Use of Management Control System among Libyan Small and Medium-Sized Firms

Yosef Kalefa Hosen, Wee Shu Hui, Suzana Suliman and Ibrahim Abdul Rahman

Faculty of Accountancy, University Technology Mara (UITM), Malaysia

Abstract: The purpose of this study is to investigate the present status of the use of information from management control system (MCS) and the effect of top management team demographic characteristics and societal culture on level of use of MCS in privatized firms in the transitional economy of Libya. The research is based on semi-structured interviews with twenty one managers in small and medium sized privatized manufacturing firms in Libya. The findings from this study suggest that uses of management control systems information among the firms vary firms according to the demographic characteristic and cultural background of the top management team. The study focuses on a sample of top management teams of small and medium-sized manufacturing firms; therefore the findings cannot be generalised to other sectors. Suitably designed quantitative studies may be conducted to verify the findings of this study. This paper is one of the few studies attempting to assess the effects of culture on the use of management accounting information in the transitional economy countries.

Key word: Management Control Systems % Small and Medium Firms % Societal Culture % Management Accounting Information

INTRODUCTION

The period between 1990 and 2000 witnessed the opening of the economies of most less developed countries. During the same period many public companies privatised, with the removal of most of the protectionist barriers ultimately altering the competitive environment in these economies [1].

In the implementation of privatisation programmes in less developed countries (LDCs) managers should be familiar with concepts such as continuous improvement and quality consciousness. On another hand, social relationships would emerge in the workplace.

This study investigates MCS used in small and medium-sized firms, in addition to the statutory annual accounts and financial reports. More specifically, the focus is on the relationships between the use of MCS practices and information and contextual factors of small firms. In particulars, the study looks at the demographic characteristics and culture of the top management teams (TMT), as well as their impact on small and medium firms' financial performance. Moreover, this study concentrates on the organizational level of small and medium firms in identifying possible causal relationships between

variables and presents evidence from five SMEs firms in manufacturing sector in Libya. It explores management accounting and control practices of the small and mediumsized firms post–privatization period.

Back Ground: The transition in Libya from a planned economy to a market economy, which commenced in the 1990s, has resulted in fundamental changes such as the restructuring of state-owned enterprises, a noticeable growth in foreign direct investment and an emerging private sector. These changes put immediate pressure on accounting practices to change to meet the demands of the new business environment.

In an attempt to rehabilitate the factories and in order to boost their productivity, the state has intervened by privatizing all the factories at the first stage of the privatization programme, transferring ownership of factories to the existing workforce and management [2-5].

Small and Medium Enterprises (SMEs) are the main driver of economy and growth in most developing countries and Libya is no exception. They are the main absorber of labour and a real driver of investment, economic growth and competition. Acknowledging the uniqueness and importance of SMEs, the Libyan

government began a privatization programme with a focus on transferring ownership in the first stage of the privatization programme for small and medium firms (SMEs).

Literature Review

Management Control Systems (MCS): In business firms, management control systems play a critical role, as they provide an instrument to survive in an era of environmental uncertainty. Both internal and external environmental changes have can have a great impact on the nature of business today. and consequently on MCSs. Management Control Systems (MCS) has been defined as a system which gathers and uses information to evaluate the performance of different organizational resources like human, physical, financial and also the organization as a whole considering the organizational strategies [6]. MCS also impacts the behavior of organizational resources to implement organizational strategies [6].

In the context of SMEs, accounting information is important as it can help the firms manage their short-term problems in vital areas like cash flow, expenditure and costing, by providing information to support monitoring and control [7]. Accounting information is also useful for firms operating in a dynamic and competitive environment as it can help them integrate operational initiatives within long-term strategic plans [8]. However, despite the importance of accounting information for their survival, according to researchers, many SMEs do not strategically use accounting information to their advantage [7, 9-11].

Noor and King [12], used a mail questionnaire to collect data from 214 small and medium-sized firms. The findings suggested that accounting information alignment and use was related to the firms level of information technology maturity; level of owner/manager's accounting and IT knowledge; use of expertise from government agencies and accounting firms; and existence of internal IT staff.

