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ACCOUNTING INFORMATION SYSTEMS IN A CENTRALLY PLANNED ECONOMY: THE CASE OF THE GENERAL COMPANY FOR PIPELINES (GCP)

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ABSTRACT

The paper has a twofold purpose. First it highlights the importance of accounting information in the economic development of developing countries, with a particular focus on the nation of Libya. Secondly, using the case of Libya's General Company for Pipelines (GCP), it demonstrates that the use of accounting information to achieve economic development goals is determined to a large extent by the political/ideological setting in which it is generated.

The study is based on a literature review and archival research, reinforced by a qualitative case study comprised of interviews, attendance at meetings and a study of internal documents.
A study of The General Company for Pipelines (GCP) revealed that frequent politically driven changes in the structure and number of popular congresses and committees severely limited the use of accounting information, relegating it to a formal role. In consequence, accounting information had little effect on stimulating economic development in Libya.

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This study focuses on one case study, which does limit its generalisability. However, it also suggests fruitful research areas in considering the historic factors which have determined accounting's role in developing and planned economies. By providing insights about social factors which have determined the use of accounting in a planned economy, this study has implications for similar economies as they move towards a more globalised mode of operations which enhance the role of accounting in meeting economic development needs.

If developing countries are to harness the potential of accounting to aid in the achievement of their development plans, the social and political setting in which accounting has been conducted need to be understood.

Accounting information systems, developing countries, culture, planned economy

INTRODUCTION

In recent years, Libya, like many other emerging nations, has attempted to enter into the global economy, by moving towards the privatisation of its industrial sector and the establishment a stock market. With the aim of decreasing its dependence on oil revenue and increasing its industrial base, the country is in the process of implementing economic development plans that will assist it in reaching this goal. In order to develop a globally applicable model of decision making and policy planning which can assist the economic situation of developing or emerging economies, each country needs to establish appropriate accounting information systems (AIS) that can ensure success in a global environment. Without such a system, a country's capability for global interaction and controlled planning is undermined and there will be no effective plan, either internally or globally.

This paper, using economic development theory, examines the importance of accounting information in the achievement of national economic goals. It applies this notion to the case of Libya and its General Company for Pipelines (GCP), by assessing the extent to which accounting information is used in Libya. GCP is an industrial company with the objective of manufacturing all types of pipelines and pipeline equipment to be traded at home and abroad. It thus forms an essential part of Libya's economic development plans. Totally government owned, it is subject to direct government supervision, and provides information to the Libyan government.

The study on which this paper is based, relied on a study of GCP documents, including financial reports and other internal reports, and involved both interviews and the administration of a questionnaire. Interview and survey questions were formulated in order to ascertain the accounting information produced by the GCP's Finance department, the government bodies to which information was provided, and the extent of the use of this information in decision-making, control, planning and supervision.

The next section of the paper provides a background to Libyan politics, its government and economic system, in order to contextualise the study of GCP. Following this, the notion of economic development theory is explored, with a focus on developing or emerging nations, and identifying the importance of accounting information in the achievement of the economic goals of these countries. This is followed by a description of the evolution of Libya's economic development plans, the changes in which have produced the current situation. The case of GCP is then examined in detail, with a focus on the use of accounting information. The paper concludes with a summary of findings, an identification of the limitations of the research and suggestions for further research on the use of accounting information in Libya and other formerly planned economics, in order to assist in economic development.

1. LIBYA: POLITICS, GOVERNMENT AND ECONOMY

Libya, with a population of almost five and a half million, is the fourth largest country in North Africa. Until the 1940s, public ownership in most Arab states rarely extended beyond irrigation works and public utilities, but during the mid-1960s the public sector grew in Egypt, Iraq and Syria. After Libya's 1969 revolution and consequent nationalisation, public ownership increased in the 1970s to cover the majority of economic activities. With the help of the 1970s oil boom and concomitant increase of trade, Libya, like other Arab countries that were exporting oil, became a spending government through industrial programmes and systems of welfare. The desire and search for independence and the construction of the State made the Arab states a symbol of socialism (Ayubi, 1992), and Libya, with the emergence of military power, became a high profile socialist Arab state.
The establishment of the Arab Socialist Union in 1971 basically changed the structure of Libya's domestic policy. While some countries followed the doctrines of socialism, they did not have strong socialist beliefs (Ayubi, 1992), being followers of economic and political structures, rather than proactivists (Jaruga, 1990). In Libya, socialism was ideologically driven, and the implementation of its socialist structure caused the emergence of an economy where many projects belonged to the State. Prior to Libya's cultural or popular revolution, Turkey, Iran, Egypt and Algeria had all transformed the State into an instrument designed to organise and promote industrialisation (Bearman, 1986). Libya's revolution had

different goals, such as the challenge of inefficient bureaucracy, the absence of public participation in sub-national governmental structures and difficulties in co-operative action of national policy (Bearman, 1986: 140). These problems were to be solved through the emergence of "people's committees", which were responsible for the management of local affairs and applied the systems of direct democracy, as outlined in the first volume of Gathafi's (1980) Green book. Consequently, with the establishment of the Revolutionary Command Council in 1977, changes in the government structure of Libya began to take place.

The Popular Congress in Libya definines the objectives and goals that Libya wishes to accomplish through established laws and legislation in regard to various policies (Gathafi 1980; Libyan People's Bureau 1982). Under these laws and legislation, which are in the form of general principles and guidelines, a great deal of flexibility and freedom is available to administrative institutions. This variability and potential instability of institutions and structures is a key factor affecting the efficiency and effectiveness of government policies and the extent to which objectives can be accomplished (El-Moghirbi, 2003). Added to this are the continuous structural changes that Libya has undergone since the 1970s, which also have a bearing on the effective implementation of government policies (Mogherbi, 2003)[i].

These changes within the government's organizational structure resulted, by 2003, in a structure of more than 30 municipalities and 450 Principal Popular Congresses. The elected members of the Principal Popular Congresses for the industry sector are those who are from the General Popular Committee for the industry, and this is the case for other sectors concerned. In 1977, the General People's Congress nominated the first popular committee, and continued to do so until 2004. The committee has been subject to amendments and the General People's Committee Secretariat was assumed during the same period (1977-2004) by eight secretaries. The average tenure of each secretary ranged between one and six years. On the other hand, the General People Committee's structure (the number of typical secretariats) was exposed to several changes. Thus, the size of General People's Committee changed a number of times over the same period from a maximum of 26 secretariats to a minimum of seven. This however, meant the abolition of some secretariats, the merger of others and the introduction of new secretariats. With all these changes, it is not difficult to realize the extent of negative impact on the planning and the implementation of the general policies and the various resolutions.

