFRS.

First, for the explanatory variables, we find that the variable uncertainty avoidance (UA) has a coefficient whose sign is positive. The student value is lower than 1.96 (t = 0.680) with a P-value equal to (0.500). Therefore, we can assume that the uncertainty avoidance variable is statistically insignificant. We can confirm that uncertainty avoidance does not contribute to the degree of compliance with IFRS.



Therefore, the first hypothesis (H1) is rejected. This result confirms the observation of Gray (1988) which demonstrated that the cultural dimension of uncertainty avoidance negatively influences the accounting value of professionalism by implying a tolerance of the diversity of professional judgments. This result is also consistent with the result reached by Ding et al. (2005) which found a negative relationship between uniformity and uncertainty avoidance. They noted that countries with a high level of uncertainty avoidance do not prefer consistency and will thus be less likely to be compliant with IFRS since IFRS promotes the approach of transparency in financial reporting and a less conservative approach.

The individualism coefficient (*IND*) is positive. The student value is greater than 1.96 (t = 2.560) with a P-value equal to 0.014. Therefore, we can accept that the individualistic variable is statistically significant at the 5% threshold and has a positive effect on the degree of compliance with IFRS. Therefore, the second hypothesis (*H2*) is valid.

This positive and significant effect on the accounting environment and the practice of accounting in a country generates increased compliance of local accounting standards with IFRS Standards in emerging and developing countries. This finding also confirms Gray's (1988) observation that individualism fosters a climate of transparency and professionalism.

The masculinity variable (*MASC*) appeared with a positive coefficient, and the value of the student is equal to 0.07 with a P-value equal to 0.947. Therefore, this variable is not significant. In addition, the 95% confidence interval from -0.025 to 0.027 includes the value 0. It is therefore impossible to reject the null hypothesis (H_q), and therefore, the third hypothesis (H_3) is rejected.

Contrary to H3, the results of our study do not show the existence of a significant relationship between masculinity and the degree of compliance with IFRS. This finding supports Gray's (1988) arguments which state that masculinity is not correlated with accounting values of professionalism and uniformity.

We assumed that power distance has a positive influence on the degree of compliance with IFRS. Although this variable appears with a negative coefficient, the results show that this variable does not have a statistically significant effect on the degree of compliance with IFRS. The student value is less than 1.96 (t = -0.130) with a P-value equal to 0.898, so we can confirm that the power distance does not contribute to the degree of compliance with IFRS, and therefore the fourth hypothesis (H4) is rejected. The variable of power distance does not influence the accounting environment and accounting practice in a country. This results in increased local accounting standard compliance with IFRS Standards in developing countries. This result also confirms Gray's (1988) finding regarding the two accounting values of professionalism and conservatism, as he stated that professionalism and conservatism are negatively associated with the cultural value of power distance.

Secondly, concerning the control variables, we note that the variable of corruption (*CORE*) has a coefficient whose sign is positive, with a P-value equal to 0.890. Therefore, we can confirm that the corruption variable is statistically insignificant. Therefore, we can also confirm that corruption does not contribute to the degree of compliance with IFRS. On the other hand, the coefficient of education (*EDUC*) is positive. The student value is greater than 1.96 (t = 2.220) with a P-value equal to 0.032. Therefore, we can confirm that the education variable is statistically significant and has a positive effect on the degree of compliance with IFRS.

The variable of investor protection (*INVP*) appears with a negative coefficient of -0.057. The results show that this variable does not have a significant statistical effect on the degree of compliance with the IFRS Standards. The value of student is inferior to 1.96 (t = -0.360) with a P-value equal to 0.718.