Sandino [13] studied the adoption of an extended set of management accounting systems from a sample of 97 young U.S. retailers. She found that most of these companies had adopted a set of management accounting systems, including budgeting system, pricing systems and inventory control.

Noor, Azizi Ismail and Zin [14], in their study of 136 small and medium-sized firms (SMEs) in Malaysia, found that most SMEs are still not aware of the importance of utilising accounting information for the benefit of their businesses.

The relationship between management control systems and organizational performance has been under investigation. In general, the literature supports the proposition that a fit between management accounting and business environment will result in better organizational performance, Gul, [15] suggested that the effects of MCS on firm's performance were dependent on environmental uncertainty. Under high levels of uncertainty, sophisticated MAS had a positive effect on performance but under low levels it had a negative effect.

Managers, particularly from the top management level, are expected to be the main users of accounting information. Therefore, it would be illuminating to examine the effects of top management demographic characteristics and culture on the use of management accounting information in the context of small and medium-sized firms.

Top Management Team (TMT): According to the theory of upper echelons introduced by Hambrick and Mason [16], executives of organizations shape the organizational outcomes. The theory proposes that the top management team (TMT) affects strategic choices of a firm, profitability and variation in it, growth and survival. In fact it can be said that the firm performance reflects the values and cognitive bases of powerful actors or top managers of a firm.

The importance of management control systems (MCS) to organisations resides in their role in providing information for planning, controlling, evaluating performance, developing and improving competitive strategies and making decisions.

MCS provides the same information to all managers within the TMT, but the actual selection and use of information depends on personal preferences. The literature an upper echelon suggestes that these preferences are based on the demographic characteristics of managers, including factors such as age, education background, seniority and experience [16].

Simons [17], suggested that new managers often bring with them new visions and strategies. Naranjo-Gil, Hartmann and Maas [18] suggested that the style of using MCS information is related to TMT characteristics. Hambrick and Mason (1994) also suggested that managers will be more familiar with the information to which they were exposed during their education and thus will tend to focus on that domain of knowledge.

Based on the data of 74 firms employing from 5 to 98 employees taken from the Compustat II database, Weinzimmer [19] found that functional heterogeneity and

size of management teams were correlated significantly and positively with growth rate in small business. However, industry heterogeneity and age of a management team were not found to be associated with small business growth.

Berry [20] examined strategic planning in small high tech companies. She has reported interesting results on management structures and strategic planning in those firms. According to Berry's (1998) investigation, formal planning was positively related to growth in sales and to managers' satisfaction.

In respect of the relationship between top management team and firm's performance, Naranjo-Gil [21] found that TMT heterogeneity was related to better performance, innovation and change.

Duh, Xiao and Chow [22] reported that there was a positive association between usage of some MACs and firm's performance.

Although TMT homogeneity or heterogeneity may affect the use of management accounting information derived from MCS, national culture can also influence the way TMT use this information.

National Culture: Hofstede identified four work-related values or national culture dimensions that differ systematically across nations: power distance, individualism collectivism, masculinity-femininity and uncertainty avoidance. Subsequent research reported by Hofestede [23], identified a fifth national cultural dimension, namely, Confucian dynamism.

Hofestede's Dimensions for Arab Countries and Libya:

The findings of the four cultural dimensions are presented in the following table (Table 1). In addition to the results reported by Hofstede (1980), other results for Arab countries are also presented for comparison [24]. Surprisingly, the results of Twati's study in Libya (2008) in an era of technology, globalization and the Internet, produced results similar to Hofstede's (1980) index. While many countries' indexes worldwide have changed since Hofstede's predictions of the 1970s, Libyan results remain similar to Hofstede's results of the 1970s. Twati [24], found that Libyan culture displays a high power distance, high uncertainty avoidance, collectivist and rates midrange on the masculinity-femininity index. These values indicate that Libyan organizational culture is likely to be more inclined to control-oriented cultures and mechanistic structures.

