THE PROCESSES OF MANAGEMENT ACCOUNTING CHANGE IN LIBYAN PRIVATISED COMPANIES: AN INSTITUTIONAL PERSPECTIVE

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By

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Dedication

To my parents, my wife, my daughters, my sons and my brothers:

Thank you all for your prayer, support, love and sacrifice

Abstract:

This study explains the management accounting process in two privatised Libyan manufacturing companies. In addition, it investigates the perception of managers regarding the emergence of new management accounting systems and/or practices. Moreover, it explores the effect of institutional factors on management accounting systems. The research is based on a case study of two privatised Libyan companies. It uses triangulation of data collection methods and multiple sources of evidence, including interviews, observation and documentation. Using an institutional framework from new institutional sociology (NIS), old institutional economics (OIE) and power mobilisation are used to help clarify the processes of change in Libyan companies. The hybrid-institutional framework utilised in this study has aided in explaining, interpreting and understanding effects which have occurred within the organisations, which involve rules and routines and/or external-organisation, including terms of coercive, mimetic and normative isomorphism.

The position as mentioned above cannot be described in terms of quantitative approaches. So the main reason behind the selection of a qualitative approach for this was that the important aim of the qualitative approach is to provide an in-depth understanding of particular phenomena, such as management accounting change. Also, the case study strategy has been chosen from among qualitative strategies; this was appropriate as the researcher wished to provide a fuller understanding of the topics of the research. Triangulation data collection methods have been drawn on. The case studies were carried out during two stages of data collection in 2008-2009. The researcher relied on multiple sources of evidence, including interviews, observations and documents and archival records. Semi-structured interviews were adopted. In this context, the researcher had a list of themes and questions, as well as responses of interviewees which were recorded. Participant observation was converged as it is related to qualitative approach and case study strategy as well.

The results of the case studies showed that the objectives of the companies have changed completely from social to economic. The study found that there were institutional factors which affected management accounting systems and practice before, during and after the privatisation process. Also, the case studies affirmed that the changes were incremental or evolutionary. Furthermore, the findings showed that there is no current revolutionary change within the management accounting systems and practices in the companies under the study. It was also found that there was resistance to change when the company attempted to introduce an Information Technology (IT) system.

Declaration

I hereby declare that the material contained in this thesis has not been previously submitted for a degree in this or any other university. I further declare that this thesis is solely based on my own research.

Akram Ali M. Zoubi

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First and foremost, I would like to kneel down in gratitude to ALLAH, for blessing me with the opportunity to learn. Secondly, I am pleased to extend my sincere thanks and great respect and appreciation to Professor Rob Dixon for the valuable guidance he provided through all the stages of research, which has had a positive impact on this thesis. In addition the prominent role played by Dr. Riham Rizk in providing all kinds of support and assistance, especially in the early stages of this journey, will not be forgotten.

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Abbreviations

AT	Agency Theory
CLFS	Country's Law of Financial System
CT	Contingency Theory
EC	Electricity Company
ED	Executive Director
FC	Financial Controller
FD	Financial Director
GPC	General People's Committee
GPCE	General People's Committee for Economy
GPCF	General People's Committee for Finance
GPCI	General People's Committee for Industrial
GPI	General Prices Index
IIHC	Industrial Investment Holding Company
JSCC	First Case company
JSCP	Second Case company
LGPC	Libyan General People's Congress
LNOC	Libyan National Oil Corporation
LSM	Libyan Stock Market
MAP	Management Accounting Practices
MAS	Management Accounting Systems
NIE	New Institutional Economics
NIS	New Institutional Sociology
OIE	Old Institutional Economics
RABS	Regulation of Accounts, Budgets and Stores
PCOTCEU	Public Corporation for Ownership Transfer of Companies and Economic Units
RCC	Revolutionary Command Council
TCE	Transaction Cost Economics

CHAPTER ONE: AN INTRODUCTION

1.1. Introduction

This study introduces the findings of two case studies that explored management accounting processes in Libyan privatised companies. More particularly, it draws on a hybrid institutional framework: old institutional economic OIE (Scapens, 1994 ; Burns and Scapens, 2000 ; Scapens, R. and Burns, J., 2000), new institutional sociology NIS (DiMaggio and Powell, 1983), power mobilisation (Hardy, 1996), and also insights from a contextual approach (Pettigrew, 1987 ; Dawson, 1994). The aim of this study is to investigate management accounting processes within an organisational context. The thesis starts with an introductory chapter, which attempts to explain the objectives and background of the research. It begins with a brief discussion of the changes in the field of management accounting research and how they have led to this study. Subsequently, it argues the research objectives. This is followed by a brief description of the methodology and research methods. Afterwards, a theoretical framework is adopted by this study. Finally, the chapter presents a view of the contents of the rest of the thesis.

1.2. Background on the Subject of the Study

Management accounting is one of the most important organisational functions within an organisation. The objective of management accounting is to present financial and non-financial information which is helpful in internal planning, controlling and decision-making. In contrast, financial accounting provides financial information to external and internal parties to assist decision-making. Much debate has been generated in the relevant management accounting literature during the last four decades. At the beginning of the 1980s the debate about management accounting witnessed a revolution that was started by Hopwood (1983) in Europe and Kaplan (1983) in the US. Johnson and Kaplan (1987) blame cost accounting textbooks and academic research for simplifying procedures of cost systems. They also state that management accounting techniques have not changed since the 1920s, despite the changes in the business environment. Hopwood argues that accounting is a dynamic and heterogeneous phenomenon, so accounting systems should change over time (Hopwood, 1983 ; Hopwood, 1987). He declares that relatively little is understood about the process of change in management accounting.

Innovations in management accounting are necessary in order to meet the developments in the business environment that have occurred. As a result of the lack of innovation, management accounting has lost its relevance today. Johnson and Kaplan (1987) assert that management accounting lost its relevance after the significant development in technology and information systems. Johnson and Kaplan (1987) introduce a great opportunity to discuss and encourage the use of innovations techniques. New management accounting means that innovations or so-called advanced management accounting techniques, such as Activity-Based Costing (ABC), Operational Control System (OCS), and Balanced Scorecard (BSC) (Kaplan, 1994), can be introduced. Although many companies modify their management accounting practices, the changes are in the methods of management accounting used, rather than the use of new systems or techniques (Scapens, 2000b).

As mentioned above, a variety of innovation systems have been suggested as a solution for the substitution of traditional management accounting systems in order to respond to the changes that have occurred within the business environment. These innovation systems were activity-based costing (e.g. Cooper and Kaplan, 1988 ; Granlund and Lukka, 1998b ; Sharman, 2003 ; Kaplan and Anderson, 2004), balanced scorecard (e.g. Kaplan and Norton, 1992 ; Kaplan and Norton, 1996 ; Johnson, 1998 ; Kaplan and Atkinson, 1998 ; Bach *et al.*, 2001 ; Kasurinen, 2002 ; García-Valderrama *et al.*, 2009 ; Huang, 2009), and strategic management accounting (e.g. Dixon and Smith, 1993 ; Collier and Gregory, 1995 ; Coad, 1996 ; Dixon, 1998 ; Guilding *et al.*, 2000 ; Lord, 2007). However, the direction of the research, especially its assumptions, has been criticised by other researchers (e.g. Drury, 1990 ; Bakke and Hellberg, 1991 ; Drury *et al.*, 1993 ; Drury and Tayles, 1995 ; Nørreklit, 2000, 2003 ; Tangen, 2004 ; Geri and Ronen, 2005 ; Thompson and Mathys, 2008 ; Bobillo *et al.*, 2009).

In addition, many researchers have criticised new management accounting systems. According to Malmi (1997), many companies suffer problems with implementing ABC (Malmi, 1997). Although ABC is used by some of the UK's largest companies, Innes and Mitchell (1995) highlight that it has been rejected by around 13% of UK companies after assessment. Scapens (2000) points out that in many organisations change took place in management accounting systems and techniques. However, this change was in the methods of management accounting used, rather than the adoption of new advanced management accounting systems and techniques such as ABC, BSC, and Strategic Management Accounting (SMA) (Scapens, 2000b). This led to the important question: “Why have accounting practices and accounting systems in particular been slow to change, despite the rapidly changing technological and organisational environmental in recent years?” (Scapens, 2000b:9).

In management accounting research the 1970s was an era of economic-oriented mathematical models (Scapens, 2006, p. 4). During and after that era the role of systems within the historical context of management accounting was examined by a large number of studies (e.g. Johnson, 1972 ; Johnson, H. T. , 1975 ; Johnson, H. Thomas, 1975 ; Johnson, 1978 ; Johnson, 1981 ; Kaplan, 1984 ; Hoskin and Macve, 1986 ; Loft, 1986 ; Miller and O’Leary, 1987 ; Macve, 1988 ; Bougen, 1989 ; Loft, 1991 ; Loft, 1995 ; Fujimura, 2007). However, research needs to be focused on the current management accounting systems and practices, rather than studying the development of such systems in their historical context. In the relevant literature the debate about management accounting change can be divided into two opposing views. On the one hand, some researchers have argued that traditional management accounting systems have continued to be used (Drury *et al.*, 1993 ; Burns and Yazdifar, 2001). On the other hand, others have considered that there have been changes in management accounting systems and practices (Friedman and Lyne, 1997 ; Laitinen, 2001).

Wickramasinghe and Alawattage (2007) divide those perspectives into two approaches. The first approach is rational perspectives on management accounting change that relate to neo-classical economic theories of management accounting change, including agency and contingency theory. In this approach, positive economic models try to explain and predict economic behaviour. Thus, normative economic orientation has been taken by management accounting researchers (Wickramasinghe and Alawattage, 2007). In this approach, some researchers have studied the relationships between different organisational factors and management accounting practices (Libby and Waterhouse, 1996 ; Williams and Seaman, 2001 ; Baines and Langfield-Smith, 2003), whereas others have focused on typology of management accounting change (Sulaiman, S., 2003 ; Sulaiman and Mitchell, 2005 ; Chanegrih, 2008). Various researchers have made several significant contributions concerning management accounting based on agency theory (Walker, 1989 ; Williamson, 1991 ; Ogden, 1993 ; Sharma, 1997 ; Lambert, 2001 ;

Spekle, 2001 ; Moers, 2006). Their studies have drawn on survey questionnaires and statistical models have been used to derive frameworks of contingency or agency theories.

However, all frameworks of contingency (Gordon and Miller, 1976 ; Otley, 1978 ; Otley, D. T. , 1980 ; Innes and Mitchell, 1990 ; Cobb *et al.*, 1995) and agency theories (Grossman and Hart, 1986 ; Holmstrom and Milgrom, 1987, 1994) have contended that the relationships are linear and unidirectional (Wickramasinghe and Alawattage, 2007). A pervasive criticism is that contingency theory has employed cross-sectional analysis, which depends on the survey questionnaire and has not afforded an in-depth understanding of how management accounting systems appear within organisations (Otley, D. T., 1980 ; Hopper and Powell, 1985 ; Chenhall, 2003 ; Wickramasinghe and Alawattage, 2007). A further criticism is that the processes of management accounting change cannot be analysed by contingency theory. Moreover, it is argued that managers' behaviour within specific organisations cannot be explained by neo-classical theories (Scapens, 1994). Neo-classical theory cannot be proposed to be an explanation of the processes of organisational or individual behaviour (Scapens, 1990 ; Burns, 2000 ; Burns and Scapens, 2000). Moreover, Scapens confirms that "some economists believe that neo-classical theory cannot even be used to predict individual economic behaviour" (1990:264).

In addition to neo-classical theory, there have been many other theoretical perspectives, such as structuration theory. This theory has been used as a helpful framework for management accounting research by some researchers (Giddens, 1984 ; Macintosh and Scapens, 1990). According to Macintosh and Scapens, "structuration theory is a more focused, informative, integrative, yet efficient way to analyse how accounting systems are implicated in the construction, maintenance, and changes of the social order of an organisation, than many frameworks used in previous studies" (Macintosh and Scapens, 1990: 455). However, Archer argues that historical events are excluded by structuration theory (Archer, 1995). Burns and Scapens (2000) confirm that structuration theory is not useful for investigating processes of change.

The second approach is interpretive and critical perspectives on management accounting change, which involves institutional theory. Institutional theory has arisen as a result of the criticism of the neo-classical economic theory. It provides an alternative framework, using sociological inputs (Wickramasinghe and Alawattage, 2007). There are three branches of institutional theory that are used in the accounting literature, namely: old institutional economic (OIE); new institutional economic (or transaction cost); (Burns and Nielsen) and new institutional sociology (NIS) (Burns, 2000 ; Burns and Scapens, 2000 ; Ryan *et al.*, 2002 ; Yazdifar, 2004 ; Siti-Nabiha and Scapens, 2005 ; Moll *et al.*, 2006a ; Ribeiro and Scapens, 2006 ; Scapens, 2006 ; Yazdifar *et al.*, 2008).

Several researchers (Scapens, 1994 ; Ahmed and Scapens, 2000 ; Burns, 2000 ; Burns and Scapens, 2000 ; Soin *et al.*, 2002 ; Ahmed and Scapens, 2003 ; Scapens and Jazayeri, 2003) have adopted OIE to study the processes of change that occurs in management accounting systems and practices. However, the main limitation of OIE is that it focuses on inter-organisational factors and ignores the external factors that affect systems and practices. On the other hand, some researchers (Covaleski and Dirsmith, 1988 ; Covaleski *et al.*, 1993 ; Covaleski *et al.*, 1996 ; Granlund and Lukka, 1998a ; Collier, 2001 ; Modell, 2003, 2005a, 2006 ; Modell, 2009) have focused on NIS to interpret and explain the effects on systems that come from the external environment. However, the problem with NIS is that the processes of change within organisations cannot be explained. Therefore, to avoid the limitations of OIE and NIS, the researcher has chosen to adopt both theoretical perspectives. The following section provides more details about that selection.

1.3. Research Questions and Objectives

This study explores the processes of management accounting change in Libyan privatised companies. In addition, the secondary objectives of the study are to explore the understanding and perceptions of the management team and accountants related to any changes which occur in management accounting systems. It also investigates the influence of institutional factors on management accounting systems. The research aims to present a contextual approach of processes of change. It undertakes case studies of two Libyan privatised companies, in which new rules might be introduced as result of the privatisation process in Libya. Thus, this study seeks to explore management accounting processes after privatisation in Libya. In order to achieve this aim, the study addresses the following research question:

How do the processes of management accounting change take place in Libyan privatised companies?

In addition to the above research question there are other sub-questions as follows:

1. How can management teams and accountants understand and recognise any processes of change which have occurred in MAS and MAP since companies have been privatised?

2. How does the pressure from external factors affect the processes of MAS and MAP in the companies under study?

3. How can privatised companies adopt MAS and MAP from other successful companies in order to maintain the institutional stability?

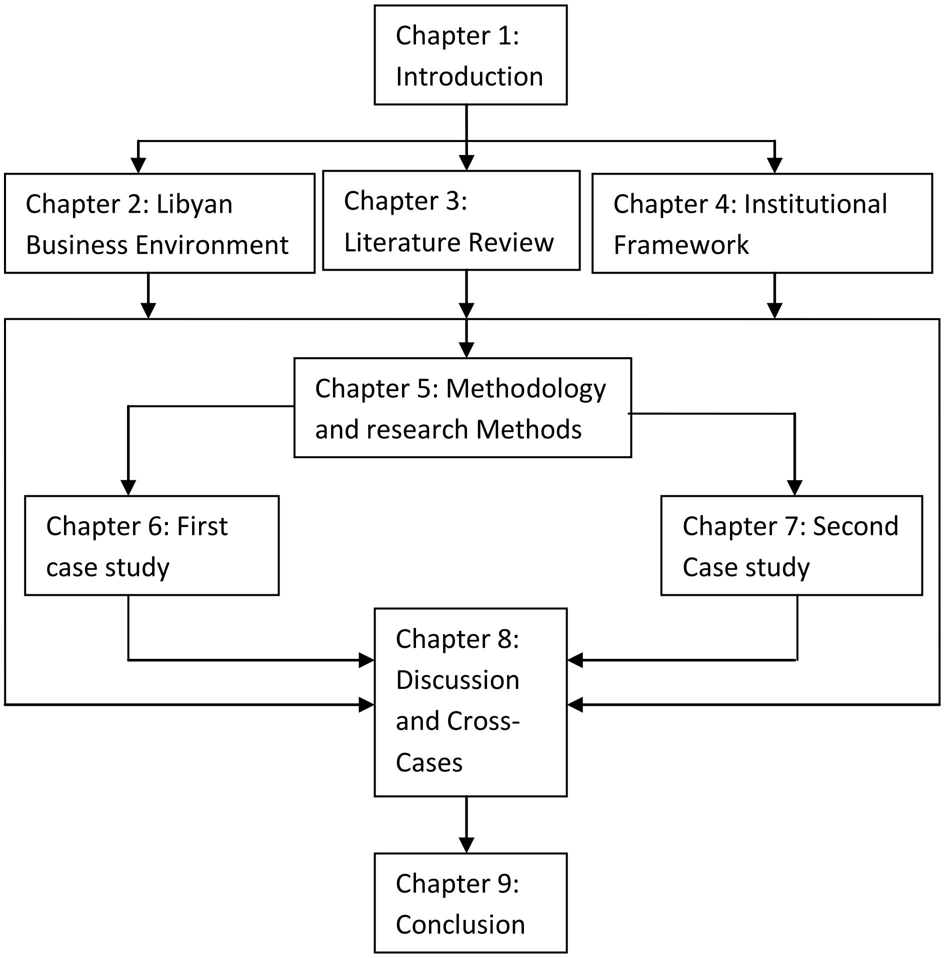
1.4. Thesis Structure

This thesis consists of nine chapters (see Figure 1-1). The first chapter provides a brief background of the subject of the study and presents the research questions and objectives and the contents of the thesis.

Chapter Two looks at the Libyan business environment, including its geography, history, politics and economics, in order to explore the factors which affect management accounting systems.

