

THE ROLE OF CULTURE IN ACCOUNTING IN THE LIGHT OF HOFSTEDE'S, GRAY'S AND SCHWARTZ'S CULTURAL DIMENSIONS THEORIES – A LITERATURE REVIEW

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Abstract For a long time many authors have been studying the factors that allow for a better explanation of different accounting practices among various countries. Cultural conditions are more often regarded as one of the reasons for these differences. Cross cultural psychology may prove helpful in becoming aware of one's own cultural identity. Researchers of this field try to systematise the traits characterising particular cultural circles. The objective of this article is to present three basic typologies of cultural value models: the conception of S.H. Schwartz, G. Hofstede and S.J. Gray. Next more recent studies that have examined the impact of national culture on accounting using these theoretical frameworks are presented.

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INTRODUCTION

For many years accounting has been serving humans in the development of civilisation. As the element of an information system it is a reliable source of various data for regulatory, social, economic and environmental purposes. According to Elliot, et al. (1993) „Accounting is the art of communicating financial information about a business entity to users (...). The communication is generally in the form of financial statements which show in money terms the economic resources under the control of the management. The art lies in selecting that information which is relevant to the user and is reliable”(p. 3).

The type and extent of information presented in the financial statements varies between countries. For a long time many authors have been engaged in studying the factors that allow for a better explanation of different formulation in particular countries of accounting principles, influencing both the measure of property and liabilities as well as the result in the

financial statements and the information disclosed therein. The cultural variable is more often provided as one of the reasons for these differences. As noted by Mueller et al. (1994) „Accounting is shaped by the environment in which it operates. Just as nations have different histories, values, and political systems, they also have different patterns of financial accounting development”(p.1). Culture is a powerful influence underlying human behaviour and social values, hence its impact on accounting practices cannot be neglected.

To become acquainted with our own cultural identity awareness, cross cultural psychology may prove helpful. Researchers of this field try to systematise the characteristics that shape particular cultures (known as cultural value models). The objective of this article is to present three basic typologies of cultural values models: the conceptions of G. Hofstede, S.J. Gray and S.H. Schwartz. Next more recent studies that have examined the impact of national culture on

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accounting using Hofstede's, Gray's or Schwartz's theory will be presented.

HOFSTEDE'S AND GRAY'S MODELS

Hofstede defined culture as (2007) *“the collective programming of the mind which distinguishes the members of one human group from another”* (p. 17). In a major survey of employee attitudes in the worldwide subsidiaries of IBM corporation¹, he identified four contrasting sets of cultural dimensions that can be used to describe general similarities and differences in cultures around the world. These are:

- 1) **Large versus small power distance** – it describes the extent to which the members of a society accept that the power in institutions and organisations is distributed unequally. High Power Distance societies accept a hierarchical order in which everybody has a place and this fact is not undermined. As for Low Power Distance societies, they strive after power equality and demand justification for power inequalities. The key issue of this dimension is how people handle inequalities between themselves when they occur. This has obvious consequence for the way people build institutions and organisations.
- 2) **Strong versus weak uncertainty avoidance** – this dimension refers to the degree to which individuals feel threatened by uncertain or unknown situations. Strong Uncertainty Avoidance societies tend to be rigid in adherence to rules and are intolerant towards unorthodox behavior and ideas. Countries exhibiting Weak Uncertainty Avoidance maintain a more relaxed attitude in which practice counts more than principles. The fundamental issue of this dimension is how a society reacts to the fact that the future is unknown: whether it tries to control the future or to let it happen. Like Power Distance, this dimension has consequences for the way people build their institutions and organisations.
- 3) **Individualism versus collectivism** – Individualism refers to a preference for a loose social bonds wherein individuals are supposed to take care of themselves. As for its opposite – Collectivism, it stands for tight social ties in which individuals can expect their relatives or members of a particular group to look after them in exchange for unquestioning loyalty (<http://geert-hofstede.com/dimensions.html>). This dimension relates to people's self-concept: 'I' or 'we'.
- 4) **Masculinity versus femininity** – Masculinity stresses traditional masculine values of performance such as achievement, heroism, assertiveness, and material success while Femininity stands for a preference for cooperation, modesty, caring for the weak and quality

of life. The crucial issue of this dimension is the way societies allocate social roles to the sexes.