National culture dimensions have been used in cross-cultural studies in accounting [26-28]. Harrison [29] examined the effects of national culture on the level of decentralization of responsibility.

Following Hofstede and Bond [23] examination of national culture in international business, Chow, Harrison, McKinnon and Wu [30] and Hui [31], studied the effects of national culture on all performance measurement and evaluation in manufacturing firms. However, national culture has not been examined in the use of management accounting information in SMEs.

Tsui [32] suggested that the interaction effects of MAS and budgetary participation on managerial

Table 1: Hofesteds's Study and Twati's Study (comparison)¹

Tuoto Il Ilotostedo o Sidaly dila I wali o Sidaly (companison)									
	Small\large Power Distance		High\low Uncertainty avoidance		Masculinity\ femininity			Individualism\ collectivism	
Study\country	Index	Rank	Index	Rank	Index	Rank	Index	Rank	
Hofstede's study 1980 (Arab World's)	80	44-45	68	24-25	53	28-29	38	25	
Twati's study 2008 (Libya)	72	71	45	18					

Source: Hofestede [25], Twati [24]

Table 2: Business Types and Firm Size of selected companies

Code	Type of industry	Number f employees	Size of firms
A	Furniture industry	175	Medium
В	Food industry	216	Medium
C	Textiles industry	90	Small
D	Chemical industry	470	Medium
E	Food industry	65	Small

¹ Hofested 25. Hofstede, Culture's Consequences. Sage, Beverly Hills, CA., 1980., study was based on regional estimated values conducted in 1984 (27 years) and within none industrial companies. Tawati 24. Twati, J.M., The Influence of Societal Culture on the Adoption of Information Systems: The Case of Libya in Communications of the IIMA L. Academy of Graduate Studies Tripoli, Editor. 2008. p. 1-12., study was based on data conducted in 2004 (five years) and within Oil & Gas companies and Banks, current study was based on data conducted in 2010 and within small & medium size industrial firms.

performance were different, depending on the cultural background of the managers. These results have implications for the design of effective control subsystems and suggest that the management accounting theories developed in the context of Western economies may not be generalizable to the Chinese environment.

Etemadi *et al.* [33] investigated the impact of culture dimensions (individualism, power distance, uncertainty avoidance and masculinity) on management accounting and managerial performance. The results indicate that management accounting tools and techniques, which improve managerial performance in one organization may have a dysfunctional impact in another organization with a different cultural background.

Libya has undergone a transformation from a centralized economy to a market economy. The government in Libya started the first stage of this programme (privatization) with the SMEs. In this paper we explore the influence of national culture in the context of Libya, following the changes in economic policy in Libya.

Methodology: This study adopted a pure qualitative research method. The rationale for the choice of qualitative approach stems from the nature and context of this study. The researchers seek to understand the context of the research matter in terms of how and why it occurs. That is, how TMT uses management accounting information and why.

The study selected a wide range of users using a random sample. Interviews were carried out with 21 top management teams considered to be users of management accounting information in small and medium-sized companies in Libya. The duration of interviewees was between September and October 2009.

The interviewees were 21 top management team members who were from 5 companies in different types of industry. In this study, the size of companies is dependent on the number of employees as small size is defined as companies with fewer than 100, employees and medium-sized companies are those with more than 100 employees but fewer than 500 employees. This classification is based on the Resolution of the General Public Committee (Libya), No 31 of 2003 for privatization [34].

The interviewes granted permission to tape record the interviews which were conducted in Arabic. These were then transcribed in Arabic and then translated into English.

RESULTS AND DISCUSSION

A frequency scale was developed to summarize the responses of the interviews conducted. The scales were calculated by counting the number of similar opinions about the same issue addressed in the interviews. The major issues are discussed in the following sections providing a deeper insight into the views of the respondents.

A budget is one of the oldest instruments of a management control system. Both large and small organizations use budgets to plan their business ahead to get an idea of what the future will bring and also to review the situation to know how carry out future plans. Planning and budgeting systems increase the amount of management control in organizations because they encourage long-term thinking, achieve coordination and create challenging but realistic goals. There are changes in the use of budget information during pre-and post-privatization stages.

