# The effect of environmental factors on accounting diversity. A literature review.

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#### 1. Introduction

Accounting diversity refers to the differences that exist between the characteristics of the financial reporting frameworks used in different countries. This diversity appears as a result of differences in the factors that affect the development of financial reporting frameworks. The accounting literature presents several factors that cause this diversity. These factors are mainly related to environmental factors.

In this article, we review the accounting literature to learn about the reasons for accounting diversity, and to better understand how accounting diversity affects accounting harmonization. We explore the environmental factors that are considered most influential in causing accounting diversity in general and in developing countries in particular; with a special focus on the Arab and Islamic countries.

This literature review is useful for two reasons. First, in general, we strengthen awareness of the existence of and the causes for accounting diversity. It is important to understand the current limitations of the drive towards international accounting harmonization. Second, more specifically, we prepare the road for a more in-depth analysis of the environmental factors that are considered most influential in causing accounting diversity. This analysis can assist policy-setters in their efforts to realize further international accounting harmonization.

## 2. Accounting diversity

Financial reporting frameworks are oriented to meet the needs for accounting information of the environment in which they are applied. These needs are determined by factors that can be country specific. Hence, different financial reporting frameworks with different characteristics

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are found in different countries. Accounting diversity refers to the differences that exist between the characteristics of the financial reporting frameworks used in different countries.

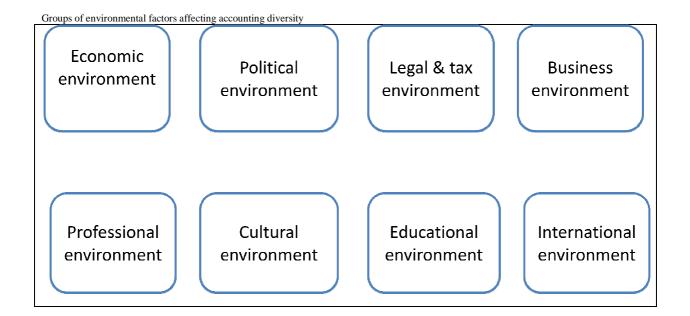
The international diversity in accounting standards and practices has drawn the attention of researchers to the importance of revealing the underlying reasons behind this phenomenon. Research in this area is particularly interesting in an environment with increasing calls for international accounting harmonization. An understanding of the factors that cause accounting diversity will enhance the possibility of realizing accounting harmonization and/or show the limits of this endeavor.

It is generally agreed that the financial reporting framework of a particular country is the product of the environment of this country. The prevailing environmental factors are influential in shaping the financial reporting frameworks. Adhikari and Tondkar (1992) establish that accounting diversity exists because financial reporting and disclosure standards and practices do not develop in a vacuum but reflect the particular environment in which they are developed. Many studies focus upon the influence of environmental factors on the processes of accounting in general and on accounting harmonization in particular. Below, we discuss this body of accounting literature.

## 3. Environmental factors affecting the international accounting diversity

In the accounting literature, environmental factors are considered the major reason behind international accounting diversity. Roberts et al. (2005) conclude that accounting rules and practices are influenced by a large number of quite different factors. Particularly important are the political and the economic system, the legal system, the taxation system, the corporate financing system, and the accounting profession. Baker and Barbu (2007) state that differences in the economic and legal systems cause accounting differences. Nobes (1998) proposes a general model to explain the reasons for international differences in accounting practices. The model uses a two-way classification based on the strength of equity markets and the degree of cultural dominance. Nobes indicates that factors such as the political system, religion and the stage of development are more relevant outside the developed world. Gray (1988) claims that the differences in financial reporting frameworks are caused by legal systems, economic circumstances, corporate financing, the size and power of the accounting profession, and national culture.

Other reasons and classifications are suggested by other authors. We consider many of these studies below. For that purpose, we classify the environmental factors into several groups (see the Figure bellow). We will address these groups separately and explore the most influential factors in each group.



### 3.1. Economic environment

The economic environment exerts an important influence on financial reporting frameworks. This claim is made in many studies (e.g. MacArthur, 1996; Needles et al., 2002; Archambault and Archambault, 2003; Belkaoui and AlNajjar, 2006; Baker and Barbu, 2007; Ding et al., 2007; Spathis and Geograkopoulou, 2007; and Mashayekhi and Mashayekh, 2008). The economic environment provides structures which determine the information that needs to be reported.

The major economic factors that influence the development of financial reporting frameworks are:

- privatization,
- economic openness,
- the stage of economic development, and
- international trade.

