CULTURAL FACTORS INFLUENCING ACCOUNTING STANDARD-SETTING: THE UNIQUE CASE OF COSTA RICA

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ABSTRACT

For decades accounting scholars have hypothesized relationships among cultural factors and accounting standard development. However, the results of empirical studies supporting the relationships have been mixed. This research question has become increasingly important because most countries have adopted international financial reporting standards -- standards developed outside of their national environments -- for their publicly-traded companies. Independent researchers in cultural studies and accounting practice have reported unique classifications within their respective disciplines for Costa Rica. These results suggested to us an opportunity for still another study to explore the association between culture and accounting practice. Applying Fisher's Exact Test, we confirm the association between two dimensions of culture as measured by Hofstede (1980, 1984) with accounting practice as reported in the Doupnik and Salter (1993) study.

INTRODUCTION

Understanding whether various environmental factors, including culture, influence accounting practice is a significant goal because international financial reporting standards (IFRS) were primarily developed for common law, equity-oriented environments. IFRS are now required or allowed in more than 120 countries, and some of those countries (for example, Latin American countries) may have had their own national standards developed in significantly different political, economic, legal and cultural environments. Sometimes the current regulatory environment results in the preparation of accounting information under two sets of standards -- one to serve the global securities trading environment (IFRS) and another to serve country-specific information needs (national standards). Mukoro and others (2011) describe the challenges of culture in an environment that is applying pressure for national convergence of accounting practice.

According to Choi et al. (2002, p. 42) "every nation's accounting standards and practices result from a complex interaction of economic, historical, institutional, and cultural factors." Because independent researchers in political science (Huntington 1984), national culture (Hofstede 1980, 1984) and accounting practice (Doupnik and Salter 1993) all have reported unique classifications for Costa Rica, this nation offers an opportunity to explore the relationships among these factors. In this paper we provide evidence that culture is associated with accounting practice by conducting an empirical test of the general association between two dimensions of culture (Individualism and Power Distance as measured by Hofstede) and common accounting practices (as reported in the Doupnik and Salter study).

Costa Rica

Costa Rica was the first democratic society in Central America. This country has been a democratic oasis in a region beleaguered by dictatorships (Palmer & Molina 2004, p. 1). For years the government spent money on preventative health programs, including clean water, vaccination and health education; and its inhabitants enjoy a life expectancy comparable to highly industrialized countries (Biesanz 1999, p. 150). According to Sheahan (1987, p. 272) Costa Rica has the most fully democratic political system in Latin America, one of the least unequal distributions of income, and the most thorough system of social services.

This nation, which lies south of Nicaragua and north of Panama, is the focus of our accounting study. Bounded on the east by the Caribbean Sea and to the west by the Pacific Ocean, Costa Rica enjoys a strategic location for conducting trade. The country spans a geographic area of approximately 51,000 square kilometers and is expected to have a population of approximately 5 million in 2015 (nationsencyclopedia.com accessed 12/07/15).

Samuel Huntington (1984, p. 213), the Harvard political scientist, has remarked

> Except for Costa Rica in 1948, it is hard to think of a case where a democratic system of any duration was inaugurated by explicit agreement between the leaders of a regime and the leaders of the armed opposition to that regime."

Costa Rica is not only unique in its history of politics and government. Independent researchers in national culture (Hofstede 1980, 1984) and accounting practice (Doupnik and Salter 1993) also have found evidence of the uniqueness of Costa Rica when exploring classification schemes within their respective research disciplines.

Accounting Classification Schemes

In accounting, classification schemes are useful when describing the respective national environments in which accounting standards are formulated. Classifying accounting frameworks has provided insights into the degree of similarities and differences to be expected between two sets of accounting standards. Anticipating the degree of variation between national frameworks is useful in many contexts, including making business decisions based on financial statements prepared under a foreign set of standards, planning formal financial statement reconciliations or gauging the difficulty of convergence between two accounting frameworks.

Nobes (1983) theorized a hierarchical classification model with two main branches: Micro-based (derived in equity markets) and Macro-uniform models (derived in capital markets traditionally served by debt). Doupnik & Salter (1993) found empirical evidence supporting Nobes' judgmental model. The Doupnik & Salter model is based on statistical cluster analysis of accounting and disclosure practices as reported by managers from accounting firms operating across the globe.

The Doupnik & Salter Study (1993).

In the results of the nine-cluster solution in the Doupnik and Salter classification study, Costa Rica failed to cluster with other countries. The evidence suggests that Costa Rica's accounting practices as reported in the early 1990's were different from practices in other countries in the Doupnik & Salter study. See Cluster 3 in Figure 1 below.