During the pre-privatization stage the purpose of preparing a budget was to avoid being accountable to any government body and the firms prepared accounting reports only to fulfil requirements of the Ministry of Industry.

"I think, pre-privatization our company prepared accounting reports just to avoid being accountable to any government body. We sent our budgets to the Ministry of Industry and after three of four months they sent to us the unit price for our production. We did not care about the losses; everything comes from the top down" [35]

"I think the financial reports were not important for us, They (accounting department) require many reports weekly and monthly, I think this is just additional work' (PMD).

However after of transfer ownership to employees under the privatization programme, the purpose of budget changed and, the point of view of managers also changed in line with changes in the competitive environment and market conditions.

"Post-privatization, the purpose of management accounting information changed. We use management accounting information to evaluate the organization's performance and we compare between planning and achievement every four months, but we monitor the cash flow day-by-day. [35].

The finding shows that the purpose of preparing the budget changed pre-and post-privatization.

The finding also shows that there are differences in use of management accounting information according to demographic characteristics of top management teams.

C "My responsibility is implementation of the production plan (quality and quantity), we are sending weekly reports to the financial department and the general manager. I think the accounting system has shown that such a control system merely provides additional paperwork and incurs unnecessary costs".

This result is consistent with the finding of Naranjo-Gil (2008) who suggested that the style of using MCS is related to TMT characteristics. Professional managers have a background in which the knowledge and experience in a specific sector is of paramount importance. Therefore, based on their experience and educational background, some managers are expected to be more operationally involved in organization activities than others.

There was consensus among all respondents about the importance and role of the cash flow statement;

- C "..The general manager is not an accountant and he does not listen or care about what we have to say or write. He is interested only in the cash flow statement" (FMB).
- C "... We evaluate our company's performance through the budget system, income statement and cash flow statement" [35].
- C "We evaluate our company's performance based on cash flow" (GMC).

There was no strong evidence on the use of management accounting information in decision making and its relationship to the manager's demographic characteristics and culture background. This result is consistent with Hogarth [36] who found that managers use different information for making decisions according to their previous knowledge and background. It is noted that there were some variance among managers in the use of management accounting information.

- C "We are a small company, so we have to focus on quality and quantity and leave the accounts for accountants...." (PMC)
- C "We are selling our products based on market price not based on production cost. The general manager changes the sales price many times in the year" [35].

- C "We try to keep our costs under control and our production is similar to our competitors, but at a lower cost and we focus on calculating the cost of production on a monthly basis. The prices of our products cannot compete with the prices of products in the international markets'. (FMD).
- C "... The general manager is not accountant, so he does not listen or care about what we have say or write" (FMB).

The general information obtained from respondents shows that all general managers and production managers have an educational background in engineering and do not have any experience in the accounting or financial domain. The target companies were characterized as companies with an engineer's culture. Engineers constitute the largest group in the firm's personnel. Thus, the technology, products and production have traditionally been considered very important in the target companies, while commercial and financial matters have received less attention played minor roles. (Table 3).

The use of computer also is very limited in accounting systems. Some companies continue use old accounting system packages, but most of them still use manual methods for accounting data. This could also limit the communication of accounting information from the accountants to the managers and prevent organisational learning from taking place.

- C "We have one computer for the accounting department. We use it for wages and salaries. However with regard to the annual financial statement, we still use the manual records". (GMC).
- C "The use of computer in our company is limited.

 Most of the financial reports are prepared manually" (FMB).
- C "Our accounting systems are computerised, but we still use old packages of software. We have to make many adjustment to our accounting system...." (FMD).

With respect to the use of accounting information for evaluating performance, most firms rely on traditional statements and financial information in performance evaluation. Traditional costing, with both full costing and variable costing methods, is frequently used within the management control systems of small and medium-sized companies.