Importance of the private sector. Privatization increases the need for publicly available financial information. As such, Ashraf and Ghani (2005) relate the evolution of Pakistan's accounting practices to different economic developments including the increasing role of the private sector. Mashayekhi and Mashayekh (2008) also mention privatization as one of the factors that has affected accounting development in Iran. Kamla (2007), Al-Shiab (2008), Alsharairi and Al-Abdullah (2008), and Al-Akra et al. (2009) consider that privatization was one of the motives for adopting International Financial Reporting Standards (IFRSs) in Jordan. From another viewpoint, Chamisa (2000) asserts the irrelevancy of IFRSs for communist developing countries because they are designed to serve the needs of capital markets in which the private sector and equity capital dominate.

Economic openness. In an open economy, the investment environment must be attractive to foreign investors. This implies the presence of a good financial reporting framework that ensures the quality and the comparability of financial statements. Many developing countries have changed their financial reporting frameworks in the hope of increasing foreign investment. Haniffa and Cooke (2002) argue that the demand for disclosure is greater when a high proportion of companies' shares are held by foreigners. Mashayekhi and Mashayekh (2008) confirm that improving accounting standards and financial reporting makes financial reporting more useful to investors and is a way to attract more foreign investment. Irvine and Lucas (2006) and Irvine (2008) claim that the United Arab Emirates (UAE) adopted and implemented IFRSs to generate higher levels of Foreign Direct Investment (FDI). Al-Shammari et al. (2007) find a positive relationship between foreign ownership in banks and the adoption of the IFRSs by Gulf Cooperation Council (GCC) states. IFRSs obviously give adopting counties the credibility to compete for FDI in the world capital markets.

Stage of economic development. Ding et al. (2007) claim that countries at different stages of economic development are expected to have different accounting practices. Archambault and Archambault (2003) declare that firms need to raise more capital when the economy becomes more developed. As a result, the need for financial reporting increases. In his early study, Nobes (1983) states that economic factors (the degree of development of the economy and the nature of the economic system) are influential factors on the financial reporting practices in developing countries. Nobes (1998) also observes that the level of economic development is not the key predictor for the split between Anglo-Saxon accounting and continental European accounting.

Roudaki (2008) and Mashayekhi and Mashayekh (2008) find evidence for the effect of economic development on the accounting profession and standard setting in Iran.

In the Arab world, several studies emphasize the effect of economic development on financial reporting frameworks. Al-Shammari et al. (2007) and Al-Shammari et al. (2008) find that economic growth has encouraged the adoption of the IFRSs by GCC states. Along the same lines, HassabElnaby et al (2003) and HassabElnaby and Mosebach (2005) confirm the impact of the stage of economic development on the development of accounting in Egypt. Naser et al. (2006) conclude that the degree of social disclosure in Qatar is related to the stage of economic development.

<u>International trade</u>. The financial reporting approaches that are used by international trade partners affect the national financial reporting framework. Irvine (2008), for example, argues that trade partners pushed the UAE to adopt IFRSs. The trade relationships between the UAE and European countries put a pressure on the UAE to adopt these standards. The influence of international trade is also confirmed by other studies (e.g. Gray, 1988; and Irvine, 2008).

In summary, accounting standards and practices are affected by economic factors, such as privatization, economic openness, the stage of economic development and international trade. These factors determine the characteristics of the accounting information needed, and accordingly the characteristics of financial reporting frameworks.

#### 3.2. Political environment

Roberts et al. (2005) make a link between the political and the economic system. They consider the political-economic system one of the most important determinants of financial reporting regulations and practices. The authors believe that financial reporting is affected by the way a country organizes its economic relations. The type of political system and accordingly the intervention of the government in economic issues impact the financial reporting framework used.

Almost all developed countries have well-established political systems which are based on high levels of democracy, freedom, political stability and a culture of accountability. These political characteristics are reflected in their business systems including their financial reporting frameworks. On the other hand, developing countries often lack some or all of these characteristics. Even if they are present, their political systems are often exposed to change.

Nobes (1998) claims that political systems do not affect accounting in developed countries since they are probably sufficiently homogeneous in these countries, but they may affect it in developing countries. In the accounting literature, factors such as the political structure, political and civil freedom, political participation, and democracy are believed to affect, mainly indirectly, the financial reporting frameworks, especially in developing countries.

Ball et al. (2003) find it likely that political factors influence financial reporting practices in the East Asian countries. HassabElnaby et al. (2003) point out that in periods of democracy there is more development in accounting in Egypt. They consider political freedom and democracy as the main components of the political environment. Irvine and Lucas (2006) stress that a culture of little or no regulation and no accountability to voters (no general suffrage) is a challenge for the implementation of IFRSs in the UAE.