Figure 1. Doupnik and Salter (1993, p. 53) Nine Cluster Groupings

Cluster 1	**Australia, Botswana, Hong Kong, Ireland, Jamaica, Luxembourg, Malaysia, Namibia, Netherlands, Netherlands Antilles, Nigeria, New Zealand, Philippines, Papua New Guinea, Singapore, South Africa, Sri Lanka, Taiwan, Trinidad and Tobago, United Kingdom, Zambia, Zimbabwe**
Cluster 2	**Bermuda, Canada, Israel, United States**
Cluster 3	**Costa Rica**
Cluster 4	**Argentina, Brazil, Chile, Mexico**
Cluster 5	**Colombia, Denmark, France, Italy, Norway, Portugal, Spain**
Cluster 6	**Belgium, Egypt, Liberia, Panama, Saudi Arabia, Thailand, UAE**
Cluster 7	**Finland, Sweden**
Cluster 8	**Germany**
Cluster 9	**Japan**

In understanding why Costa Rica stands alone, it may be helpful to consider how the other clusters may reflect the operation of environmental factors believed to influence accounting practice and to consider why Costa Rica did not group with its geographic neighbors, Mexico and Panama. The grouping of Canada with the United States probably results from these nation's geographic proximity, similar heritages and trading partnerships. Before Canada's adoption of IFRS, accounting practice grew so similar between the U.S. and Canada that, for some applications, the standards were considered reciprocal. We would expect Great Britain to cluster with its former colonies as it does, and for inflationary economies in South America to cluster with each other as they do. Separate groupings for Germany and Japan are also understandable in that they are each economic powerhouses in their geographic regions with domestic accounting standards favorable to debt financing (prior to adoption of IFRS).

Costa Rica also stands alone and apart from its geographic neighbors. Political system may be an important factor. In 1991, Panama was a military regime, whereas Mexico was a one-party democracy (Huntington 1984, p. 582). Costa Rica, on the other hand, is a democracy -- the first democracy in Central America. In addition, Mexico has the strongest equity market, with an established stock exchange. Costa Rica, although it has its own stock exchange, does not have many publicly-traded companies.

CULTURE

In addition to politics and economics, culture is also believed to be an important societal factor contributing to the development of a nation's institutions because the values and beliefs of citizens are reflected in their institutions. According to Gray (1988, p. 5), a framework incorporating cultural differences identified by Hofstede (individualism, power distance, uncertainty avoidance, and masculinity) may explain differences in international accounting systems.

A large number of studies have empirically examined hypothesized relationships between culture and accounting practice, including Hofstede's cultural values and national accounting systems (Doupnik and Tsakumis 2004). The results of these studies have been mixed. Although most studies find a relationship between cultural values and disclosure consistent with Gray's hypotheses (Doupnik and Perera 2015, p. 39), they are unable to determine whether culture influences accounting disclosures through its effect on accounting values or through its effect on institutional consequences. Finch (2009) provides a review and critique of certain papers in the literature that have attempted to extend or refine Gray's model.

Our comparing the results of the Doupnik and Salter's (1993) classification scheme and Hofstede's cultural rankings for Costa Rica will not answer the conundrum of whether culture influences accounting practice through its effect on accounting values or through its effect on institutional consequences. However, by comparing Hofstede's national rankings on two dimensions (individualism and power distance in combination) to reported clusters of accounting practice, we can provide empirical evidence of the association between a nation's cultural preferences as described by Hofstede and nationally-developed accounting practice as reported by Doupnik and Salter.

The Hofstede (1980, 1984) Studies.

Hofstede (1984, p. 82) describes "culture" as the collective programming of the mind which distinguishes the members of one group from another. It consists of patterns of thinking, as well as the meanings people attach to various aspects of life. Costa Rica exhibited a unique cultural combination of preferences for both collectivism (opposite of individualism) and low tolerances for power distance in Hofstede's study (1984). This combination (collectivism coupled with a low tolerance for power distance) distinguishes Costa Rica from other countries, including its Latin American neighbors of Guatamala, Panama and Mexico. See Quadrant 1 in Figure 2 below. Although collectivists, these three neighbors express a high tolerance for power distance within their societies.