Table 3: TMT Demographic Characteristics

							Experience as manager in	Total work
	Position	Code	Age group	Gender	Education level	Area of education	this company (years)	experience (years)
A	General manager	GMA	< 30	M	Diploma	Engineering	5-Jan	10-Jun
	Administrative manager	AMA	30-40	M	Bachelor	Low	5-Jan	15-Nov
	Financial manager	FMA	30-40	M	Bachelor	Accounting	5-Jan	16-20
	Production manager	PMA	> 40	M	Bachelor	Engineering	10-Jun	10-Jun
	Sales manager	SMA	30-40	M	Bachelor	Engineering	10-Jun	15-Nov
В	General manager	GMB	30-40	M	Bachelor	Engineering	10-Jun	16-20
	Administrative manager	FMB	30-40	M	Diploma	General	5-Jan	15-Nov
	Financial manager	PMB	30-40	M	Bachelor	Accounting	5-Jan	15-Nov
	Production manager	PMB	> 40	M	Bachelor	Engineering	10-Jun	16-20
	Sales manager	SMB	30-40	M	Bachelor	Engineering	10-Jun	15-Nov
С	General manager	GMC	30-40	M	Bachelor	Engineering	10-Jun	15-Nov
	Financial\Sales manager	FMC	30-40	M	Diploma	Management	5-Jan	10-Jun
	Production manager	PMC	> 40	M	Diploma	Engineering	15-Nov	16-20
D	General manager	GMD	< 30	M	Bachelor	Engineering	5-Jan	10-Jun
	Administrative manager	AMD	30-40	M	Bachelor	Education	10-Jun	10-Jun
	Financial manager	FMD	30-40	M	Master	Accounting	15-Nov	16-20
	Production manager	PMD	> 40	M	Bachelor	Engineering	15-Nov	15-Nov
	Sales manager	SMD	30-40	M	Bachelor	Engineering	10-Jun	15-Nov
Е	General manager	GME	30-40	M	Bachelor	Engineering	5-Jan	10-Jun
	Financial \Sales manager	FME	30-40	M	Bachelor	Management	10-Jun	15-Nov
	Production manager	PME	30-40	M	Diploma	Engineering	10-Jun	16-20

Davila [37] found that managers how had adopted fewer management control system and had shorter tenures (shorter experience).

- C "I as a general manager, evaluate our company's performance based on financial reports, like cash flow statement, sales reports. I know there is a lack in our accounting system, so we will make changes in the accounting system next year. And we will start to use the new system on 1/1/2010." (GMB).
- C "We evaluate our company's performance through the budget system, income statement, cash flow statement" [35]
- C "We evaluate our firm's performance when we compare between planning and achievement in the budgetary systems, especially the cash flow statement. We also evaluate our firm's performance through the balance sheet and income statement" (GMD).

Regarding the impact of culture on the use of accounting information in small and medium-sized companies [24, 25], Libya is rated high on the power distance dimension. Specifically Libya rated 80 in Hofstede's study in 1980 and 72 in Twati's study in 2008. Libya also rated high on uncertainty avoidance. Libya's index of uncertainty avoidance was 68 in Hofstede's study and 71 in Tawti's study.

Some firms are suffering from financial difficulty, but the impact of Islamic culture, which prohibits interest, make managers reluctant to borrow from banks usury.

C "...the shortage of hard currency is the main problem in our company. It's not unusual for the factories to be stopped for many days because of the shortage of raw material or spare parts, because there is not enough hard currency. We are worried about interest......" (FMB)

The impact of culture on the relationship between managers and employees is also evident in Libyan society,

C "The choice of the management committees in the industrial companies is based on social, tribal and friendly relationships rather than on qualifications and experience".(PMD).

The study indicates that in Libya with a Muslim majority, cultural factors do affect accounting generally and in particular the disclosure of accounting information. The national culture has a strong effect on the choice of general managers and top management teams all top management teams are males (Table 3). All the managers are males, reflecting that top positions are male dominated. This is an initial study and the results need to be confirmed in future research.