Archambault and Archambault (2003) find that disclosure increases with political freedom. They measure political freedom by political rights and civil liberties. Political rights are the ability to participate in the political process through such means as voting. Civil liberties represent individual freedom from state control. They also find evidence that the political structure, such as democracy or monarchy, influences the degree of political freedom.

In summary, accounting systems are likely to be affected by the political environment, especially in the developing countries. In the accounting literature, the distinction made between the factors contributing to the political environment is not always clear. Also, sometimes one factor has different meanings or groups together different factors. The factors that are generally considered are:

- political stability,
- accountability, and
- democracy.

## 3.3. Legal and tax environment

The legal and the tax environment have a direct effect on how accounting is regulated.

Many authors find that the legal environment has a significant influence on the development of accounting standards and practices (e.g. Gray, 1980; Larson and Brown, 2001; Rahman et al., 2002; Needles et al., 2002; Perera and Baydoun, 2007; and Roudaki, 2008).

The influence of the legal environment on accounting has been addressed in the accounting literature mainly through the distinction between 'common law' and 'code law' systems. The type of legal system can substantially influence the orientation of accounting regulations and of the related laws such as commercial law and company law. It thus determines the form and the objectives of the financial statements.

The main differences between the two types of systems and how accounting standards and practices reflect these differences, are amply discussed in the accounting literature (e.g. Hoarau, 1995; Ball et al., 2000; Archambault and Archambault, 2003; Ball et al., 2003; Ashraf and Ghani, 2005; and Mashayekhi and Mashayekh, 2008).

Financial reporting frameworks in common-law countries are oriented towards fair presentation, transparency, and full disclosure (known as the Anglo-Saxon model). Standard-setting and enforcement are primarily private-sector functions. The interference of the public authorities is limited. The stock market is the dominant source of financing for corporate entities. Therefore, financial statements are primarily intended to satisfy shareholders and investors. The legal framework emphasizes shareholders' rights.

By contrast, governments in code-law countries establish and enforce national accounting standards, typically with representation from major political groups such as labor unions, banks and business associations. Banks or governments are the main sources of financing. Therefore, financial reporting is geared towards creditor protection (known as the Continental model). Financial reporting is characterized by low disclosure and an alignment of financial accounting with company law and taxation.

Many studies confirm the effect of the two types of legal systems on several accounting issues, including the adoption and application of IFRSs. Jaggi and Low (2000) find that common law countries are associated with higher financial disclosure. In turn, Prather-Kinsey et al (2008) find that common law-based domestic standards are more comparable to IFRSs while code law-based accounting standards deviate more from IFRSs. Consequently, companies domiciled in code-law countries must make more significant changes in financial reporting when adopting IFRSs. The use of IFRSs has more significant market consequences for firms from code-law countries than for firms from common-law countries. Perera and Baydoun (2007) contend that the differences between the legal system in Indonesia and in Anglo-Saxon countries make the acceptance of IFRSs in Indonesian society problematic. Ball et al. (2000) find that code-law

income is substantially less timely and less conservative than common-law income. They state that IFRSs are widely viewed as reflecting a common-law view of transparent timely disclosure.

The tax environment also has an impact on the financial reporting framework. In some countries, financial reports effectively reflect tax laws (Ali and Hwang, 2000). Nobes (1983) claims that the impact of tax rules on accounting measurement is an influential factor. Mashayekhi and Mashayekh (2008) find that the tax law affects the accounting development in Iran and as such presents a challenge for accounting standard setters. Hung and Subramanyam (2007) declare that IFRSs are independent of tax reporting considerations. Samaha and Stapleton (2008) reveal that the degree of compliance with items of IFRSs that conflict with Egyptian tax law is lower than for items of IFRSs that do not conflict with the tax law. Other authors also find evidence for this influence of tax laws on the financial reporting rules and practices (e.g. Gray, 1980; Ali and Hwang, 2000; Larson and Brown, 2001; Haverals 2007; Roudaki, 2008; and Samaha and Stapleton, 2008).

#### 3.4. Professional environment

The quality of the financial reporting is affected by the degree of development of the accounting profession. The development of the accounting profession is a broad concept. It can be measured in several ways. Important indicators are:

- the adequacy of accounting standards,
- the presence and the importance of professional bodies,
- the adequacy of accountants' qualifications, and
- the availability of legal and regulatory backing.

Accounting standards. Chand and Patel (2008) assert that the existing accounting standards and practices are founded in traditions. They exercise an important influence on the convergence process with IFRSs. Lundqvist et al. (2008) add that the existing accounting practices may cause inconsistent application of these standards.