6. CONCLUSION

This research pertains to the category of studies in international accounting dealing with the cultural impact of Hofstede (1980) on the degree of compliance with IFRS Standards in 55 developing countries, based on the method used by Elad (2015)in determining the degree of adoption of IFRS Standards. The results show that culture (through three of these components, namely power distance, uncertainty avoidance, and masculinity) does not increase the degree of compliance with IFRS Standards. However, only one significant relationship is proven between individualism and the degree of compliance with IFRS. As a conclusion to the shortcomings of the obtained results, it can be said that the developing countries do not have the same structures as those of the developed countries for which these International Accounting standards are intended. These Accounting Standards would be relevant if they are adapted to the economic and cultural context of a particular country. Based on these findings, thus, an awareness of the importance of the cultural factor which is often neglected by accounting normalization of developing countries is brought to the fore.

At this stage of research, it appears that the cultural effect on the degree of compliance with IFRS varies from one country to another.

As a future research avenue, we can propose to carry out a comparative study of the role of cultural factors on the degree of compliance with IFRS Standards between developed and developing countries.

REFERENCES

- 1. Adibah Wan Ismail, W., & Anuar Kamarudin, K., van Zijil, T., & Dunstan, K. (2013). Earnings quality and the adoption of IFRS-based accounting standards: Evidence from an emerging market. *Asian Review of Accounting*, *21*(1), 53–73. https://doi.org/10.1108/13217341311316940
- 2. Al-Akra, M., Eddie, I A., & Ali, M. J. (2010). The influence of the introduction of accounting disclosure regulation on mandatory disclosure compliance: Evidence from Jordan. *The British Accounting Review*, *42*(3), 170–186. https://doi.org/10.1016/j.bar.2010.04.001
- 3. Barkema, H. G., & Vermeulen, F. (1997). What differences in the cultural backgrounds of partners are detrimental for international joint venture? *Journal of International Business Studies, 28*(4), 845–864. https://doi.org/10.1057/palgrave.jibs.8490122

