Cross-cultural impact on the budgeting cycle: A preliminary analysis of Anglo-American and Libyan companies operating in Libyan oil sector

Abstract

Globalization is causing the rapid integration of markets, nations, and technology, which facilitates faster contact between people, corporations, and nations. However, there is a failure to notice cultural differences that exist between workforces across nations. Thus all staff needs to have cultural sensitivity, which could be helped by studying cross-cultural differences. Current understanding of how and why specific budget aspects and budgeting processes are different could be attributed to cultural differences. This study utilizes societal cultural dimensions identified by Hofstede to identify differences in budgets and budgeting process between Libyan and Anglo-American companies operating in Libyan oil sector. Some preliminary analysis is discussed.

Key words: Culture; Cultural dimensions; budget; budgeting process; Libyan oil sector

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1. Introduction

In the past two decades there have been considerable concerns about the influence of culture on many aspects of an organization. These concerns are typically because of changes in the business environment as well as the variety of organizations and their workplaces (Erez, 1994 as cited in Aycan 2000; Miroshnik 2002). Because of globalization, understanding culture's impact on a business' environment in multinational corporations has attracted considerable research interest (Douglas et al. 2007). Hofstede (1983) states that "Twenty or even 10 years ago, the existence of a relationship between management and national cultures was far from obvious to many, and it may not be obvious to everyone even now". The subject of cultural diversity is most relevant for multinational corporations which have many subsidiaries across the world (Douglas et al. 2007). Recognizing cultural differences is appropriate for managing international corporations and disregarding these differences is unproductive and short-sighted leading to marginalizing talent in multinational corporations (Radebaugh, Gray et al. 1997; Miroshnik 2002). Many researchers conclude that managers of multinational companies should understand cultural difference in countries in which they operate because many management behaviours and attitudes are embedded in culture (Miroshnik 2002; Douglas et al. 2007).

There are many challenges facing multinational companies in which foreign subsidiaries operate globally including the important impact of heterogeneous cultural, institutional, and organizational context. Managers responsible for these companies' local operations should adapt practices according to localized conditions. This is critical in terms of maintaining their legitimacy and acceptance as perceived by local stakeholders (Sauers, Lin et al. 2009).

Interactions between workers and supervisors will occur in workplaces. In this context different preferences will manifest in the workplace where different cultures interact in organizations that operate internationally (Bing 2004) especially with budgeting that involves a variety of activities which have an obvious human dimension. Milani (1975) argues that human aspects are of paramount importance to budgeting because a budget does not exist without people. Budgets are prepared, controlled, and revised by people to facilitate management's functions. In this regard budgets and budgeting process are influenced by employees' behaviours (Milani 1975). When an organization operates in different countries or if they have subsidiaries overseas (especially multinational corporations), management should understand the importance of human aspects (including culture) when dealing with budgets and budgeting processes. The budgetary process is heavily dependent on human involvement, participation and judgment (Douglas et al. 2007) which can be affected by values, background, religion, education, language, and culture.

A better understanding of different cultures could assist managers to participate and deal more effectively with employees in a suitable way while undertaking the budgeting process. However, the growth in international trade between Anglo-American countries and Libya in recent years necessitates a better understanding of customs and expectations in cross-cultural budgeting systems. Because culture is so important when dealing with people from different cultures (Chang 2003). This study is also motivated by the need to close the culture gap that most likely exists between Libyan and Anglo-American companies in regards to the budgeting process. Libya is considered to be a developing country and has received little attention in international studies of accounting practices. Libyan companies are differentiated from Anglo-American companies by being classified as having poor management performance, governance structure, unsophisticated users and a weak accounting profession (Baralexis 2004).

From a review of the literature it seems very little research has focused on cross-cultural studies in Arab and North Africa countries. There is a dearth of research addressing the impact of social culture on the budgeting process and comparing Western cultures (developed countries) such as Anglo American with non-Western cultures (developing countries) and with North Africa in general and Libya in particular. The impact of culture differences on budgeting has been examined in many developed countries and many of these studies have been restricted to the manufacturing industry (Sauers, Lin et al. 2009).

2. Justification for choosing Libyan and Anglo-American cultures

From the literature it seems that there is a critical lack of research on cultural differences in the oil industry. Despite its tremendous importance in both developed and developing countries the oil industry has not been studied to the same extent. Ruud, De and Kay (2008) state that "The impact of cultural diversity on business efficiency is certainly not new to this business, but has steeply intensified due to globalization". Furthermore, the numbers of multicultural workforce employees in companies that operate in oil sector increase the number of senders and receivers which require precise and concise information and special techniques to convey information accurately (Weijermars, de Jong et al. 2008). Paláu (2001) also argues that the most influential obstacle that holds back harmonization and harmony in budgeting in organizations is often related to culture or more specifically cultural differences. This requires a great understanding of cultural differences when communicating with individuals from different cultural backgrounds. Therefore, research is needed to better understand cultural differences and similarities.