<u>Professional bodies</u>. The differences in financial reporting frameworks are caused by several factors including the size and power of the accounting profession (Gray, 1988). Askary (2006b) points out that national accounting and auditing professional bodies should be actively engaged in developing accounting and auditing functions. Ali and Hwang (2000) find that the

value relevance of financial accounting data is lower for countries where private sector bodies are not involved in the standard setting process. Joshi et al. (2008) assert the role of these bodies in enforcing the accounting standards. Roudaki (2008) states that a powerful accounting profession is necessary for the development of accounting and auditing standards. The lack of powerful accounting professional bodies is a barrier to standard setting in developing countries such as Iran.

Accountants' qualifications. Several studies (e.g. Chen et al., 2002; Spathis and Geograkopoulou, 2007; and Lundqvist et al., 2008) confirm the effect of accountants' qualifications on the development of financial reporting frameworks and on the application of IFRSs. Chand and Patel (2008) find that the availability and experience of professional accountants influences the convergence towards IFRSs.

Legal and regulatory backing. Accounting quality is low in the absence of effective regulatory and enforcement mechanisms. Needles et al. (2002) find that the regulations and control of the quality of audits are the critical factor in achieving high quality financial reporting. Ashraf and Ghani (2005) argue that enforcement mechanisms (interaction between the legal system, the financial reporting framework and the sub-system within the financial reporting framework) are key in improving the quality of financial reporting in Pakistan. Rahman et al. (2002) claim that the effectiveness of enforcement is not less important than the standards themselves in influencing the harmonization of accounting practice. The importance of enforcement mechanisms in pushing or impeding the development of accounting is emphasized in many other studies (e.g. Ball et al. 2003; and Samaha and Stapleton, 2008).

## 3.5. Business environment

The business environment determines to a large extent the form and the content of the information needed and thus helps shape the financial reporting framework rules and practices. We will consider the following factors of the business environment:

- firms' characteristics.
- degree of capital market development, and
- prevailing type of financing system.

<u>Firms' characteristics</u>. In the accounting literature, different firm characteristics are believed to affect the type of accounting information needed and hence the necessary features of

the financial reporting framework. The most influential characteristics are size, industry sector, legal form, ownership concentration, and listing/cross-listing status.

Size. Many authors assert that firm size is an important determinant for the disclosure level and the financial reporting framework in general (e.g. Jaggi and Low, 2000; Joshi and Al-Mudhahki, 2001; Joshi and Bremser, 2003; Naser et al., 2006; and Elsayed and Hoque, 2010). Boesso and Kumar (2007) believe that large firms disclose more information because they have a wider ownership base than smaller companies. Rahman et al. (2002) add that large firms have a greater amount as well as a wider variety of activities than small firms, leading to greater variability in practices among them as they have more to disclose. Large firms will have a greater need for using a variety of accounting policies. Therefore, across countries there will be a higher variability of disclosure and measurement practices for large firms than for small firms.

International accounting harmonization is also affected by the firm size. Many studies conclude that firm size affects the adoption of IFRSs and the degree of compliance with their requirements. Hung and Subramanyam (2007) suggest that early adopters of IFRSs are larger than the typical German firm. Joshi and Ramadhan (2002) confirm the effect of company size on the degree of relevancy of IFRSs for Bahraini companies. Floropoulos (2006) shows that company size affects compliance with IFRSs and the familiarity with these standards. The effect of company size on the compliance degree with the requirements of IFRSs is also confirmed by other studies (e.g. Aljifri and Khasharmeh, 2006; Jagannath and Nanjegowda, 2008; and Al-Shammari et al., 2008).

*Industry sector.* Financial reporting frameworks and accounting harmonization are influenced by the dominant industries (e.g. Rahman et al., 2002; Haniffa and Cooke, 2002; Boesso and Kumar, 2007; Al-Shammari et al., 2008). Industries such as oil and banking are influential in orienting the accounting standards and practices.

In the second half of the last century, accounting was introduced to some developing countries following the appearance of the oil industry. The effect of this industry is still perceived in the financial reporting frameworks of these countries. Ritchie and Khorwatt (2007) indicate that the British and American oil companies in Libya have strongly influenced Libyan accounting practices. They add that this effect is still reflected in the financial reporting used in Libya.

The high risk associated with the operations of banks and other financial institutions requires the adoption of strict regulations. Several quantitative and qualitative disclosures are required. Thus, the prevailing of the banking industry is an indicator for the level of disclosure and accordingly the content of the financial statements. Elsayed and Hoque (2010) argue that the level of disclosure by firms in highly regulated industries such as banking, insurance and securities will be primarily conditioned by regulatory practices.