Figure 2. Hofstede (1984) Ranking of Costa Rica on Dimensions of Tolerance for Power Distance and Individualism

QUADRANT 1/ LOW POWER DISTANCE AND COLLECTIVISM

Costa Rica

QUADRANT 2/ HIGH POWER DISTANCE AND COLLECTIVISM

Arab Countries, Argentina, Brazil, Chile, Colombia, Equador, Greece, Guatamala, Hong Kong, India, Indonesia, Iran, Jamaica, Japan, Korea, Malaysia, Mexico, Pakistan, Panama, Peru, Philippines, Portugal, Salvador, Singapore, Taiwan, Thailand, Turkey, Uruguay, Venezuela, West Africa, Yugoslavia

QUADRANT 3/ LOW POWER DISTANCE AND INDIVIDUALISM

Austria, Australia, Canada, Denmark, Finland, Germany, Great Britain, Ireland, Israel, Netherlands, New Zealand, Norway, Sweden, Switzerland, USA

QUADRANT 4/ HIGH POWER DISTANCE AND INDIVIDUALISM

Belgium, France, Italy, Spain, South Africa

The source of Figure 2 is information in an exhibit presented in Brewer's "International Cultural Diversity and the Design of Management Accounting Systems," (Spring 1997, p. 73) in which the author explores the application of Hofstede's cultural dimensions (1984, pp. 81-95) to various practices in management accounting.

Four dimensions in the Hofstede (1980) framework are: *Individualism versus Collectivism*, *High versus Low Tolerance for Power Distance*, *Strong versus Weak Uncertainty Avoidance* and *Masculinity versus Femininity*. The following is a brief description of behaviors attributed to the cultural dimensions of *Individualism versus Collectivism* and *High versus Low Tolerance for Power Distance* (largely based on Hofstede 1980, 1984). We focus on these two dimensions because of the results depicted in Figure 2 (presented above) where Costa Rica stands alone in its cultural preferences for both collectivism and low tolerance for power distance.

Individualism is generally related to economic development and is the preference for individuals to take care of themselves and their immediate families only. Its opposite, *Collectivism*, stands for a preference for a tightly-knit social framework in which individuals can expect their relatives, clan, or other in-group to look after them in exchange for loyalty. A high value is placed on harmony in these cultures.

An example of collectivist activities in Costa Rica is *Solidarismo*, a labor organization which includes contingency funds saved by workers and owners in individual companies to provide workers with certain benefits outside of unions. As another example, many farmers in Costa Rica belong to cooperatives ranging from savings and loans associations to consumer and producer co-ops (Biesanz, 1999, p. 48).

The dimension of *Power Distance* is also related to economic development and is the degree to which the members of a society accept that power in institutions and organizations is distributed unequally. In cultures with a high tolerance for power distance (such as Guatamala, Panama, and Mexico), there are status differences inside and outside the workplace. Rather than status being based on merit (as it is likely to be in countries with a culture of low tolerance for power distance), status and wealth are derived from rank and ancestry.

Power Distance is related to economic development, and economic development is a precondition to democracy. Costa Rica has a successful history of economic development perhaps due in part to its good soil and location for trade. Currently, its labor force is at work in agriculture, tourism and other service industries, including telephone servicing centers for international corporations (http://costarica-information.com/about-costa-rica/economy/economic-sectors-industries). Businesses deal with the manufacturing and assembly of electronics, chemicals and other products. Costa Rica's low tolerance for power distance is reflected in its income distribution pattern, as well as its concern for the quality of life.

STATISTICAL ANALYSIS

We confirm our hypothesized association between a nation's cultural environment and its reported accounting practices with a nonparametric test of association. We test the hypothesis that the clustering of prior countries in the Doupnik and Salter (accounting) and Hofstede (culture) studies as depicted in Figures 1 and 2, respectively, are related. Our research hypothesis is:

H1: Culture as measured by tolerance for power distance and degree of collectivism in the society is associated with the nation's reported accounting practices.

Specifically, there is a general association between the cultural rankings provided in Hofstede's study as depicted by Brewer (four quadrants in Figure 2) and the groupings provided by the Doupnik and Salter accounting practice classification study (nine cluster groupings in Figure 1). Table 1 provides a visual summary in the form of a matrix.

Table 1. Figure 1 (9 accounting clusters) and Figure 2 (4 cultural combinations) Superimposed

1	**2**	**3** **CR**	**4**	**5**	**6**	**7**	**8**	**9**
2 **HK** **MAL** **SIN** **TAI**			**ARG** **BRA** **CHL** **MEX**		**PAN** **THA**			**JAP**
3 **AUS** **IRE** **NET** **NZ** **UK**	**CAN** **ISR** **USA**					**FIN** **SWE**	**GER**	
4 **SAF**				**FR** **ITA** **SPA**	**BEL**			

Note: The four combinations of tolerance for power distance and individualism/collectivism (rows) are associated with different groupings of accounting practices (columns).
Costa Rica in Row 1 = Low Tolerance for Power Distance and Collectivist Culture
Countries in Row 2 = High Tolerance for Power Distance and Collectivist Culture
Countries in Row 3 = Low Tolerance for Power Distance and Individualist Culture
Countries in Row 4 = High Tolerance for Power Distance and Individualist Culture

We conducted the test of association using the Fisher's Exact Test statistic available in the Frequency Procedure of SAS. Evidence is provided that the cultural dimensions and accounting practice groupings are related ($p=<.001$).