Unlike its neighbouring colonised countries such as Algeria, Tunisia or Egypt, Libya did not create clear domestic financial, commercial, capitalist or agricultural firms that had a close economic relationships with its colonial powers (Knapp, 1977). By the time it became an independent nation in 1951, Libya was in a very poor economic condition[ii]. Since then, with the aid of American and British financial support, along with UN backing through programmes (Altunisik, 1995: 33), and with the discovery of oil, which it has in abundance, its wealth has increased substantially. Libya's reliance on oil and the consequent investment of foreign capital has been heavy. since then has been heavy. The oil sector's contribution to GDP reached its peak in 1980 (LD6, 525.7 million). On the other hand, the non-oil sector's climax reached LD 9, 998 million in 1997.

The Libyan economic system was feudalist for the most part during the years 1951 to 1969 (Bait El-Mal *et al*.,1973). The Government did not interfere in private ownership and focused on the regions where a high degree of investment was needed. In order to encourage competition, the government set some standards and rules for private businesses, such as the establishment of rules of import and export, which demanded the necessity of issuing a licence for the importation of foreign goods. The second standard was the setting up of the Real Estate Bank of Libya (currently the Development Bank) which provided loans to Libyan business in order to establish local industries. Finally, there was the development of the Industrial Research Centre which assisted the operation of the country's development plans through producing technical and economic services in both the public and private sectors (Bait El-Mal, Smith *et al.* 1973: 86). After the discovery of oil, the economic situation jumped from a deficit to surplus income and the 1969 revolution turned the capitalist inclination to a socialist one. There appeared to be an increase in State interference and governmental expansion of the public sector as well as a rejection of the private sector. The structure of State ownership of businesses began in the 1970s, rapidly increased and reached a climax in the 1980s when the majority of businesses were controlled by the State (Altunisik, 1995: 112). All the industrial operations, foreign and domestic trade, banking and insurance services were under the dominance of the State as well.

The Economist Intelligence Unit (1997) reported that although the Libyan economy was focused on the policies of authorities and central control, during 1990-2000 private companies appeared to operate their activities as well. The reason behind this shift was the heavy fall of oil prices in the world and the critical economic situation it brought about for Libya in the late 1980s and 1990s. As Vandewalle (1998: 84) stated, in order to compensate for the economic loss, the State gave freedom for the emergence of the private sector by introducing more liberal standards. The general purposes of such measures were the stopping of public spending, and blocking of subsidies and finally the encouragement of the growth of the private sector (Vandewalle, 1998: 84). The establishment of group businesses was the first revolutionary standard that occurred in 1987 and 1988. Another reformative measure was the policy regarding the management of the private sector and selected projects and the end to limitations on private trading. In order to enhance the private practices, the government passed Act Number 9, enabling the process of privatisation of a number of public-sector companies. The major aim of the act was to regulate the important key function of private sector economic activities. The Act signified the main operative duties of the private sector, including production, distribution and services. Transport, agriculture, industry, commerce, tourism, and finance are the main areas of those activities. The Act also permits the establishment of privately funded companies and allows families to fund their own private business. It also allows the selling of public companies to private sector based organisations on General People's Committee suggestion.

The State issued another Act (Number 5), Foreign Capital Investment Encouragement, in 1997. In order to develop the economic and social situation, The Act set a base for foreign capital investments generally. It specifically encouraged investment in the fields which brought modern technology to Libya, offering variation of income and helping the development of national products, which, in turn, led to Libya's entering the international market.

2. A THEORY OF ECONOMIC DEVELOPMENT AND THE ROLE OF ACCOUNTING INFORMATION

Alternative economic theories of development have emerged to explain the national role of accounting systems. Each uses different arguments and assumptions, and all have implications on the importance of accounting information in the decision making process. Four major theories of development, Modernization, Dependency, World-Systems and Globalisation, have been identified as the principal theoretical explanations used to interpret development efforts carried out, especially in developing countries. Modernization Theory is an international development theory that considers the shortage of capital technology and lack of industrial development in a society as the reason for underdevelopment (Martinussen, 1997; Chase-Dunn, 2000; Reyes, 2001a). Dependency Theory identifies unfavourable production relations that exist between countries as being the result of imperialistic domination (Muuka, 1997; Haque, 1999). World-Systems Theory takes a world-centric view, focusing on social and cultural change as a necessary contributor to economic development (Wallerstein, 1974; Wallerstein, 1979; Szymanski, 1982; Reyes, 2001b).

Globalisation Theory identifies a greater level of integration taking place among different regions of the world, and asserts that this integration has an important impact on economic growth and social indicators through enhanced communication and the proliferation of global technologies (Reyes, 2001a; Reyes, 2001b; Zineldin, 2002). The adoption of the theoretical perspective of Globalisation Theory allows us not only to clarify concepts and to set them in their economic and social perspective, but also to identify recommendations in terms of social policies.

For the purposes of this study, the term “development” is understood to be a social condition within a nation, in which the authentic needs of the population are satisfied by the rational and sustainable use and development of natural resources and systems. This utilization of natural resources is based on technology that respects the cultural features of the population of a given country. This general definition of development includes the specification that social groups have access to organisations, basic services such as education, housing, health services, and nutrition, and above all else, that their cultures and traditions are respected within the social framework of a particular country. In economic terms, this definition indicates that for the population of a country, there are employment opportunities, satisfaction at least of basic needs, and the achievement of a positive rate of distribution and redistribution of national wealth. In a political sense, this definition emphasizes that governmental systems have legitimacy not only in terms of the law, but also in terms of providing social benefits for the majority of the population.

Despite the contemporary focus in many development circles on enhancing the capacity of accounting systems in developing countries, as an empirical matter surprisingly little is known about the relationship between accounting systems and development (Clark & Knowles, 2003; Graham & Neu, 2003). By reviewing literature on accounting and theories of development, it has been concluded that little attention has been given to the study of the relationship between accounting systems and development needs through the interpretation of theories of development (Graham & Neu, 2003; Shareia, 2004). This lack of emphasis on accounting highlighted a need to consider to the aspects ignored in economic development theories, and this is the focus of this investigation. The use of a theory of development highlights the influence of culture, including religion, the role of the state and political systems and the stage of development, encompassing a country’s history, resources, and place in the world. A globalisation theory of development focuses on the interaction between developed and developing countries, and is a useful and appropriate way of understanding the data gathered from field work, as it acknowledges social and cultural factors, the prevalence of global communication and greater technological unity at a global level, including the technology of accounting (Enthoven, 1973; Mirghani, 1982; Perera, 1989; Belkaoui, 1994).

As a result of globalising forces, many developing countries have adopted the accounting systems of western developed countries without any concern being given to the ability of these systems to create information that is necessary for effective national economic planning (Mir & Rahaman, 2005; Shareia, 2005). Most frequently it has been U.S./U.K. accounting systems which have been adopted, and factors that have been identified in this process include the British Empire, English language, the availability of professional qualifications offered by some of the British professional accounting bodies in overseas countries, and educational exchange and direct aid from the U.S. and U.K (Briston, 1990). Nevertheless, there are powerful arguments to suggest that a system imported from a western nation is unlikely to meet the information needs of developing countries in their quest to pursue economic development goals (Briston, 1990).