Chapter Three presents a general idea of management accounting systems. It opens by presenting a definition of management accounting change. After that, it goes on to provide the topology of management accounting change before comparing traditional and new, or so-called advanced, management accounting techniques and their limitations. Moreover, this chapter discusses intra- and extra-organisational factors which might form management accounting practices within organisations. It concludes by reviewing different theoretical perspectives which debate management accounting in general and management accounting change in particular, such as agency, contingency and neo-classical economic theories.

Figure (1- 1) shows thesis structure



Chapter Four provides institutional theory, which consists of three branches, beginning with a brief background of OIE. This includes the definitions of such things as institutions, habits, rules and routines. In addition, there are a number of subsections which identify the relationships between routine, actions and institutions. It also explains the processes of institutionalisation. Another branch of institutional theory is NIS. This involves three main mechanisms of isomorphism. Finally, it justifies the integration between OIE and NIS and uses power mobilisation.

In Chapters Six and Seven, the details of two case studies have been addressed; each case study addressed a Libyan industrial company, which had been recently privatised. Analysis has focused on internal and external factors that may affect the management accounting systems and practices, such as organizational structure, information systems techniques used in the administration and production, competition, markets and customers. Furthermore, there is an in-depth study of management accounting systems, their role in decision making and the extent of reliance on the information provided by these systems. It mainly focused on the major changes in the practice of management accounting, highlighting the stability and the causes which continued on the systems.

In a discussion chapter, there is comparison with the most important results that have been reached through the case studies referred to in previous chapters. The selected companies' case studies are located in the same city (Benghazi). This means that the social, economic, political and environmental conditions are quite similar. This similarity gives a great opportunity for in-depth comparisons of the internal procedures, in order to identify the differences that enhance the understanding of the nature of management accounting systems. As well as this, the results of case studies are interpreted and compared in the context of the study and links with them, either positive or negative, with the accounting literature are found.

1.5. Conclusion

This chapter provides a summary of the work reported in this study. This includes giving a background of the subject of study, management accounting processes. Also, the motives, research questions and objectives of this study are shown. In subsequent chapters of this research some detailed explanation of the study is given, while the following chapter includes an explanation of the Libyan business environment.

CHAPTER TWO: LIBYAN BUSINESS ENVIRONMENT

2.1. Introduction

The main purpose of this chapter is to provide a brief background of the Libyan business environment, including geography, history, politics and economics, in order to explore the factors which affect management accounting systems. Hence, this chapter consists of four sections. The section which follows this introduction presents Libya’s geography, involving location, area and population. The third section discusses the historical background and political change. The fourth section presents some details about change, which affects economic environment. The final part argues about the current event in the Libyan business environment, which is privatisation.

2.2. Geography of Libya

2.2.1. Location and Climate

Libya is one of the developing countries and occupies a strategic location in North Africa on the southern coast of the central Mediterranean, bordering the Mediterranean coast by up to 1770 kilometres. Also, Libya goes deeply into the Great Sahara desert and lies between latitudes 18º and 33º north and longitudes 9º and 25º east (NCID, 1998). Borders of Libya have neighbours with Arabian and African countries. According to the report of the CIA (2010), claims are made that the total land boundaries are 4,348 kilometres, which are distributed as follows: Algeria 982 kilometres and Tunisia 459 kilometres in the west and Egypt 1,115 kilometres to the east and Sudan 383 kilometres, Chad 1,055 kilometres and Niger 354 kilometres in the south. Regarding the climate of Libya, it is cold and rainy in the winter and hot and dry in the summer (GAI, 2007).

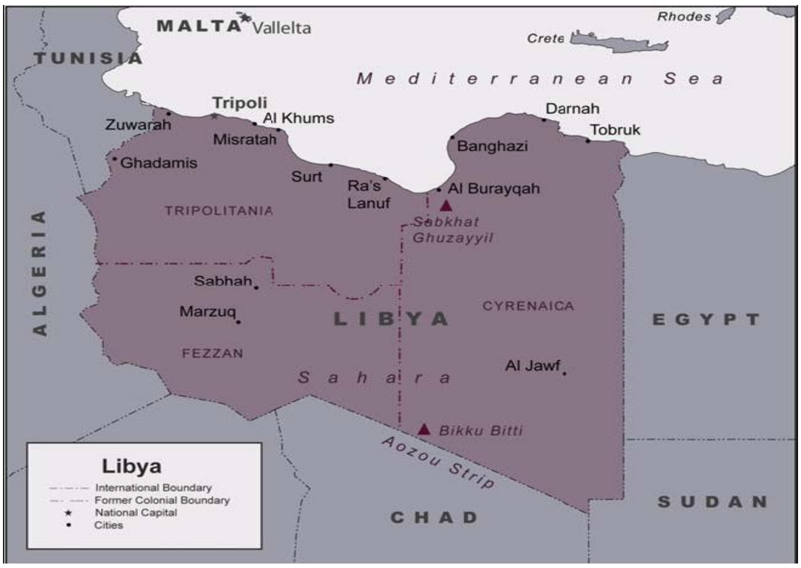
2.2.2. The Area

Libya is the fourth biggest African country. The total of Libya’s area is almost 1,754,000 square kilometres (Murabet, 1964). Moreover, Libya after its independence consisted of three main states; Tripolitania, Cyrenaica, and Fezzan, the map below representing the location of these states. Therefore, the total area of Libya distributes between these states as follows; Tripolitania has 214,000 square kilometres, Cyrenaica has 740,000 square kilometres, and Fezzan 8,000,000 square kilometres (Murabet, 1964). Murabet (1964) states Libya is approximately more than seven times the size of the British Isles and is larger than France, Italy, West Germany and Spain together.

2.2.3. Population

The economic position of any country depends on the human resources. In Libya, there is no balance between an availability of human resources and the economic position. In general, the human resources position is weak, because Libya has limited population, but the growth rate of population is significantly increased; it was 2.3% annually (CIA, 2010). On the other hand, the economic circumstances are strong, the reason behind that being oil and gas revenues. In 1951, Libya had a population of roughly one million people; this number can be distributed between regions as follows; 750,000 in Tripolitania, 300,000 in Cyrenaica and 60,000 in Fezzan (Vandewalle, 1998). The final results of the general census reported that the Libyan population in 2006 was 5,298,152 people (GAI, 2006). According to estimation of (CIA, 2010), which expects that the Libyan population will exceed 6,461,454 people, this number includes 166,510 non-nationals, at the end of 2008.

Figure (2- 1) shows Libya's map



Source: CRS report for Congress. Libya: Background and U.S. Relations (2008)

2.2.4. Language and Religion

Islam is the main religion in Libya and approximately 97 per cent of Libyans are Muslim; other religions claim 3 per cent (Murabet, 1964 ; Mahmud, 1997 ; CIA, 2010). The majority of population is mixed Arab-Berber and consists of Muslims practising the Malikite rite of Sunni Islam (Sicker, 1987). Arabic is the formal language and English and Italian have been utilized in the major cities (Murabet, 1964 ; Mahmud, 1997 ; García-Valderrama *et al.*, 2009). There are two forms of Arabic, one classical, the written language common to all Arabs, the other the vernacular, or Arabic spoken by people in the street, which is affected by other languages, such as English and Italian (Murabet, 1964). In next section contains historical discussion to how Islam and Arabic become the main religion and language in Libya.

2.3. Historical Background and Political Changes

2.3.1. Old History of Libya

Libya is a young independent state born under the auspices of the United Nations, but at the same time it is a very old and established community of people with a long and ancient history (Aneizi, 1956). This ancient history went down to at least 8000 B.C. Copeland (1967) states that archaeological evidence indicates that the early Libyans were of two groups: tribes of Mediterranean stock and people from Ethiopia and Negro Africa. Also, Rinehart (1979, p. 5) affirms that “inscriptions found in Egypt dating from the Old Kingdom (ac. 2700-220 B.C.) are early known recorded testimony of the Berber migration and also the earliest written documentation of Libyan history”. Libya was subject to wave after wave of military invasions and colonisation by Phoenicians (in around 1000 BC), the Greeks (600 BC), the Vandals (431 BC), and the Romans (96 BC) (El-Sharif, 2005).

Libya came into recorded history when Phoenician traders founded trading posts along the North Africa shore (Copeland, 1967). These Semitic people dominated the sea trade of the eastern Mediterranean for over 1000 years (Copeland, 1967). Also, Aneizi (1956) asserts that the east of Libya (Cyrenaica) was first colonized by Greeks around 600 B. C. Buru (1989) affirms that the date usually assigned to this events is 613 B.C. Greek trades were also active along Libya’s coast in 650 B.C. (Murabet, 1964). By 500 B.C. the Greek city-states were forming a succession of confederation (Copeland, 1967). As result, the cities of Tokra, Hesperides, and Apollonia[1] had been established (Murabet, 1964). In 107 B.C., Rome had beaten north-western Libya, and that part had fallen under Carthage's administration (Buru., 1989). Moreover, the Romans obtained formal possession of Cyrenaica in 96 B.C. (Buru, 1989). The Roman Empire had continued conquering Libya until the Empire of Islamic had appeared.

Islamic Imperial has dominated since the seventh century A.D until modern times(Abou-El-Haj, 1983). In A.D 635 Arabs swept through the Levant and later overran Egypt. Seven years later Arabs moved westwards in Libya, meeting feeble resistance (Buru, 1989). The forces of the Caliph Omer, under the command of Amr Ibn El-As, conducted a campaign of conquest that soon reached Tripoli in 645 AD and Fezzan in 663 (Rinehart, 1979 ; Bearman, 1986 ; Sicker, 1987 ; Joffe, 1989). From the middle of the sixteenth century until the start of the twentieth century Libya was part of the Ottoman Empire (Abou-El-Haj, 1983). Furthermore, the Ottoman state had not changed the regime until the entry of France, Italy and England into North Africa and the Middle East, when the Ottoman state copied European law-making and adapted it to its needs (Abou-El-Haj, 1983).

During the same period, the relationships between the United States and Libya have witnessed fluctuations since 1799. At that time, John Adams was the second president of the United States. In the same period, Thomas Jefferson was vice president and he became the third USA president later in 1801. In the same period as well, the Ottoman governor of Tripoli established the Qaramanli dynasty (Vandewalle, 2006). Vandewalle (2006, p.16) informs us that "the Qaramanli dynasty ruled part of what became known as the Barbary Coast until 1835, its acts of piracy and buccaneering involving the North African city-state for the first time with the United States." In 1801 the war was started. In 1803 the *Philadelphia*, United States frigate, was captured off Tripoli harbour (Vandewalle, 2006). The United States had been negotiating and signing a treaty ending the war on 10th June 1805; this is known as the Tripoli Agreement (*ibid*).

[1] Hesperides, and Apollonia were the oldest names of Benghazi's city, whereas Tokra is a city located at the east of Benghazi and the distance between the cities is about 70 km.

2.3.2. Modern History of Libya

2.3.2.1. Prior Independence

This period of time expanded from the end of the era of the Ottoman Empire at the beginning of the twentieth century until now. The modern Libyan history had started with the entry of the Italian army. On 29th September 1911, Italy declared war on the Ottoman Empire (Kilani, 1988). The Italians landed in Libya, while the Turks vacated inland. When the Ottoman Empire had ceded Libya to Italy under the Treaty of Lausanne in 1912, the Libyan people arranged themselves in continuing their resistance (Buru, 1989). By 1914, when the First World War had begun, the Italians seized only cities on the Mediterranean coast, such as Tripoli, Benghazi, Derna and Tobruk (Mahmud, 1997 ; El-Nakhat, 2006a). Control over the whole country's area was achieved by Italy only in 1934(Mahmud, 1997 ; El-Nakhat, 2006a).

On 10th June 1940 Italy entered the Second World War on the side of Germany against Britain and France (Murabet, 1964 ; Rinehart, 1979). During the war years, in January 1943, British forces occupied Tripolitania and Cyrenaica (Rinehart, 1979 ; Buru, 1989). Therefore, during the period after the end of the Second World War, Tripolitania and Cyrenaica were placed under British Army Administration, and Fezzan was placed at Free French Army Headquarters (Murabet, 1964 ; Rinehart, 1979). Contemporary governments were formed by military administration (Buru, 1989).

2.3.2.2. Independence

Mohammed Idris Al-Sanusi became a prince of Cyrenaica after obtained its independence as an emirate in 1949 (Vandewalle, 2006). On 21st November 1949, the United Nations promised to gift independence for all Libya's regions after 2 years (Vandewalle, 2006). One year later, the National Assembly convened in Tripoli to designate Prince Idris as king of the whole of Libya (Vandewalle, 2006). On 24th December 1951, according to the United Nations' agreement, Libya was declared its independence. More than eight years after the Second World War, Libya was still under temporary British and French administration (Copeland, 1967 ; Bearman, 1986).

At that same date also, King Mohammed Idris Al-Sanusi declared that Libya was an independent country (Murabet, 1964). The official name of Libya was to become the

United Kingdom of Libya (Vandewalle, 2006). Elections were also to be conducted to select parliament's members in February 1952 (Vandewalle, 2006). Therefore, Libya was the first country to achieve independence through the United Nations and one of the first former European possessions in Africa to gain independence (El-Nakhat, 2006b). Libya was proclaimed a constitutional and hereditary monarchy under King Muhammad Idris (Murabet, 1964 ; Copeland, 1967).

Disease and ignorance had spread among the citizens, as a result of the occurrence of many years of colonial rule and reliance on foreign aids. As a result, the Libyan government signed two separated treaties with the USA and the UK. In return, Libya offered a number of military air-bases to those countries, which agreed to grant money to finance the Libyan budget over 20 years. With regard to Libya's relationships with western countries, Mahmud (1997, p. 112) asserts that:

> "In July 1953, Libya signed a 20-year agreement with the UK. In return for a number of military air bases granted to the UK in Libya, the UK agreed to grant the new State an annual sum of £2.7 million to meet budgetary deficits and a further £1 million annually for economic development. In September of the same year, a similar agreement was concluded with the USA. Permission to maintain military bases in Libya was granted to the USA in return for economic aid of $40 million over 20 years. This amount was significantly increased during the following years. During the 1950s and early 1960s, as will be seen later, Libya depended heavily on the economic aid which had been received from both the UK and USA in return for the use of military bases. Libya also signed a friendship pact with France in 1955 and a trade and financial agreement with Italy in 1957. Libyan relations with the communist countries were much more reserved".

The World Bank Mission (1960, p. 45) also confirms that

> "Treaty the United Kingdom undertook during the five financial years 1953/54-1957/58 to pay £L 1 million a year to Libyan development organizations and £L 2.75 million a year to the Libyan budget. A new agreement was negotiated in 1958, under which the United Kingdom is providing £L 3.25 million a year in the form of budgetary aid for a further five years… United States the right to occupy and use certain areas in Libya for military purposes, including the important Wheelus Air Base on the outskirts of Tripoli. Under the economic agreement Libya was to receive an initial sum of $7 million (together with some grain) followed by grants of $4 million annually during the six fiscal years beginning July 1954 and $1 million annually during the eleven years beginning July 1960" (WB, 1960: 3).

In April 1963, legislation designed to transform Libya from a federal into a unitary state had been presented (Kilani, 1988 ; Vandewalle, 2006). However, Libya did not support Arab events generally, and it did not play any role in the area of Arab politics (Rinehart, 1979). There had been some evidence that the Libyan government with other Arab countries had supported Egypt by offering oil during the 1967 war against Israel.

2.3.2.3. Revolutionary Era

On 1st September 1969 revolution and many of the results that have appeared, it is a part of continuing efforts that Libya should have constructed to defeat its colonial legacy (Joffe, 1989). Also, that date was selected, since it had been known that King Idris would still be abroad for medical treatment (Rinehart, 1979). The Revolutionary Command Council (RCC) had been headed by Muammar Qaddafi (Rinehart, 1979 ; Sicker, 1987 ; Kilani, 1988 ; Joffe, 1989 ; Vandewalle, 1995 ; Mahmud, 1997 ; Vandewalle, 1998 ; Vandewalle, 2006). Also, RCC proclaimed that Libya became the Libyan Arabic Republic.

In an extraordinary session held on 2nd March 1977, the Libyan General People's Congress (LGPC) adopted the Establishment Declaration of the People's Authority (Mussen, 1979 ; Sicker, 1987). The declaration changed the name of country from Libyan Arabic Republic to the Socialist People's Libyan Arab Jamahiriya, instituted the Koran as the fundamental law of the land, established a system of direct popular authority and called for universal military training (Sicker, 1987). Libya had been designated General Secretary of the General People's Committee (GPC), while the RCC had been transformed into the General Secretary of the LGPC and the Council of Ministers had become the General People's Committee (Sicker, 1987). The GPC is a unique system, according to the Third Universal Theory developed by Muammar Qaddafi in his *Green Book*. This theory refused the class exploitation of capitalism. Also, it rejected the class conflict advocated by communism. However, it has sought the abolition of class differences and has reflected the principle of *shura* (consultation), which has governed the community and national affairs through consultation. All changes occurred as a result of the Green Book, first part, the solution of the problem of democracy, which was published in 1976 (Mussen, 1979 ; Bearman, 1986).

2.3.2.4. The Relationships with Western Countries

From the first revolutionary day, Libya was standing against western countries, especially the US and Great Britain. So Libya required forces of both the US and Britain to leave the country. Actually, on 28th March 1970, the last British soldieries were evacuated (Vandewalle, 1998 ; Vandewalle, 2006). Also, on 11th June 1970 in Libya had taken place the same situation with the US and RCC imposed on the American Military to leave their airbases around Tripoli. As result, the last US troops evacuated the Wheelus airbase (Vandewalle, 1998 ; Vandewalle, 2006). The important step taking place in that stage was the nationalisation of some oil companies and all banks on 1st August 1970 (Vandewalle, 1998 ; Vandewalle, 2006).