- Baskerville, R. F. (2003). Hofstede never studied culture. Accounting Organizations and Society, 28(1), 1-14. 4. https://doi.org/10.1016/S0361-3682(01)00048-4
- Baydoun, N., & Willet, R. J. (1995). Cultural relevance of western accounting systems to developing countries. 5. Abacus, 31(1), 67-92. https://doi.org/10.1111/j.1467-6281.1995.tb00355.x
- Beugelsdijk, S., Van Schaik, T., & Arts, W. (2006). Toward a unified Europe? Explaining cultural differences by 6. economic development, cultural heritage, and historical shocks. Regional Studies, 40(3), 317-327. https://doi.org/10.1080/00343400600631590
- Borker, D. R. (2012). Accounting, culture, and emerging economies: IFRS in the BRIC countries. Journal of 7. Business & Economics Research, 10(5), 313-324. https://doi.org/10.19030/jber.v10i5.6983
- Chamisa, E. E. (2000). The relevance and observance of the IASC standards in developing countries and the particular case of Zimbabwe. *The International Journal of Accounting*, 35(2), 267–286. 8. https://doi.org/10.1016/S0020-7063(00)00049-2
- Chan, K. H., Lin, K. Z., & Mo, P. L. L. (2003). An empirical study on the impact of culture on audit-detected accounting 9 errors. Auditing: A Journal of Practice and Theory, 22(2), 281-295. https://doi.org/10.2308/aud.2003.22.2.281
- Ding, Y., Jeanjean, T., & Stolowy, H. (2005). Why do national GAAP differ from IAS? The role of culture. *The International Journal of Accounting*, 40(4), 325–350. https://doi.org/10.1016/j.intacc.2005.09.004
- Doupnik, T. S., & Salter, S. B. (1995). External environment, culture, and accounting practice: A preliminary test of 11. a general model of international accounting development. *The International Journal of Accounting*, 30(2), 189–207. Retrieved from https://www.econbiz.de/Record/external-environment-culture-and-accounting-practice-apreliminary-test-of-a-general-model-of-international-accounting-development-doupnik-timothy/10007331878
- 12. Doupnik, T. S., & Tsakumis, G. T. (2004). A critical review of the tests of Gray's Theory of cultural relevance and suggestions for future research. Journal of Accounting Literature, 23, 1-30.
- 13. Eddie, I. A. (1990). Asia Pacific cultural values and accounting systems. Asia Pacific International Management Forum, 16, 22-30.
- Elad, C. (2015). The development of accounting in the franc zone countries in Africa. *The International Journal of Accounting*, *50*(1), 75–100. https://doi.org/10.1016/j.intacc.2014.12.006
- 15. Elbannan, M. (2011). Accounting and stock market effects of International Accounting Standards adoption in Review Quantitative Finance a developing economy. of and Accounting, 36(2). 207-245. https://doi.org/10.1007/s11156-010-0176-1
- 16. Erramilli, M. K. (1996). Nationality and subsidiary ownership patterns in multinational corporations. Journal of International Business Studies, 27(2), 225–248. https://doi.org/10.1057/palgrave.jibs.8490133
- Garcia-Sanchez, I.-M., Rodriguez-Ariza, L., & Frias-Aceituno, J.-V. (2013). The cultural system and integrated reporting. *International Business Review*, *22*(5), 828–838. https://doi.org/10.1016/j.ibusrev.2013.01.007 17.
- 18. Geiger, M. A., O'Connell, B. T., Clikeman, P. M., Ochoa, E., Witkowski, K., & Basioudis, I. (2006). Perceptions of earnings management: the effects of national culture. Advances in International Accounting, 19(6), 175-199. https://doi.org/10.1016/S0897-3660(06)19007-8
- Gordon, L. A., Loeb, M. P., & Zhu, W. (2012). The impact of IFRS adoption on foreign direct investment. *Journal of Accounting and Public Policy*, *31*(4), 374–398. https://doi.org/10.1016/j.jaccpubpol.2012.06.001 19
- 20. Gray, S. J. (1988). Towards a theory of cultural influences on the development of accounting systems internationally. Abacus, 24(1), 1-15. https://doi.org/10.1111/j.1467-6281.1988.tb00200.x
- 21. Gray, S. J., & Vint, H. V. (1995). The impact of culture on accounting disclosures: Some international evidence. *Asia-Pacific Journal of Accounting, 2*(1), 33–43. https://doi.org/10.1080/10293574.1995.10510476
- Gray, S. J., Kang, T., Lin, Z., & Tang, O. (2015). Earnings management in Europe post IFRS: Do cultural influences persist?" *Management International Review*, 55(3), 827–856. https://doi.org/10.1007/s11575-015-0254-7
- Grochová, L., & Otáhal, T. (2013). How does corruption in Central and Eastern Europe Hurt economic growth? 23. Granger test of causality. Journal of Economics, 61(6), 563-577. https://doi.org/10.2139/ssrn.2363461
- 24. Groebner, D. F., Shannon, P. W., Fry, P. C., & Smith, K. D. (2008). Business statistics: A decision-making approach (7th ed.). Upper Saddle River, NJ: Prentice-Hall.
- 25. Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA: Sage Publications.
- 26. Hofstede, G. (1991). Cultures and organizations: Software of the mind. London, UK: McGraw-Hill.
- 27. Hofstede, G. (1994). The business of international business is culture. International Business Review, 3(1), 1-14. https://doi.org/10.1016/0969-5931(94)90011-6
- Hofstede, G. (2001). Culture's consequences. London, UK: Sage Publications. 28.
- Hofstede, G., & Hofstede, G. J., & Minkov, M. (2005). Cultures and organizations: Software of the mind. Retrieved 29. from https://cutt.ly/eE4Utjp
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P., & Gupta, V. (2004). Culture, leadership and organizations: 30. The GLOBE study of 62 societies. Thousand Oaks, CA: Sage Publications.
- 31. Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. Journal of International Business Studies, 43(9), 834-864. https://doi.org/10.1057/jibs.2012.26
- Kamal Hassan, M. (2008). The development of accounting regulations in Egypt: Legitimating the International Accounting Standards. *Managerial Auditing Journal*, 23(5), 467–484. https://doi.org/10.1108/02686900810875299 32.
- Kanagaretnam, K., Lim, C. Y., & Lobo, G. J. (2014). Influence of national culture on accounting conservatism and risk-33. taking in the banking industry. *The Accounting Review*, *89*(3), 1115–1149. https://doi.org/10.2139/ssrn.2319548 Kythreotis, A. (2010). The interrelation among faithful representation (reliability), corruption and IFRS
- 34. adoption: An empirical investigation. International Journal of Business and Economic Sciences Applied Research, 8, 25-50. Retrieved from https://ideas.repec.org/a/tei/journl/v8y2015i1p25-50.html
- 35. Laínez, J-A., & Gasca, M. (2006). Obstacles to the harmonization process in the European Union: The influence of culture. International Journal of Accounting, Auditing and Performance Evaluation, 3(1), 68-97. https://doi.org/10.1504/IJAAPE.2006.010100
- 36. Landsman, W. R., Maydew, E. L., & Thornock, J. R. (2012). The information content of annual earnings announcements and mandatory adoption of IFRS. Journal of Accounting and Economics, 53(1-2), 34-54. https://doi.org/10.1016/j.jacceco.2011.04.002
- Leung, K., Bhagat, R. S., Buchan, N. R., Erez, M., & Gibson, C. B. (2005). Culture and international business: 37. Recent advances and their implications for future research. Journal of International Business Studies, 36(4), 357-378. https://doi.org/10.1057/palgrave.jibs.8400150