There is no doubt that the adoption of the U.S/U.K. system, in a situation where very little accounting existed before, would represent an improvement. However, it must be borne in mind that such a system evolved in a westernised social, political and economic environment, and that it may well need considerable adaptation to meet the needs of a particular country. In the first place the system presupposes that companies financed by private shareholders and whose shares are listed in a local stock exchange carry out the bulk of economic activity. Where the bulk of investment is in public sector companies, then very different criteria of measurement need to be developed. There is also the likelihood that the political and economic system would be very different from that of the U.S. or U.K., so that the objectives of economic management might well be different.

Also, particularly in the Arab world, religion may have a significant influence upon financial and economic reporting. Finally, whatever the nature of the economy, there is a strong argument that the approach to accounting should be broadened, partly to take into account different political, economic and religious objectives, but even more importantly, to have regard to the fact that scarce accountancy skills may well make a stronger contribution if they are directed towards information for decision-making, internal audit, and performance measurement, rather than being aimed at the external audit of activities, which are already completed. For accounting to play a vital role in economic development it has to provide information that is relevant to the needs of that particular country. Government planning without adequate and reliable accounting information is bad planning (Seidler, 1967).

In the area of government planning and activity, accounting has an important role to play. Economic planners need accounting information in order to identify past economic development trends, to carry out feasibility studies of projects for the plan and to monitor ongoing economic projects in order to facilitate control and revision of plans. Seidler (1967: 272) asserted that they have not always realized this potential contribution of accounting:

> this neglect [of the importance of accounting to the economic development process] seems to stem partly from a feeling by economists working in economic development that general accounting concerns only private enterprises. Not only is it assumed that the private sector is capable of satisfying its own needs in this respect, but the extensive role of enterprise accounting in affecting the operations of government and development planning is also ignored.

National economic planning and control are activities that rank high in the agenda of most developing countries. Even governments of developed countries with free-market economies will normally exercise some degree of control over their economies through monetary and fiscal policies. Consequently, developing countries require an accounting system that supplies information reflecting the economic realities of the country, and which produces information useful in aiding national economic development planning (Mirghani, 1982). Information which is either unavailable or unreliable hampers the ability of government to achieve its economic goals since it means that the selection of a development model will not be conceived based on a realistic assessment of the current economic situation and the country's ability to achieve its stated plans (Mirghani, 1982). Information that is sporadic or inconsistent could lead to an economic plan that covers certain sections of the economy rather than others, simply because information is available on that sector (Mirghani, 1982). A dearth of information about the interdependency of the "major economic sectors", similarly, will lead to an ill-conceived economic development plan, as will a lack of information about "the relative scarcity of resources available for development" and an accurate assessment of the progress being made towards economic goals (Mirghani, 1982: 60).

3. LIBYA'S ECONOMIC DEVELOPMENT PLANS

This pattern of dependence on foreigners to perform crucial skilled functions, which subsequent governments have been unable to eliminate, has made Libyans acutely aware of their subordinate status in the world economy in relation to the industrialized West.

Consequently, the Gathafi government has assigned a high priority to the achievement of what it perceives as "true economic independence." This theme has been one of Gathafi's staple arguments and underlies much of the post-1969 revolutionary government's economic policies. Gathafi's other principal economic objective has been to promote equity, which he equates with socialism. Because of Gathafi's unique conception of the character of the state, his distrust of the private sector, and his abhorrence of the profit motive, he has maintained that it is only through massive state intervention that economic independence and equity can be attained. Thus, the state has taken control of virtually all economic domains since Gathafi came to power in 1969.

The policy of economic development in Libya in the early seventies aimed to give greater attention to the industrial sector in order to play a role in decreasing dependence on the oil sector (as far as the income source is concerned) and lessening dependency on imports from abroad. The state has undertaken the task of increasing expenditure on the industry sector, which has been reflected in the establishment of many economic enterprises controlled by the government. As a result, the need for accounting information has increased.

The development movement went through two phases following the 1969 revolution. During these phases, economic and social plans were set up during the first phase, between 1973 and 1985, but during the second phase that covered the period from 1986 to 2003 the setting up of development plans was suspended, and instead, reliance was placed on the annual budget.

3.1 The period of setting plans (1973- 1985)

During the period from 1973 to 1985 a change in Libya's development plans meant that a remarkable amount of attention was directed to the industry sector in order to undertake the vital role of diversifying the nation's economy, thereby lessening its dependence on oil. In addition, there were the creation of new job opportunities and the replacement of imports of some goods by local production, which contributed to the establishment of a strong industrial foundation.

The three year economic and social plan between 1973 and 1975 focused on fundamental food industries and making use of available natural resources by providing assistance to the agriculture sector to ensure that the food industries were supplied with the resources they needed. In the subsequent five year economic and social plan between 1975-1980, more attention was devoted to the industry sector through the allocations it acquired during that period (Barker 1982; Bait El-Mal 2003). The plan also offered a good deal of attention and priority in the implementation and operation of industry designed to replace imported fundamental goods with Libyan production. For example, final consumption industries, industries of intermediate the consumption, commencement of establishing fundamental mineral and chemical industries, the iron and steel industry and the expansion of oil and gas refinement were established.

The five year economic and social shift plan of 1980-1985 gave priority to investment and implementation processes in export industries, with the establishment of a group of integrated industries, which are considered to be intermediary industries. They made use of available organic and mineral materials and secured the manufacturing of a maximum percentage of those materials in order to increase added value in the industry sector and make a tangible change in the industrial production structure (Barker, 1982; El-Jehimi, 1987; Bait El-Mal, 2003). The plans also aimed at broadening food industries so as to increase the level of import replacement to lessen dependency on the import of products of these industries.

In order to accomplish the objectives set by the 1980-1985 plan, a number of policies were adopted. The phrase, "partners not wage-workers", (Gathafi, 1980: 43) aimed at increasing production, securing the continuity and stability of the work force, lessening the rate of work rotation and disseminating industrial awareness of the workers in order to increase the level of productive skills, was adopted. Industrial credit was broadened, guiding Libya towards industrial partnerships through economic development by choosing and researching industrial enterprises and guiding the private sector to make investment in them. Material incentives were offered to national industry by customs duty exemptions on machinery and raw materials and through tax exemptions.

Among the most important results of implementing the economic and social development plans during the period 1973 to 1985, was the accomplishment of higher rates of growth in overall production. Although these good results were achieved in the industry sector, the main objective was not achieved, which was to find alternative resources to the oil sector to generate foreign currency.

3.2 The action period with no plans (1986-2003)

The consecutive decline in crude oil prices in the European market, and subsequently in oil returns, from 1982 until the collapse in oil prices in 1986, led to uncertainty about oil revenues and, subsequently, disorder in Libya's development efforts. Instead of making use of the opportunity to change planning objectives, economic administrators during the period 1986 to 2000 suspended development plans and relied upon annual development budgets (Altunisik, 1995: 87). In order to deal with the decline in the oil prices, the government decided to take a greater role in both economic management and in the direct provision of goods. It also narrowed the field of commodity balancing (imports) and imposed restrictions on foreign remittances. State intervention resulted in reduction of spending on imports, so that Libya's own manufacturing sector output would not have to compete with goods from overseas.