In later work, Hofstede (2007) added a fifth cultural dimension: **Long versus short – term orientation (also called ‘Confucian Dynamism’)**². This dimension stands for the way people favor pragmatic, future-oriented virtues. According to him *“Societies with a short-term orientation generally have a strong concern with establishing the absolute Truth. They are normative in their thinking. They exhibit great respect for traditions, a relatively small propensity to save for the future, and a focus on achieving quick results. In societies with a long-term orientation, people believe that truth depends very much on situation, context and time. They show an ability to adapt traditions to changed conditions, a strong propensity to save and invest, (...), and perseverance in achieving results.”* (<http://geert-hofstede.com/dimensions.html>)

Using measures of each of the cultural values for a group of countries included in the study, Hofstede classifies them into ten different cultural areas. The Anglo cultural area, for instance is characterized by high individualism, low uncertainty avoidance and power distance and moderate masculinity. As the opposite, the Less Developed Latin cultural area (e.g., Colombia, Ecuador, Mexico, Venezuela) is described by low individualism, high uncertainty avoidance and power distance and quite high masculinity.

The importance of Hofstede's dimensions of national culture in accounting is the national culture's influences on the nature of accounting practices. It is claimed in the literature that the dimensions such as individualism, power distance and uncertainty avoidance are most significant for accounting (Gray, 1988, p. 8-11). For example, it is argued that in a country with high uncertainty avoidance, efforts are made to minimize uncertainty. This means in the area of accounting that rules and regulations tend to be rather detailed and rigid. Individualism affects accounting in terms of disclosure practices and income measurement rules (Gray, 1988, p. 9-11).

Hofstede's model of cultural patterns was extended by Gray (1988) who introduced a framework for analyzing the development of accounting systems by using accountants' value systems (named a country's accounting subculture), which derive from societal values. These societal values are shaped by external and ecological influences such as: trade, investment,

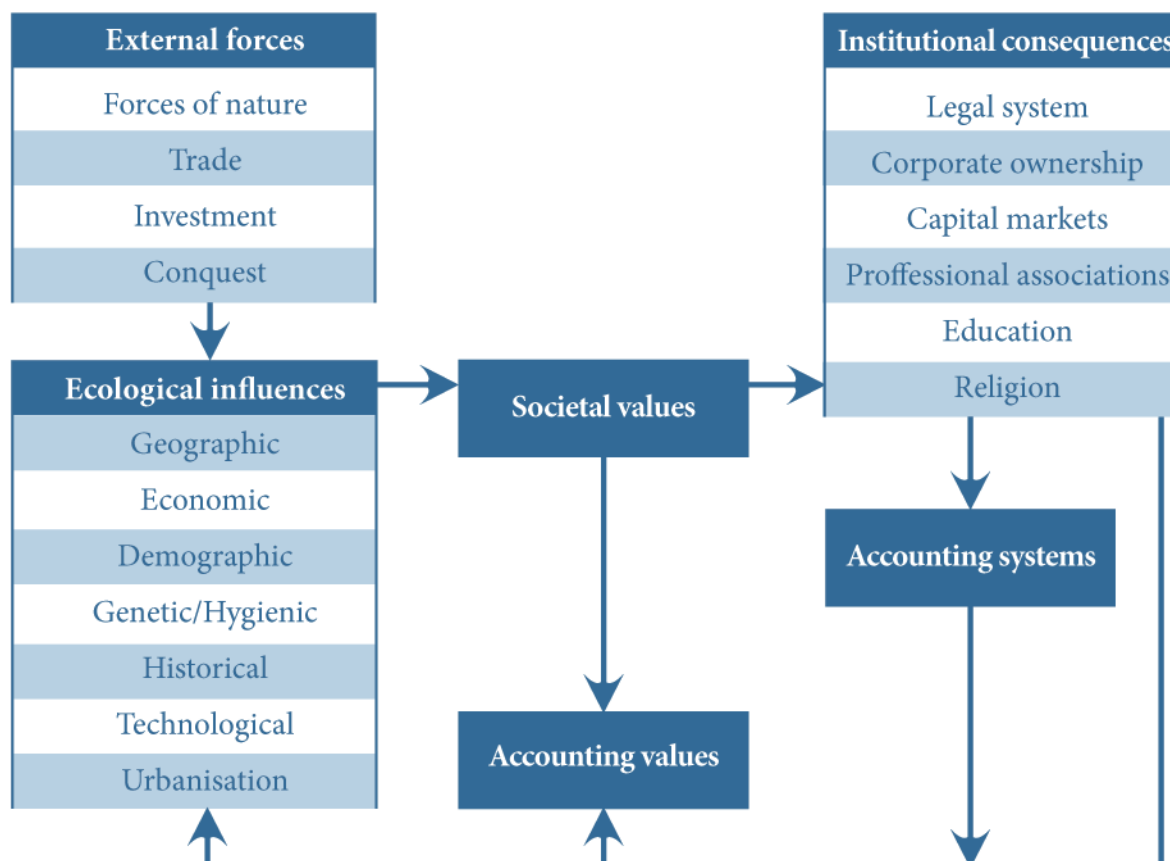
¹ The survey initially took place between 1968 and 1973, and involved over 60 countries.