- 38. Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics, 69*(3), 505–527. https://doi.org/10.1016/S0304-405X(03)00121-1
- 39. Liang, H., & Renneboog, L. (2014). *Finance and society: On the foundations of corporate social responsibility* (European Corporate Governance Institute (ECGI) Finance Working Paper No. 394/2013). https://dx.doi.org/10.2139/ssrn.2540024
- 40. Liao, Q., Sellhorn, T., & Skaife, H. A. (2012). The cross-country comparability of IFRS earnings and book values: Evidence from France and Germany. *Journal of International Accounting Research*, *11*(1), 155–184. https://doi.org/10.2308/jiar-10215
- 41. Liu, C., Yao, L. J., Hu, N., & Liu, L. (2011). The impact of IFRS on accounting quality in a regulated market: An empirical study of China. *Journal of Accounting, Auditing & Finance, 26*(4), 659–676. https://doi.org/10.1177/0148558X11409164
- Mayrhofer, U. (2002). La culture nationale du pays d'origine et le choix du mode d'entrée sur les marchés étrangers. *Management International, 6*(3), 23–33. Retrieved from https://cutt.ly/qE4Pziw
 McLeod, J. M., Daily, K., Guo, Z., Eveland, W. P. Jr., Bayer, J., Yang, S., & Wang, H. (1996). Community integration,
- McLeod, J. M., Daily, K., Guo, Z., Eveland, W. P. Jr., Bayer, J., Yang, S., & Wang, H. (1996). Community integration, local media use and democratic processes. *Communication Research*, 23(2), 179–209. https://doi.org/10.1177/ 009365096023002002
- 44. Moussa, I. (2009). *Evolution and adaptability of the accounting system in Libya in relation to environmental changes: Study of the cultural factor* (Doctoral thesis, University of Auvergne, France).
- 45. Noravesh, I., Dianati Dilami, Z., & Bazaz, M. S. (2007). The impact of culture on accounting: Does Gray's model apply to Iran? *Review of Accounting and Finance*, *6*(3), 254–272. https://doi.org/10.1108/14757700710778009
- 46. Peng, Y. S., Dashdeleg, A.-U., & Chih, H. L. (2014). National culture and firm's CSR engagement: A cross-nation study. *Journal of Marketing and Management*, 5(1), 38–49. Retrieved from https://cutt.ly/iE4Akn9
- Poirot, J. (2005). Le rôle de l'éducation dans le développement chez J. Rawls et A. Sen, entre équité et efficacité [The role of education in development in J. Rawls and A. Sen, between equity and efficiency]. *Developing Worlds*, 132(4), 29–38. https://doi.org/10.3917/med.132.0029
- 48. PricewaterhouseCoopers (PwC). (2014). *IFRS adoption by country*. Retrieved from http://www.pwc.be/en/publications/2014/epsas_oct_2014.pdf
- 49. Ramanna, K., & Sletten, E. (2009). *Why do countries adopt International Financial Reporting Standards*? (Harvard Business School Accounting and Management Working Paper No. 09-102). https://doi.org/10.2139/ssrn.1460763
- 50. Riahi-Belkaoui, A. (2002). International accounting and economic development: The interaction of accounting, economic, and social indicators. Westport, CT: Quorum Books.
- 51. Richardson, G. (2006). Determinants of tax evasion: A cross-country investigation. *Journal of International Accounting, Auditing and Taxation, 15*(2), 150–169. https://doi.org/10.1016/j.intaccaudtax.2006.08.005
- 52. Ringov, D., & Zollo, M. (2007). The impact of national culture on corporate social performance. *Corporate Governance*, 7(4), 476-485. https://doi.org/10.1108/14720700710820551
- 53. Salter, S. B., & Niswander, F. (1995). Cultural influence on the development of accounting systems internationally: A test of Gray's (1988) theory. *Journal of International Business Studies, 26*(2), 379–397. https://doi.org/10.1057/palgrave.jibs.8490179