There had been chains of events, which had been occurring during 1980s, between Libya on one side, and the US on the other. Those events had been continuing in the Reagan administration. For example, on 10th March 1982, the American administration banned all exports except food and medicine to Libya (Bearman, 1986 ; Vandewalle, 1998 ; Vandewalle, 2006). Also, the import of Libyan oil into the USA had been prohibited (Vandewalle, 1998). The development of the worst relations between both countries had been reached by a military crash. On 15th April 1986, the US attacked Tripoli and Benghazi, in retaliation for a bombing in a Berlin discotheque[2] (Vandewalle, 1998 ; Vandewalle, 2006).

In November 1991 the United States and Great Britain indicated Libya's responsibility for the 1988 Lockerbie bombing of Pan Am flight no.103 (Vandewalle, 1998). In April 1992 international sanctions from the United Nations were imposed on Libya (Vandewalle, 1998), after the Libyan government rejected extraditing two Libyan citizens charged with bombing the aeroplane in 1988. As result, the Security Council had taken several resolutions, such as resolutions no 731 and 748 (1992), and resolution no 883(1993), which had involved a variety of sanctions (SC, 1992b, 1992a, 1993). These resolutions decided that all countries must:

a) deny permission to any aircraft to take off from, land in, or overfly their territory if it is destined to land in or has taken off from the territory of Libya;
b) prohibit, by their nationals or from their territory, the supply of any aircraft or aircraft components to Libya and the provision of engineering and maintenance servicing of Libyan aircraft or aircraft components;

[2] This was according to US' novel, whereas Libyan government has denied these charges.

c) prohibit any provision to Libya by their nationals or from their territory of arms and related material of all types, including the sale or transfer of weapons and ammunition, military vehicles and equipment and paramilitary police equipment;
d) prohibit any provision to Libya by their nationals or from their territory of technical advice, assistance or training related to the provision, manufacture, maintenance or use of the items in (c) above;
e) withdraw any of their officials or agents present in Libya to advise the Libyan authorities on military matters;
f) significantly reduce the number and the level of the staff' at Libyan diplomatic missions and consular posts and restrict or control the movement within their territory of all such staff who remain; in the case of Libyan missions to international organizations;
g) prevent the operation of all Libyan Arab Airlines offices;
h) take all appropriate steps to deny entry to or expel Libyan nationals who have been denied entry to or expelled from other states because of their involvement in terrorist activities;

On 11th November 1994, the United Nations Security Council assumsed further sanctions, such as its embargo against Libya (Vandewalle, 1998). On 5th August 1996 the United States issued new trade laws against Libya, which threatened relationships against foreign companies that dealt business with Libya (Vandewalle, 1998). Finally, Libya agreed to extradite the two Libyan citizens to another country, Holland, in the middle of February 1999. So, international sanctions imposed on Libya have been suspended. With respect to compensation paid by Libya:

> "U.S. officials have repeatedly stated that Libyan acceptance of responsibility and settlement with families of the victims of the Pan Am 103 tragedy is a precondition for the permanent lifting of U.N. and U.S. economic sanctions. U.N. sanctions were suspended after two suspects in the Pan Am bombing were delivered to The Hague. In ongoing negotiations between lawyers of the family members and the Libyan government, Libya has allegedly offered to pay $2.7 billion in compensation payments – $10 million per victim" (Hufbauer and Oegg, 2003: 132).

According to Security Council resolution 1506 (2003), the international sanctions against Libya had been lifted (SC, 2003 ; Buferna, 2005). On 24th September 2004 the United States, Bush's administration, has departed all sanctions on Libya, which signalled that the United States desired to start a clean sheet with Libya. As a result, relationships between both countries have been reinstated. Also, Libya has proved to the world that it has started trying to attract tourists. In the second half of 2007, diplomatic relations with the U.S. and the EU have contributed to enhanced foreign investors, principally in the oil, banking and infrastructure sectors (IMF, 2008b). More details about those themes will be discussed in the next subsection.

2.3.2.5. Recent history of Libya

During August 2009, the relationships between Western countries, especially the USA and the UK, and Libya saw some tension. This was against the backdrop of the launch of the Scottish authorities[3] releasing Baset Al-Megrahi, accused of bombing Pan Am America over Lockerbie (Crook, 2009). Generally, the Scottish Government issued a decision to release Baset Al-Megrahi for humanitarian reasons and the explanation was that the he had left a life of just three months. Anyway, these justifications were hatched long before the date of his release but he is still alive to now. But what irritated the U.S. and Britain was a festive reception given to Al-Megrahi upon arrival at Tripoli airport. The following provides some details about the celebration:

> "Some commentators have argued that Saif's[4] visible role in freeing Abdel Basset al-Megrahi, the only person convicted in the bombing of Pan Am flight 103, suggested his political star was again on the rise and, while this may have been the case, it is more likely a misreading of Megrahi's return. When his plane arrived in Tripoli, there were no Libyan government officials at the airport to meet Megrahi and the Leader did not greet him until the following day. Therefore, it is highly likely that the Libyans thought they were complying, at least in part, with the wishes of Western governments for a low-key return for Megrahi, when Saif, not a member of the government at the time, was the only notable Libyan prominently involved in his return home" (St John, 2010: 6).

Generally, common interests had prevailed in the coordination between the two sides, where Western countries expressed their desire to preserve their interests instead of making such unrest. After this problem, Libya's relations with all countries of the world had improved steadily and no longer had any outstanding issues. In other words, all the problems and issues that had occurred during the period in which Libya had been accused of supporting terrorism had been settled again.

[3] Kenny MacAskill, who is Scotland's justice secretary, authorised the release of Basset Al-Megrahi.
[4] Saif is the son of Kaddafi'.

On 15th February 2011, the Libyan authorities arrested the lawyer for the families of victims of the Abu-Salim prison. As a result, a group of representatives of the families of victims demanded in a peaceful demonstration the release of the lawyer. But the Libyan authorities suppressed the protest, using violence and firing live bullets at the demonstrators. As a result of these clashes, the demonstrations were joined by members of the community and the requirements ceiling has been increased to demand more freedom and democracy and require that the regime must be changed. This also led to excessive use of force and violence and arrived at the use of heavy weapons, such as tanks and artillery, rocket launchers and aircraft.

During these events, the SC had had meetings in order to discuss the situation in Libya. The SC adopted resolution no 1970 at its 6491st meeting, acting under Chapter VII of the Charter of the United Nations and taking measures under its Article 41(SC, 2011a: 2). This resolution has included some sanctions aspects, such as an immediate end to the violence, referral of the situation in Libya since 15th February 2011 to the Prosecutor of the International Criminal Court, an arms embargo, a travel ban and an assets freeze. The resolution has been issued since 26th February 2011 and it must be implemented. Diplomacy with opposition directors cannot be the fastest option or the most dramatic but it is more likely to obtain permanent results (Tisdall, 2011). On 27th February 2011, the Former Minister of Libyan Justice, Mustafa Abdul-Jalil, reported on his efforts to form a Temporary National Council[5] under his chairmanship, its headquarters located temporarily in Benghazi.

It might be said that the Libyan authorities have not complied with resolution 1970 (SC, 2011b). Excessive use of violence has been insanely continued. On the one hand, President Obama said Muammar Qaddafi "has lost his legitimacy to lead, and he must leave" (Yoo, 2011). The perspective of President Obama, about the legitimacy of Muammar Qaddafi, has been adopted by many of the world leaders and regional and international organisations. On the other hand, Mouse Kousa[6] believes that Libya risks turning into another Somalia (Kinninmont 2011). In the meantime, the forces of Qaddafi equipped the army to attack the city of Benghazi, when these forces reached the outskirts of Benghazi on 18th March 2011.

[5] This was the name of the temporary Libyan government that has been represented by opposition directors. This body has been renamed the Transitional National Council.

[6] Moussa Koussa is the former Libyan foreign minister

The Security Council adopted resolution (1973) at its 6498th meeting, on 17th March 2011. This resolution included some instructions such as an immediate ceasefire and a complete end to violence and all attacks against civilians, protection of civilians, a no-fly-zone, and enforcement of the arms embargo, a ban on flights and an asset freeze. Also, the Security Council decided to use all necessary measures and NATO carried out this task. The USA, the UK and France had been attacking Qaddafi forces from 19th until 30th March 2011. On 31st March 2011, the control of all military action over Libya under United Nations Security Council Resolutions (1970, 1973) was taken by NATO. The aim of this mission comprises three components: an arms embargo, a no-fly-zone and actions to protect civilians from attack or the threat of attack.

No-fly zones have been introduced and there have been a rapid change in Washington’s attitude, because Qaddafi’s forces inflicted the violence on civilians in Benghazi (Rogers, 2011). The Pentagon had been preparing for action on that occasion (Rogers, 2011). The African Union's offer of a proposal for a ceasefire was, predictably, rejected by the opposition, as it would have kept Colonel Muammar Qaddafi in power (Sinco, 2011). It could be concluded that fighting has been in existence by Qaddafi forces and NATO and there is nobody who knows when this war will be ended.

2.4. Libyan Economic Environment

The period of Libyan economic environment can be divided into two stages. The first phase involves Libya’s circumstances before oil discovery and after independence had been obtained. The second stage covers the period after oil had been discovered, which includes specific issues, such as development plans, improving gross domestic product and increasing the existing surplus in the balance of payments. Also, this stage can be divided into different themes. The first Libyan government had adopted vision of capitalism. The second included the orientation to socialism. Finally, the government (GPC) has returned to its starting point to apply some capitalist visions, such as privatisation.

2.4.1. Previous Oil Discovery

Economically, according to the report of a mission organised by International Bank for Reconstruction and Development in 1960, Libya had been classified, after obtaining its independence and before 1959, as one of the poorest countries in the world (WB, 1960).

Despite its large size and small population, Libya had been characterised by its lack of economic resources and low income. Hence, the Libyan government was unable to provide a minimum of public services. Therefore, freedom of economic activity had been opened up to foreign investment through legislation encouraging this. This led to the entry of foreign oil companies from different nationalities to the Libyan land to explore oil on a large scale. Intense competition among these companies led to the discovery and exploitation of oil, at a speed unprecedented in other oil-producing countries.

Before the discovery of oil, the majority of the population had worked in agriculture and animal husbandry. Cyrenaica's infrastructure had been damaged during the Second World War (Vandewalle, 1998). Also, trade that had taken place in Tripolitania was significant with Tunisia and other countries in the west, whereas Cyrenaica's trading patterns were oriented towards Egypt (Vandewalle, 1998). Few countries have suffered so sudden and drastic a transformation of the economic prospects as Libya (Higgins, 1968). In 1952 Libya seemed to be an almost hopeless case. Higgins (1968, p. 819) adds that:

> "Libyan's great merit as a case study is as a prototype of a poor country. We need not construct abstract models of an economy where the bulk of people live on a subsistence level, where per capita income is well below $50 per year, where there are no sources of power and no mineral resources, where agricultural expansion is severely limited by climatic conditions, where capital formation is zero or less, where there is no skilled labour supply and no indigenous entrepreneurship. When Libya became an independent kingdom under United Nations auspices (December, 1951) it fulfilled all these conditions. Libya is at the bottom of the range in income and resources and so provides a reference point for comparison with all other countries".

The World Bank Mission (1960, p.3) states that

> "Most Libyans still lead a very simple life, their diet is plain, their wants are limited, they have little knowledge of twentieth-century technology, tribal traditions are strong. This section of the Libyan population has been little touched by all the development that has taken place in the past fifty years. The majority (perhaps 200,000 workers) till the land or graze their livestock on the fringes of the desert, largely consuming what they produce, supplying most of their own needs. For shelter they have a low one or two-roomed house, a tent, a tin-shack or a cave; for clothes home-spun woollen barracanes; for transport a camel, horse or donkey. The property of a family or a *Kabila* may be considerable, but their living standards generally remain austere. Such amenities as electricity and running water are practically unknown".

So, it can be confirmed that Libya has witnessed since its independence, and even now still witnesses, radical economic changes. The Libyan economy after independence was very simple economically and depended on agriculture, grazing, traditional industries and fishing. Immediately after the oil was discovered in the late fifties of the last century the economy became more complex in the application of capitalism theory to properties and the expansion of foreign investment. The monarchy in Libya was dominated by the ideas of capitalism. Consequently, the individual capitalist was a dominant feature of the economic system, which is based on *laissez-faire*. These ideas reflected the disparity in living standards among members of the community. Those circumstances allowed the creation of a new individual class called rich oil; this situation continued until early in the year of revolution, when Colonel Al-Qadhafi had been bothered by these differences, which was one of the main reasons for the revolution.

2.4.2. After Oil Discovery

Ultimately, Libya was transferring from being the poorest country in the world to the one of oil exporting counties at the beginning of the 1960s (Murabet, 1964). Generally, a capitalist style had been implemented by Libyan governments since the country obtained independence until the early years of revolution. This has been divided into two periods; the first was after independence and after the oil discovery, and the second was after the revolution. The Libyan economic position had modified after the oil discovery. As a result, many international companies had begun to discover oil and gas, so the foreign capital was increased. In general, the Libyan economic system was capitalist from the independence to the revolution. Moreover, the economic structure was mixed between the private sector in small enterprises and the public sector had managed strategic enterprises in order to maintain the balance in the economy. The Libyan government had issued some laws related to economic activities. The basic principles of the private sector were to be established by these laws.

On 1st September 1969, the revolutionary period started. Colonel Muammar Al-Qadhafi declared that “from now on, Libya is deemed a free, sovereign republic under the name of the *Libyan Arab Republic*” (Cooley, 1983: 2). As mentioned above, RCC (RCC) had been headed by Colonel Muammar Al-Qadhafi. During the first few months after the revolution, the leader of RCC required the military forces of both the US and Britain to leave Libya immediately. Also, at the same period, the nationalisation of the Libyan oil industry began on 4th July 1970, according to Revolutionary Law No. 69 (Otman and Karlberg, 2007). This law confirmed that all activities related to oil industry must be joined to the Libyan National Oil Corporation LNOC (*ibid*). Therefore, all assets and liabilities of foreign companies[7] were transferred to the Libyan government (*ibid*). Moreover, the same period also witnessed the beginning of bad relations between Libya and western countries, especially the USA.

On 2nd March 1977, the Libyan General People's Congress (LGPC) governed Libya and declared that it had to be managed by its citizens (Vandewalle, 1998). Also, Colonel Muammar Al-Qadhafi declared that the formal name of Libya had become *Socialist People's Libyan Arab Jamahiriya*. Those events coincided with the publishing of the *Green Book* written by Colonel Al-Qadhafi (Bleuchot, 1982). The Green Book has reflected Al-Qadhafi's thoughts in relation to some crises contained by societies such as *Democratic, Socialist, and Social Side* (Bleuchot, 1982).

In economic terms, the *Green Book* has explained that the solution of the economic problem lies in the application of a new *socialism* theory. This theory is based on the idea that the goal of economic activity is production, in order to satisfy the needs of members of society. From this direction, it selected another point, which is the liberation of needs to be satisfied. Basically, a solution has been provided for the liberation of those needs to participate in the production as a substitute for wage or salary. With regard to participation in production, there has been a proposal that it must be divided equally between production elements. Elements of production had been divided into three main components, namely; raw materials, production tools and workers; without one of these elements the production process cannot be finished.

The implementation of *socialism* had been characterized by the orientation towards the liberalization of the national economy from the dominance of foreign companies. As a result, the exercise of economic activity in most cases has been carried out by the public sector, which took over the majority of the national investments. This control was conducted by the public sector and had many negative consequences, mainly relying on the public treasury as a financier of all economic activities. Besides, the public sector became the main user of the labour force in society. Also, an industrial base was building in the factories and productivity and service companies. These projects enabled the national economy to achieve the relative diversity of national income, and resulted in the relative stability and high and equal levels of income between individuals in society. The

[7] This was surrounded all companies worked in Libyan land to discover or produce oil, for example Asseil Company (owned 50:50 by Agip Company and Libyan private sector), Shell Libyan Ltd, Esso Standard Libyan, Petrolibya, and Esso Standard Middle East Branch of Libya…etc.

main project conducted by the public sector was the Great Man-Made River Project, which was classified as one of the biggest projects in the world (Salama and Flanagan, 2005).

2.4.3. Development Plans

Commercial quantities of oil have been discovered since the early 1960s. Thus, the Libyan government had prepared the first Five-Years as Development Plan and the Libyan Parliament approved it on 22nd August 1963(Murabet, 1964). The Five-Year plan had covered 1963-1968; it had also involved total expenditure of £L[8] 170 million to be provided by 70 per cent of oil revenues (Murabet, 1964)--for more details see table 2-1. The main objective of the first five years was to focus on agriculture, because this sector was ignored after discovering oil. Also, it was to enhance the infrastructure, such as forestry, education, health, and communication development. During that period, the oil revenues increased twice, which let the government consider adding to the final total of expenditure to reach £L551 million, or 325.8 per cent of planned spending (Saleh, 2001 ; El-Nakhat, 2006a).

The Second Development Plan Five-Year 1969-1974 was designed to allocate more than double the amount that was allocated to the previous development plan. In general, this plan was not implemented, because the revolution occurred in September 1969. After the revolution, development plans have been followed. In 1973, the second development plan was launched, which was considered as the first development plan prepared by the RCC. The main objective of this plan was to reduce dependence on oil, in addition to other objectives, such as strengthening infrastructure through a focus on electricity, water and transport (for more details, see table 2-1).

In 1975, a new development plan five-year 1976 - 1980 was launched. This plan is scheduled for the development of various economic activities, which will continue to generate income. Overall, the total allocation of the plan was LD 7.2 billion (almost equivalent $ 22 billion). In this plan, agriculture was devoted to 14.4% of the total allocations, while the industry sector received 21% (as shown in table 2-1). The objectives of this plan focused on economic targets, such as achieving self-sufficiency

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[8] Currency of Libya after independence and before the Revolution was the Libyan pound, which was the equivalent of U.S. $ 4.

and reduced dependence on oil. There were also social objectives, such as providing employment opportunities for members of society and the achievement of social fairness. Of course this happened after overall economic activities were controlled by the government.