Although, all five privatized firms prepare annual financial statements, but they do not publish the financial statements or disclose the net profit and the level of participation in preparation of budget is very low. This study concludes that most firms are centralized in decision making: the role of accountants in the evaluation of performance and decision-making is almost negligible.

CONCLUSION

This paper reports the findings of an exploratory study analyzing users' perceptions and use of management accounting information in SMEs in a transitional economy. The study was based on contingency theory of management accounting and was conducted through semi-structured interviews with a wide sample of top management teams in privatized SMEs in Libya.

The study shows that the use of management accounting information is influenced by the demographic characteristics of the male-dominated top management team. The use of computers in accounting systems is limited.

As with previous studies in the area, this study found that competition has becomes more intense in the Libyan environment in the post-privatization period. The results reveal a young management team with an average age between 30-40 years. Educational background of the TMT varied (62% engineering, 14% accounting and 24% others). The study also found that the language of accounting was not used as the means of communication between managers, because all general managers and most of top management teams members in the sample were male and had an educational background in engineering. These demographic characteristics have affected the use of management accounting information.

Although accounting reports were prepared in the five Libyan privatized firms, they were oriented to the requirements of external agencies and the annual expenditure aggregation exercise and played little part in either planning or operational decision-making and control

This study revealed that secrecy is influenced by a range of cultural values: high power distance and uncertainty avoidance and low ranks in individualism and masculinity, therefore the findings cannot be generalised to other sectors because this study focuses on a small sample of top management teams of small and medium-sized manufacturing firms; therefore the findings cannot be generalised to other sectors, a more extensive study is

needed in future to test the impact contingency factors on use of management control system post-privatization period.

REFERENCES

- Narayan, F., T. Godden and B. Reid, Financial management and governance Issues in Selected Developing Member Countries. Available: http://www.adb.org/Documents/Books/Financial_ Mgt/Selected_DMCs/prelims.pdf 2000.
- Mirza, A., Economic performance, develoment Policies and privatization in the Arab World, (in Arabic). in *Economic performance, Development* policies. 1995, Economic performance, Development policies: Tripoli - Libya.
- 3. Mirza, A., Economic and Social Trends in Libya (1985-1996), (in Arabic). in *Economic performance, development Policies*. 1989: Tripoli-Libya (in Arabic).
- 4. Hawadana, B., Characteristic of Libyan Industrial Sector (in Arabic). in *Economic Development in libya* : past and present. 2003: Benghazi Libya.
- Alfaitori, A., The state role in privatization process. (in Arabic) in *The privatization in Libyan Economy Conference*, T.E.R. Center, Editor. 2004, The Economic Research Center: Benghazi - Libya.
- Otley, D., 1994. Management control in contemporary organizations: towards a wider framework. Management Accounting Res., 5(3-4): 289-299.
- Son, D.D.N.M. and M. Pru, 2006. Users' perceptions and uses of financial reports of small and meium companies (SMCs) in ransitional economies. Qualitative Research in Accounting and Management Accounting Res., 3(3): 218-235.
- 8. Ismail, N.A. and M. King, 2005. Firm performance and AIS alignment in Malaysian SMEs. International J. Accounting Information Systems, 6(4): 241-259.
- Marriott, N. and P. Marriott, 2000. Professional accountants and the development of a management accounting service for the small firm: barriers and possibilities. Management Accounting Res., 11(4): 475-492.
- Perren, L. and P. Grant, 2000. The evolution of management accounting routines in small businesses:
 a social construction perspective. Management Accounting Res., 11(4): 391-411.
- McMahon, R.G.P., 2001. Business Growth and Performance and the Financial Reporting Practices of Australian Manufacturing SMEs. J. Small Business Manage., 39(2): 152-164.