- 54. Salter, S. B., Sharp, D. J., & Chen, Y. (2013). The moderating effects of national culture on escalation of commitment. *Advances in Accounting*, *29*(1), 161–169. https://doi.org/10.1016/j.adiac.2013.02.001
- 55. Samaha, K., & Stapleton, P. (2008). Compliance with International Accounting Standards in a national context: Some empirical evidence from the Cairo and Alexandria Stock Exchanges. *Afro-Asian Journal of Finance and Accounting*, *1*(1), 40–66. https://doi.org/10.1504/AAJFA.2008.016890
- 56. Stecher, J., & Suijs, J. (2012). Hail, procrustes! Harmonized accounting standards as a procrustean bed. *Journal* of Accounting and Public Policy, 31(4), 341–355. https://doi.org/10.1016/j.jaccpubpol.2012.05.003
- 57. Stulz, R. M., & Williamson, R. (2003). Culture, openness, and finance. *Journal of Financial Economics, 70*(3), 313–349. https://doi.org/10.1016/S0304-405X(03)00173-9
- Sudarwan, M., & Fogarty, T. J. (1996). Culture and accounting in Indonesia: An empirical examination. *The International Journal of Accounting*, 31(4), 463–481. https://doi.org/10.1016/S0020-7063(96)90032-1
- Tsakumis, G.-T., Curatola, A.-P., & Porcano, T.-M. (2007). The relation between national cultural dimensions and tax evasion. *Journal of International Accounting, Auditing and Taxation, 16*(2), 31–147. https://doi.org/10.1016/j.intaccaudtax.2007.06.004
- 60. Türel, A. (2009). The value relevance of IFRS: The case of Turkey. *Economica*, *5*(1), 119–128. Retrieved from https://www.researchgate.net/publication/40755292_The_Value_Relevance_of_IFRS_The_Case_of_Turkey
- 61. Waldman, D. A., Sully de Luque, M., Washburn, N., House, R. J., Adetoun, B., Barras, A., ... Widerom, C. P. M. (2006). Cultural and leadership predictors of corporate social responsibility values of top management: A GLOBE study of 15 countries. *Journal of International Business Studies*, *37*(6), 823-837. https://doi.org/10.1057/palgrave.jibs.8400230
- 62. Wingate, M. L. (1997). An examination of cultural influence on audit environments. *Research in Accounting Regulation*, *1*, 129–148.
- 63. World Economic Forum (WEF). (2014, August 21). *Global competitiveness report 2014–2015*. Retrieved from https://www.weforum.org/reports/global-competitiveness-report-2014-2015/
- 64. Yang, B. Y., Wang, Y., & Wang Drewry, A. (2009). Does it matter where to conduct training? Accounting for cultural factors. *Human Resource Management Review*, *19*(4), 324–333. https://doi.org/10.1016/j.hrmr.2009.03.002
- 65. Zarzeski, M. T. (1996). Spontaneous harmonization effects of culture and market forces on accounting disclosure practices. *Accounting Horizons*, *10*(1), 18–36. Retrieved from https://ulysse.univ-lorraine.fr/discovery/fulldisplay/cdi_proquest_journals_1518453366/33UDL_INST:UDL
- 66. Zeff, S. A. (2007). Some obstacles to global financial reporting comparability and convergence at a high level of quality. *The British Accounting Review*, *39*(4), 290–302. https://doi.org/10.1016/j.bar.2007.08.001
- 67. Zhou, H., Xiong, Y., & Ganguli, G. (2009). Does the adoption of International Financial Reporting Standards restrain earnings management? Evidence from a developing market. *Academy of Accounting and Financial Studies Journal*, 13, 43-56. Retrieved from https://www.researchgate.net/publication/266079755_ DOES_THE_ADOPTION_OF_INTERNATIONAL_FINANCIAL_REPORTING_STANDARDS_RESTRAIN_EARNINGS_MAN AGEMENT_EVIDENCE_FROM_AN_EMERGING_MARKET