The situation outlined above is in fact representative of the dilemma of most developing countries. Even though reliable accounting information is not the only factor that is required to achieve effective economic planning, its usefulness is indisputable. With reliable accounting information, at least governments of developing countries could tell with some degree of assurance where and why their plans were not working so that corrective action could be taken where possible. An examination of the information produced in the GCP illustrates this situation.

4. THE CASE OF THE GENERAL COMPANY FOR PIPELINES

4.1 The conduct of the study

Data for this case study was collected from a combination of documentary evidence, interviews, and the administration of a survey. Financial reports of the GCP from 1993 – 2003 were studied, together with production and sales reports for the years 2002, 2003 and the first half of 2004, and other internal documents describing the company's statute and its organizational chart. Fourteen interviews were conducted with people prominent in the Finance Department of the GCP, as indicated in Figure 3, in order to ascertain the nature and extent of accounting information provided to various government departments. Significantly, only one interviewee agreed to the recording of the interview, an indicator of the sensitivity of the issue (Shareia, Parasuraman *et al.*, 2005), and the fact that interviewees could contribute more information without being recorded (Stake, 1995; Jones & Gratton, 2003). Interview questions, listed in Appendix 1, focused on a range of questions around the production and use of accounting information.

Following the conduct of the interviews, an individually administered questionnaire was distributed to 28 workers within the GCP's Finance Department, with 22 returned. Survey questions, shown in Appendix 2, investigated the role of the company's accounting systems, the information produced, its significance, and use in decision-making, control, planning and supervision. Respondents were required to answer according to a Likert scale (Sekaran, 1992).

4.2 GCP Background

The GCP is one industrial company that is subject to direct supervision by the Popular Committee Secretariat for Industry, Mining and Energy in the Sha`biya (Municipality) of Benghazi (Libya State 1978). GCP as being wholly owned by the Industry Secretariat (IS), and in the metallurgy industry. GCP's supervision by the IS followed the abolition of the Popular Committee Secretariat for Industry on a national level and the devolution of all its functions and properties to the General Board for Transfer of Ownership of Companies and Public Economic Units and the Popular Committee Secretariat for Industry on the level of Sha`biyas (Municipality). The GCP is located in the Qawarsha district, 15 km south west of Benghazi. It was established in 1978 with a capital of 12 million Libyan Dinars. Its capital grew to 42 million Libyan Dinars in 1992, owing to the emergence of some new installations, for example a factory for producing longitudinally welded pipelines, a factory for producing spirally welded pipelines, and a factory for producing spray irrigation pipelines.

The company is completely owned by the State, and the Treasury Secretariat provided all capital under the auspices of the IS until 2002 when its supervision was transferred to the IS in the Sha`biya of Benghazi, (the local Municipality) the second largest city in Libya. The main objective of establishing this company was to manufacture all types of pipelines and pipeline equipment, to trade these products at home and abroad, and to undertake all necessary work in order to accomplish this objective. According to a company statute it was to undertake the following (Libya State 1978):

- ownership, management and operation of pipelines factories and their supplies, as well as factories involved in finishing those products, or those based on them, whether by construction, purchase or partnership;
- purchasing of patents, industrial forms and private licenses regarding industrial use of the products mentioned;
- the import of raw materials and production supplies necessary for the company's factories;

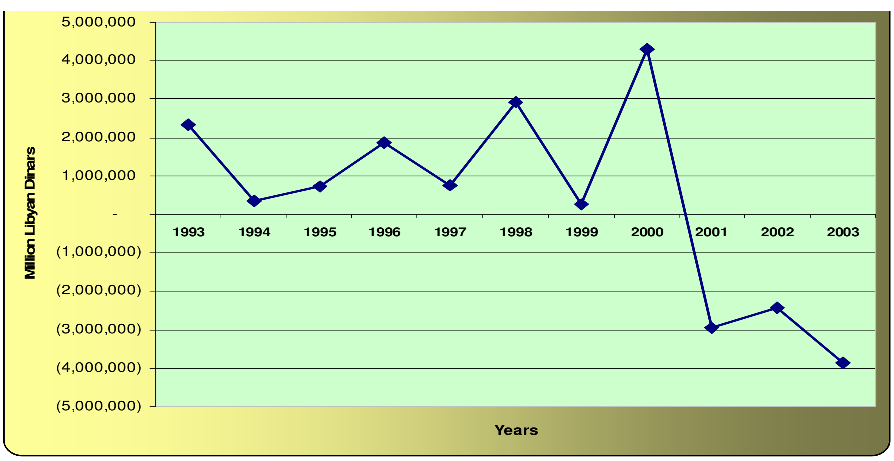
- the import of pipelines and pipeline supplies manufactured abroad in various types and sizes, plus the marketing of the products mentioned at home and abroad and undertaking activities of the commercial agencies of the productive foreign companies in accordance with Act No.78 of 1975 (Libya State 1975);
- trading pipelines of various types and supplies, whether from the company's production or from elsewhere at home and abroad, and the establishment of assembly and distribution centres; and
- the ownership and procurement of fixed and circulating assets necessary for accomplishing its objectives, and to achieve its objectives, the company should participate in any way with other companies which undertake similar activities to help accomplish its objectives at home and abroad, including, where necessary, merger or annexure.

The company was established on the basis of monopolizing pipeline goods in the Libyan oil market, offering no opportunity for any other competitor. This monopoly position was reflected in the company's performance from 1993 to 2003; as shown in Figure 1. Profits ranged from a high of 4.3 million Libyan Dinars in 2000, to a loss of 3.86 million Libyan Dinars in 2003 (see Table 1).

Table 1. **GCP Performance from 1993 to 2003**

years	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
P/L Million Dinars	2.34	.338	.7308	1.86	.757	2.93	.268	4.30	(2.95)	(2.42)	(3.86)

Figure 1. **GCP'S Performance from 1993 to 2003**



(*Source:* GCP Financial reports (1993-2003))

The outcomes of the company's activity changed to losses during the years 2001- 2003, when the state abandoned its support of the company and adopted the open market system.

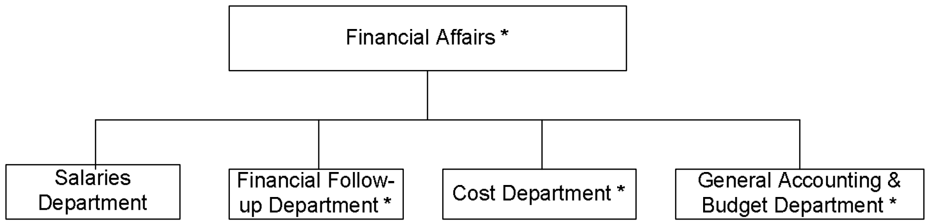
4.3 Management of the GCP

An organisational chart is a helpful tool in identifying and explaining formal relationships and accountabilities within firms. The data collected showed that the GCP maintained its organisational structure since 1978 without any changes (See the GCP's chart Figure 3) When studying the company's organizational chart, it can be seen that there are four administrative levels. The organisational structure consisted of eight Bureaus, three Administrations, eleven Departments and twenty-five Units and subunits. The Bureaus and Administrations were accountable to the Executive Manager who was also the Head of the GCP's Administration Board. Supreme management is represented by the Popular Committee Secretariat for the company, which is immediately followed by eight bureaus. Under these is the second administrative level, which consists of three public administrations, each of which includes other internal administrations, followed by departments and units. Financial Affairs is responsible by four departments, the General Accounting and Budgets Department, the Costs Department, the Financial Follow-up Department and the Salaries Department. The ultimate authority in GCP was the Popular Committee Secretariat. A description of some of the tasks of the GCP Bureaus, Administrations and Departments is provided next.