Table (2- 1) represents some long development plans

Sector	1963-1968	1973-1975	1976-1980	1981-1985	1994-1996
Agriculture and Forestry	63	327.8	1030.1	3100	158
Oil and Natural Gas		48.9	41	200	
Mining & Quarrying			9		
Industry	32.6	234.5	1515.4	3930	94.7
National Economy	5.5			500	6
Transportation and Communication	118.6	253.8	1197.8	2100	194
Public Works	82.2	186.7	760.1	1300	
Education	59.9	192.1	513	1000	289
Health	24.3	71	145.2	560	205
Labour and Social Affairs	29.7				
News and Guidance	10.4				
Public Administration	0.8				
Planning and Development	9.7			80	17.9
Housing	109.3	361.3	887.5	1700	297.45
Interior	52.3				
Electricity	25.3	257.4	706.7	2000	332
Construction		6.2	7		
Wholesale & Retail Trade			32.9		
Information & Culture				150	12
Social Security				130	
Sport				100	
Labour Force				150	32
Sea Resources					25.6
Reserve		23.9	325.3	1500	264.35
Justice & General Security					12.3
Administration Centres					240
Tourist					3
Animal Resources					11
Man-Mad River					100
Finance					5
Other	1.7	1.4			100
Total	625.3	1965	7171	18500	2399.3

Taken from: Saleh, M., (2001),*"Accounting Information Disclosure and Accountability: Cases from Libya"*, PhD, Accounting Sheffield Hallam University: Sheffield.

2.4.4. The Impact of International Sanctions

As already noted, the conflict between the USA and Libya had extended to military confrontation in 1981 on the outskirts of the Gulf of Sirte[9]. Also, Tripoli and Benghazi were nightly raided by the U.S. Air Force with Britain's assistance on 15th April 1986. Relations had reached their worst when the U.S. and Britain accused two Libyan citizens of bombing the Pan Am aeroplane over Lockerbie in Scotland in 1988. This had resulted in the imposition of international sanctions against Libya from 1992 to 1999. During the period of international sanctions, the Libyan government had adopted a new development plan of three years, 1994-1996. This plan had been allocated LD 24 billion (the equivalent of $ 72 billion). As a result of sanctions which had been imposed against Libya, the government could not accomplish the entire plan and the proportion completed was approximately 60%.

There have been different researchers' opinions about the effect of international sanctions in several sectors (Agnaia, 1996 ; Alkizza, 2006 ; El-Nakhat, 2006a). Agnaia, (1996) said that the international sanctions which had been imposed by the UN and US on Libya had affected the management training and development policies in Libyan companies. He determines the fields as "opportunities for training abroad, importing modern facilities, inviting foreign experts for consultation and participating in conferences about management training and development" (1996:47). Alkizza (2006) and El-Nakhat (2006) argue that the international sanctions have affected all society members in Libya. Also, during the international sanctions period, Libya had been classified as at the lowest level in the world in communications infrastructure (Twati, 2006 ; Twati and Gammack, 2006). Twati and Gammack (2006: 179) describe the state of communications infrastructure during international sanctions as follows:

> "Mobile cellular telephone systems became operational in 1996 with limited access and coverage. Until recently these services covered only certain areas of Libya, and the country is not widely networked for this service….use of the internet, which was introduced into the country in 1999 with less than 300 users then, most being government agencies or organisations".

[9] Original name was the Gulf of Sidra, but Al-Qadhafi changed the name to the Gulf of Sirte.

The period of international sanctions against Libya brought much more influence than the US sanctions alone (Vandewalle, 2006), though Mahmud and Russell (2002) argue that Libya had succeeded in exploiting its own oil sources and the UN sanctions against Libya were sterile in regard to oil and natural gas. On the other hand, the Libyan mission[10] to the UN gave details to the Security Council in March 2000 that the implication of its resolutions, as mentioned above, had influenced all infrastructure and development plans (Buferna, 2005 ; Alkizza, 2006). Therefore, the Libyan economy has been negatively affected by these sanctions. In the same context, Libya has lost US$33.6 billion during the sanctions period (Buferna, 2005). El-Nakhat (2006: 58) gives some details related to the same issue:

> "Libyan companies operating in the transportation sector have suffered total losses of about US$ 3,713 million, which has forced the closure of a large number of branches and a reduction in their labour forces. The manufacturing sector has also made losses estimated at about US$ 5,851 million, while the losses of the trade and commercial sector have been estimated at about US$ 8,628 million"(see also, Alkizza, 2006: 44).

Vandewalle (2006) declares that the Libyan economy grew during that period, but the Libyan per capita GDP fell from $7,311 to $5,896. The financial impact of international sanctions had been diluted by transferring the Libyan assets away from crisis sites (*ibid*). However, Libya's international capacity to earn income had hindered its ability to pay foreign oil companies (*ibid*). Nevertheless, GDP increased gradually during the sanction period, although the GDP from the oil sector was fluctuating (Buferna, 2005). Moreover, after 1998, GDP increased sharply, owing to the sharp increase in the GDP from oil sector (*ibid*). The growth of the Libyan economy had deteriorated, the number of foreign investments had dramatically decreased and the ability to obtain new manufacturing technologies had been restricted (El-Nakhat, 2006a).

2.4.5. Budget

Overall, during the years after 1985, with the exception of the development plan 1994-1996, the budget of the transformation or development plan has been prepared annually. Moreover, the development plan and the administrative budget have been incorporated. The administrative budget in Libya is composed of two parts (*Bab*); the first component includes wages and salaries, the second includes the administrative expenditures.

[10] The letter of Libyan Mission to the Security Council was dated on 8th March 2000; also it was presented by Abuzeid Dourda, who was the permanent representative of Libya in the United Nations.

Following the merger development plan with the administrative budget, a third part of the budget was added. Thus, the budget in Libya is divided into three parts. The table (2-2) represents some indicators related to revenues and expenditures.

Through the table mentioned above, it is clear that the last years of economic sanctions had created a budget deficit, particularly in 1998. Despite the surplus in 1999, it was the year that the international sanctions were suspended. The surplus was relatively due to high oil prices. Also, there was a deficit in the following year, 2000, via the sanctions impact continuation. This effect resulted in a decline in oil production and increased allocation of the administrative budget and development plan. It is interesting to note that 2000 was the last budget to achieve a deficit, and all subsequent budgets have achieved a surplus, while 2008 witnessed the highest surplus, where it was LD 32 billion. This was a logical consequence of the rise in oil prices, which had been unprecedented.

With regard to other sources of income, taxes, customs and services have been affected. There has been a clear impact from the issue of new laws that encourage investment. For example, some provisions of the Customs Law No (67) of 1972 have been modified and Free Zones Law No 9 of 2000 was issued (RCC, 1972 ; LGPC, 2000). This law has contributed to reduce the tariffs of some imported items. Also, the tariff protection of local products has been removed. The aim of this step was to reduce or break the monopoly that was practised by some public companies on their products and also to encourage competition. This had, of course, a negative impact on the government treasury, the customary proceeds of which had been dropped after the law has been passed (for more details see table 2-2). Moreover, new versions of the customs law have been issued as Customs Law No (10) 2010, to modify some articles in previous laws (LGPC, 2010c).

Also, the Income Tax Law No (64) of 1973 and the Stamp Tax Law No (65) of 1973 were abolished (RCC, 1973a, 1973b). Besides, the general tax on income has been cancelled and only other types of tax have been retained. There have been new laws issued; for example, Income Tax Law No (11) and Stamp Tax Law No (12) of 2004 have been released (LGPC, 2004a, 2004b). Despite the reductions in tax rates and facilities provided, the effects of these laws were contrary to expectations, and the effect was positive, with doubled state revenues from taxes. This is confirmed by the table (2-2), as shown above. Income Tax Law No (11) and Stamp Tax Law No (12) of 2004 have been modified by Income Tax Law No 8 and Stamp Tax Law No 7 of 2010 respectively (LGPC, 2010a, 2010b). The influence of new law versions has not been clarified yet.

Table (2- 2) shows the Summary of Actual Revenues and Expenditures (Million LD)

Years	Oil Revenues	Non Oil Revenues				Total Revenues	Expenditures				Surplus or - Defect
		Customs	Taxes	Others	Total		Administrative	Development	Extra Budget	Total	
1998	2551.0	519.0	535.0	761.0	1815.0	4366.0	3163.8	485.2	792.0	4441.0	-75.0
1999	3444.4	519.5	620.1	273.0	1412.6	4857.0	2966.9	794.1	535.0	4296.0	561.0
2000	2203.0	395.2	637.1	1426.9	2459.2	4662.2	3153.2	1541.0	556.0	5250.2	-588.0
2001	3603.0	362.5	706.8	1326.5	2395.8	5998.8	3596.6	1539.0	496.0	5631.6	367.2
2002	6551.0	364.0	715.1	944.0	2023.1	8574.1	4210.3	3701.7	575.0	8487.0	87.1
2003	3929.0	384.8	890.6	1709.2	2984.6	6913.6	3577.7	2530.0	758.5	6866.2	47.4
2004	19956.0	852.6	1037.6	1511.5	3401.7	23357.7	6720.0	6718.0	3792.0	17230.0	6127.7
2005	34378.0	548.0	1044.0	1247.0	2839.0	37217.0	8282.0	10273.0	2788.0	21343.0	15874.0
2006	43566.0	526.9	1259.7	1735.4	3522.0	47088.0	9054.0	11039.0	1285.0	21378.0	25710.0
2007	48638.3	528.0	1376.0	2824.0	4728.0	53366.3	11890.0	18993.0	0.0	30883.0	22483.3
2008	64417.0	499.2	2790.5	5034.5	8324.2	72741.2	11874.8	28903.3	0.0	40778.1	31963.1
2009	35347.0	1150.7	2836.2	4991.6	8978.5	44325.5	13757.4	17651.8	8915.3	40324.5	4001.0

Sources: (CBL, 2005, 2006a, 2006b, 2007a, 2007b, 2007c, 2007d, 2007e, 2008b, 2008c, 2008d, 2008e, 2008a, 2009a, 2009b, 2009c, 2009d, 2010a, 2010c, 2010b)

Table (2- 3) shows daily production (Million barrels) and price average of oil

Years	Price Average	Daily Production	Years	Price Average	Daily Production	Years	Price Average	Daily Production	Years	Price Average	Daily Production
1970	2.38	3,318	1980	36.11	1,832	1990	20.82	1,389	2000	28.62	1,347
1971	3.20	2,761	1981	39.17	1,218	1991	17.43	1,406	2001	24.7	1,324
1972	3.58	2,239	1982	36.20	1,136	1992	17.94	1,433	2002	24.55	1,201
1973	5.46	2,175	1983	32.90	1,121	1993	15.68	1,361	2003	28.21	1,432
1974	15.18	1,521	1984	N A	985	1994	15.39	1,390	2004	36.58	1,537
1975	13.46	1,480	1985	N A	998	1995	16.73	1,399	2005	52.62	1,642
1976	12.47	1,933	1986	N A	1,308	1996	19.91	1,394	2006	63.35	1,702
1977	14.06	2,063	1987	18.08	973	1997	18.71	1,396	2007	71.41	1,710
1978	13.91	1,983	1988	14.72	1,023	1998	12.20	1,449	2008	96.65	1,718
1979	20.47	2,092	1989	18.21	1,129	1999	18.04	1,287	2009	61.45	1,557

Sources: (OPEC, 1999, 2000, 2001a, 2001b, 2002a, 2002b, 2003a, 2003b, 2004a, 2004b, 2005a, 2005b, 2006a, 2006b, 2007a, 2007b, 2008a, 2008b, 2009a, 2009b). prices from 1970 to 1989 are taken (Mahmud, 1997).

Table (2- 4) GDP by economic sectors at current factor income (Million LD)

Economic Sectors	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Agriculture, hunting , forestry and Fishing	1437.7	1392	1348.8	1375.8	1,328.60	1,447.50	1,643.10	1,905.30	2,247.90	2,382.70
Mining and Quarrying and other related activities	7761.9	6784.2	13630.6	18940.5	29,202.10	44,041.70	53,867.80	62,282.60	81,149.80	47,087.10
Mining and Quarrying (including oil and gas)	293.9	306.7	387.1	360.2	75.8	79.8	85.5	114.5	127.5	144.1
Manufacturing industries	889.7	877.8	813.1	764.7	2,451.80	3,124.80	3,602.60	4,032.10	4,888.80	5,447.60
Electricity, Gas And Water	270	284.6	293.7	303.1	734.3	876.6	972.7	1,019.10	1,204.50	1,334.60
Building and constructions	1013.9	1063.4	1342.3	1249	2,159.20	2,683.50	3,129.30	4,198.40	5,994.50	7,577.50
Wholesale, retailer and repairing personal	0	0	0	0	2,060.70	2,520.20	2,724.80	3,225.00	3,761.60	4,092.70
Hotels and Restaurants	1685.9	1882.4	2089.5	2193.9	134.2	137.3	138.5	171.3	187.9	205.4
Transport, Storage and Telecommunications	1213.9	1299.3	1429.2	1515	1,944.00	2,412.60	2,724.20	3,299.50	3,884.20	4,125.80
Financial Intermediary	357.2	377.2	414.9	439.9	627.7	717.1	816.5	980.8	1,081.30	1,181.80
Real-estate and Renting and business activities	475.5	499	515	534.1	3,996.90	4,324.20	4,643.50	5,218.90	5,723.80	6,154.80
Government, Defence and Mandatory Social Insurance	2665.8	2901.4	3222.3	3606.5	3,658.60	4,481.90	4,935.10	6,507.30	6,670.70	6,870.80
Education*	0	0	0	0	72.5	74.6	84.9	98.9	122.4	133.8
Health care and Social Activities*	0	0	0	0	110.4	113.5	132.4	153.7	155.5	164.7
Other services	391.5	411.1	427.5	448.9	43.1	53.3	61.9	69.4	82.3	91
Total	18,456.90	18,079.10	25,914.00	31,731.60	48,599.90	67,088.60	79,562.80	93,276.80	117,282.70	86,994.40
Financial services indirectly computed	0	0	0	0	-441	-470	-533	-364.3	-643.1	-705.5
GDP Distributed between:	18,456.90	18,079.10	25,914.00	31,731.60	48,158.90	66,618.60	79,029.80	92,912.50	116,639.60	86,288.90
Mining and Quarrying and other related activities, Oil And Natural Gas	7761.9	6784.2	13630.6	18940.5	29,202.10	44,041.70	53,867.80	62,282.60	81,149.80	47,087.10
Other economic activities	10,695.00	11,294.90	12,283.40	12,791.10	18,956.80	22,576.90	25,162.00	30,629.90	35,489.80	39,201.80

* Represent the private Sector only, while the education and health services provided by the public sector are included in the public administration and defence activities
Sources:(CBL, 2005, 2006a, 2006b, 2007a, 2007b, 2007c, 2007d, 2007e, 2008b, 2008c, 2008d, 2008e, 2008a, 2009a, 2009b, 2009c, 2009d, 2010a, 2010c, 2010b)

Table (2- 5) shows some economic indicators (Million LD)

Years	Exports[1]	Imports[2]	Trade Balance[3]	GDP[4]	Import to Export	Import to GDP	Export to GDP	Economic Exposure
2000	5221.5	1911.4	3310.1	18456.9	36.6%	10.4%	28.3%	38.6%
2001	5394	2660.4	2733.6	18079.1	49.3%	14.7%	29.8%	44.6%
2002	10177	5585.7	4591.3	25914.1	54.9%	21.6%	39.3%	60.8%
2003	14806.6	5597.9	9208.7	31731.8	37.8%	17.6%	46.7%	64.3%
2004	20848.3	8255.2	12593.1	48,159.00	39.6%	17.1%	43.3%	60.4%
2005	31148	7953.5	23194.5	66,618.60	25.5%	11.9%	46.8%	58.7%
2006	36336.3	7934.7	28401.6	79,029.90	21.8%	10.0%	46.0%	56.0%
2007	40336.3	8501.4	31834.9	92,693.60	21.1%	9.2%	43.5%	52.7%
2008	54732.4	11195.2	43537.2	116,639.60	20.5%	9.6%	46.9%	56.5%

The sources of 1,2,3,4 taken from: (CBL, 2005, 2006a, 2006b, 2007a, 2007b, 2007c, 2007d, 2007e, 2008b, 2008c, 2008d, 2008e, 2008a, 2009a, 2009b, 2009c, 2009d, 2010a, 2010c, 2010b)

2.4.6. General Characteristics of the Libyan Economy

According to IMF (2006, 2008) it is observed that the Libyan macroeconomic was satisfactory during the 2000s. However, Libya does not have the diversity in economic activities which is required, although attempts have been made by the transformational economic and social plans. In addition, there had been dominance by the public sector in all economic activities. This can be attributed to the socialist ideology that was adopted after the issue of the second chapter of the *Green Book*, which had been introduced by Al-Qadhafi. The Libyan economy has most of the characteristics of the economies of developing countries. The Libyan economy is relatively small size in activities, depends on oil income and has a lack of skilled labour.

Libyan experience in public sector domination over most economic activities has had many negatives and positives. On the level of the pros, the State has had some success in the infrastructure formation. Also, it can be confirmed that there has been some improvement in economic indicators such as economic growth in some years (for more information, see table (2-6)). However, it is noticed in the negatives that the economy depends heavily on oil revenues as a main source of income. This has been confirmed by (Mahmud, 1997 ; Mahmud, 1999 ; Mahmud and Russell, 2002) and many international organisations such as WB and IMF (IMF, 2005b, 2005a, 2006b, 2006a ; WB, 2006 ; IMF, 2007a, 2007b, 2008a, 2008b, 2009 ; WB, 2009). The proportion of oil revenues to total revenues reached 80% in 2009. On the other hand, the percentage of oil and gas revenues was 54% of the GDP at current prices (for further explanations see tables 2-2, 2-3, 2-4 and 2-5).