Anglo-America and Libya are culturally different in many respects, including religion, predominant ethnic group, language, political system, economic systems, traditions, attitudes, and external environments. In intercultural studies there is tendency to view Anglo-American and Arab cultures as cultural opposites (Yasin and Stahl 1990; Zaharna 1995). Employees

working in these companies have different languages, educations systems, management style, backgrounds, and values. According to Hofstede's (2001) dimensions, different cultures behave differently in managing their business including their budgets. Hofstede (1991) also mentions that culture impacts on a person's views on many topics, including views of the budgeting process.

Libyan history and economy in brief

Libya is an Islamic Arab oil-producing developing economy with a total population of around six million (Oxford 2008). Libya joined the Organization of Petroleum Oil Exporting Countries (OPEC) in 1962 (St John 2003; Otman 2008; Yahia and Saleh 2008). Its economy is heavily dependent on oil revenue and oil revenue represents more than 95 percent of Libyan export income, which contributed 60 percent to annual GDP during the period 1963-2006 (Heitmann 1969; Yahia 2008).

In 1959 the United Nations appointed the economist Benjamin Higgins to draw up a plan for economic and societal development for Libya. Higgins in his textbook of economic development, stated that "If Libya can be brought to a stage of sustained growth, there is hope for every country in the world" (Higgins 1959, cited in Gurney 1996). In the period prior to 1951, Libyan history was marked by severe levels of poverty until the discovery of oil. Despite the discovery of oil its remedial effects were slow to develop due to a lack of production and exports. This was primarily caused by a shortage of capital and expertise particularly management and accounting expertise. The latter was caused by academic underdevelopment in the country (Clarke 1963). There were just 16 students who graduated from universities in 1949, and there were no PhD holders in the country (Gurney 1996; Abouzied 2005). The industry was very poor and there was a scarcity of capital and skills to manage it.

Oil is considered as the first resource for power use in the world. Oil is also deemed to be the resource that contributes most to the national income of oil producing countries. In this regard, Libya is considered as having the largest proven oil reserves in Africa. It holds 3.34 % of the world's reserves. Libya also is a major oil producer and one of Europe's biggest North African suppliers. Stjohn (2007) states that "Libyan is located closer to European markets than its Middle Eastern competitors. It is abundantly clear Arab countries, Libya included, have noticeably changed after discovery of oil. These changes can be seen in their lifestyles, economic systems, societal structures, education systems, and management practices (Ali 1990).

In 1992 travel to and from Libya was prohibited by UN Security Council when the embargo was imposed on Libya. (Hufbauer, Schott et al. 2001). These authors state that "A year later, the United Nations banned the sale of petroleum equipment to Libya and froze all nonpetroleum-related Libyan government assets abroad". In 2003 after the Security Council lifted sanctions on Libya there was an increase in the imperative for the Libyan economy to benefit from international trade. This was in order to maintain the Libyan economy and pursue the objective of increased international investment especially in the oil sector (Boucek 2004).

The geological factors include onshore oil fields close to Europe. The natural flow of oil towards the sea has helped Libya to produce relatively cheaply compared to many other oil producers. The central geographical location of Libya, between the developed economies in the West and growing economies of North Africa, has reduced transport costs and increased the significance of the Libyan oil market (Yahia 2008). Libyan crude oil is valued for its geographic proximity to Western countries. Anglo-American companies also seek to invest in the Libyan oil sector because about 95% of Libyan exports go to Europe. United States and Western Europe were the largest consumers of oil per day in 2003 (GAO 2006). They also wanted to renew their presence in the Libyan oil sector which they had left three decades prior.

American international companies returned to their original concessions and obtained 11 licenses covering 98,673 km^2 out of 15 areas offered which represented about 78.3% of the total areas offered (Otman 2008).

3. Related literature

Culture is easy to understand but it is difficult to define. There are many definitions of culture in the literature. Most of these focus on a number of elements. Economic systems, attitudes, education systems, laws and legal systems, social rules, associations, enterprises, religious communities, school systems, family structures, habits, art, values, beliefs, morals, ritual practices, ceremonies, and forms are all part of formal culture. Informal culture includes stories, rituals of daily life, gossip and language, customs, habits, resultant behaviour, norms, and artefacts shared by a certain society. These norms govern how people act, how they define themselves, and how they differ from other societies' members. Culture is linked to politics, as an example Croatian nationalism had a strong anti-communist aspect during the years when Croatia was submerged within the Serbian-dominated Yugoslavian communist state. Anti-communist is a fairly recent addition to an age-old culture which has always been strongly nationalistic. Cultures can and do change over time (Hay 2001). They also govern how these shared elements facilitate communication with each other in effective and efficient ways. Moreover, they influence a particular group of people's behaviour and their mental life. (Jennergren 1980; Swidler 1986; Williams 1988; Christie, Kwon et al. 2003; Dahl 2004; Bradford 2005; Hofstede and Hofstede 2005; Twati 2007).