Legal form. Tzovas (2006) declares that accounting policies are affected by the legal status of the firm (public or private). Based on the legal form, Abd-Elsalam and Weetman (2007) distinguish between two types of companies listed on the Egyptian Stock Exchanges (ESE): public sector companies and private sector companies. Public-sector companies have been listed on the ESE in preparation for full privatization. These companies are more in the public eye through news coverage and regular governmental evaluation for privatization programs. They are likely to disclose more than private-sector companies. The same results are found by Elsayed and Hoque (2010). They provide evidence that the voluntary disclosure of non-financial listed companies on the ESE is affected by a company's legal form. In another study, Abd-Elsalam and Weetman, (2003) find further evidence that compliance with accounting standards by companies is affected by the legal status of the company.

Ownership concentration. There is less need for disclosure with a small number of stockholders. Rahman et al. (2002) find that firms with lower shareholder concentration disclose more. Haniffa and Cooke (2002) add that disclosure is greater for companies with diffused ownership because it helps owners to monitor behavior of management as predicted by agency theory. In the same context, Rahman et al. (2002) find that ownership concentration is negatively correlated with voluntary disclosure.

Listing/cross-listing status. Generally, listed companies disclose more than unlisted companies because they seek to meet the information needs of different stakeholders. A company's disclosure policy is influenced by the disclosure policies of the exchanges it is trading on (Archambault and Archambault, 2003). With respect to the adoption of IFRSs, listed firms tend to comply with IFRSs earlier and more easily than unlisted companies. The compliance of these firms with IFRSs is also greater than for the unlisted firms (Floropoulos, 2006).

Companies that are looking for more capital sometimes go for cross-listing on foreign stock exchanges. These companies disclose more information because they have to comply with foreign regulations and must meet the needs of capital markets to obtain funds on favorable terms (Haniffa and Cooke, 2002). Foreign stock exchanges may require more information to be disclosed than local stock exchanges. These companies also tend to disclose more since this will lead to greater investor confidence (Elsayed and Hoque, 2010).

The adoption of IFRSs is also affected by cross-listing. Multiple listing on foreign stock exchanges affects the multinationals' compliance with IFRSs (El-Gazzar et al., 1999). Taylor and Jones (1999) argue that the use of the IFRSs is a primary method to facilitate cross-border listings of securities. Hung and Subramanyam (2007) confirm the effect of cross-listing on the adoption of IFRSs by German firms. They find that firms with cross-listed shares were more inclined to adopt IFRSs than other firms.

<u>Capital market development</u>. Capital markets influence accounting rules and enforcement practices. In some counties, accounting is regulated mainly by the regulations of capital markets. Furthermore, the push for changes in accounting practices appears to come from the capital markets (Perumpral et al., 2009). Ding et al. (2007) link the financial reporting quality with the capital market development. They indicate that the mere changing of the accounting standards may not be sufficient to substantially improve the financial reporting quality unless changes to the capital market development are brought about simultaneously.

Archambault and Archambault (2003) argue that the nature of capital markets influences the information requirements of investors. Companies from countries with large capital markets disclose more information than companies from countries with small capital markets. The effect of capital markets on disclosure is confirmed by Roudaki (2008). He argues that capital markets play an important role in persuading companies to use accounting standards effectively and in enhancing their financial reporting frameworks towards more disclosure, uniformity and comparability.

Other authors also point to the influence of capital markets on accounting rules and practices including the adoption of IFRSs (e.g. Adhikari and Tondkar, 1992; Chamisa, 2000; Needles et al., 2002; Zeghal and Mhedhbi, 2006; and Mashayekhi and Mashayekh, 2008). However, Jaggi and Low (2000) reveal that the degree of capital market development is not associated with the financial disclosures. HassabElnaby et al. (2003) also finds no relationship between the development of the equity market and the development of accounting in Egypt.

Type of financing. The type of financing determines to whom companies must orient the financial disclosure. Hence, it affects the form and the content of the financial statements. In general, there are two types of financing systems, the equity (market) based system and the debt (bank) based system. Several studies confirm the importance of the financing system on the financial disclosure and/or the adoption of IFRSs (e.g. Hoarau, 1995; Archambault and Archambault, 2003; Naser et al., 2006; and Tzovas, 2006).