² This dimension was added on the base of the Chinese Values Survey conducted with Michael Bond.

geography, economic system, history, etc. Accounting values in turn, affect accounting systems, therefore cultural factors have an impact on the development

and financial systems at a national level. These relations are presented in *Figure 1*.

Figure 1: Gray (1988) Original framework



Source: Adapted from Gray, S. J. (1988). *Towards a Theory of Cultural Influence on the Development of Accounting Systems Internationally*, *Abacus*, Vol. 24, p. 7

As mentioned, Gray (1988) used Hofstede's cultural dimensions to define four accounting accounting values as follows (Gray, 1988, p. 8):

- 1) Professionalism versus Statutory Control – a preference for the exercise of individual professional judgment and the maintenance of professional self-regulation as opposed to compliance with prescriptive legal requirements and statutory control.
- 2) Uniformity versus Flexibility – a preference for the enforcement of uniform accounting practices between companies and the consistent use of such practices over time as opposed to flexibility in accordance with the perceived circumstances of individual companies.
- 3) Conservatism versus Optimism – a preference for a cautious approach to measurement so as to cope with

the uncertainty of future events as opposed to a more optimistic, risk-taking approach.

- 4) Secrecy versus Transparency – a preference for confidentiality and the restriction of disclosure of information about the business only to those who are closely involved with its management and financing as opposed to a more transparent, open and publicly accountable approach.

These accounting values in turn, are linked to Hofstede's cultural dimensions as shown in *Table 1*.

Table 1: Relationships between Gray's Accounting Values and Hofstede's Cultural dimensions

Gray's Accounting Values	Hofstede's Cultural Dimensions			
	Power Distance	Individualism	Masculinity	Uncertainty Avoidance
Professionalism	Negative	Positive	No relationship hypothesized	Negative
Uniformity	Positive	Negative	No relationship hypothesized	Positive
Conservatism	No relationship hypothesized	Negative	Negative	Positive
Secrecy	Positive	Negative	Negative	Positive

Source: Adapted from Gray, S. J. (1988). *Towards a Theory of Cultural Influence on the Development of Accounting Systems Internationally*, *Abacus*, Vol. 24, p. 9-11

In identifying the dimensions that characterize accounting systems, Gray distinguishes between the statutory authority for accounting systems, and their enforcement, and the measurement and disclosure characteristics of accounting systems. Next, he classes ten cultural areas according to his four accounting values. First, the cultural areas according to their attitudes towards regulations are classified. The values that correspond to these attitudes are professionalism

versus statutory control and uniformity versus flexibility at extremes. Second, he divides the cultural areas according to measurement and disclosure practices. The values are named as conservatism versus optimism and secrecy versus transparency. Consequently he differentiates between (shown in Table 2):

- 1) regulation authority in accounting,
- 2) measurement and disclosures practices.

Table 2: Relationships between Gray's Accounting Values and Accounting Practices

<i>Gray's Accounting Values</i>	<i>Accounting Practices</i>
Professionalism/Statutory Control	Authority and Enforcement
Uniformity/Flexibility	
Conservatism/Optimism	Measurement of assets and profits
Secrecy/Transparency	Information Disclosures

Source: Adapted from Gray, S. J. (1988). *Towards a Theory of Cultural Influence on the Development of Accounting Systems Internationally*, *Abacus*, Vol. 24, p. 12-13

For example, Gray characterizes the Anglo cultural area by a relatively low rank on conservatism and secrecy (or high on optimism and high on flexibility). As the opposite pattern of a cultural area, the countries of the less developed Latin cultural area (e.g., Colombia, Mexico) tend to rank relatively high in conservatism and secrecy.