This study uses Hofstede's (2001) model. Hofstede's study is considered to be the most comprehensive study conducted in a large multinational corporation (IBM) operating in more than 72 countries. His study was the largest cross-cultural business survey ever conducted and achieved major interest from business scholars (Chow, Kato et al. 1996; Rodrigues 1996; Yates and Cutler 1996; Sivakumar and Nakata 2001; Thompson 2003; Van Everdingen and Waarts 2003; Bing 2004; Dahl 2004; Silvia 2006). Hofstede's (2001) model is also the most

prominent, well-known, robust, comprehensive, and the most famous among cross-cultural studies as well as the most often cited work in culture research as it helps to differentiate the culture differences from one county to another (Jackson 1995; Chapman 1996; Chow, Kato et al. 1996; Rodrigues 1996; Radebaugh, Gray et al. 1997; Collins, Almer et al. 1999; Sivakumar and Nakata 2001; Thompson 2003; Bing 2004; Dahl 2004; Fang 2006; Kirkman, Lowe et al. 2006; Silvia 2006; Soares, Farhangmehr et al. 2007; Twati 2007; Harris and Carr 2008; Robbins, Judge et al. 2008; Jansen, Merchant et al. 2009). This study used the four dimensions of Hofstede model which are: power distance, uncertainty avoidance, individualism vs. collectivism and masculinity vs. femininity. However, the fifth dimension long vs. short-term orientation was not used because there is no score for Arab cultures for this dimension.

Hofstede's four cultural dimensions

Power *distance* (PD) is defined as "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally. Institutions are the basic elements of society, such as the family, the school, and the community; organizations are the places where people work" (Hofstede and Hofstede 2005).

Uncertainty *avoidance* (UC) is defined as "the extent to which the members of a culture feel threatened by ambiguous or unknown situations" (Hofstede and Hofstede 2005). Uncertainty and anxiety are when you are worried or afraid about something unknown. Individualism-*Collectivism* (IC) is defined as "Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people's lifetimes continue to protect them in exchange for unquestioning loyalty" (Hofstede and Hofstede 2005).

Masculinity *versus Femininity* (MF) is defined as "Men are supposed to be more concerned with achievements outside the home—hunting and fighting in traditional societies, the same but translated into economic terms in modern societies. Men, in short, are supposed to be assertive, competitive, and tough. Women are supposed to be more concerned with taking care of the home, of the children, and of people in general—to take the tender role" (Hofstede and Hofstede 2005). Masculine cultures have separate defined men's and women's roles. By contrast, in feminine cultures, men and women are regarded as equal and quality of life and environment are appreciated more than money.

Ueno and Sekaran (1992) studied the impact of culture on budget control practices in Japan and USA and recommend support for future research to include culture as an explanatory variable. They also indicated that future research will assist managers to effectively manage multinational-companies in different nations. Douglas and Wier (2005) state that "Hofstede's Power Distance and Individualism are expected to influence organizational choices in budgetary system design".

Many researchers have investigated the influence of national culture using one or more of Hofstede's dimensions on budgetary systems; slack creation behaviour in budget; budget control practice; performance of management; incentive to create slack; the opportunity to participate in the budget; and budgeting behaviour comparing more than one culture (Ueno and Sekaran 1992; Tsui 2001; Collins, Holzmann et al. 2005; Douglas and Wier 2005; Douglas et al. 2007; Yee, Otsuka et al. 2008; Oumlil and Balloun 2009).

Budgetary systems are different according to different cultures that vary in values, educational background, beliefs, fundamental attitudes, economic policies, and cultures cluster (Hofstede 1968). Budgeting systems of multinational companies might be modified to suit different cultures in which they work (Radebaugh, Gray et al. 1997).

Even though the influence of budgetary control systems on the effectiveness of organizations and job satisfaction has been critically examined in previous research studies on the influence of cultural variations on budgeting have been rare in this context. The differences between countries are due to different shared norms of individuals in each group coming from different cultures. Budgetary systems are different according to different cultures that vary in values, economic policy and culture cluster. Culture also has the role of shaping organizational and individual values which have been ignored by prior research (Douglas and Wier 2005). Understanding these differences helps management of multinational companies to understand and predict how budgets and budgeting processes and practices will differ from country to country (Ueno and Sekaran 1992) especially when dealing with aspects of budget and budgeting processes such as participation; voice and explanation; propensity to create slack; using fixed or flexible budget; using the rolling budget; basis of rewards; and the attitude towards budget.

4. Research Design

4.1 Research question and conceptual model

It is assumed that both Libyan and Anglo-American companies prepare their budgets to achieve their goals. However, it is not obvious whether companies that operate in the Libyan oil sector are following similar procedures and techniques in budgeting processes. The main research question for this study is *"how and to what extent do societal cultural dimensions affect budgeting processes in Libyan and Anglo-American companies operating in the Libyan oil sector"?*

From the research question the two following research issues emerge:

RI 1: To what extent does each societal cultural dimension affect certain aspects of the budgeting process?

RI 2: To what extent are Libyan and Anglo-American workers aware of the potential influence of culture on the budgeting process?

To attempt to answer these issues, a conceptual model was developed based on the extant literature (Figure 1).