Libyan experience in the field of economic planning has produced a lack of implementation of investments efficiency, in particular, in the productive sectors. A number of properties have become characteristic of the Libyan economy. Surprisingly, sectors such as industry and agriculture have received the largest share of development plan allocations. Allocations of industry and agriculture sectors were 20% and 15% respectively, while the contribution of these sectors together to the GDP ranged between 6% and 12% during 2000s.

Table (2- 6) shows Annual Economic Growth Rate in GDP

G.D.P.by Economic Sectors at Constant Prices (2003)						
	2004	2005	2006	2007	2008	2009
Oil Sector	21347	23348	24256	24474	24363	22488
Annual growth rate	5.7%	9.4%	3.9%	0.9%	-0.5%	-7.7%
Non-Oil Sector	18332	20739	22327	24424	25866	27366
Annual growth rate	6.4%	13.1%	7.7%	9.4%	5.9%	5.8%
Total	39679	44087	46583	48898	50229	49854
Annual growth rate	6.0%	11.1%	5.7%	5.0%	2.7%	-0.7%
G.D.P by Economic Sectors at Current Factor Income.						
	2004	2005	2006	2007	2008	2009
Oil Sector	29202	44042	53868	62283	81150	47087
Annual growth rate	44.6%	50.8%	22.3%	15.6%	30.3%	-42.0%
Non-Oil Sector	18957	22577	25162	30411	35490	39202
Annual growth rate	10.0%	19.1%	11.4%	20.9%	16.7%	10.5%
Total	48159	66619	79030	92694	116640	86289
Annual growth rate	28.7%	38.3%	18.6%	17.3%	25.8%	-26.0%
Source: Central Bank of Libya different reports						

Tables (2-3, 2-4, 2-5 and 2-6) refer to the slowdown in economic growth influenced by global financial crisis. GDP records a negative growth rate of %-0.7 in 2009 compared with growth of 2.7% in 2008. In analysis of these rates it was noticed that the oil sector has achieved a declining percentage (% -7.7) during 2009, while non-oil sectors achieved a positive growth of 5.8%. It can be assumed that the global financial crisis did not have any impact on these sectors (for further explanations see table 2-6). Indicators of economic exposure can be represented as follows. The proportion of imports to GDP had been between 9% and 18% during the 2000s. Also, the percentage of exports to GDP had been between 30% and 47% during the same period. Moreover, the proportion of imports to exports had been between 20% and 55%. Finally, the average percentage of total balance trade to GDP had been approximately 55% (for further explanations see table 2-5).

2.4.7. Microeconomic Foundations of Competitiveness

The Green Book, *part II the solution of economic problem*, has been published since early 1978 and was written by Al-Qadhaafi. He describes the relationship between workers and employers as one of slavery. As a result of these changes, all business activities were transferred from private to public sector. Also, the economy became dependent on the state-owned enterprises, which have depended only on oil revenues. The role of the public sector in economic activity had grown steadily throughout the period between 1977 and 1988. A period preceded the thinking about applying a new basis for the restructuring of the Libyan economy and the application of privatisation methods. A number of legislative instruments have been accomplished, which confirmed the control of the public sector on various aspects of economic life. The most important legislation was nationalisation of foreign trade, limiting of imports of goods to public institutions and companies.

Public industrial companies were tied by control and supervision from many government agencies. For example, GPC of Industry had directly been responsible to the industrial companies. These responsibilities may have reached dismissal and / or appointment of an administrative committee and / or the Executive Director (ED). Also, there had been some kind of wage controls imposed by the GPC of Finance through a set of Financial Controllers (FC) in these companies (Gzema, 1999). Functions of financial controllers comprise supervision of the daily financial operations in these companies. Moreover, the Control Secretariat (CS) oversees all state agencies, including public companies, periodically. Also, the CS undertakes the role of the External Auditor through carrying out audits of financial statements. Moreover, all products of public companies have been protected (Omar, 2005). Finally, the GPC of economy has imposed its control in determining selling prices of companies' products.

Since the early 1980s, government revenues from oil exports had been receding and projects that were administered by the public sector faced a number of problems that the burden inflicted upon the public treasury. Also, the treasury revenues from domestic sources had declined owing to reduced private activities. This led to the emergence of problems resulting from the domination of the public sector in all activities. It is possible to summarise the problems which faced the public sector, including low return on investment projects, deficits in the general budget and lack of liquidity in most public sector projects. These problems and others had necessitated reviewing public projects and starting to assess the projects implemented. Some public enterprises had been sold to their employees and the announcement to sell other public sector projects had been made.

2.5. Privatisation

The concept of the privatisation programme includes its policies to create a suitable environment for activating the role of the private sector in the economic field. Laws have been passed to govern the economic activities. These laws also included foundations to create legal forms for the conduct of these activities. Additionally, laws were passed that helped the development of an appropriate environment for investment to ensure the establishment of joint stock companies and to encourage participation of foreign investment.

2.5.1. Legitimacy Frame of Privatisation

It can be considered that the Libyan privatisation programme has theoretically started with the issuance of Law No 1 of 1986 to organise the contribution of public companies (LGPC, 1986 ; Otman and Karlberg, 2007). This legislation was the first law in the era of revolution, encouraging producers to become owners of companies (Shernanna and Elfergani, 2006, 2007). However, the actual beginning was applied when the General People's Committee issued resolutions 219 & 225 of 1987 and 183 & 214 of 1988 (GPC, 1987b, 1987a, 1988a, 1988b). The aims of these resolutions were to privatise some state-owned factories, so that ownership was transferred from the State to workers in these factories (Shernanna and Elfergani, 2006, 2007). However, these resolutions proved to be ineffective methods of transferring to the public sector (Otman and Karlberg, 2007). These events were based on ideas of the political leadership to liberate workers from employer exploitation.

Four years afterwards, the Law No 9 of 1992 was issued to regulate the transfer of property and to carry out economic activities (LGPC, 1992). The law has given permits to set up a private business owned and operated by families and businessmen. Also, the law has allowed the sale of some of the companies owned by the public to the private sector, which led to the appearance of a number of private companies. According to this law, the government had desired to move responsibility from the owners of these companies to the controller with limited liability by privatizing state-owned enterprises. Privatization had witnessed stagnation in its operations after these acts. According to Ellabbar (2007), in June 2003, in a speech to the LGPC, Al-Qaddafi called for the wholesale privatisation of Libya's fundamental oil and other industries. Meanwhile, the Secretary of GPC for trade and economy,[11] minister Shukri Ghanem,[12] had been appointed as Secretary of GPC[13] to start a new privatisation policy in all sectors (Ellabbar, 2007).

The privatization programme has been re-initiating its implementation. In accordance with the rules it set forth the decision of adoption and making the subsequent implementation in the framework of the provisions of the regulation on ownership issued by GPC No (31) of 2003 and amended by resolution No (52) of 2005 and the resolution (108) of 2007 (GPC, 2003, 2005, 2007). All arrangements had been made and these were intended primarily for the reconstruction of companies that can be effectively managed in the future. The disposition of companies was because their economic indicators pointed to their inability to continue in competition. This was done by the Public Corporation for Ownership Transfer of Companies and Economic Units (PCOTCEU), in coordination with relevant sectors. However, despite issuing this entire legal framework, Salama and Flanagan declared that "Libya lacks the legal framework for privatization" (2005: 7).

2.5.2. Motivations of Privatisation

Privatisation should be made to have specific targets to be achieved. These targets are based on a number of motivations. Privatisation in the Libyan economy is in its infancy. So, experience has not been sufficient to become a subject for assessment. Some motivations of the Libyan government may agree with those motives, that led to their being adopted by other countries. However, Libyan motivations have reflected to a large extent the privacy of the Libyan economy and are thus characterized. The policy of privatisation in other countries came as a result of what ails those countries, such as external debt, unemployment, inflation or the result of the dictates imposed by IMF policies. The privatisation of Libya may be regarded as a result of local economic data

[11] Trade and Economy Minister
[12] Shukri Ghanem has had a PhD in Economics from one of the USA universities and had worked with OPEC as acting secretary general and director of research division.
[13] Prime Minister

arranged privacy, an undiversified economic base and reliance on a resource being depleted.

On this basis, the objectives of privatisation policy can be determined in the following ways. Firstly, the productive base should be diversified to allow individuals to contribute production and service activities. Secondly, economic resources have to be exploited efficiently. Thirdly, companies that are not economically workable must be immediately disposed. Fourthly, individuals and institutions have to be involved in economic activity; also economic freedom must be widely ensured. Fifthly, economic efficiency and production capacity should be increased.

2.5.3. Implementation of Privatisation

Privatisation requires the need to assess the companies set up for it. This was done by estimating the fair value of net assets, property rights and appreciation of the real value of shares. The evaluation process must be carried out in a scientific and delicate manner. The process of estimating the fair value of the company raises many problems. There have also been many problems that have arisen before, during or after the evaluation. First, different rules and accounting routines have been implemented in public companies from those in private sector companies. Hence, this required a number of adjustments and modifications for the preparation of the financial statements to become in line or conformity of systems in the private sector. Second, the Libyan Stock Market (LSM) has had weak activity and been of very small size. This has affected the evaluation process and the transition to the private sector together. In the shadow of the weak activity of the LSM, the evaluation process has been become difficult and it is far away from reality.

2.5.4. Accounting Evaluation Methods of Firms

Generally, PCOTCEU was established according to GPC decision no (198) of 2000. The PCOTCEU has hired experts and professionals to help in estimating the values of companies, which were required to transfer their ownership from public to private sector. In spite of the difficulties referred to earlier, PCOTCEU has issued a set of rules and procedures under which is determined the value of venture capital firms. Consultations and negotiations between PCOTCEU and a group of collaborating consultants have revealed a variety of ways in which they were determining the value of net assets.

The evaluation process included two phases. The first phase, check and audit procedures, was incorporated. The goal of this stage was to examine and review the legal, administrative, technical and financial data within the company. This enabled acting-ray technicians to give accurate measures in the evaluation process through the findings of the examination and audit requirements (GPC, 2005). The second phase, the evaluation occupation, was established (GPC, 2005). This stage had begun after achieving the review and checks (first stage). The evaluation process had involved the preparation of financial statements at the evaluation date in different ways and that could be clarified as follows:

2.5.4.1. *Book Value Method (Historical Cost)*

This method represents the basis of the evaluation process, which relies on the latest financial statements certified by the External Auditor. The aim of this method was to assess the company consistent with the reality of records and accounting books, which aimed to determine the net assets value. This method is based on the evaluation Notebook, according to the historical basis, based on the financial statements approved by the External Auditor, taking into consideration his observations. Also, this method depends on the way of following the generally accepted accounting basis, determining the value of fixed assets and making sure depreciation has been handled effectively. This is additional to clarifying which assets have been fully consumed and it is still working.

There is a set of procedures to be followed to determine the net assets. These measures include fixed assets and their depreciations, and determination of the value of property rights. Finally, the nominal value of shares is determined by dividing the property rights into the number of shares to be issued. This method is generally characterized as based on the book value of the nominal value of shares. However, this method has some disadvantages, because it does not take note of a change in the purchasing power of money in the account (Riahi-Belkaoui, 2004). This method also does not show the reality of the financial position, especially in cases of inflation (Most, 1977). In addition to this, this method is not consistent with the International

Accounting Standards, which stress the necessity of taking the change in prices into account when preparing the financial statements(Abu-Bakr, 2004).

2.5.4.2. *Adjusted Book Value Method (Current Cost)*

According to this method, historical data are adjusted on basis of the General Prices Index (GPI). This means having an adjustment based on the unit of measurement of accounting book value. This is done by use of public records to establish the adjusted value to replace the book value. The overall purpose of this method is to overcome the effect of the change in prices. When applying this method, there is a set of procedures which must be followed that is to prepare financial statements on the basis of the book value method. Also, it is necessary to determine the appropriate record to change the unit of measurement. Subsequently, it divides classified financial statements items into cash and non-cash elements. Non-cash elements are modified by using an equation[14].

This method is characterized by easy application, substance and comparisons. Also, it features a proposed reduction in the scope and content of financial reports (Most, 1977). However, it does not take into account the price changes of assets quality. Other criticisms are that it is set in two types of financial statement which require extra effort to be accomplished (Abu-Bakr, 2004). There is also difficulty in determining the harsh public figures. In addition, this method depends on the book value. Also, GPI will not be suitable for any business requirement which necessitates adjustment to assets in order to maintain the value of its capital in the long term (Glautier and Underdown, 2001).

2.5.4.3. *Replacement Value Method*

This method relies on determining the financial position of the company based on replacement value or the current value of the asset. Replacement value is considered as the cost that can be borne by the company in order to replace the asset by another asset, which is the same in the productive capacity. This method depends on a range of measures, including the valuation of land owned by the company in accordance with the land prices in surrounding areas. The buildings and construction validity are estimated as validity rates, which are assessed by the relevant experts. Finally, book values are

[14]

$$\text{Adjustment book value of the asset} = \text{Book value of the asset} \times \frac{\text{Record of the asset on the evaluation date}}{\text{Record of the asset on the purchase date}}$$

adjusted by replacement values in accordance with the validity ratios. It can be said that this method is useful for liquidation purposes, not evaluation. Moreover, it does not separate profits and capital (Abu-Bakr, 2004). Another disadvantage of this method is that it ignores changes in prices and purchasing power and the effect of inflation (Riahi-Belkaoui, 2004).

2.5.4.4. *Adjusted Replacement Value Method*

This method depends on the replacement value method, with modification of the results in accordance with GPI. In this method, non-cash assets are evaluated based on replacement values on the valuation date, as is the case in the replacement value method. However, replacement values are modified by using the impact of changes in the GPI. Therefore, the advantages of this method are that it avoids the criticism addressed to the previous methods, in addition to the collection of the advantages of all of them. However, this method also has faced criticisms that it ignores the most important evaluation of intangible assets, such as goodwill (Abu-Bakr, 2004). In addition, this method disregards the expected cash flows (*ibid*).

2.5.4.5. *Net Present Value of Future Cash Flows Method*

This method aims to determine the future cash flows in order to assess the company. The evaluation process is done by estimating the cash inflows and outflows for a specific time period. Consequently, this method is interested in measuring the company's ability to make profits and the determination of net future cash flows. The main problem facing this method has been that it lies in determining the period of cash flows expected to be achieved (Abu-Bakr, 2004). Also, this method cannot be used with a company that made losses in the years prior to the evaluation process (*ibid*). Therefore, there is a prerequisite, which is to achieve profits in order to apply this method.

2.5.5. Privatisation Difficulties and Challenges

A policy of direct intervention had been adopted by the Libyan government in economic life, as a branch of a key policy after the socialist transformation since 1978. Formerly, the private sector played an important role in economic activities. The state became the main control point of most aspects of production and distribution. Employment had depended on the public treasury and the economic activities had been dominated by the reduction of the private sector to a very insignificant role. A review of five-year economic development plans (1976-1980, 1981-1985) notes an economic power shift in favour of the public sector, which was considered by the centre of economic and social development. According to the socialist vision, banks, foreign trade, wholesale trade and retail, industrial firms and construction companies were completely nationalized.

The oil boom helped in the expansion of public sector activity and provided substantial financial resources. A large part of financial resources went on financing huge projects. The government institutions were not worried about studying the operational feasibility of economic development. After a decade of socialist process, the state found itself facing a severe economic crisis. Excessive funding policy for the establishment and management of government facilities exhausted most of the financial reserves. Concurrently, the oil revenues were decreased by an oil shock after oil prices declined in the middle of the 1980s. As a result, the various sectors had been negatively affected by the diminution of the main sources of funding. This was accompanied by the failure of institutions, companies and government projects, which cannot have generated revenue to cover their costs. There was a need for structural change in the national economy, but that happened only during the beginning of the nineties.

The implementation of the privatisation policy after a period of control of the public sector was not an easy process, but also it crashed at a number of difficulties. For example, the presence of sufficient of a stock market is an important factor in the success of the privatisation policy. Therefore, the lack of regular LSM is one of the fundamental problems facing the application of the privatisation policy. Most public sector units have suffered from inflation of employment in the administrative apparatus as a result of employment policy in place. As a result, companies may be privatised to retain employment in excess of the actual need, which is not accepted by investors (Salama and Flanagan, 2005 ; Alfergani, 2010). In addition to the foregoing, the Libyan government should begin to take initial action leading to the development of LSM.

"Libya is a rich country in natural resources which include oil, natural gas and minerals" (Salama and Flanagan, 2005: 2). Moreover, the Libyan environment has had a low rate of crime (Alfergani, 2010). These factors may provide a suitable climate for foreign direct investment. However, the business environment has not been acceptably improved (Salama and Flanagan, 2005). The low Libyan oil cost and ready access to

European markets make it a most attractive development prospect (Wallace and Wilkinson, 2004). Wallace and Wilkinson (2004) declare that the Libyan state has encouraged stability in this critical sector.

There have been many reasons for the lack of turnout on companies offered for subscription. For example, there has been a weak investment culture through the trading of shares in the Libyan community. Religious reasons prevent some members of Libyan society from obtaining loans and/or banking facilities; this is of course in the absence of Islamic Banking. However, financial institutions (Banks) have failed to respond in financing the shares purchase. Inadequate previous management meant that public companies were unable to generate profits and revenues and this has led to a lack of confidence in profits after privatisation. Instability in administration loses the confidence of investors and small private owners, as the adventure of their results is not known.

The influence of private sector on Libyan business environment is very little and has been disappointing (Wallace and Wilkinson, 2004). This is because the private sector in Libya had lost its experience during the socialist period. Also, there has been dissatisfaction from the Libyans with the level and service of the existing infrastructure service and this has forced the Libyan administration to think about the privatisation policy (Salama and Flanagan, 2005). There has been a lack of sufficient infrastructure to support economic growth in Libya (Alfergani, 2010).

Finally, it might be noted that the privatisation has many opponents and they represent a challenge to its supporters. For example, the privatisation project is opposed by employees and this may be associated with liquidation of public companies and a fear of losing jobs. Government officials are reluctant to have to implement this policy because it might reduce and limit their functions. For these reasons, the government feels some difficulties in retreating from its role. Thus, the government experiences privatisation policy with some frequency, although it has issued a range of laws. The government has felt forced to increase the financial burdens and consequences of this role in the light of the restrictions and economic sanctions which were imposed on Libya.