Ali and Hwang (2000) cite Berglof (1990) who outlines the differences between bank-based and market-based systems and considers the effect on disclosure. In bank-based systems, businesses generally have very close ties to their banks. Banks supply most of their capital needs, have concentrated and long-term debt and equity holdings, and have direct access to company information, reducing the demand for published financial statements. In contrast, in market-based systems, there are numerous and diverse investors without direct access to company information. Investors are likely to rely heavily on financial accounting disclosures to value securities and to monitor management.

Nobes (1998) indicates that the financing system determines the purpose of the financial reporting. The difference of purpose will lead to differences in accounting practice. He identifies four types of financing systems: a credit-based system, a credit-based system with a large amount of listed debt with outsider owners, an equity-based system where most shares are owned by insiders, and an equity-based system where most shares are owned by outsiders. The equity/creditor split leads to different kinds of objectives for financial reporting. Nobes adds that financial reporting frameworks serving equity markets are required to provide relevant information on performance and the assessment of future cash flows in order to help investors make financial decisions. These financial reporting frameworks are characterized by a high level of disclosure and independence from tax accounting. On the other hand, the level of disclosure is low in the financial reporting frameworks serving creditors. These systems are oriented to meet the needs of creditors and tax authorities who can obtain needed information through means other than external financial reporting.

Rahman et al. (2002) underscore the effect of the diversity in financing systems on accounting harmonization. They state that firms with higher equity disclose more information in terms of both amount and variety. This, in turn, leads to more measurement methods being used and greater variety in the use of measurement methods. The consequence of this would be

greater variability in the use of disclosure and measurement methods between firms of countries where equity financing is high in comparison to debt financing. El-Gazzar et al. (1999) find that firms complying with IFRSs employ more equity financing, relative to non-IFRSs firms. Joshi and Bremser (2003) provide evidence supporting the effect of the type of financing system on the adoption of IFRSs (i.e. IAS 34: Interim Financial Reporting) by Bahraini companies.

Perera and Baydoun (2007) argue that IFRSs are designed to facilitate a particular financing system, the 'equity-outsider system'. In equity-outsider systems, commercial pressures give strong power over financial reporting to professionals. Rules are set by professional accountants, independent bodies, stock exchanges and other equity market regulators.

#### 3.6. Cultural environment

A considerable body of prior studies addresses the relationship between the financial reporting framework and cultural environment. The most widely known studies are by Hofstede (1980, 1983, and 1984) and Gray (1988).

Hofstede (1984) identifies culture as the collective programming of the mind which distinguishes the members of one group or society from those of another. He highlights four dimensions of international differences in cultural values relating to the environment of a country's financial reporting framework. These are strong versus weak uncertainty avoidance, large versus small power distance, masculinity versus femininity, and individuality versus collectivism. In turn, Gray (1988) explores the extent to which international differences in accounting may be explained and predicted by differences in cultural factors. He proposes a framework which links culture with the development of financial reporting frameworks internationally. Based on Hofstede's cultural dimensions, Gray identifies four accounting subcultural dimensions, namely professionalism versus statutory control, uniformity versus flexibility, conservatism versus optimism and secrecy versus transparency. The first two dimensions describe attitudes toward regulation and the type and the level of control that is preferred. The third dimension is related to attitudes towards measurement. The fourth dimension is concerned with attitudes towards disclosure.

The Hofstede-Gray model has been used in many studies to examine the effect of culture on accounting (e.g. Amat et al., 1999; Jaggi and Low, 2000; Dahawy et al., 2002: HassabElnaby and Mosebach, 2005; Askary, 2006b; and Abd-Elsalam and Weetman, 2007). MacArthur (1996) investigated the influence of cultural factors on the corporate comment letters sent on the IASC's

E32 (Comparability of Financial Statements). He finds that cultural and accounting sub-cultural factors affect the international accounting preferences of corporate management. Dahawy (2009) confirms the effect of cultural values on disclosure. He finds that the degree of disclosure by Egyptian companies is affected by the highly secretive Egyptian culture. Qu and Leung (2006) find that Chinese corporation disclosure is affected by the changes in cultural and social norms. In the same context, Perera and Baydoun (2007) declare that Indonesia's accounting profession is likely to rank highly in terms of both conservatism and secrecy, given the lower level of individualism and professionalism and the large power distance in Indonesia. This results in a low level of transparency in financial reports.

The effect of culture on accounting harmonization is highlighted widely in the accounting literature. Archambault and Archambault (2003) find a strong relationship between disclosure and cultural systems. Culture influences how people perceive situations and organize institutions. They conclude that acceptance of mandated disclosures from a body such as the IASC may meet with resistance. Several other studies (e.g. Zeghal and Mhedhbi, 2006; Baker and Barbu, 2007; and Perumpral et al., 2009) stress the effect of culture on the success of international accounting harmonization.