4.2 Hypotheses

According to Hofstede's model (2001) Arab countries are classified as high in PD (Table 1). This means that participation between managers and workers will be expected to be less in such societies. Budget will be imposed on workers from top levels without seeking their subordinates' participation (Hofstede 1968; Milani 1975; Harrison 1992; Bjerke and Al-Meer 1993; O'Connor 1995; Lau and Tan 1998; Shields and Shields 1998; Lau and Buckland 2000; Tsui 2001; Chong and Chong 2002; Douglas and Wier 2005; Hofstede and Hofstede 2005). On the other hand, Anglo-American countries are classified as low in PD. This means that managers seek their subordinates' participation in budgeting process and give them the opportunity to express their ideas and thoughts. Furthermore, managers will explain differences in budgets to their staff. Voice and explanation may be different in Libyan and Anglo-American companies (Ali 1993; Harrison, McKinnon et al. 1994; Magner, Welker et al. 1995; Libby 1999; Hofstede 2001; Miroshnik 2002; Magner, Johnson et al. 2006; Yee, Otsukab et al. 2008). To test these differences between Libyan and Anglo-American companies the study hypothesized:

H1: Participation of workers in the preparation of budgets is higher in Anglo-American companies than in Libyan companies.

H2: Managers of Anglo-American companies will give more voice and explanation to their workers than Libyan companies' managers.

Arab countries are classified as strong in UA whereas Anglo-American countries are classified a weak in UA (Table 1). In societies where UA is strong members of organizations will be afraid of the unknown circumstances and ambiguous situations so they will gather a

lot of information and make lots of rules to decrease anxiety and concern about unforeseen futures (Ueno and Sekaran 1992; Harrison, McKinnon et al. 1994; Van der Stede 2000; Hofstede 2001). Long-term planning will be used in strong UA societies; also long-term budget will be favoured. In societies where UA is weak, members of these societies will be less anxious and worried about the unknown (Ueno and Sekaran 1992; Harrison, McKinnon et al. 1994; Van der Stede 2000; Hofstede 2001). Short-term planning will be favoured in weak UA societies and managers will use a rolling budget and flexible budget. Using rolling budgets to improve performance allows managers to evaluate their subordinates during short periods of time when variances occur in order to avoid such variances early and try to solve promptly any deviations arising in the previous period (Ueno and Sekaran 1992; Harrison, McKinnon et al. 1994; Hofstede 2001; Douglas and Wier 2005). Slack in a budget is related to UA. In societies where UA is high managers will create slack in a budget to reduce unknown futures by having some extra resources and to resolve information asymmetry through private channels so that "face" can be maintained (Douglas and Wier 2005; Hofstede and Hofstede 2005; Yee, Otsuka et al. 2008). To examine the influence of uncertainty avoidance on budgeting process in both Libyan and Anglo-American companies hypotheses three, four and five will be tested:

H3: Anglo-American companies prepare long-term budgets to a lesser extent than Libyan companies.

H4: Anglo-American companies adopt flexible budgeting practices to a larger extent than Libyan companies.

H5: Anglo-American companies use rolling budgets to a larger extent than Libyan companies.

In individualist societies managers will care about themselves and they will look for personal benefits and try to enhance their performance that leads them to creating slack in budgets so they can achieve budgets' goals and obtain rewards based on a achievements (Ueno and Sekaran 1992; Aycan 2000; Hofstede 2001; Miroshnik 2002; Douglas and Wier 2005; Douglas et al. 2007; Staley and Magner 2007). Individual Protestant work ethic and

high achievement in Anglo-American societies are the bases of individualism (Ali 1993). German sociologist Max Weber argued that capitalism spread faster in Protestant rather than Roman Catholic countries because the Protestant work ethic is the "spirit of capitalism" (Weber 1965). Managers in collectivist societies are group-oriented (Miroshnik 2002). Therefore they will not be encouraged to create slack in budgets because managers will not obtain rewards from achieving budget targets. Achieving the budget's goal will be related to the group's achievement not to the individual's (Ueno and Sekaran 1992; Tsui 2001; Magner, Johnson et al. 2006). Variances also will be tracked and reports will be sent to evaluate individuals' performances in individualistic societies. However in collectivist societies variances will not be related to individuals but to the group so there will be less attention to variances (Merchant 1981; Ueno and Sekaran 1992; Harrison, McKinnon et al. 1994). The following hypotheses will be used to examine the differences between both Libyan and Anglo-American companies in terms of individualism vs. collectivism.

H6: Creation of budget slack is larger in Anglo-American companies than in Libyan companies.

H7: Performance rewards are more often based on meeting budgets rather than on a company's actual profit in Anglo-American companies than in Libyan companies.

H8: Budget variances will be used more to evaluate performance of managers and workers by Anglo-American companies than by Libyan companies.

Feminist societies' members of organizations will be expected to look at quality of life and modesty as important equally for women and men. In these societies budgets will be considered as important tools to improve performance and contribute to a more efficient working environment (Bjerke and Al-Meer 1993; Harrison, McKinnon et al. 1994; Hofstede 2001; Miroshnik 2002; Chang 2003; Douglas and Wier 2005; Hofstede and Hofstede 2005; Yee, Otsukab et al. 2008). In masculine societies, members like challenges and assertiveness. Therefore a budget will be expected to be a control mechanism to cut cost within the context of continuous improvement. Unfavourable variances will lead to prompt and severe action.

Related to the fourth dimension of masculinity and femininity the following hypothesis will be tested:

H9: Anglo-American companies take prompter and more decisive action in regards to unfavourable variances than do Libyan companies.