SCHWARTZ'S CULTURAL DIMENSIONS OF VALUES

The work of Israeli psychologist Shalom Schwartz is considered by some authors (Johnson et al., 1998) as supplementary to Hofstede's theory as it proposes an exhaustive set of 'ethic' dimensions of culture. Using data obtained from 41 cultural groups in 38 nations, he divided national cultures into seven value types and then summarized these values into two culture-level dimensions. These values are (Schwartz, 1994):

- 1) **Conservatism** – includes values that are important in close-knit harmonious relationships. These values are mainly concerned with security and tradition,
- 2) **Intellectual Autonomy** – this value is likely to be important in a society that views the individual as an autonomous entity pursuing his or her interest. Intellectual autonomy places an emphasis on self-direction and flexibility on ideas,
- 3) **Affective Autonomy** – this value places an emphasis on hedonism and enjoying life,
- 4) **Mastery** – stresses active mastery of the social environment through self-assertion. This value promotes active efforts of people to modify their surroundings and get ahead of others. It encompasses values such as being independent, ambitious and successful,
- 5) **Hierarchy** – accentuates an entity's hierarchical role in society. It reflects wealth, social power and authority,
- 6) **Egalitarian commitment** – this group of values concerns voluntary commitment to helping to improve the welfare of other people,
- 7) **Harmony** – lays emphasis on harmony with nature – protecting the environment, the world of beauty, etc.

As mentioned, Schwartz further condensed the above values into two cultural dimensions:

- 1) Autonomy versus Conservatism,
- 2) Hierarchy and Mastery versus Egalitarian Commitment.

The first culture-level dimension contrasts Autonomy with Conservatism. This dimension focuses on the extent to which a society views the individual as an autonomous entity. Conservatism occurs in a society in which values as moderation, social order, security and tradition are favored. Great importance is placed

on maintenance of the status-quo and harmonious relations both with the group and the society. Its opposite – Autonomy encompasses values such as curiosity of the world, creativity and promotes enjoyment of a varied life for an entity concentrated mainly on pleasures.

The second culture-level dimension contrasts Hierarchy and Mastery with Egalitarian Commitment which examines whose interests are more important for the society – those of the individual or those of the group.

Using measures of this cultural values Schwartz discriminated seven different cultural regions as follows (Sagiv, et al., 2007, p. 180-182):

- 1) West Europe (except from Great Britain and Ireland),
- 2) East Europe (e.g., Lithuania, Estonia, Poland),
- 3) English Speaking (USA, Canada, New Zealand, Great Britain, Ireland),
- 4) Confucian (China, Japan),
- 5) Africa and the Middle East,
- 6) South Asia (except China),
- 7) Latin America.

For example, according to him Western Europe „emphasizes intellectual autonomy, and egalitarianism more than any other world cultural region” (2007, p. 180). Confucian influenced countries exhibit a pragmatic, entrepreneurial orientation which combines a strong focus on hierarchy and mastery with a rejection of egalitarianism and harmony (2007, p. 181).

THE APPLICATION OF THE CULTURAL DIMENSION FRAMEWORK IN INTERNATIONAL ACCOUNTING RESEARCH

Since the publication of Gray's theory, increasing attention has been paid to the cultural dimension of accounting. Most of these surveys relied on Hofstede's and Gray's theoretical framework to identify cultural factors that are likely to be associated with accounting practices. Schwartz's theory is less popular in this field of study, however a few studies that apply it have also been found. The table below presents some more recent studies (in this section only selected studies published from 2000 are presented. For a more detailed review of this literature presenting prior researches, see for instance: Doupnik, T. S., Riccio, E. L. (2006)) that empirically examined the impact of national cultures on accounting based on the theoretical frameworks of Hofstede, Gray and Schwartz.

Table 3: Selected International Accounting Studies of Empirical Assessment Hofstede's, Gray's and Schwartz's Frameworks published from the year 2000

Author	Theory applied			Sample of countries	Brief description of the study	Conclusions
	H ⁽¹⁾	G ⁽²⁾	S ⁽³⁾			
Jaggi et al. (2000)	x			Canada, United Kingdom and USA (common law countries); France, German and Japan (code law countries)	The authors investigate the role of culture and legal origin in explaining disclosure levels.	National cultural values do not appear to have significant influence on financial disclosures.
Schultz et al. (2001)	x	x		France, Germany, USA	The influence of culture on accountants' interpretation and application of similar financial reporting standards.	The results indicate that, even given similar facts and rules, judgments' among accountants vary significantly. Accountants from German and France (high uncertainty avoidance countries) are more conservative in their professional judgments than accountants from USA (low uncertainty avoidance country).
Hope (2003)	x		x	39 and 42 countries (depending on the particular test)	The author investigates whether national culture (as measured by Hofstede and Schwartz) is correlated with firms' disclosure levels.	The author finds no links between culture and the level of financial disclosures. However he claims that (2003) "(...) it is too early to dismiss culture as an explanatory variable for firms' disclosure choices" (p. 22).
Ding et al. (2005)	x		x	52 countries	The authors investigate the role of culture as an explanatory factor underlying differences between national and international accounting standards. These differences are measured using the following measures: divergence and absence ⁸ .	The authors find a strong relationship between cultural values and the divergence index but no significant relationship between these values and the absence index.
Doupnik et al. (2006)		x		USA, Brazil	The authors test two of Gray's hypotheses: secrecy and conservatism to find whether differences in culture cause accountants in distinct countries to interpret and apply the same financial reporting standards differently. As a basis for this research the accounting standards that require accountants to exercise their judgment have been identified (the standards relating to income-increasing and income-decreasing, e.g. IAS 18 – Revenues, IAS 11 – Construction Contract).	The authors find a strong relationship between the conservatism hypothesis and recognition of income-increasing items but no relationship between this hypothesis and recognition of income-decreasing items. However strong relationships were obtained between the secrecy hypothesis and disclosures of financial information.