IMPLICATIONS

The research question of whether a global set of standards is a "good fit" for a particular nation's accounting practice has become increasingly important because, in an effort to increase the comparability of financial reporting, more than 120 countries now permit or require use of IFRS. These global standards were developed outside of the adopting country's national environment.

If culture is significantly associated with the nature of accounting practices that have evolved naturally within a country's economy and history, imposing a "one-size-fits-all" framework may be difficult for a nation. As a matter of fact, especially in Europe the current regulatory environment often results in the preparation of accounting information under two sets of standards -- one to serve the global securities trading environment (IFRS) and another to serve country-specific information needs, including national governments (national standards).

Independent researchers in cultural studies and accounting practice have reported unique classifications within their respective disciplines for Costa Rica. These results suggest an opportunity to explore the association between culture and historical accounting practice. Applying Fisher's Exact Test, we confirm the association between two dimensions of culture as measured by Hofstede (1980, 1984) with accounting practice as reported in the Doupnik and Salter (1993) study. By testing the association of Hofstede's national rankings on two dimensions (individualism and power distance in combination) with Doupnik & Salter's (1993) clusters of national accounting practice, we have provided additional empirical evidence of the association between culture and national accounting practice.

The implication of the association between culture and historical accounting practices in Costa Rica and other countries is that accounting practices probably evolved naturally to suit respective national economic and historic environments. Although regulators may require or permit reporting under the same set of standards (IFRS) towards the goal of global comparability for investors, an individual nation may not find IFRS will meet the needs of other users of their financial information.

Borker (2013) has extended the relationships between culture and accounting systems posited by Gray (1988) to form an IFRS-favorable profile for predicting the ease of adoption of IFRS on a nation by nation basis. Using Russia as an example, Borker suggests that evaluating the variance between a country's accounting value profile and the IFRS-favorable profile will be useful to predict ease of adoption and recommendations for actions to facilitate acceptance. Exploring the answer to the question of whether or not IFRS will prove a good fit to a particular national environment will be an area for future research.

Limitations

Two perceived limitations of the research results presented in this paper may be that Hofstede's original rankings in his cultural values framework is based on data collected in the 1960's and 1970's and that Doupnik & Salter's study was published in 1993. However, Kirkman and others (2006) reviewed 180 studies published between 1980 and 2002 (p. 285) and conclude that overall Hofstede's values are clearly relevant for additional cross-cultural research in the 21st century.

An inquiry submitted to the LexisNexis Academic Library confirmed continued application of Hofstede's cultural values framework. For example, professionals continue to apply the framework as the basis for understanding the issues in relocating employees to the Philippines (Mercene 2015). Social scientists use the framework to interpret the preferred living arrangements of Danes (Orange 2015).

In addition to the current citation of Hofstede's work in individual publications, a current search of the web finds that the Hofstede Centre began operations in 2012 with a goal of offering high quality education in the field of culture and management (http://geert-hofsteded.com/about-us.html accessed 2/26/16). The Centre currently provides various professional certifications.

Although more than twenty years have passed since the publication of the Doupnik & Salter (1993) study, the results contribute to the study reported in this paper because they represent the naturally-evolving accounting practices reported within a nation rather than the currently imposed global IFRS standards. We could not develop the thesis underlying the implications expressed in the previous section of this paper without this historical connection.

CONCLUSION

Prior researchers in political science (Huntington), organizational behavior (Hofstede) and accounting practice (Doupnik and Salter) have found Costa Rica to be unique. These unique characteristics provide an interesting research subject (Costa Rica) and an opportunity to test the relationship between cultural areas and accounting practice. Specifically, our analysis provides evidence of a highly significant association between certain cultural factors (Individualism and Power Distance in combination) as measured by Hofstede and accounting practice as reported by Doupnik and Salter. We propose that the factors contributing to the economic, political and social development in Costa Rica produced a unique national value system and institutions, including its form of government and specific accounting practices.

Costa Rica, as well as other countries, currently apply IFRS and, as a result, accounting practice today may be significantly different than the standards analyzed in the Doupnik and Salter (1993) study. However, the implications of the general association between culture and accounting practice are more important today than ever because "home-grown" accounting standards are likely to be a better fit to a country's environment. The question for future research and accounting practice is whether standards such as IFRS which are developed independently from the national environment will be more useful in practice for a given country's economic system than standards that evolved along with a country's cultural environment. The relationships among culture and accounting practice have been explored by many researchers over decades, and in the current environment; we expect researchers to continue this exploration.

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