To answer the research issue two this proposition is presented:

Are the Libyan and Anglo-American workers aware of the cultural differences in their management practice when dealing with each other in the budgeting process?

5. Research Methodology

This study has used mixed method combining quantitative and qualitative approaches, which could provide a deeper understanding of the research issues. Using both methods allows triangulation for objectivity and reliability (Johnson and Onwuegbuzie 2004; Neuman 2006; Creswell 2009). This allows to gain more insight and understanding to limitations of one approach with the strengths of the other to gain more insight and understanding (Onwuegbuzie and Leech 2005; Creswell 2009). The quantitative approach is to examine the hypotheses. Qualitative data is used to evaluate the proposition of this research.

The questionnaire in this study was designed to solicit information from workers and managers working in Libya and Anglo-American companies about their budgets and budgeting process. The information solicited from these questions was used for comparing between the two cultures in order to identify the differences between both cultures in terms of budgets and budgeting process and how cultural dimensions affect budgets and budgeting process in Libyan and Anglo-American companies operating in the Libyan oil sector.

Budgets and budgeting process were measured by asking respondents to assess their extent of agreement or disagreement with the items in the questionnaires. Their agreements or disagreements were measured through Likert-type scale assessment. In order to make it easier for the respondent all the scales were ranging from 1= strongly disagree to 5= strongly agree.

The questionnaire was divided into 14 sections. Each section measure one construct (see table 2).

5.1 Sample design

The target population for this study is Libyan and Anglo-American (USA, Canada, UK, and Australia) companies operating in the Libyan oil sector. All Libyan and Anglo-American companies operating in the Libyan oil sector are include expect for two Libyan companies and one Anglo-American company that declined to participate.

The survey includes accountants in budget sections and managers of finance departments. Non-accountants were also surveyed including managers from production, sales, purchasing, human resources, training, drill and workover (operation), personnel, exploration and marketing. Names and contact details of these companies were obtained from Libyan National Oil Cooperation.

5.2 Data collection

Phase one started with a pilot study of one Libyan and one Anglo-American company to familiarize the researcher with the budget process used in the oil industry and to test the questionnaire.

Phase two about 480 survey questionnaires were sent to both Libyan (300) and Anglo-American (180) managers and workers at different levels to solicit information from participants who have direct experience in budgeting processes. The useable responses were 228 questionnaires from Libyan companies and 115 from Anglo-American companies. The survey explored budgetary participation; budgetary slack, use of flexible or fixed budget; rolling budget; long or short term budget; reward for managers based on achieving budget goal or on company's profit; how variances are analysed in performance evaluation and the attitude towards budget.

Phase three interviews were conducted with managers of departments of finance, marketing, production, purchasing, and human resources as well as with accountants who are more involved in budget preparation and usually are members of budget committees. Semi-structured interviews were conducted in order to gain a deeper understanding of the quantitative data gathered. Interviewees were self-selected by indicating their interest in being interviewed, as part of the survey process. Managers (from CEO to heads of departments including accounting and budget sections) and four accountants from Libyan and Anglo-American companies were interviewed. Thirty three interviews were conducted: 23 from Libyan, 10 from Anglo-American companies. Both questionnaires and interviews were conducted in the English language at Anglo-American companies and in the Arabic language or Libyan companies.

6. Preliminary data analysis

Quantitative data gathered by questionnaire were checked for missing data and extreme values. Internal consistency (Cronbach's alpha) was calculated in order to assess the reliability of all constructs and measures (Hair, Black et al. 2006). Factor analysis was used to decrease the number of variables to a lesser number of factors for analysis purposes. Principal components analysis is largely preferred for of data reduction (Hair, Black et al. 2006). T-test was also used to test the nine hypotheses because each hypothesis involves testing differences in one dimension between two groups (Anglo-American and Libyan companies) to determine if significant differences exist. Harrison et al. (1994) used t-test in a similar way to compare USA and Australia (Anglo-American) to Singapore and Hong Kong (Eastern) organizations. O'Connor (1995) also used a t-test in his evaluation of the impact of culture on the importance of budget participation by Singaporean-Chinese managers.

Qualitative data gathered from interviews is recorded in notes, categorized, and then tabulated and summarized. This was collected to enrich the empirical analysis.

7. Descriptive statistics

This paper is at an early stage of development as only a preliminary analysis of the data has been undertaken at time of writing. Some basic descriptive statistics were gathered to understand the profile of staff in Libyan and Anglo-American oil companies. There are other non-Libyan companies operating in the country but they are excluded on the basis of the cultural category being different to Anglo-American companies according to Hofstede's cultural dimensions.

Most respondents were working in exploration and production. This figure was higher in Anglo-American companies (73%) because most Anglo-American are workers in exploration, production and services while Libyan companies work mostly in refining and marketing (Table 3). The age of respondents was between 41 to 50 years in Libyan companies while the respondents from Anglo-American companies were mostly between 31 and 50 years old (Table 3). It is obvious that 76% of respondents from Anglo-American companies are fluent in English and about 29% of themselves as 'good' while in Libyan companies 51% of respondents are 'good' in English and about 23% are average (Table 5). In regards to the educational level of respondents, about 59% from Libyan companies hold bachelor degrees and around 25% have a post graduate degree while 53% respondents from Anglo-American hold bachelor degrees and 34% have a post graduate degree (Table 6).