2.6. Conclusion

This chapter can seal a set of points which are summarised in the following points. First, Libya has a strategic geographical location that is a link between Southern Europe and Central Africa. Moreover, Libya has quantities of natural resources, such as iron, phosphate and other minerals. Unfortunately, these natural resources are not exploited and exploitation needs investment. It is shown that there is a need for foreign investment and this is what is being sought by the Libyan government. Secondly, the Libyan economy depends heavily on oil and gas. Although the Libyan economy has achieved satisfactory growth rates during some years, the reason behind that was that oil prices had been increased. On the other hand, the role of non-oil sectors is still weak proportionally in the GDP.

With regard to external factors, international crises had influenced the Libyan economy. It can be said that Libya was not affected by sanctions imposed by the US as much as by international sanctions imposed by the UN. With regard to the global financial crisis, it can be confirmed that the non-oil sectors are not affected by this crisis or the crisis that preceded it. However, the impact of global financial crisis on the oil sector was clear from the negative growth rate achieved by the GDP. Finally, there is an overlap between factors such as political, economic, social and cultural in the Libyan society inspired by the teachings of the Islamic religion. Overlapping between these factors has increased the complexity of the administrative practices within Libyan companies. Therefore, these factors and their relationships with management accounting systems and practices will be discussed in the next chapter.

It might be concluded that, context, there has been no stability at all in Libyan, neither in political issues nor in the business environment. For example, during the last hundreds years, Libya has witnessed several aspects of rules systems, including the Ottoman Empire, Italian occupation, World War II, British and French administration, Kingdom, Republic, Jamahiriya and a new revolution (Transitional National Council) with a lack of knowledge about what kind of new government system is best. Also, the Libyan business environment has been changeable during the last six decades. Libya transferred from being one of the poorest countries in the world to being a rich country with individual capitalism. Individual capitalism had been discontinued in order to implement a new version of socialism. No more than ten years later, this version of socialism had transferred to state capitalism. As a result, the public sector had dominated all aspects of economic activities. Finally, the government perceived that the best way to disengage state-owned enterprises was to apply privatisation.

CHAPTER THREE: LITERATURE REVIEW

3.1. Introduction

In the previous chapter, the Libyan business environment was discussed. It concluded that the Libyan business environment, excluding the oil sector, had not been influenced by international global crises. There had been no side effects of the US sanctions that had been imposed on Libya, whereas international sanctions had been imposed by the UN, which had actually affected all life aspects in Libya. Also, some factors were determined in order to argue about some of them and their influence on management accounting systems and practices. These factors may reflect management accounting techniques and practices within the organisations which work in this environment.

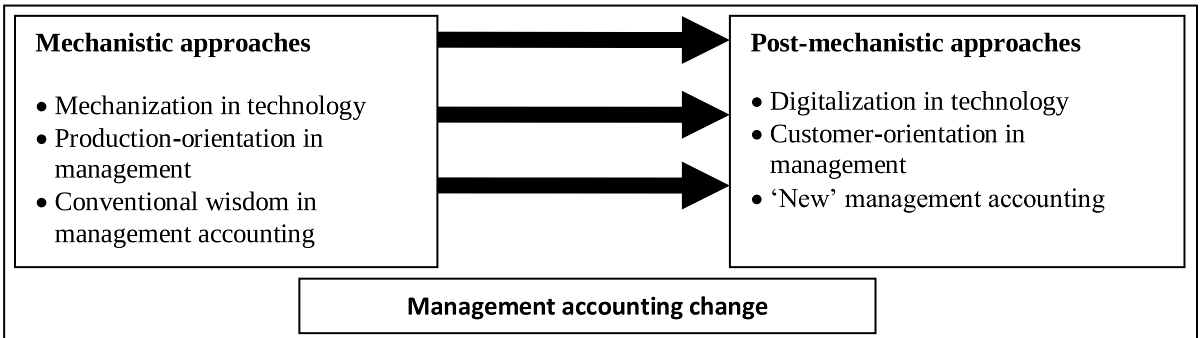
Therefore, the objective of this chapter is to present a general idea of management accounting systems. It opens by presenting a definition of management accounting change. After that, the chapter provides the topology of management accounting change. Then, it compares traditional and new or so-called advanced management accounting techniques and their limitations. Moreover, this chapter discusses intra and extra organisational factors which might form management accounting practices within organisations. The last section of this chapter reviews different theoretical perspectives which argue about management accounting in general and management accounting change in particular, such as agency, contingency and neoclassical economic theories.

3.2. Management Accounting Change Definition

In management accounting research the 1970s was an era of economic-oriented mathematical models (Scapens, 2006, p. 4). During and after that era the role of systems within the historical context of management accounting was examined by a large number of studies (e.g. Johnson, 1972 ; Johnson, H. T. , 1975 ; Johnson, H. Thomas, 1975 ; Johnson, 1978 ; Johnson, 1981 ; Kaplan, 1984 ; Hoskin and Macve, 1986 ; Loft, 1986 ; Miller and O'Leary, 1987 ; Macve, 1988 ; Bougen, 1989 ; Loft, 1991 ; Loft, 1995 ; Fujimura, 2007). However, research should be focused on the current management accounting systems and practices with studying the development of such systems in their historical context. Johnson and Kaplan (1987) assert that management accounting lost its relevance after the significant development in technology and information systems. They introduced a great opportunity to discuss and encourage use of innovations techniques.

According to Wickramasinghe and Alawattage (2007) management accounting change can be reflected in recent developments in three major areas: cost management, strategic management and management accounting in new organisations. Also, they have introduced a definition of management accounting from three different viewpoints, technical-managerial, pragmatic-interpretive, and critical-socio-economic, viewing management accounting change as a shift from mechanistic to post-mechanistic approaches of management accounting (Wickramasinghe and Alawattage, 2007: 103). The figure below illustrates movement from one situation to another.

Figure (3- 1) Management accounting change from mechanistic to post-mechanistic approaches



Taken from: Wickramasinghe, D., and Alawattage, C., (2007) Management Accounting Change Approaches and Perspectives, London: Routledge Taylor & Francis Group, p. 14.

In the relevant literature the debate about management accounting change can be divided into two opposing views. On the one hand, some researchers argue that traditional management accounting systems have continued to be used (Drury *et al.*, 1993 ; Burns and Yazdifar, 2001). On the other hand, others consider that there have been changes in management accounting systems and practices (Friedman and Lyne, 1997 ; Laitinen, 2001). Burns and Scapens (2000) confirm that, whether it has changed, has not changed or should change, management accounting has become common in recent years; all views require more research.

3.3. Management Accounting Change Topology

In this approach, some researchers have studied the relationships between different organisational factors and management accounting systems and practices (Libby and Waterhouse, 1996 ; Williams and Seaman, 2001 ; Baines and Langfield-Smith, 2003), whereas others have focused on the typology of management accounting change (Sulaiman, S., 2003 ; Sulaiman and Mitchell, 2005 ; Chanegrih, 2008). The major result of Sulaiman and Mitchell (2005) supports the evidence from the previous literature that a contemporary phenomenon of MA is not fixed in nature (see, Hopwood, 1987). The rate of management accounting change in Malaysian companies was higher than that of others in Canada, France and Singapore (Libby and Waterhouse, 1996 ; Sulaiman, S. , 2003 ; Sulaiman and Mitchell, 2005 ; Chanegrih, 2008). The studies have agreed that the highest level of management accounting change was in controlling, planning and costing sub-systems.

Table (3- 1) shows the topology of management accounting change

Type of change	definition	examples
Addition	Introduction of new techniques as extensions of the management accounting system (e.g. the first-time introduction of a non-financial performance measurement package, or of a quality costing system).	Simonds (1981), Clark (1985), Innes and Mitchell (1990b, 1995), Shields and Young (1991), Bright et al. (1992), Kaplan and Norton (1992), Drury et al. (1993), Friedman and Lyne (1995), Yoshikawa et al. (1995), Dutton and Ferguson (1996), McLaren (1999).
Replacement	Introduction of new techniques as replacements for an existing part of the management accounting system (e.g. the replacement of traditional costing with ABC, or of a fixed budgeting system with flexible budgeting).	Innes and Mitchell (1990b), Innes and Mitchell (1995), Darlington et al. (1992), Bright et al. (1992), Kaplan and Norton (1992), Drury et al. (1993), Shank (1996), Gosselin (1997), Jones and Dugdale (1998), Burns et al. (1999), May and Bryan (1999), Anderson and Young (2001).
Output modification	Modification of the information output of the management accounting system (e.g. the preparation of weekly as opposed to monthly variance reports or the re-presentation of numerical information in graphical form).	Kaplan (1986), Innes and Mitchell (1990b, 1995), Gosselin (1997), Anderson and Young (2001), Granlund (2001).
Operational modification	Modification of the technical operation of the management accounting system (e.g. the use of a pre-determined as opposed to an actual overhead rate in an existing costing system or the use of regression analysis as opposed to an inspection basis for separating fixed and variable costs).	Innes and Mitchell (1990b), Kaplan and Norton (1992), Amat et al. (1994), Burns et al. (1999), Vaivio (1999).
Reduction	The removal of a management accounting technique with no replacement (e.g. the abandonment of budgeting or the cessation of break-even analysis).	Wallander (1999).

Taken from: Sulaiman, S. and Mitchell, F., (2005), 'Utilising a Typology of Management Accounting Change: An Empirical Analysis', *Management Accounting Research*, 16:428.

3.4. Factors Affecting Management Accounting

One of the objectives of the study is to investigate the impact of institutional factors on management accounting systems and practices. In this regard it is necessary to discuss the relevant literature of the factors that could affect systems and practices. Therefore, these factors are divided into environmental and internal. The environmental factors comprise political, social and economic effects. On the other hand, internal factors involve micro-economic ones, which include competition, markets and consumers and organisational factors, such as culture and power.

3.4.1. Environmental Factors

In general, the environment may involve a variety of factors, for example prices, products, competition, government policies etc (Wickramasinghe and Alawattage, 2007). In specific terms, the business environment influences the functioning of business organisations (Wickramasinghe and Alawattage, 2007). Wickramasinghe and Alawattage (2007) confirm that there has to be a relationship between business environmental factors and the functioning of business organisational systems. Therefore, there are no attempts to explore those factors and their effect and relationships with MAS (Scapens, 2000a).

According to Child (1972), environmental changeability has drawn most attention as the main factor contributing to uncertainty among organisational decision-makers. The conception refers to the degree of change which characterises environmental activities relevant to an organisation's operations. Degree of change may be seen as the function of three variables (Child, 1972), as follows. The first factor is the frequency of change in relevant environmental activities. The second is the degree of difference involved at each change. The third is a degree of irregularity in the overall pattern of change in a sense the variability of change.

There have been some studies concerned with the relationships between environmental factors and management accounting systems (Khandwalla, 1972 ; Otley, 1978). Khandwalla (1972) examines empirical relationships between different kinds of competition and the usage of number of sophisticated controls of general relevance to manufacturing organisations. Otley 1978 examines the influence of difference in the environment formed by unit managers. Khandwalla (1972) and Otley 1978 arrive at the same conclusion, that sophistication of management accounting systems has been affected by the business environment variables in general and the competition factors in particular.

Political, economic, and social are classified as environmental factors (Sulaiman, S. , 2003). For example, economic crises have driven accounting change (Hopwood, 1987). Specific economic, institutional and human factors support continuity together more than driving change (Granlund, 2001). During the crises phases the 'Accounting Information Systems' exhibited many dysfunctional limitations which inhibited effective crisis management' (Ezzamel and Bourn, 1990: 422). Abernethy and Chua's (1996: 599) case illustrates that 'accounting control systems do not serve a particularly important role in the planning and control function, but rather are used to rationalise and supplement other more visible elements of the control package'. The social and political crises have additionally contributed to the importance of management accounting and standard costing (Oakes and Miranti, 1996). Moreover, management accounting is characterized by continuity and change, despite huge institutional changes in environment (Vamosi, 2000).

Competition, markets and customers have classified as economic factors (Sulaiman, S., 2003). Competition has been deemed as a key factor in design and implementation of new management accounting system (Amat *et al.*, 1994). The results of another study suggest that greater emphasis on multiple measures for performance evaluation is associated with businesses facing high competition and making greater use of computer-aided manufacturing processes (Hoque *et al.*, 2001).

From a marketing viewpoint, employees in marketing divisions might attempt to relegate other divisions to a secondary position (Kohli and Jaworski, 1990). Kohli and Jaworski (1990) suggest that the equilibrium of power across divisions has to be supervised carefully in any attempt to become more market-oriented. The meaning of market orientation appears in the marketing concept—customer focus and coordination (Kohli and Jaworski, 1990). They enhance the traditional perspective that customer focus includes obtaining data from customers' requirements and favourites. Also, they confirm that customer focus is the vital component of marketing orientation.

There are rhetorical claims of increased competition, rather than real economic effects but that does not really matter (Scapens, 2000a). It is the awareness of managers and accountants that is important, and how they see the economic environment in which they operate. If there is an awareness of greater competition, then an increased concentration might be given to markets, customers and marketing (*ibid.*). Although much of this focus on clients may be just 'rhetoric', there did emerge a better stress on the service given to customers, and to providing that service in a market-orientated approach (*ibid.*).

3.8.1. Internal Factors

Profitability has been considered and a close relationship between accounting change and internal factors has been proved (Amat *et al.*, 1994). Amat *et al.*, (1994) assert that the intra and extra organisational has been utilised to analyse with respect to the implementation and change of management accounting systems. One of many results of *Relevance Lost: the Rise and Fall of Management Accounting* is that management accounting has been dominated by external financial accounting statements during the last century (Kaplan, 1984 ; Johnson and Kaplan, 1987). Responding to this call, Joseph *et al.*, (1996) present the results of a questionnaire survey that involves the opinions of professionally qualified management accountants working in UK companies which have been collected. As result, there is little evidence of a generally held belief that external financial accounting statements dominate management accounting (Joseph *et al.*, 1996). The following subsections discuss some intra-organisational matters.

3.4.1.1. *Technology*

Technology refers to the methods of production adopted by companies. This has been considered to be contingent in the classic study by Woodward (1965), cited in Wickramasinghe and Alawattage (2007) and Otley (1980). In this study the author distinguished between different kinds of production systems. The author classified the production systems into three kinds: small-batch and unit production; large-batch and mass production; and process production. Based on this categorisation, the author explained the effect of different types of technology on organizational systems. Burns and Baldvinsdottir (2007) declare that the increased speed of technological change has affected management accounting systems (see also, Scapens *et al.*, 2003).

Otley (1980) affirms that the nature of the production process determines the amount of cost allocation rather than cost apportionment. The production technology has a significant effect on the type of accounting information system (*ibid.*). In summary, complex technology needs simple and informal control mechanisms and standardized technology requires complex mechanisms (Wickramasinghe and Alawattage, 2007). In other words, environment and technology are related to the structure of complex organisations (Pennings, 1975).

3.4.1.2. *Organisational Structure*

There have been other significant changes in the organisational structure. Although the changes in organisational structure respond to some organisational factors, the real economic factors are unclear (Scapens, 2000a). According to Otley (1980), there is evidence to propose that the structure of organisation affects the method in which budgetary information is utilized. Hopwood (1972) distinguishes between methods in which accounting reports show the actual and budgeted cost for cost centre and the difference between all of them. In this context, there are introduced three styles of evaluation the data which are isolated and defined: *Budget Constrained Style*, *Profit Conscious Style*, and *Non-accounting Style* (Hopwood, 1972). Otley (1980) concludes that the organisational structure and technology may thus be seen to have an important effect upon the way in which an accounting system functions.

Waterhouse and Tiessen 1978 state that that management accounting systems are an essential part of an organisation, interwoven with organisational structure and its processes to improve organizational control. According to Scapens (2000), there has been other considerable change in the organisational structure. Scapens (2000) and Scapens et al (2003) assert that, in the UK in the 1970s, there was a wave of acquisitions and mergers, with the creation of conglomerates but by the 1990s organisations were moving in the opposite direction. Cassia *et al.*, (2005) analyse the consistency of management accounting system in relation to the organisational structure. Their outcomes indicate that the development of the organisational structures is not constantly consistent with the relevance supposed by management accounting systems. Thus, this change has affected all aspects of management accounting systems in these organisations.

3.4.1.3. Information Systems

There are different perspectives in the role of information systems to develop management accounting systems. The following example shows that using information technology has failed to convince reconciliation between the designers and users. Changes to information systems often fail because the designers focus on technical issues and forget the issues relating to users (Hardy, 1995). Decentralised systems require the support of new organisational forms by allowing staff to access the information strategy of the organization and make decisions that may be resisted by senior managers, who fear loss of control (Hardy, 1995). Another criticism is that "during the early phases of the crisis the Accounting Information Systems did not appear to possess the requisite qualities for effective pro-active nor responsive crisis management"(Ezzamel and Bourn, 1990: 155). Also, no association was found between the level of cost system sophistication and cost structure, product diversity and quality of information technology (Al-Omiri and Drury, 2007).

On the other hand, there have been many researchers who have supported the belief that information technology has played a significant role in developing management accounting techniques. One of some criticisms which have faced management accounting is that it has been dominated by financial accounting (Johnson and Kaplan, 1987). One of the huge number of responses to this point is that the organisation needs only one database system to be used in all aspects of information needed (Scapens, 2000a ; Scapens *et al.*, 2003). In that system, information can be analyzed by different methods. One of these methods is preparing financial reporting. Moreover, with the progress of information technology and the emergence of personal computers, managers can acquire any information at any time and without accountants' assistance (Burns and Baldvinsdottir, 2007). Accordingly, the criticism that financial accounting dominates management accounting is just an assumption that can be easily refuted.