Askary (2006a) argues that different forms of culture prevent unified accounting practices globally. He defines the cultural environment as a national (or regional) system comprising language, religion, morals, values, attitudes, law, education, politics, social organization, technology, and material culture. He asserts that the interaction of these cultural elements on accounting is expected to be exceedingly complex. In turn, Hill et al. (1998) divide cultural factors into two categories. The 'constants' are factors inherent to the culture over time. They tend to be dominant and are very resistant to change. Examples include geography, currency, social norms, and traditions. The 'changeables' are factors that are more readily changed. They include GNP, technology, employee morale, and education level.

Religion is a main cultural component and it thus affects the financial reporting framework. The effect of religion on accounting is more likely in developing countries (Nobes, 1998), especially Islamic countries. Islam exerts a deep influence on Muslim societies and individuals. The influence of Islam on its followers extends to business affairs. "Islam does not recognize the separation between spiritual and temporal affairs, and considers commerce as a matter of morality and is subject to the precepts of the *Shari'a*" (Karim, 2001, p. 172). Business structure

and financing in Islamic countries are affected by the *Shari'a* law (see for example, Hamid et al., 1993; Lewis, 2001; Mellahi, 2001; and Perera and Baydoun, 2007).

Accounting has also been affected by the teachings of *Shari'a*. Several studies confirm that Islam influences the structure, the underlying concepts and the mechanisms of accounting in the Islamic world (Pomeranz, 1997; Sulaiman, 2003; Roberts et al., 2005; Kamla et al., 2006; and Kamla, 2007). Hamid et al. (1993) argue that the Islam's potential for influencing accounting policy is illustrative of religion as a confounding element in the analysis of national idiosyncrasies in accounting practice and in deconstructing the impediments to international harmonization. The authors believe that religion in general and Islam in particular have the potential to exert a profound influence on the international harmonization of accounting.

Like other aspects and systems, the development of accounting in a country may be influenced by language. Several studies such as Needles et al. (2002), Abd-Elsalam and Weetman (2003), Aljifri and Khasharmeh (2006), and Tyrrall et al. (2007) highlight the importance of language in the development of financial reporting frameworks in general and the achievement of accounting harmonization in particular.

#### 3.7. Educational environment

The more sophisticated the level of the education system is, the more the other systems, including accounting, are developed. In the accounting literature, the level of education is measured as the general literacy rate, the level of accounting university education and/or the level of accountants' knowledge in practical and academic related issues.

Several studies emphasize the impact of the level of education on the financial reporting frameworks used in different countries (e.g. Zeghal and Mhedhbi, 2006; Al-Fehaid and Higson, 2008; Chand and Patel, 2008; and Samaha and Stapleton, 2008). Irvine and Lucas (2006) and Abd-Elsalam and Weetman (2007) consider the availability of a high quality education system as a prerequisite for the adoption of IFRSs.

## 3.8. International environment

The local financial reporting framework is not only influenced by the local environment. The international environment may contribute heavily in shaping the characteristics of financial reporting frameworks, especially in developing countries. Accounting in a particular country can be developed as a result of the country's engagement in the international community.

International parties (countries, organizations) may encourage or urge a country to use particular rules of accounting.

Most financial reporting frameworks used in developing countries have been directly imported from the West through western multinational companies, colonialism in the past, aid and loan agencies from the industrialized nations and the influence of local professional associations, usually founded originally by western counterpart organizations (Baydoun and Willett, 1995).

Big international accounting firms play an important role in developing accounting internationally. They are enthusiastic supporters of accounting harmonization. Generally, international accounting firms are bigger, more experienced and have better-trained staff than local firms. It is argued that using international accounting firms instead of local ones affects the level of disclosure. Wallace and Naser (1995) suggest that bigger accounting firms are less likely than smaller accounting firms to depend on (or have a bonding relationship with) clients. The apparent lack of bonding with clients enables big audit firms to demand disclosure in greater detail. Haniffa and Cooke (2002) believe that international accounting firms are more likely to influence companies to disclose additional information because they have greater expertise and experience and also because they want to maintain their reputations. The effect of the international accounting firms on accounting is also confirmed by Dahawy (2009) in Egypt. He finds that affiliation of the auditor with an international firm is the main variable that affects the degree of disclosure reported by the companies. Internationally affiliated auditors are superior to the local accounting firms because of their adherence to the disclosure standards of the international firms. These are usually higher than the disclosures required by the Egyptian standards.