Approximately 46% of the respondents from Libyan companies have more than 20 years experience in the oil sector and 16% of them have between 16 to 20 years experience. Libyan companies operated even while the UN embargo was imposed on Libya. Most respondents from Anglo-American companies have less than five years experience because Anglo-American companies recommenced in Libya after the lifting of sanctions. Around 10% have experience of more than 20 years because they were working in their headquarters (Table 7).

The highest number of Libyan respondents came from other finance and accounting, other general, and middle managers in finance and accounting with about 27%, 26%, and 24% respectively. By contrast, respondents from Anglo-American were from middle manager, general, other general, and senior manager finance and accounting with about 19%, 15%, and 14% respectively (Table 8). About 78% of respondents from Anglo-American have less than 5 years experience in their position whereas about 50 % of Libyan respondents have less than 5 years experience in their position (Table 9). Around 96% of Libyan respondents do not have experience in countries other than Libyan while 38 % of Anglo-American respondents do not have experience in Libya. That might be because of some Libyan respondents are working in Anglo-American companies working in Libya oil industry. Also about 37% of Anglo-American respondents have experiences for more than 5 years in countries other than Libya (Table 10).

All the Libyan respondents were Muslims this is because most of the workers are from Libya and Libya is Islamic country while around 51% of Anglo-American respondents were Muslims with about 37% of respondents were Christian (Table 11).

8. Contributions of the study

It is expected that there are number of contributions to the extant literature in terms of budgets and budgeting process that have not been adequately or sufficiently studied previously. Literature appears to indicate that no previous studies have attempted to empirically address how culture influences the perceptions of the effectiveness of various levels of *voice* and *explanation* in the budgeting process (Yee, 2008). After a review of the literature, it appears that there is a critical lack of empirical studies of cross-cultural impact on Arab management practices, business, and budgeting processes comparing Western developed countries (Anglo-American) and non-Western developing countries (North Africa) countries in general and Libyan in particular (Atiyyah, 1993; Kozan, 1993). The significance of replicating prior research performed in one nation to another is that it enhances the knowledge

of cultural influences on economic activities (Frucot, 1991). The study's outcomes are expected to provide further descriptive insights relating to Hofstede's (2001) model of cultural dimensions and the differences in budgeting processes between Anglo-American and Libyan cultures in the oil industry.

The study is also anticipated to contribute to practice in terms of providing guiding insights to managers of both multinational corporations and host country's management in terms of the influence of culture in the budgeting process as applicable to the gas and oil industry in Libya. Despite its tremendous importance in both developed and developing countries, the oil industry has not been studied to the same extent as the manufacturing and service sectors, particularly in terms of cultural differences. Skarlicki (2001) confirms that the study of cross-cultural differences has been restricted to the manufacturing sector. Furthermore, as the number of multinational employees increases, senders and receivers of information in companies that operate in the oil sector require special techniques to convey information accurately especially where cultural differences may hinder communication and reception (Weijermars, 2008).

The findings will also assist and enable managers of multinational companies to better comprehend and understand how culture affects budgets and budgeting processes in managing cross-cultural organizations. Further, the study will assist in providing guidelines in implementing human resource programs in situations where workforces are culturally diverse in general. Anglo-American managers in particular may benefit from these findings which will help them in managing predominantly Libyan employees with predominantly Arab background. Similarly, as a developing nation, Libyan employees might gain insights on how to deal with managers that are culturally diverse who may adopt practices from Anglo-American approaches that may not be culturally appropriate. This study seeks to identify these inconsistencies and offer some practical recommendations. As such, this research will benefit not only contribute to the academic discourse of issues related to cultural diversity but

also in terms of practice assisting managers and workers within the oil and gas industry in Libya.

9. Conclusion

Oil revenues contribute to the bulk of Gross National Products (GNP) of oil producing countries. Similarly, the oil sector plays an important role in Libya since its economy is heavily depended on oil revenues which represent more than 90 percent of GNP (Yahia 2008). The majority of Anglo-American oil companies disinvested from Libya after sanctions were imposed in 1992 by the UN and USA. In 2003 the UN lifted the sanctions which resulted in an increase in foreign investment in the oil sector and the re-investment by Anglo-American companies who were granted concessions (Otman 2008). This necessitated a better understanding of how cultural differences affect operations in general and budgets in particular. Interest has been expressed in the literature on understanding cultural impacts on the budgeting processes in both Libyan and Anglo-American companies operating in the Libyan oil sector. According to Hofstede's cultural dimensions, there are differences between the two cultures. Despite the criticism of Hofstede's model, it is still regarded as the most prominent, comprehensive, robust, well-known, influential, and pioneering research among cross-cultural researchers as well as the most often cited work in culture research (Harris and Carr 2008; Fang 2009; Jansen, Merchant et al. 2009). From the preliminary analysis undertaken, it appears that there are differences between workers in Libyan and Anglo-American companies in terms of their educational background, religion and experience in the oil industry. How and to what extent these differences are significant and affect budgets and the budgeting process, will be investigated further and reported in future articles.