- Noor, A.I. and M. King, 2007. Factors influencing the alignment of accounting information systems in small and medium sized Malaysian manufacturing firms. Journal of Information Systems and Small Business,
- 13. Sandino, T., 2007. Introducing the First Management Control Systems: Evidence from the Retail Sector. Accounting Review, 82(1): 265-293.
- Noor. Azizi Ismail and R.M. Zin, 2009. Usage of Accounting Information among Malaysian Bumiputra Small and Medium Non-Manufacturing Firms. J. Enterprise Resource Planning Studies, 1(2): 11-17.
- Gul, F.A., 1991. The Effects of Management Accounting Systems and Environmental Uncertainty on Small Business Managers' Performance. Accounting and Business Res., 22(85): 57-61.
- Hambrick, D. and P. Mason, 1984. Upper Echelons: The Organization as a Reflection of Its Top Managers. Academy of Management Review, 9(2): 193-206.
- 17. Simons, 1994. Hwo new managers use control systems as levers of strategic renewal. Strategic Management J., 15: 169-189.
- Naranjo-Gil, D., F. Hartmann and V.S. Maas, 2008.
 Top Management Team Heterogeneity, Strategic Change and Operational Performance. British J. Manage., 19(3): 222-234.
- Weinzimmer, L.G., 1997. Top Management Team Correlates of Organizational Growth in a Small Business Context: A Comparative Study. J. Small Business Manage., 35(3): 1-10.
- 20. Berry, M., 1998. Strategic planning in small high tech companies. Long Range Planning, 31(3): 455-466.
- Naranjo-Gil, D., 2009. Management information systems and strategic performances: The role of top team composition. International J. Information Manage., 29(2): 104-110.
- Duh, R., J. Xiao and C. Chow, 2009. Chinese Firms'
 Use of Management Accounting and Controls:
 Facilitators, Impediments and Performance Effects. J.
 International Accounting Res., 8(1): 1.
- 23. Hofstede and M.H. Bond, 1988. The Confucius Connection: From Cultural Roots to Economic Growth. Organizational Dynamics, 16(4): 5-21.
- 24. Twati, J.M., 2008. The Influence of Societal Culture on the Adoption of Information Systems: The Case of Libya in *Communications of the IIMA* L. Academy of Graduate Studies Tripoli, Editor. pp: 1-12.

- 25. Hofstede, *Culture's Consequences*. Sage, Beverly Hills, CA. 1980.
- 26. Harrison, G., 1992. The cross-cultural generalizability of the relation between participation, budget emphasis and job related attitudes. Accounting, Organizations and Society, 17(1): 1-15.
- 27. Frucot, V. and W.T. Shearon, 1991. Budgetary participation, locus of control and Mexican managerial performance and job satisfaction. Accounting Review, 66(1): 80.
- 28. Soeters, J. and H. Schreuder, 1988. The interaction between national and organizational cultures in accounting firms. Accounting, Organizations and Society, 13(1): 75-85.
- 29. Harrison, *Culture and management*. Australian Accountant, 64(10): 14.
- Chow, C.W. *et al.* 2002. The organizational culture of public accounting firms: evidence from Taiwanese local and US affiliated firms. Accounting, Organizations and Society, 27(4-5): 347-360.
- 31. Hui, C., 1984. Measurement of individual-collectivism. J. Research in Personality, 18(1): 17-36.
- 32. Tsui, J.S.L., 2001. The impact of culture on the relationship between budgetary participation, management accounting systems and managerial performance: An analysis of Chinese and Western managers. The International J. Accounting, 36(2): 125-146.
- 33. Etemadi, H., *et al.* 2009. Culture, management accounting and managerial performance: Focus Iran. Advances in Accounting, 25(2): 216-225.
- 34. General Public Committee, *Resolution No (31) for privatization*. 2003, General Public Committee Tripoli.
- 35. Coffman, D.L. and R.C. MacCallum, 2005. Using parcels to convert path analysis models into latent variable models. Multivariate Behavioral Res., 40(2): 235.
- 36. Hogarth, R.M., 1993. Accounting for decisions and decisions for accounting. Accounting, Organizations and Society, 18: 407-424.
- 37. Davila, A., 2007. Management Control Systems in Early-Stage Startup Companies. The Accounting Review, 82(4): 907-937.