The Internal Auditing Bureau, which can be considered one of the company's control mechanisms, is obliged by law to audit the company's records and books, payment documents and procedures, money and cash balances, and review the inventory reports. The GCP's Internal Auditor, who was appointed by the Executive Manager, listed his main obligations as auditing the company's payments, sales and entries. However, he described three types of auditing that the Bureau was involved in: accounts auditing, document auditing and technical auditing. The Bureau prepared a report for the Executive Manager every three months. The report was then sent to the IS. Although the Bureau worked very closely with Financial Affairs, it answered to the Executive Manager.

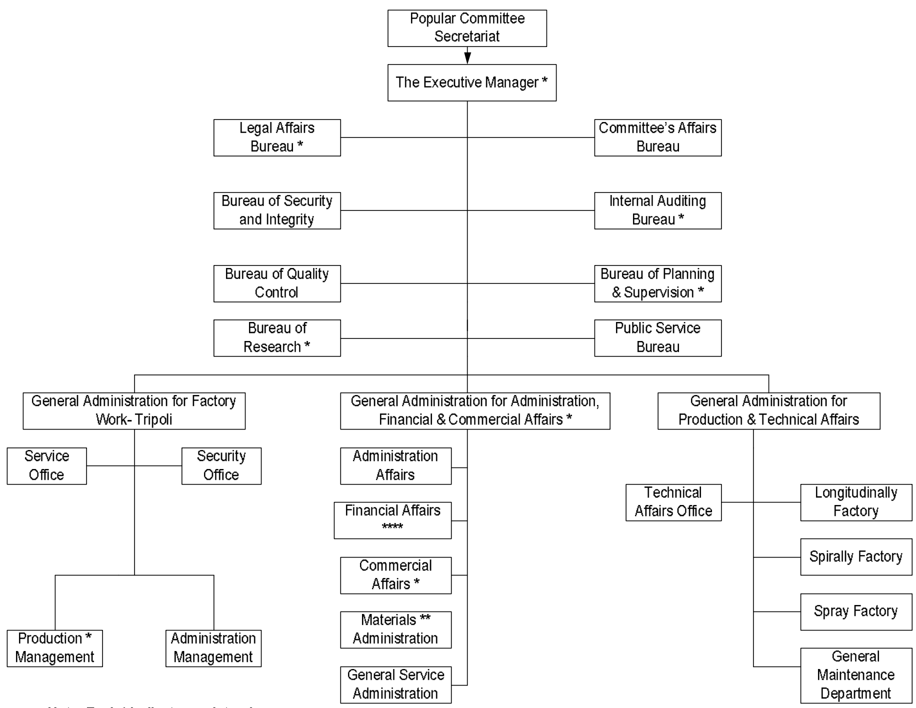
Financial Affairs (see Figure 2), which consisted of four departments, was obliged to apply the right accounting procedures according to the Libyan Commercial Code, the Libyan Financial System Law, and to follow the instructions given by government bodies such as the Public Control Office and the Tax Office. The General Accounting and Budget Department, which operated under Financial Affairs (see Figure 3), prepared the company's budget and financial statements and reports. The Salaries Department prepared employees' salaries, issued payment cheques and compared the company's money balances in records and banks. The Cost Department developed and applied the company's cost system, determined the production cost per unit, prepared monthly reports on costs of production, and reported on variances from the budget. The Financial Follow-up Department was responsible for following the financial procedures in the company.

Figure 2. **Financial Affairs of GCP**



Note: * Indicates where interviews were conducted

Figure 3. **The GCP's Organisation Chart**

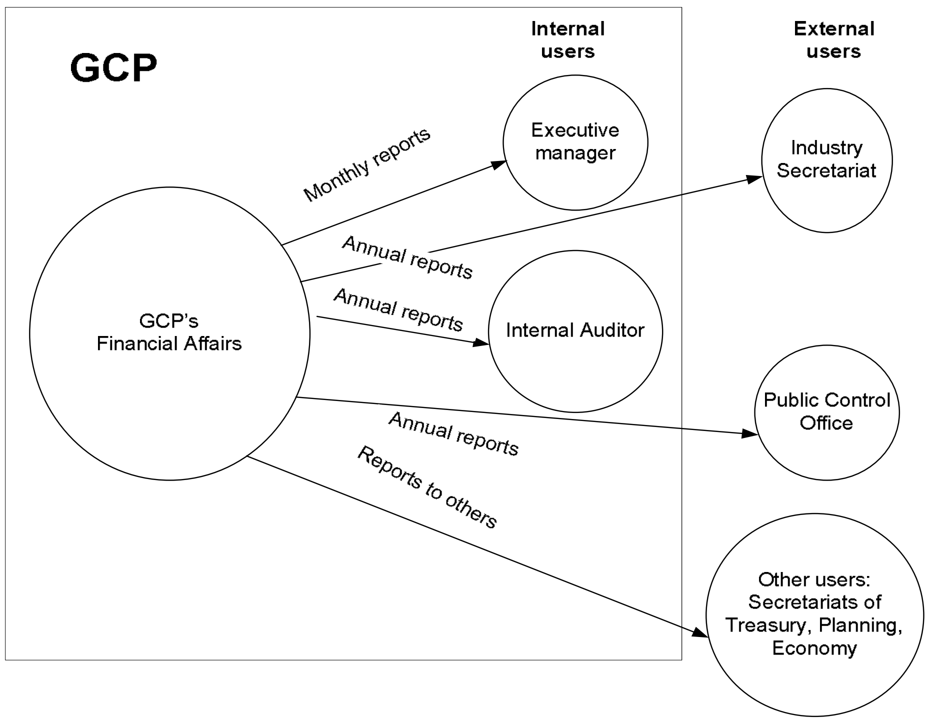


Note: Each * indicates an interview

4.4 The GCP Financial System

The company's fiscal year starts on the 1st January and ends on 31st December each year. The company's main revenues are generated from selling its products, however other revenues are obtained from loan interest and selling other assets. The company uses the following accounting books as part of its accounting system: the journal sheet, expense book, cash account and chequebook. Finance Management is required by the company's Financial System to prepare a monthly trial balance and a comparison between actual and estimated production values and costs. It also analyses any variances and reports these to the Executive Manager within the first ten days of the following month (see Figure 4).