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Appendix

Figure 1 Conceptual model

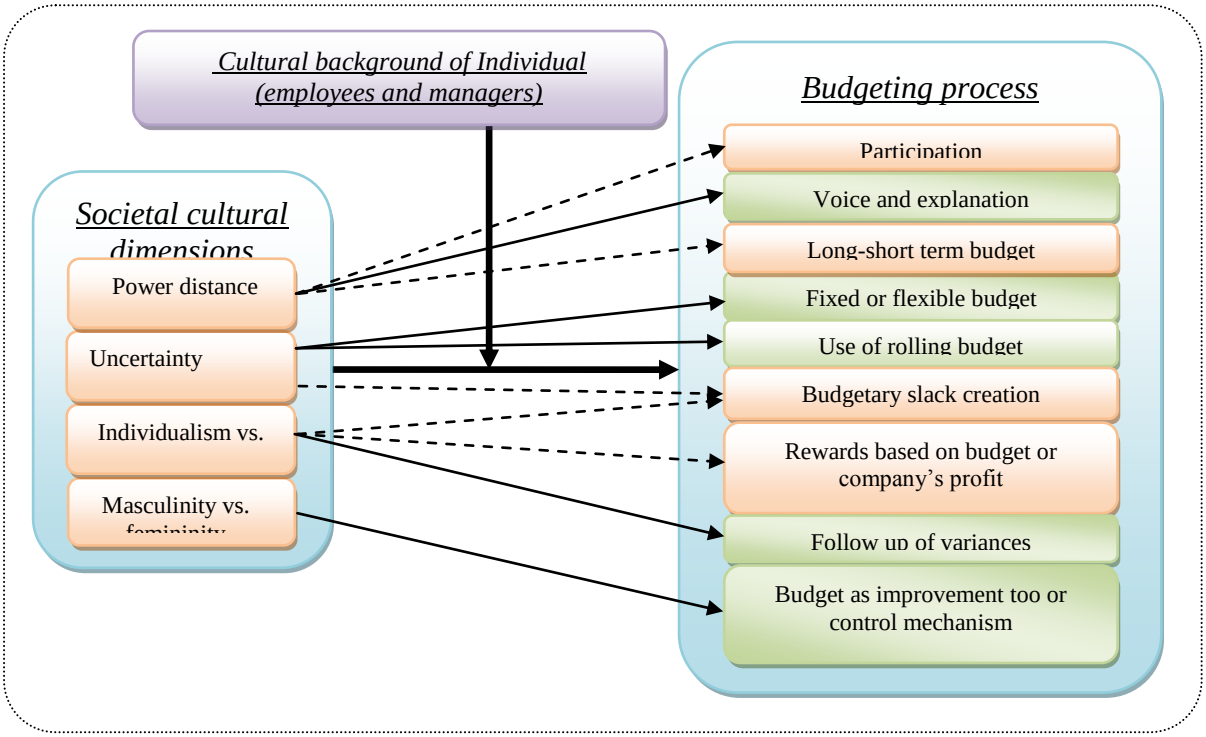

Table 1: Libyan and Anglo-American index for culture dimensions

Country	Power distance (PD)	Uncertainty avoidance (UA)	Individualism vs. *collectivism(IC)*	Masculinity vs. *femininity (MF)*
Arab countries (*Libya is included*)	*80*	*68*	*38*	*53*
USA	*40*	*46*	*91*	*62*
Canada	*39*	*48*	*80*	*52*
UK	*35*	*35*	*89*	*66*
Australia	*36*	*51*	*90*	*61*

Source: adapted from Hofstede and Hofstede (2005)

Table 2: Sources of measures used in study

N	Items	To measure	Adapted from
1	1 to 9	Participation	(Milani 1975; Harrison, McKinnon et al. 1994; Magner, Welker et al. 1995; O'Connor 1995; Tsui 2001; Wentzel 2002; Wu 2005; Leach-LÃ³pez, Stammerjohan et al. 2007; Maiga and Jacobs 2007)
2	1 to 5	Voice	Adapted with changes (Magner, Welker et al. 1995; O'Connor 1995; Klammer 1997; Tsui 2001; Wu 2005; Leach-LÃ³pez, Stammerjohan et al. 2007)
3	1 to 5	Explanation	Adapted with changes (Magner, Welker et al. 1995; O'Connor 1995; Klammer 1997; Tsui 2001; Leach-LÃ³pez, Stammerjohan et al. 2007; Staley and Magner 2007)
4	1 to 4	Using flexible or fixed budget	New items for this study
5	1 to 6	Creating slack of budget	(Onsi 1973; Maiga and Jacobs 2007; Staley and Magner 2007)
6	1 to 5	Based of rewards	(Onsi 1973; Magner, Welker et al. 1995; O'Connor 1995; Skarlicki and Folger 1997; Wu 2005)
7	1 to 8	Evaluating performance by variances	(Otley 1978; Merchant 1981; Harrison, McKinnon et al. 1994; Magner, Welker et al. 1995; Douglas et al. 2007)
8	1 to 8	Action towards budget variances	(Merchant 1981; Dunk 1993; Harrison, McKinnon et al. 1994; Magner, Welker et al. 1995; O'Connor 1995; Wu 2005; Douglas, HassabElnaby et al. 2007)
9	1 to 13	Attitude towards budget	(Dunk 1993; Harrison, McKinnon et al. 1994; Magner, Welker et al. 1995; Collins, Almer et al. 1999; Wu 2005)
10	1 to 1 to 3	Using of rolling budget	New items for this study
11	1	Using long or short term budget	New items for this study
12	1 to11	Extra questions support previous sections	Suggested by Professor G Hofstede (O'Connor 1995)
13	1 to 12	Demographic information	From the above authors