After discussion of the definition of management accounting change, its topology and factors that influence management accounting techniques has been reviewed, there should be launched different theoretical perspectives which concern studying management accounting in general and management accounting change in particular. Therefore, theories such as contingency, agency and neoclassical economics will be discussed in the next section

3.5. Perspectives on Management Accounting Change

According to management accounting literature, there has been a variety of perspectives on management accounting. Wickramasinghe and Alawattage (2007) divided these perspectives into two approaches. The first approach is rational perspectives on management accounting change that related to neoclassical economic theories of management accounting change, including agency and contingency theory. The second approach is interpretive and critical perspectives on management accounting change, which are involved with institutional, networks and political economy.

3.5.1. Neo-classical Economic Theory

Neoclassical theory emerged in the second half of the nineteenth century (Scapens, 1990). Besides, fundamental characteristics of this theory have been modified to focus on values and to benefit all from production to demand (*ibid*. and see also, Samuels, 1995). Methodological aspects of this theory have been translated into mathematics after it has been cosmetic, but the core is still in existence (*ibid*. and see also, Prasad, 2003). Neo-classical theory studies the behaviour of firms at macro-economic levels. The theory assumes that individuals in the companies interact with the change in the environment by taking the optimal decisions. Also, neoclassical economic theory is based on two basic assumptions, which are rationality and equilibrium (Scapens, R. and Burns, J., 2000). So, it has difficulty in analysing processes of change (*ibid.*).

Along with new institutionalists, who modify some of the neoclassical assumptions about economic consistency (Dugger, 1995), they also emphasise the significance of transaction cost minimization (*ibid.*). Dugger (1995, 453) affirms that the new institutionalists develop "new models but not new theory". New institutionalism neglects the important contribution of institutionalist literature (*ibid.*). NIE "is concerned with the structures used to govern economic transactions" (Scapens, 2006: 11). NIE extends the traditional economic approach and applies the assumptions of economic rationality and markets to the governance of organisations (Scapens, 2006: 11).“Transaction-cost economics (TCE) has been criticized because it deals with polar forms–markets and hierarchies–to the neglect of intermediate or hybrid forms” (Williamson, 1991: 269). As a result, neoclassical theory is coming under attack from both inside and outside the economics profession (Scapens, 1990).

3.5.2. Structuration Theory

In addition to neo-classic theory, there have been many other theoretical perspectives, such as structuration theory. This theory has been used as a helpful framework for management accounting research by some researchers (Giddens, 1984 ; Macintosh and Scapens, 1990). According to Macintosh and Scapens, “structuration theory is a more focused, informative, integrative, yet efficient way to analyse how accounting systems are implicated in the construction, maintenance and changes of the social order of an organisation, than many frameworks used in previous studies” (Macintosh and Scapens, 1990: 455). However, Archer argues that historical events are excluded by structuration theory (Archer, 1995). Burns and Scapens (2000) confirm that structuration theory is not useful for investigating processes of change.

Macintosh and Scapens (1990) recommend structuration theory as a helpful framework for management accounting study. As a result of their recommendation, specific criticism has been faced, for example, they “do not really allow us to see the “knowledgeable, purposive human actor” (….) who is producing and reproducing social structure through management accounting practice” (Boland, 1993: 126). The response to this criticism is that:

> “In rebutting Boland’s (mis-)reading of our paper, we contend that he: 1) did not grasp our central theme: (2) failed to understand our project: (3) accused us unjustly of not recognizing the interpretive power of agents in ‘reading’ their social world, and (4) used his criticism of our paper to advance his own monolithic theory of management accounting as a creative, open interpretive act on the part of agents who ‘make’ the meaning of management accounting systems” (Scapens and Macintosh, 1996: 676-377).

Also, Boland (1993) criticises Macintosh and Scapens’ argument, because they summarise the relation of management account systems to structuration theory in fairly strong terms including reference to interpretive schemes, norms and facilities. However, Scapens and Macintosh (1996) claim that there are issues other than interpretive schemes, norms and facilities available in any organisation.

3.9.3. Agency Theory: Principal-Agent Relationship

During the 1960s and the early stage of the 1970s, economists had explored risk sharing between individuals or groups (Eisenhardt, K.E., 1989). In the 1970s and 1980s, the appearance of agency theory (AT) had a profound influence on management accounting research (Indjejikian, 1999). AT affords a rich theoretical principle of understanding organisational processes and design from principal-agent viewpoint (Subramaniam, 2006). According to economic literature, there are different classifications of AT. Many researchers have stated that AT has divided into two branches, positivists and principal-agents (Jensen, 1983 ; Eisenhardt, K.E., 1989).

Eisenhardt, (1989) describes the risk sharing problems as one that occurs within the so-called agency problem. So the definition is of "agency relationship as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent" (Jensen and Meckling, 1976: 308). Baiman (1990) states that that in the principal-agent branch, individuals are supposed to be rational and to have unlimited computational ability.

In general, an agency relationship exists when one or more individuals (principal(s)) hire others (agent(s)) in order to delegate responsibilities (Baiman, 1990 ; Subramaniam, 2006 ; Wickramasinghe and Alawattage, 2007). The rights and responsibilities of the shareholders and managers have been specified in their mutually agreed-upon employment contracts (Baiman, 1990). Baiman, (1990) adds that, within the term 'employment contract', the following are included: compensation arrangements, information systems, allocation of duties and allocation of ownership rights.

In a management context, there has been research into the relationships between owners of organisations as principals and managers as agents. Also, there have been other principal-agent relationship forms, such as: organisation and suppliers; organisation and customers; manufacturer and salesmen; shareholders and managers; consumers and suppliers. In large- and medium-sized companies it could be complicated by having managers and employees (Sulaiman, S., 2003). For example, company's shareholders might be employed as principal hire managers to be their agents in controlling the company in their interests.

3.9.4. Agency Theory and Management Accounting Research

Eisenhardt (1989) confirms that the AT has been utilized in a variety of sciences, including: accounting; economics; finance; marketing; political sciences; organisational behaviour; and sociology. AT was utilised to rationalise or explain different types of management accounting practices, such as participative budgeting, cost allocations, transfer pricing and variance analyses, amongst others (Indjejikian, 1999). AT has been utilized in management accounting research to address two main questions: (I) how do features of information, accounting and compensation systems affect (reduce or make worse) incentive problems and (Covaleski *et al.*) how does the existence of incentive problems affect the design and structure of information, accounting and compensation systems?(Lambert, 2001: 4) Indjejikian (1999) states that the main contribution of AT to management accounting literature has concerned the principle of controllability.

Baiman (1990) specifies that there are a number of criticisms that can be made of the principal-agent relationship. The first criticism deals with the realism of some of the assumptions appearing to underlie the principal-agent model. These assumptions courts can enforce all contracts, even when all individuals may subsequently wish to re-contract. The second criticism deals with the simplicity of the relationships which are analyzed. Because of most models being developed to analyze the principal-agent relationship's emphasis on internal consistency, this is too simple and optimal a solution. A third criticism deals with the results of the principal-agent relationship; whereas we often observe the use of simple and forceful contract forms, these may be too complicated and not closely related to real world contracts.

Indjejikian (1999) denotes that the criticisms of AT are linked to its relationships. First, shareholders'-managers' relationships are more complicated than standard principal-agent relationships. Second, the idea is that many shareholders-managers relationships involve informal arrangements and understandings about principals' duties and responsibilities. Third, companies have many employees whose interactions and collective behaviour affect the nature of an organization's incentive problem beyond those captured by the classic agency model. Fourth, companies have suffered to allow employees to develop, learn, and improve their productivity while providing the employer opportunities to replace shirking employees and redesign performance evaluation

3.9.5. Transaction Cost Economics (TCE)

TCE appeared when OIE experienced a silence during and after the war years. There had been renewed interest in institutions amongst economists beginning from the 1960s forwards (Moll *et al.*, 2006a). Moll *et al,* (2006) provide another reason behind the emergence of TCE, that the neoclassic economists wanted to study institutions within the neo-classical economic framework. TCE, as a principal-agent, assumes that individuals are rational and focus on their own interests (Subramaniam, 2006), whereas TCE, unlike a principal-agent, takes the common view of the transaction as the focal unit of analysis (Williamson, 1991 ; Wickramasinghe and Alawattage, 2007).

Baiman (1990) assumes that TCE attempts to find a link between principal-agent branches and transaction cost economies considers that all individuals act in their own self-interest. TCE is unlike the principal-agent view, because TCE assumes that individuals do not have unlimited computational ability (Baiman, 1990). Also, TCE is unlike the principal-agent model because TCE assumes that the courts are imperfect enforcers of contracts (Baiman, 1990).

According to Baiman (1990), the focus of the TCE literature differs in a number of methods from that of the principal-agent literature. First, the idea motivating transaction cost research is that transactions are organized so as to minimize transactions costs, where that term includes out of pocket costs. Second, the principal-agent branch has a tendency to focus on the relationships between individuals within an organisation, whereas the TCE branch has a tendency to focus on the relationships between organisations. Third, with respect to the research agenda mentioned in the introduction, relative to principal-agent research, transaction cost economics places less emphasis on the formal modeling of the underlying economic environment and on deriving optimal solutions.

3.9.6. TCE and Management Accounting Research

TCE has been developed in explicating various management accounting phenomena (Wickramasinghe and Alawattage. 2007). Wickramasinghe and Alawattage (2007) state that there are three main fields in which it has presented an influential theoretical framework: management accounting history; inter-organisational relationships; and management control systems (Spekle, 2001). The best account of using TCE in management accounting history is that of the textbook for Johnson and Kaplan (1987). They reviewed management accounting systems history from the 1920s until the 1980s.

The second area is where TCE attempts to explain inter-organisational relationships. Dekker (2004) provides the framework to study the control of inter-organizational relationships. Accounting can be conceptualised as an actor to help to mediate, shape and construct inter-organisational relations through self-regulating and orchestration mechanisms (Mouritsen and Thrane, 2006). Management accounting can be an essential element of governance in inter-organizational relationships and signifies the importance of these relationships (Dekker, 2004).

Finally, TCE tries explaining management control structure. Spekle (2001) proposes a framework that acts as a link between various archetypical configurations of control devices and the activities to control. In his framework, that is the nature of organisational activities and the required contribution from organisational participants. These participants are defined by three factors (Spekle, 2001). The first is extending programmability. The second is the degree of asset specificity. The third is the intensity of ex post impacted information.

Dekker (2004) affirms that the criticism of TCE suggests that this is not the sole or even the main purpose of control. There are other problems of theory, as follows:

> "Most of the problems stem from the assumption in transaction cost theory that changes in organisational forms and control systems are universally driven by searches for elementary feature of capitalist economic life that there are also gains to

> be made from extension and intensification of labour and from the monopolisation of product markets"(Hopper and Armstrong, 1991: 407).

Baiman (1990) specifies that there are a number of criticisms that can be made. Firstly, the theoretical analysis in TCE tends to be less formal and rigorous than in principal-agent research. Secondly, the source and size of the contract costs regularly used to motivate the imperfect of contracts are imprecise. Thirdly, a specification problem is that the equilibrium concept that gives rise to the particular organisational design adopted by the firm is often unstated and the context in which the issue is being addressed is often not fully specified. Finally, TCE problems are usually posed within a multi-period setting; the literature has not fully explored the role of reputation as a substitute for governance procedures.

3.9.7. Contingency Theory

Contingency theory had been developed in the later 1960s. Hopper and Powell (1985) affirm that contingency theory had developed since the work of Woodward (1965), Burns and Stalker (1961), Pugh and Hickson, 1976, and Lawrence and Lorsch (1967). Otley (1980) states that until the mid-1970s there was no reference to contingency theory in accounting literature. During the 1970s, management accounting researchers believed that there was universal model of management accounting systems, which might be adopted by any company (Wickramasinghe and Alawattage, 2007).

Chenhall (2003) affirms that early management accounting researchers drew on contingent factors to examine the significance of environment, technology, structure and size to the design of management accounting systems. There are interactions contingent and environmental factors, as declared below:

> "Contingency theory essentially states that efficient organization structures vary with organizational contextual factors such as technology and environment. It further implies that the efficacy of certain managerial techniques such as participative decision making or task directed leadership is contingent on the organization's context and structure. Thus the contingency theory literature provides a convenient point-of-departure for discussing the effects of organizational variables on MAS"(Waterhouse and Tiessen, 1978: 66).

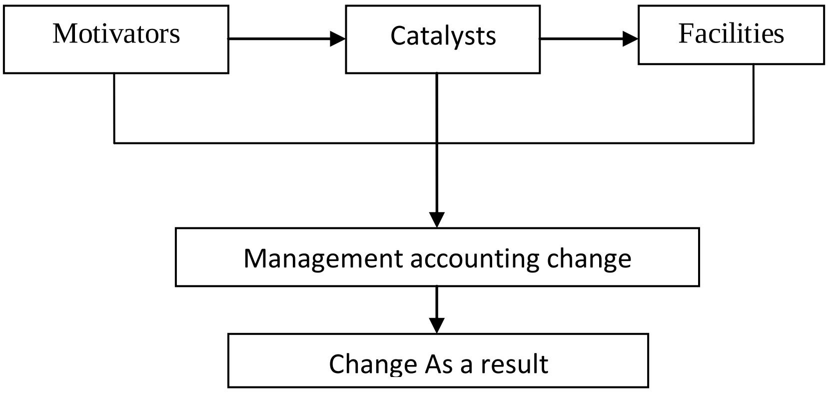
Another important definition which involves contingent factors is this: contingency theory is essentially a theoretical perspective of organisational behaviour that emphasises how contingent factors such as technology and the task environment affected the design and functioning of organisations (Covaleski *et al.*, 1996: 4). The following subsections will discuss the contingent factors, for example, environment, technology, structure and size.

3.9.8. Contingency Theory and Management Accounting

According to Wickramasinghe and Alawattage (2007), the contingency theory of management accounting, which is still in use as a popular framework for management accounting, has changed from mechanistic to post-mechanistic approaches. Therefore, there have been several attempts that have been made to suggest a framework contingency theory of management accounting. Some frameworks are introduced by (Gordon and Miller, 1976 ; Otley, D. T., 1980 ; Innes and Mitchell, 1990 ; Otley and Berry, 1994 ; Cobb *et al.*, 1995). Therefore, there is a need for another framework to explain contingent factors of management accounting systems which have been changed over time. Thus, Innes and Mitchell (1990) provide their framework of management accounting change. Other researchers applied the Innes and Mitchell framework (Gobb, *et al*, 1995; Kasurinen, 2002). Kasurinen (2002), in order to understand how variables combine and interact to shape change in accounting strand of studies has analysed the influencing factors in the change process.

Innes and Mitchell (1990) find that the management accounting systems have been affected by three kinds of contingent variables, classified as motivators, catalysts and facilitators. Firstly, motivators were related to change in a general manner. Innes and Mitchell (1990) Gobb, *et al*, (1995); Kasurinen, (2002) observed the motivating function of a competitive market, organisational structure and production technology. Secondly, catalysts could be directly associated with the change. Innes and Mitchell (1990) provide examples of poor financial performance, loss of market share and the launch of a competing product. Finally, facilitators were necessary but not sufficient, per se, to result in the change. Innes and Mitchell (1990) point out the facilitating function of accounting staff resources, accounting computing resources and a degree of independence from the company.

Figure (3- 2) shows the process of management accounting change



Innes, J. and Mitchell, F., (1990), 'the Process of Change in Management Accounting: Some Field Study Evidence', *Management Accounting Research*, 1:3-19.

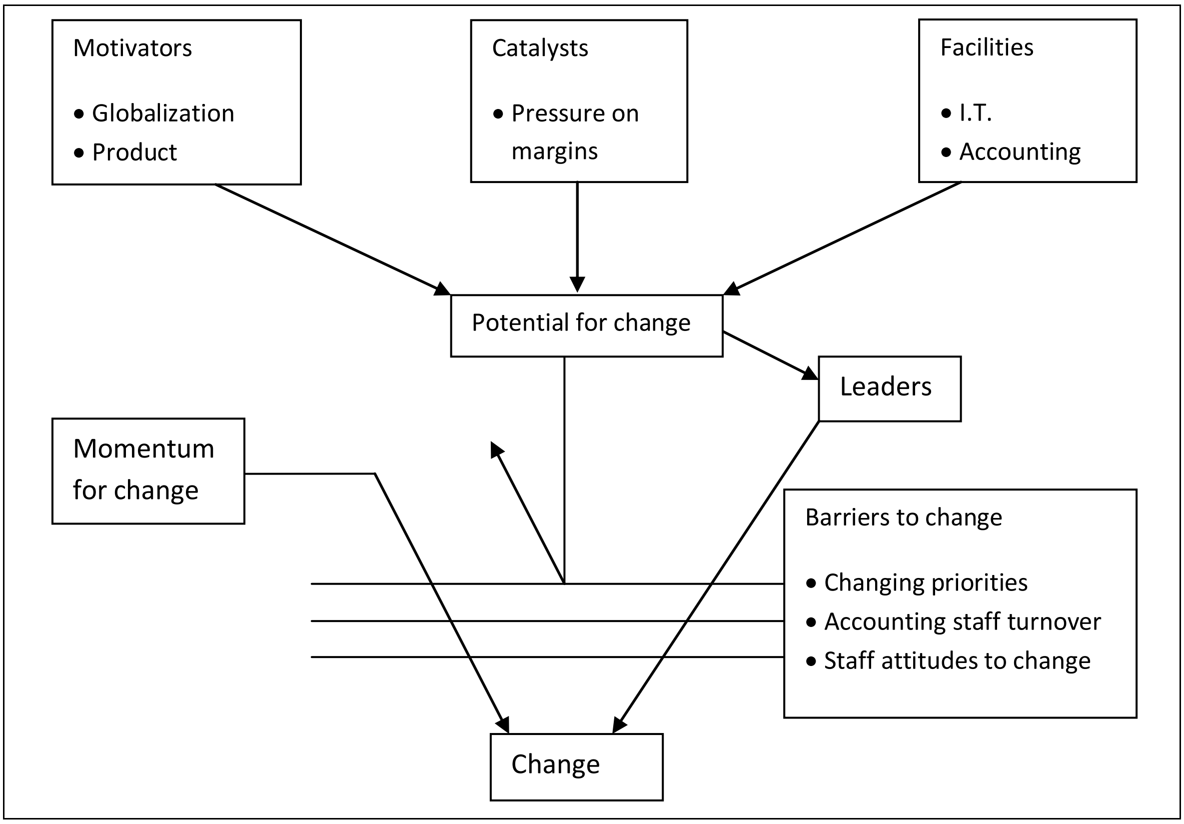
Gobb *et al.*, (1995) criticise Innes and Mitchell’s (1990) framework. The first criticism is that Innes and Mitchell’s framework has disregarded barriers-variables which hinder and even prevent change. The second is that this framework is strong on the focusing on external factors but it has some weakness on how the process of change occurs within the company and in particular, on the effect of individuals. Kasurinen, (2002) supports Gobb et al., (1995) in their viewpoint. Thus, Kasurinen, (2002) provides some evidence of management accounting literature which he presents in the table below.