Some of the prior studies discuss the role of international accounting firms in perusing accounting harmonization. According to Rahman et al. (2002), the multinational auditors helped establish the IASC in the early 1970s and they still belong to the main supporters of its successor (the IASB). Chand and Patel (2008) found that the presence of international accounting firms is one of the attributes that influence convergence with IFRSs. In the same context, Irvine and Lucas (2006) and Irvine (2008) argue that the adoption of IFRSs by the UAE was inspired by the international accounting firms. Joshi and Ramadhan (2002) and Joshi et al. (2008) confirm this for Bahrain.

Following the economic globalization, the role of the international organizations has become more important. Organizations such as the World Bank, the IMF, and the World Trade Organization (WTO) help shape the main characteristics of the global economy. Accounting also is affected by these organizations.

Elsayed and Hoque (2010) indicate that the level of a company's voluntary disclosure in Egypt is positively and significantly associated with the perceived influence of (a) international socio-political institutions (such as the United Nations, the European Union, the Association of South East Asian Nations, the WTO, and the OECD), (b) IFRSs, and (c) international financial institutions (such as the World Bank and the IMF). The results of Elsayed and Hoque (2010) are confirmed by other studies in other countries such as Tyrrall et al. (2007) in Kazakhstan, Perumpral et al. (2009) in India, and Ashraf and Ghani (2005) in Pakistan.

Mashayekhi and Mashayekh (2008) argue that joining the WTO is a gradual, multi-step, and long process with considerable impact on the trading environments of member countries. Since about 97% of world trade is supervised by such an organization, with its own rules and regulations, it should not be ignored. Mashayekhi and Mashayekh add that financial reporting has gained importance in Iranian companies following international pressure from the World Bank and the IMF.

In the same context, Irvine (2008) claims that the World Bank and the IMF are deeply embedded in the structures of capitalism, providing loans and assisting in economic development, arguably from beneficial motives. The author indicates that there is no doubt that the World Bank has pushed countries to adopt IFRSs or develop national standards based on IFRSs, in some cases making the adoption of IFRSs a requirement for their loans. Chamisa (2000) agrees that the World Bank and the IMF are increasingly insisting on the use of IFRSs by the recipients of their finance.

Some studies highlight the important role of multinational companies (MNCs) in encouraging the adoption of IFRSs. Al-Shammari et al. (2007) and Al-Shammari et al. (2008) indicate that the pressure from MNCs is one of the reasons that led the governments of the GCC member states to adopt IFRSs. Irvine and Lucas (2006) and Irvine (2008) confirm the role of MNCs in the adoption of IFRSs by the UAE. The same results are found by Joshi and Ramadhan (2002) in Bahrain.

Several studies focus on the effect of colonization. According to Chamisa (2000), the colonist countries imposed, willy-nilly, their economic system, professional associations, languages, religion, customs, and culture on their respective colonies. Nobes (1998) considers the colonial inheritance as probably the major explanatory factor of the financial reporting frameworks in many countries.

The financial reporting frameworks in many countries are inherited from their former colonizers. Kamla (2007) mentions that as a result of the British colonial influence from 1882 to 1956, the training of accountants, the organization of the accounting profession, the law regulating companies, disclosure standards, and the financial reporting practices in Egypt were based on those of the UK. The UK exported its culture, including language, economic, legal and educational systems, to its colonies, thus bequeathing them (for better or for worse) similar institutional environments. As a result, many former British colonies have found IFRSs to be largely or partially relevant to their national needs (Tyrrall et al., 2007).

Along the same lines, Ashraf and Ghani (2005) describe how the colonial past and later the international financial institutions such as the IMF played key roles in shaping accounting and reporting practices in Pakistan. They argue that British trained accountants are a major source of influence on accounting practices in former British colonies. They consider the colonial background of a country as a key explanatory variable that has to be explicitly incorporated into any model that tests the relationship between culture and financial reporting frameworks.

#### 4. Conclusion

In this article, our main aim was to explore the environmental factors that are mentioned in the international accounting literature as affecting accounting diversity. Our review reveals that many environmental factors contribute to determining the characteristics of the financial reporting frameworks. These factors can be classified into several groups. We identified the economic environment, the political environment, the legal and tax environment, the professional environment, the business environment, the cultural factors, the level of education, and the international factors including past colonization, as influential factors that affect the financial reporting standards and practices. The existence of such diversity in environmental factors has an important implication for accounting harmonization. It is essential that accounting policy-setters,

and more specifically the IASB, are aware of the environmental differences between countries in order to better achieve the overall objective of international accounting harmonization.

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