Noravesh et al. (2007)	x	x		Iran	The authors examine the relationships between cultural values defined by Hofstede and accounting values described by Gray in Iran.	The authors confirm eight out of thirteen of Gray's hypotheses. Contrary to Gray they find: 1) no positive relationship between: a) uncertainty avoidance and secrecy hypothesis, b) uncertainty avoidance and uniformity hypothesis, c) individualism and professionalism hypothesis 2) positive linkage between: a) power distance and conservatism hypothesis, and b) masculinity and professionalism hypothesis.
Tsakumis (2007)	x	x		USA, Greece	The author examines the influence of national culture on accountants' application of financial reporting rules. As a basis for this research a standard that requires professional judgment was chosen (IAS 37: Provisions, Contingent Liabilities, and Contingent Assets). Participants of this study were asked to consider whether they would recognize or disclose a contingent asset or contingent liability based on the guidelines of a financial reporting standards.	Using the Hofstede-Gray framework, the author finds that Greek accountants are less likely to disclose the existence of both contingent assets and liabilities than U.S. accountants. The results confirm a strong relationship between Gray's secrecy hypothesis with disclosures practices. However no significant differences were noticed in professional judgment related to recognizing contingent assets and liabilities between those two countries.
Chand (2008)	x			Australia, Fiji	The author examines the effects of both cultural and non-cultural factors on judgments of professional accountants.	Using Hofstede's cultural dimensions the author concludes that Fijian accountants display stronger conservatism when compared to the Australian accountants. The results of this study show that national culture has a significant effect in the manner of accountants' professional judgment required by International Financial Reporting Standards.
Orij (2010)	x	x		2 countries	The author investigates whether corporate social disclosure levels relate to national culture.	It was concluded that corporate social disclosure levels are likely to be influenced by national cultures.
Salter et al. (2011)	x	x		15 countries	The authors use actual reported data (1998-2004) from SEC Form 20-F to test relationships between one of Gray's accounting values – conservatism and Hofstede's cultural dimensions.	The results of this study suggest that as theorized by Gray, the cultural variable of individualism is significantly and positively related to differences in income measurement practices between countries. The study also finds that a country's membership in the European Union and corporate tax rate is related to income measurement practice differences.

§ According to the authors (2003), "Divergence measures the degree to which GAAP (author's note: national accounting standards) and IAS (author's note: international accounting standards) cover a specific accounting topic but prescribe a different method. Absence measures the degree to which national GAAPs do not cover an accounting issue regulated by IAS"(p. 343).

Perera et al. (2012)	x	x	New Zealand, Samoa	The authors investigate the value systems in two culturally distinct countries: New Zealand and Samoa to provide empirical evidence on the relationships between accounting and culture. They use a Hofstede-Gray framework to verify the possible linkages between cultural values and accounting professionalism.	The findings of the study suggest a high level of professionalism in New Zealand and a low level of professionalism in Samoa. It is concluded that culture may be a factor that has an impact on these differences.
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¹⁾ H – Hofstede

²⁾ G – Gray

³⁾ S – Schwartz

CONCLUSIONS

Hofstede's, Gray's and Schwartz's theoretical frameworks have greatly benefited international accounting research. Although the results of the findings outlined above are different, some of them find relationships between cultural values and accounting practices consistent with Hofstede's, Gray's or Schwartz's hypotheses. The mixed results

of these studies also indicate that the validity of cultural dimension theories needs further testing. These researches may prove helpful especially in contemporary times during the widespread process of uniform application of international accounting standards across different countries. It may turn out that global accounting convergence will be very difficult when cultural factors are taken into consideration.

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