Figure 4. **GCP Information flows**



The company's Financial System requires the company to prepare its balance sheet and profit and loss account within two months of the fiscal year end and presented it to the Internal Auditor. Then, the Internal Auditor reviews, within two months at most, the company's financial statements, before the company sends them to the Public Control Office. The Public Control Office appoints an external auditor to audit the statements and makes a report to the company's General Assembly. The appointed external auditor is either an auditor working within the Public Control Office or a self-employed (independent) auditor. The Public Control Office appoints independent auditors to audit companies' financial statements whenever it suffers from auditing staff shortages.

The Libyan Financial System Law of 1967 requires that all Libyan owned companies have a Finance Controller, who works very closely with the Financial Affairs Administration. The Finance Controller, who is appointed by the Secretary of Treasury, is not accountable to the management of the company that he/she works in, but to the Secretary of Treasury. One of the Finance Controller's responsibilities is to make sure that companies are committed to, and do not exceed, their budgets. They also supervise finance departments and make sure that these departments apply the right accounting procedures and policies. Finance Controllers must provide the Secretary of Treasury with a monthly report on the organisation's expenditures as set forth by the Libyan Financial System Law (Libya State 1967). They have to provide their approval on all of the organisation's payments that exceed a pre-agreed amount. They also provide a copy of their reports to the body supervising the organisation they are reporting on. The following sections outline the qualitative and quantitative analysis undertaken, based on the gathering of data from the GCP.

4.5 The role of accounting systems in the GCP: qualitative analysis

The GCP undertakes the task of supplying the IS, annually, quarterly and monthly with many reports such as production and sales reports, and other reports required by the IS from the companies associated with it. The reports are prepared on forms specifically designed for this purpose by the IS and utilised in all companies, in order to facilitate the IS's ability to draw comparisons between various industrial companies. This point highlights a difficulty for those in charge of preparing these data. They believe that each company, its own activities and circumstances, differs from others, even in the same sector. The Director of General Administration for Production and Technical Affairs indicated this precisely when he said:

> we are bound by the IS to provide the data and information on a form prepared beforehand by the Secretariat, and this form is completely unsuitable for what we need to give and they have never even consulted us regarding the format.

In addition to supplying the IS with these reports and information, the company also was required to supply data and reports to other authorities, such as the Board of Control and the Inland Revenue (The Tax Office). The participants in this study almost unanimously agreed that there was no existing role for the accounting systems, and that no one read these reports. This was due to the enormous amount of data and the number of reports required. The Financial Supervisor in the Bureau of Research of the GCP observed that:

> no one seriously reads these reports. In the past, a person who wasn't an accountant was assigned to conduct an evaluation of the company and submit this evaluation in the form of a report. In fact he did his work in a period of only three days, but no one ever asked for this report and its content.

There was a belief among many people in the company that no one examined these reports and their content. The Director of Commercial Affairs made this clear:

> These reports became routine work, and they are prepared and submitted to the IS or to any other authority, and the only thing the authority does with the reports that have been sent, is to confirm that the company has sent these reports and nothing more. Their sole concern is to stress that the companies should submit these periodical reports on time, and subsequently this emphasis leads to the inaccuracy in preparing these reports and the indifference of those in charge of preparing the reports, because they are already confident that no one will look into and evaluate the reports.

This attitude certainly weakened the vital and potentially positive role of the accounting systems and the extent to which they could be effectively utilised in decision-making, setting up development plans, supervision and control.

The sheer volume of reports and the need to gain approval by higher administration further increased the ambiguity of their contents. The Popular Committee Secretariat for the company attested to this:

> When requesting the reports, normally the original copy is requested and the size of one report may reach 100 pages on some occasions, stressing the necessity to confirm each page of this report by the Popular Committee Secretariat for the company, and this certainly takes a long time, and subsequently I end up taking these reports home to confirm them, and because the reports are very long, I cannot study and examine every single page of them and subsequently I do not blame anybody in the IS when making any comments regarding these reports.

The IS received reports from all companies with similar content and length to that of the GCP, because these reports were all prepared in a standard manner as required. Undoubtedly, clear and accurate reports always lead to appropriate and timely decision-making. The Financial Supervisor of the company made this clear when he drew an analogy with a football match:

> football has been developed in the third world and has reached the same level of football as in developed countries, because you cannot hide anything with football. Everything is clear. So in the case of poor performance of the team, the coach gets changed without favoritism or courtesy, and this certainly leads to the taking of the right decision at the right time without resorting to the concealment of truth, because there is no room for the truth to be hidden.

The Financial Supervisor of the company recognized that social factors were important in influencing the types of reports and their contents, and even their credibility and timeliness. So the analogy of the football match was very fitting. The reports of any football match played by a team cannot be circled in secrecy or courtesy because the crowds of spectators follow up the match, and as a result we find the management committed to changing the coach in the event of defeat or poor performance. This is what has made football in the third world develop and catch up with football in the developed countries. In a similar way, the impact of social factors and social relations in influencing the role accounting systems play in both the developed countries and the third world is important.

During discussion with some participants in the study, it became evident that they felt at one stage that the state wanted to receive positive reports on the industrial companies' activities, regardless of the actual situation, because this sector enjoyed the support of the state. Its success played a part in the state's success in accomplishing its policies, and prompted many people to believe that anyone submitting poor quality reports might lose his or her job. Responsible members of staff in any department, if they submitted a good report, even if it were untrue, might be promoted or at least their current job would be secured. The Financial Supervisor clearly indicated this:

> in order to secure any job, the official in charge prefers to submit an untrue report and embellish the truth to the relevant authority, in an attempt to secure his job for a longer period of time, because this person is seen as a supporter to the public sector and subsequently he supports the state and its policies, which in turn, devote support to this sector. On the other hand, any person who submits a bad report, even if it represents the truth, may be considered to be an obstacle for the public sector, and should be removed or replaced by another person.

During the researcher's presence in the GCP, he attended two meetings, a regular meeting of the General Administration for the Administration and Financial and Commercial Affairs (see Figure 2) and a meeting of the Popular Committee

Secretariat for the company. From the meeting, the researcher formed the following impressions:

Half of those who were supposed to attend the first meeting failed to be present. No genuine excuse was offered despite their role in the company. They later indicated they were convinced that attending such meetings was a futile matter.

There was a general failure by attendees to produce reports required for the meeting well before the start of the meeting. The outcome of this was that the chair of the meeting received reports during the meeting, which resulted in loss of opportunity to discuss these reports thoroughly.
When the General Director of Financial Affairs reviewed his periodical report it was apparent to the researcher that the Directors of the Department were not acquainted with financial and accounting terms, even the simplest of these such as, “deferred sales”, “advance instalments”, and “cash surplus”.