Table 3: Number of respondents working in different types of sectors

Sector in oil industry	Libya companies		Anglo American companies	
	Frequency	Percent	Frequency	Percent
Exploration and production	126	55.3 %	84	73.0 %
Refinery	55	24.1 %	1	0.9 %
Marketing	14	6.1 %	0	0 %
Services	4	1.8 %	30	26.1 %
other	29	12.7 %	0	0 %
Total	***228***	***100***	***115***	***100*** %

Table 4 Age of respondents

Age range	Libya companies		Anglo American companies	
	Frequency	Percent	Frequency	Percent
Less than 20 years	*7*	3.1 %	3	2.6 %
Between 21 and 30 years	18	7.9 %	7	6.1 %
Between 31 and 40 years	56	24.6 %	39	33.9 %
Between 41 and 50 years	88	38.6 %	37	32.2 %
over 50 years	59	25.9 %	29	25.2 %
Total	***228***	***100***	***115***	***100*** %

Table 5 English skills

Level of English skills	Libyan companies		Anglo American companies	
	Frequency	Percent	Frequency	Percent
Does not speak English	3	1.3 %	1	.9 %
Poor	7	3.1 %	1	.9 %
Average	53	23.2%	2	1.7 %
Good	118	51.8 %	34	29.6 %
Fluent	47	20.6 %	77	67.0%
Total	***228***	***100*** %	***115***	***100*** %

Table 6 Level of education attained

Education level attained	Libyan companies		Anglo American companies	
	Frequency	Percent		Frequency
Primary school	2	.9 %	3	2.6 %
High school	5	2.2 %	1	.9 %
Diploma level	29	12.7 %	10	8.7 %
Bachelor degree	135	59.2 %	61	53.0 %
Post graduate	57	25.0 %	40	34.8 %
Total	***228***	***100 %***	***115***	***100 %***

Table 7 Experience in current organization

Length of experience in current organization	Libyan companies		Anglo American companies	
	Frequency	Percent	Frequency	Percent
From 1 to 5 years	28	12.3 %	70	60.9%
Between 6 and 10 years	29	12.7 %	17	14.8 %
Between 11 and 15 years	29	12.7 %	10	8.7 %
Between 16 and 20 years	37	16.2 %	6	5.2 %
Over 20 years	105	46.1 %	12	10.4 %
Total	***228***	***100*** %	***115***	***100*** %

Table 8 Position of respondents

Position title	Libyan companies		Anglo American companies	
	Frequency	Percent	Frequency	Percent
General /deputy general manager	1	.4 %	12	10.4 %
Senior manager finance and accounting	5	2.2 %	17	14.8 %
Senior manager general	28	12.3 %	16	13.9 %
Middle manager finance and accounting	14	6.1 %	14	12.2 %
Middle manager general	56	24.6 %	22	19.1 %
Other, finance and accounting	63	27.6 %	16	13.9 %
Other, general	61	26.8 %	18	15.7 %
Total	***228***	***100*** %	***115***	***100*** %

Table 9 Experience in current position

Length of experience in current position	Libyan companies		Anglo American companies	
	Frequency	Percent	Frequency	Percent
From one year to 5 years	116	50.9 %	90	78.3 %
From 6 years to 10 years	54	23.7 %	12	10.4 %
From 11 years to 15 years	20	8.8 %	3	2.6 %
From 16 to 20 years	19	8.3 %	8	7.0 %
More than 20 years	19	8.3 %	2	1.7 %
Total	***228***	***100 %***	***115***	***100 %***

Table 10 Oil industry experience in other countries

Experience in other countries	Libyan companies		Anglo American companies	
	Frequency	Percent	Frequency	Percent
No experience overseas	221	96.9 %	44	38.3 %
less than 1 year	1	.4 %	4	3.5 %
1----2	1	.4 %	4	3.5 %
2-----3	1	.4 %	2	1.7 %
3-----4	0	0 %	6	5.2 %
4------5	0	0 %	12	10.4 %
over 5 years	4	1.8 %	43	37.4 %
Total	***228***	***100 %***	***115***	***100 %***

Table 11 Religion

Religion	Libyan companies		Anglo American companies	
	Frequency	Percent	Frequency	Percent
Muslim	228	100 %	59	51.3 %
Christian	0	0 %	43	37.4 %
Other	0	0 %	13	11.3 %
Total	***228***	***100 %***	***115***	***100 %***