VIRTUS

APPENDIX

Determination of degree of compliance with IFRS (DEFRS)

Country	IFRS for listed companies	IFRS for statutory filings	Version of IFRS	Total
Albania	2	1	2	5
Angola	0	0	0	0
Argentina	2	1	2	5
Brazil	2	0	1	3
Bulgaria	2	1	1	4
Colombia	0	0	0	0
Costa Rica	2	2	2	6
Dominican Republic	2	1	2	5
Egypt	0	0	0	0
Emirates	2	1	2	5
El Salvador	2	2	2	6
Finland	2	1	1	4
	2	1	2	5
Ghana	2			
Greece	=	2	1	5
Guatemala	0	1	2	3
Honduras	2	1	2	5
Hungary	2	1	1	4
Iceland	2	1	1	4
Indonesia	0	0	0	0
Iran	2	2	2	6
Ireland	2	2	1	5
Jamaica	2	2	2	6
Jordan	2	2	2	6
Kenya	2	2	2	6
Kuwait	2	1	2	5
Latvia	2	1	1	4
Lebanon	2	2	2	6
Libya	0	0	2	2
Malawi	2	2	2	6
Malta	2	1	1	4
Mexico	2	1	2	5
Marocco	1	0	2	3
Mozambique	2	1	1	4
Namibia	2	2	2	6
Netherlands	1	1	1	3
Nigeria	0	0	0	0
Pakistan	2	0	1	3
Panama	1	2	2	5
Peru	2	2	2	6
Philippines	2	1	1	4
Romania	2	0	1	3
Saudi Arabia	0	0	2	2
Senegal	0	0	0	0
Serbia	2	2	1	5
South Africa	2	1	2	5
Sri Lanka	2	2	1	5
	2		2	
Taiwan	2	1		5
Tanzania		2	2	6
Thailand	0	0	0	0
Trinidad	2	2	2	6
Turkey	2	2	2	6
Ukraine	2	1	2	5
Uruguay	2	2	2	6
Venezuela	2	2	1	5
Vietnam	0	0	2	2
Zambia	2	2	2	6