As previously mentioned, the extent of the influence of political factors in this subject is clear. This has led to workers being fully convinced that there is no way to row against the sweeping current without losing their jobs or incurring countless problems. This behaviour obviously weakens the role that accounting systems play, which is to produce accurate data and timely information that shows the state of industrial activity and progress in Libya. The General Director of Financial Affairs stated that there was no role for accounting systems in the company in helping the Department:

> The Department here undertakes its work spontaneously. In other words, we can call it the “Department of crises”. Therefore, we notice that the subject continues until a crisis or a problem emerges, then all authorities rush and intervene to solve the crisis.

4.6 The role of the GCP’s accounting systems in fulfilling development needs: quantitative analysis

The first question on the GCP questionnaire asked respondents whether they believed accounting information systems were very important at each stage of decision making in GCP. The results indicated that the majority of the 22 participants stressed the importance of accounting information in decision-making, with 12 strongly in favour of the idea.

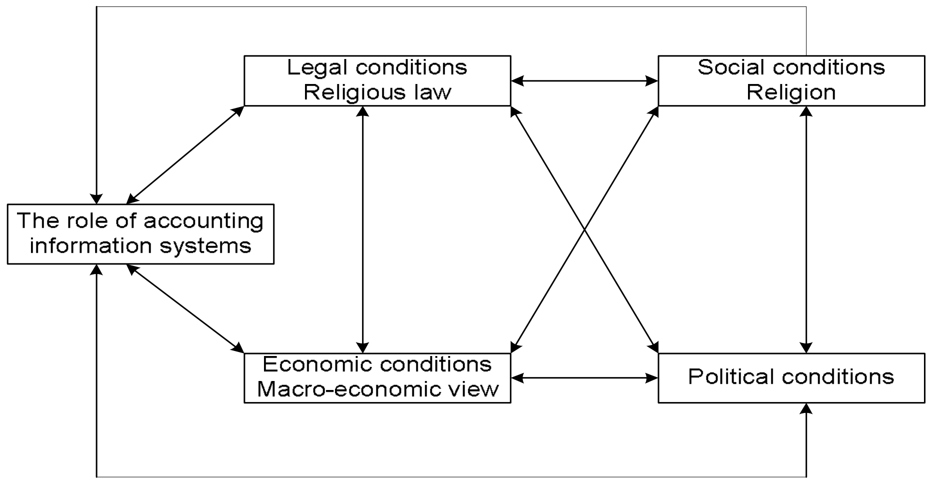
The second part of question one sought reasons for the scarcity of accounting information, and the researcher provided several hypothetical reasons. Participants agreed on some of these but disagreed on others. For example, some participants agreed that among the reasons were the poor standard of awareness of the importance of accounting information and how to use it. Other participants were not in agreement with either the poor quality of accounting information or the inadequacy and irrelevance of accounting information.

Regarding factors which hinder the development of accounting applications in Libya (Question 2), educational, professional and other factors were suggested. Participants did not agree on the educational factor items, except those factors that dealt with the scarcity of training programs for managers. Eighteen participants out of 22 agreed that these were part of the factors that hindered the development of accounting applications, whereas they did not agree on the rest of the items: the poor influence of accounting method, the poor standard of efficiency of lecturers, the lack of accounting books in Arabic language as well as state policies that failed to devote enough attention to the significance of the accounting information.

Regarding professional factors in question number 2 part B, participants all agreed on the failure of people to understand the role of accounting in decision-making, in addition to the poor efficiency exercised by the Accountants Union and the scarcity of accounting releases. Other participants were preoccupied by the decline in the accounting profession in Libya. Participants also stressed the decline of government support and cultural and social influences.

Regarding the issue of to whom participants felt accountable (Question 3), their answers indicated superiors, the IS, the Public Control Unit and the Community. They did not agree that they undertake accounting tasks for the benefit of other secretariats, customers, IS and the public as a whole. Meanwhile, participants stressed that they undertook their professional accounting activities to satisfy the implementation of government programmes and policies and the company's programmes and policies. This was logical because they worked for the public sector.
Despite the importance of data and accounting information in decision-making in regard to the economic and social development of Libya, it is evident that the current role of accounting and accounting systems in providing information for decision making is unclear. This affirms the results of previous studies conducted in developing countries, at the same time providing evidence that accounting information is not effective in meeting the development needs of Libya. It has also been revealed that there are contextual reasons why that information to date has not been utilised to its full potential. Therefore, this study provides practical evidence that confirms accounting literature on developing countries in general by providing evidence of the limited extent of Libya's use of accounting information, as shown in Figure 5. Its role is shown to be marginal, being used in a very limited way in decision-making, planning and control.

Figure 5. **The Interaction between the Role of Accounting Systems and Libyan Environmental Factors**



An analysis of participants' views revealed that the public authorities do not make appropriate use of the information and data that has been provided. Understandably, this creates an impression on the part of information presenters (the industrial companies) that a lack of care can be shown in relation to the demands of those authorities. Where there is no evidence of the use of information, or perhaps sporadic use, signs of the lack of use of requested information may be deduced. Sometimes the information provider gives an estimate or random numbers because he regards this as a mere routine measure without incurring any consequences. Participants in the GCP made it clear in interviews that there was an absence of feedback, which would have provided a motive to the information providers to present and set up the information earlier and convey it or submit it to the authorities who needed it. It was clear that information users need the information and data at various times. Some data and information were required monthly, others annually, or even quarterly or every six months. Interviews also revealed that there were authorities that demanded certain data and information without the power and authorisation to do so. Instead, these authorities should have contacted the supervision and control authorities to acquire what they wanted in relation to data and information. Participants believed that the financial statements could provide most public authorities' needs if they were coordinated and required at times set by law.

CONCLUSIONS

This paper identifies how AIS could assist Libya in its economic development in the future. Drawing on previous discussions, both the role of accounting information systems in economic development and the reflexive effect on this role of legal, economic, religious, political, social and cultural conditions have been investigated. The achievement of economic development in developing countries implies a recognition of the importance of an accounting system which produces reliable, timely and globally valid information. The role of the communications system of developing countries is thus very important since those countries operate in global environment in which the technologies of the West inevitably have an impact on national conditions.

The paper has dealt with the role of accounting systems in the economic and social plans of developing countries. This has been done in the Libyan context through a study of the role played by data and accounting information submitted by accounting systems in the GCP to government authorities. The study certainly may not reflect the view of the entire population, but the similarities between the public sector in developing countries, in general, and in Libya, in particular, as far as economic, political and social situations are concerned, make the results beneficial and support the accounting literature. The Libyan example, therefore, while it affirms other studies and offers valuable insights, is one case study in one country, and care needs to be exercised when applying its findings to other developing countries.

Another limitation of the study, particularly pertinent to qualitative studies, is the role of the researcher. Researcher bias is always present when conducting interviews. Moreover, the researcher was looking through a particular theoretical lens by using Globalisation Theory as the framework for this study. Qualitative research using a different lens could produce a different interpretation of the data, which would have implications for further research, as addressed in the next section.

The observations and propositions of this study could be used to conduct further studies on other Libyan companies, either by replicating this study in other organisations or by adopting different research methods. Action research may provide a richer/different understanding of the role of accounting systems in decision making, planning and control. Further research may explore the extent to which the notion of the role of accounting in decision making applies to other organisations in Libya. Although the study demonstrated the importance of context in the role of accounting systems, further research is needed to illuminate the role and the influence of an organisation's unique national and global context on the role of accounting. This may involve understanding how societal setting influences, or is related to, the role of accounting systems. Such dynamics as religion, political system, the status of the accounting profession, and changing government legislation warrant further attention.

The challenge for developing countries, such as Libya, in developing and using accounting information systems in the same way as developed countries use them, is to adopt them successfully to their own regulatory, legal, political, cultural and religious setting. This has be accomplished while still achieving the production and effective use of timely, relevant and accurate accounting information in order to serve the country's development needs. This is a huge challenge, worthy of concerted effort on the part of government authorities, company personnel, accounting professionals, other users of information and academics.

REFERENCES

Altunisik, M. B. (1995) *External vs internal debate revisited: The political economy of economic reform policies in Libya (1987-1993),* Graduate School Boston, Boston, Unpublished PhD Thesis

Bait El-Mal, A. (2003) "Evaluation of Goals and Development Plan in Libya" *Journal of Economic Research*, 14(1): 208-243

Bait El-Mal, M., C. H. Smith, *et al.* (1973) "The Development of Accounting in Libya", *The International Journal of Accounting, Education and Research*, 8(2): 83-101

Barker, P. (1982) *The Development of Libyan Industry in Libya Since Independence: Economic and Political Development*, Kent, Croom Helm

Bearman, P. J. (1986) *Qadhafi's Libya*, London: Zed Books

Belkaoui, A. (1994) *Accounting in the Developing Countries*, Westport, Conn., Quorum Books

Chase-Dunn, C. (2000) *The Effects of International Economic Dependence on Development and Inequality: A Cross-National Study (1975). From Modernisation to Globalisation: Perspectives on Development and Social Change* J. T. Roberts and A. Hite. Oxford, Blackwell**:** 210-228

Clark, T. & Knowles, L. L. (2003) "Global Myopia: Globalisation Theory in International Business", *Journal of International Management,* 9: 361-372

El-Jehimi, T. (1987) *Industry Development in Libya Around the year 2000. The Economic Development of Libya.* B. Khader and B. EL-Wifati. London, Croom Helm**:** 73-80

El-Moghirbi, M. (2003) *The Structure of Libyan Government. The Public Management in Libya*, M. El-Moghirbi and A. J. Al-Mansuri. Benghazi, The Economic Research Centre

Enthoven, A. J. H. (1973) *Accountancy and Economic Development Policy*, Amsterdam, North-Holland

Gathafi, M. A. (1980) *The Green Book*, Tripoli, The Green Book World Centre for Research and Study

Graham, C. & Neu, D. (2003) "Accounting for Globalisation", *Accounting Forum*, 27(4): 449-471

Haque, M. S. (1999) *Restructuring Development Theories and Policies, A Critical Study* New York, State University of New York Press, Albany

Higgins, B. (1968) *Economic Development: Principles, Problems and Policies,* London, Constable

Jaruga, A. A. (1990) "Accounting functions in socialist countries", *British Accounting Review*, 22: 51-77

Libya State (1967) Financial System Law Act, Libya

Libya State (1975) Act of Import. *78*. 78**:** 12

Libya State (1978) The Basic System of the General Company for Pipelines Act, Libya

Libyan People's Bureau (1982) *Jamahiriya: era of the masses*. Canberra, People's Bureau of the Socialist People's Libyan Arab Jamahiriya

Martinussen, J. (1997) *State, society, and market: a guide to competing theories of development* London, Atlantic Highlands

Mir, M. Z. & Rahaman, A. S. (2005) "The adoption of international accounting standards in Bangladesh, An exploration of rationale and process", *Accounting, Auditing & Accountability Journal,* 18(6): 816-841

Mirghani, M. (1982) "Framework for a Linkage Between Microaccounting and Macroaccounting for the Purposes of Development Planning in Developing Countries", *International Journal of Accounting.* 18(1): 57-68

Mogherbi, M. Z. (2003) "The Effects of Administrative and Structural Stability on Economic Policies in Libya 1977-1998", *Journal of Economic Research*, 14(2): 1-11

Muuka, G. N. (1997) "Wrong-footing MNCs and local manufacturing: Zambia's 1992-1994 structural adjustment program", *International Business Review,* 6(6): 667-687

Perera, M. H. (1989) "Accounting in Developing Countries: A Case for Localised Uniformity", *British Accounting Review,* 21(2): 141-158

Reyes, G. E. (2001a) "Four main Theories of Development: Modernization, Dependency, World -Systems, and Globalisation", *NOMADAS* 4: 1-12

Reyes, G. E. (2001b) "Theory of Globalisation: Fundamental Basis", *Sincronia* Spring 1-5

Seidler, L. J. (1967) *The function of accounting in economic development: Turkey as a case study*. New York, Praeger

Shareia, B. (2004) *The Role of Accounting Systems in Developing Countries: A Case Study of Libya,* Accounting, Commerce & Finance: The Islamic Perspective Conference, Brisbane, Queensland University of Technology

Shareia, B. (2005) *The Role and Objectives of Accounting Systems in Libya: The Status of the Industry Secretariat,* Accounting, Commerce & Finance: The Islamic Perspective Conference, Jakarta, Trisakti University

Szymanski, A. (1982) *The Socialist World-System. Socialist states in the world-system* C. K. Chase-Dunn. Beverly Hills, Sage Publications**:** 57-84

The Economist Intelligence Unit (1997) Country Profile -Libya, London, The Economist Intelligence Unit

Vandewalle, D. (1998 *Libya Since Independence: Oil and State-Building*, London: Cornell University Press

Wallerstein, I. (1974) "The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis", *Comparative Studies in Society and History*, 16(4): 387-415

Wallerstein, I. (1979) *The capitalist world-economy: essays*, London, Cambridge University Press

Zineldin, M. (2002) "Globalisation, Strategic Co-operation and Economic Integration Among Islamic/Arabic Countries", *Management Research News*, 25(4): 35-61

[i] Between 1977 and 1992, Libyan government consisted of a variety of structures involving provinces, municipalities, and municipal branches (Mogherbi, 2003; Libya State, 1986). In 1992, the municipalities and branches were abolished, with political representation provided through the Principal Popular Congress and approximately 1,500 principal popular congresses (Libya State, 1992). Gradually the number of these congresses was reduced, and Libya was divided into 13 regions (Libya State, 1995).

[ii] Before the economic development of Libya after the discovery of oil, the Libyan people earned their living through agriculture and animal husbandry Higgins, B. (1968). *Economic Development: Principles, Problems and Policies*. London, Constable.. The limited number of enterprises which existed before were controlled by Italian expatriates Bait El-Mal, M., C. H. Smith, *et al.* (1973). "*The Development of Accounting in Libya.*" *The International Journal of Accounting, Education and Research* 8(2): 83-101.