Table (3- 2) overview of the potential barriers presented in the literature

Study	**Barrier**
Argyris and Kaplan (1994)	Inadequate education and sponsorship process Inadequate internal commitment creation process
Shields (1995)	Behavioural and organisational implementation variables
Roberts and Silvester (1996)	Organisational structures
Markus & Pfeffer (1983)	Organisational culture Power distribution Inadequate agreement on the organisation's goals and the technology required for achieving them
Brooks and Bate (1994)	Cultural infrastructure
Scapens and Roberts (1993)	Failure to secure the legitimacy of a new system Inability to find a workable relationship between the languages of production and accounting
Strebel (1996)	Different views on change

Taken from: Kasurinen, T. (2002) Exploring management accounting change: the case of balanced scorecard implementation, Management Accounting Research, 13, pp. 323–343

Figure (3- 3) shows the accounting change model



Cobb, I., Helliar, C. and Innes, J., (1995), 'Management Accounting Change in a Bank', *Management Accounting Research*, 6 (2):173.

3.9.9. The Main Criticisms of the Previous Theoretical Perspectives

According to Pennings (1975), contingency theory shows a good deal of conceptual confusion. Major advocates of the contingency theory have confused or combined technology with environment, which characterises both environment and technology (Pennings, 1975). Pennings (1975) confirmed that the confusion between environment and technology may be explained by the concept of uncertainty. Also, another view is provided as follows:

> "Managerial accounting, then, is seen as being implicated in the social construction of reality rather than as being passively reflective of the reality as depicted in contingency theory and its predecessors. Although the thrust of the interpretive perspectives in general and institutional theory in particular have received a growing amount of empirical support, a number of useful criticisms of them have been offered" (Covaleski *et al.*, 1996: 15)

Another criticism related to the nature of accounting controls within contingency theory is that these form only part of broader control systems (Chenhall, 2003). Researchers have preferred to conduct questionnaires, to take photocopies of the structure and then follow with statistical analysis, rather than observing the process of change over time (Hopper and Powell, 1985). Contingency theory has suffered from the common weaknesses in variable selection and specification has been eclectic; also, sample selection has not always comprehensive and some conflicting results have been produced (Tillmann and Goddard, 2008).

The main criticism has faced contingency theory regarding methodological terms. Firstly, a pervasive criticism is that contingency theory has employed cross-sectional analysis, which depends on survey questionnaire and has not afforded in-depth understanding of how MAS appears within organisations (Otley, D. T., 1980 ; Hopper and Powell, 1985 ; Chenhall, 2003 ; Wickramasinghe and Alawattage, 2007). Secondly, cross-sectional analysis methods have just examined the relationships between factors, rather than exploring if the relationship is statistically significant or not; nothing could be explained (Wickramasinghe and Alawattage, 2007).

All frameworks of contingency theory, (Gordon and Miller, 1976 ; Otley, D. T., 1980 ; Innes and Mitchell, 1990 ; Otley and Berry, 1994 ; Cobb *et al.*, 1995), have supposed that the relationships are linear and unidirectional (Wickramasinghe and Alawattage, 2007). The findings of contingency theory cannot be generalised to each position. Moreover, prescriptive inferences of these findings cannot be utilised without proper consideration of other factors (*ibid.*). Another criticism which has faced contingency theory is that researchers cannot successfully link their results to management accounting literature (*ibid.*).

Also, the relationships between management accounting systems and other organisational factors have been analysed. For example, Naranjo-Gil and Hartmann (2006) investigate how top management teams use management accounting systems for strategy implementation. In addition, Naranjo-Gil and Hartmann (2007) attempt to improve the understanding of MAS as being of a mechanism that mediates the relationship between the compositions of top management teams and organisational strategic change. Naranjo-Gil and Hartmann (2007) discover that the use of the management accounting system reconciles the relationship between top management team and strategic change. Yazdifar and Tsamenyi (2005) contribute to the debate by providing evidence from a sample of management accountants working in both dependent and independent companies in the U.K. Agbejule (2005) examines the relationship between the moderating role of perceived environmental uncertainty and management accounting systems on managerial performance. He finds that, the higher the perceived level of environmental uncertainty, the more positive is the relationship between the use of management accounting systems and managerial performance. Agbejule and Saarikoski (2006) investigate the relationship between budget participation (BP), cost management knowledge and managerial performance. They find that a high perception of managerial performance is obtained when both the BP and managers' cost management knowledge are high.

In each of above studies, the authors formulate hypotheses, which are developed and tested to measure the relationships between various factors. Moreover, questionnaire surveys are adopted by the researchers as the main tool of data collection, while mathematical models are used by (Joseph *et al.*, 1996 ; Agbejule, 2005 ; Yazdifar and Tsamenyi, 2005 ; Agbejule and Saarikoski, 2006 ; Naranjo-Gil and Hartmann, 2006 ; Naranjo-Gil and Hartmann, 2007). However, an in-depth understanding might be obtained by using a case study, whereas survey questionnaire or statistic models have a lack to provide real depth understanding.

Furthermore, the various researches have used different types of theoretical perspectives, such as work performance (Agbejule and Saarikoski, 2006), contingency, contracting costs (Agbejule, 2005), agency and transaction cost economics. The majority of these theories are rooted in neo-classical economic theory, which, according to Rutherford (1995), underplays the importance of institutions. Furthermore, the neo-classical search for determinate optimal equilibrium solutions and the static nature of neo-classical problems and models have been criticised (Samuels, 1995). In addition, neo-classical theory does not adequately explain the economic factors when transaction costs are not zero (Prasad, 2003). Moreover, neo-classical economic assumptions are based on "the 'rational' individuals and equilibrium-orientated analysis" (Hodgson, 1993: 4). However, rationality and equilibrium have difficulty in analysing processes of change, because of the assumptions of neo-classical focus on "predicting the rational or 'optimal' outcomes" (Burns and Scapens, 2000: 4).

Various researchers have made several significant contributions about management accounting based on agency theory (Walker, 1989 ; Williamson, 1991 ; Ogden, 1993 ; Sharma, 1997 ; Lambert, 2001 ; Spekle, 2001 ; Moers, 2006). Their studies have drawn on survey questionnaires and statistical models have been used to derive frameworks of contingency or agency theories. However, all frameworks of contingency (Gordon and Miller, 1976 ; Otley, 1978 ; Otley, D. T. , 1980 ; Innes and Mitchell, 1990 ; Cobb *et al.*, 1995) and agency theories (Grossman and Hart, 1986 ; Holmstrom and Milgrom, 1987, 1994) have contended that the relationships are linear and unidirectional (Wickramasinghe and Alawattage, 2007). A pervasive criticism is that contingency theory has employed cross-sectional analysis, which depends on survey questionnaire, and this has not afforded an in-depth understanding of how management accounting systems appearance within organisations (Otley, D. T., 1980 ; Hopper and Powell, 1985 ; Chenhall, 2003 ; Wickramasinghe and Alawattage, 2007). A further criticism is that the processes of management accounting change cannot be analysed by contingency theory. Moreover, it is argued that managers' behaviour within specific organisations cannot be explained by neo-classic theories (Scapens, 1994). Neo-classical theory cannot be proposed to be an explanation of the processes of organisational or individual behaviour (Scapens, 1990 ; Burns, 2000 ; Burns and Scapens, 2000). Moreover, Scapens confirms that "some economists believe that neoclassical theory cannot even be used to predict individual economic behaviour" (1990:264).

3.6. Management Accounting and Privatisation

Cragg and Dyck (1999) study the relationships between ownership and internal control for state-owned, privatised and publicly trading firms in the UK. They argue that there is a change in the objectives of state-owned companies when transferring to the private sector. In this regard, they assert that privatised companies focus on profitability. The researchers confirm that the managers are more likely to resign when the companies achieve loss. On the other hand, state-owned-companies concentrate on non-commercial objectives. This study adopts a statistical approach, which mentions that the researcher cannot provide in-depth understanding about how these objectives have been changed.

Uddin and Hopper (2001) identify the effect of full privatisation on accounting systems. Their study reports an intensive case study of a soap manufacturing company in Bangladesh, which was privatised in 1993. They point out that after privatisation, there have been important changes. For example, the top management team uses the budget to assess the performance. The budget has become more market-oriented. Also, there is significant change in accounting practices, which are associated with new computerised systems, to speed up information to managers.

Uddin and Hopper (2003) examine changes in accounting practices and financial performance disclosed in a case study of a soap manufacturing company in Bangladesh. Also, they compare the same issues with those of other privatised companies in the World Bank report. Therefore, the results reveal that the financial accounting and budget systems have changed, because the company became subject to all rules and the Companies' Act, which have affected the privatised company. Moreover, budgets and related controls changed significantly after full privatisation, because the companies use computerised systems to speed up the stream of inner-information.

3.7. Institutional Theory and Management Accounting

This section of the chapter presents a brief discussion about institutional theory and its use in management accounting research. However, the focus in this part is just on the issues related to researches which apply institutional theory with both branches: OIE and NIS. Burns (2000) explores accounting change in the product development department of a small UK chemicals manufacturer, utilizing an institutional framework of accounting and a framework of power mobilisation to help tease out the dynamics of the processes of change. Burns (2000) also demonstrates barriers to change and conflicts which emerge as new accounting routines fail to impinge on existing laboratory ways of thinking. Collier (2001) describes the introduction of management accounting change in the structure of local financial management in a police force, West Mercia Constabulary, using an ethnographic study. Collier (2001) makes two contributions to institutional theory. First is the particular development of understanding of relations of power. Second is an explanation of how loose coupling can take place through accounting.

Ahmed and Scapens (2003) illustrate how an institutionalist perspective can help us understand the development of cost-based pricing rules in Britain. Ahmed and Scapens (2003) conclude that the cost-based pricing practices gained importance in Britain at the foundation of the 20th century, with the introduction of uniform cost accounting schemes, such as the one set up by the British Federation of Master Printers. That scheme emerged as a result of changing economic conditions caused by an expansion of the printing industry in the closing decades of the 19th century. Vaivio (1999) explores the appearance of non-financial measures in the organisational context of Lever Industrial-U.K service-oriented British Chemicals Company. He also proposes that non-financial measures become a powerful vehicle for focusing interactive management control into the organization's strategic uncertainties.

Several researchers have adopted the new institutional sociology perspective in their studies, such as Lapsley and Pallot (2000), who explore management accounting in local government in Scotland and New Zealand in a situation of change. Modell (2003) has compared the goal-directed and institutional perspectives to the development of the measurement of performance in Swedish universities. Modell (2005) investigates the political and institutional processes surrounding the construction of consumer-orientated measurement of performance practices. Modell (2006) explicates how cost allocation rules are shaped by the political interplay between key actors in the regulatory process.

In accordance with Scapens, (2006), new institutional sociology was used in relation to the public sector, such as universities, schools, hospitals and other governmental organisations. Yazdifar, *et al.,* (2008) add that the new institutional sociology wants to be harmonised with other institutional perspectives, which focus on internal organizational factors. Another theory that may be of assistance in analysing the complex dynamics of change at the micro-level in new institutional sociology's role could be that of old institutional economics (Yazdifar, *et al.,* 2008). When new institutional sociology and old institutional economics are combined, they lead to the adoption of a holistic framework (Yazdifer, *et al.,* 2008).

On the one hand, there is some evidence from management accounting research that a new management accounting system or practice may face failure in implementation or at least face resistance to change (Scapens and Roberts, 1993 ; Ezzamel and Burns, 2005 ; Siti-Nabiha and Scapens, 2005). Scapens and Roberts (1993) demonstrate how the process of management accounting change inadvertently created circumstances which overcome the contents of the change. Scapens and Roberts (1993)[15] describe the introduction of a new management accounting system into a specific unit in a large company. They want to explore the dynamic of change and try to understand the origins of resistance in the case company. Their case company fails to guarantee the legitimacy of a new management accounting system guide to resistance to management accounting change. In more detail, the managers in engineering department did not understand their activities in terms of financial measurement performance, because of their concern in terms of quality, delivery and customer service (see, Busco *et al.*, 2001). As a result, these different business standpoints between accountants and production managers created organisational conflict.

Ezzamel and Burns (2005)[16] explore power relations between organisational actors in their struggle over management control strategy. They describe case company to introduce new measure system Economic Value Added EVA in a large UK company. This company designed EVA to replace former performance measurement system, which focused on profit margin. The previous performance measurement system, depended on profit margin, was suspended after six months. The main reason behind suspension was due to conflict between the accountants and other managers within the company. The authors conclude that EVA had failed to become component of the day-to-day information used by different organisational levels. Also, there was no matching and harmony between new rules that were emerged with EVA and existing institutions or taken-for-granted assumptions were grounded.

Jansen (2011) explores how new senior management introduced new accounting information to facilitate its leadership style. He states that resistance to new management accounting practices (standard service prices) for a specific organisational level is typical. In his case company, the employees have resisted the change that the senior management has imposed through the transactional leadership style.

[15] Their study is reanalysed by Burns, Ezzamel and Scapens (2003), also, it is summarised by Busco, Riccaboni and Scapens (2001).
[16] This study was reanalysed by Burns, Ezzamel and Scapens (2003), also it is pre-published by Burns, J. and M. Ezzamel (2001). "Professional Competition, Management Control Strategies and Case of Economic Value Added." Unpublished Working Paper.

Nevertheless, the successful introduction of new management accounting practices points out that when senior managers present personal concentration on employees, there is less resistance and change can take place (Jansen, 2011). To support this point, "training should be both extensive and intensive; that is to say, it should be given to everyone, and it should be of sufficient depth so that each person fully understands the new ways of work" (Burns *et al.*, 2003: 45-46).

On the other hand, some studies obtain successful change (Jazayeri and Hopper, 1999 ; Busco *et al.*, 2002). Jazayeri and Hopper (1999)[17] examine the effect of world class manufacturing on management accounting. They depend on the UK chemical company adopting world class manufacturing. The main result of their study is that management accounting is unaffected by world class manufacturing. In their case company there is a shift from manager-centred manufacturing to customer-focused manufacturing. Also, this is associated with the need to direct the company's production towards meeting customers' requirements. In accounting practice, managers tend to focus on actual costs rather than standard costs. So, in order to achieve the aim of introducing the new system, incentives are shifted from individual to group-based. This shifting needs to change the culture before a new system is introduced (see Burns *et al.*, 2003). Burns *et al.*, (2003) declare that, in Jazayeri and Hopper's (1999) case company, the external pressures led to the introduction of new production systems, such as JIT and TQM.

Lukka (2007) explains why there appeared to be a problem without solution in the Finnish case study. He affirms that there are a few indications of resistance to change. Also, he supports that change and stability might be simultaneously coexistent. Moreover, he concludes that the loose coupling between rules and routines has two aspects, which are solution and problem.

Busco *et al.*, (2002)[18] explore post-acquisition cultural change, which was eased with a company-wide performance measurement systems. They adopt an Italian state-owned company as case study. The case company had been privatised; after that it was

[17] Their study is reanalysed by Burns, Ezzamel and Scapens (2003).
[18] Also, this paper is reanalysed by Burns, J., M. Ezzamel and R. W. Scapens (2003), also it is pre-published by Busco, Riccaboni and Scapens (2001).

acquired by a US company. Busco *et al.*, (2002) state that the company had been state-owned. It had had to present reports and budgets for the Executive Director and the government as well. Nevertheless, the systems used were not incorporated into the organisational processes. However, there have been two main parts of organisational change within the company and both were supplemented by extensive and intensive training plans. First, the case company redesigned systems of accountability. Second, the company implemented a measurement-based quality programme. As a result of these changes, all the members of the organisation shared with each other the same langauge of accoutability and measurement performance. This is consistent with the call recommended by Burns *et al.*, (2003:46), which includes this:

> "Management accounting change should be accompanied by clear explanations of why it is taking place, and they should encompass everyone in, or affected (either directly or indirectly) by, the process of change. Otherwise, the existing taken-for-granted assumptions are likely to remain unchanged, and thereby create conflict and resistance that can ultimately lead to the failure of the programme of change".

A few studies in management accounting literature adopt a hybrid framework, that combines OIE, NIS and power mobilisation (Abdulkhalid, 2000 ; Dillard *et al.*, 2004 ; Yazdifar, 2004 ; Siti-Nabiha and Scapens, 2005 ; Yazdifar *et al.*, 2008 ; Ma and Tayles, 2009). Abdulkhalid (2000)[19] uses a case study strategy, in order to examine the introduction of new systems, Key Performance Indicators KPIs, imposed by the parent company. The new system challenged existing ways of thinking and doing things. As such, the parent company imposed revolutionary change on subsidiary company and an evolutionary path dependent process has been followed. Also, there was formal change, but ways of thinking and doing things were in spite of everything the same. She concludes that the formal change might be failed if it is not associated with the change in neither the way of doing thinking nor existing institutions.

The integration between OIE and NIS is used by the authors in order to avoid the criticisms of each branch (see, Greenwood and Hinings, 1996 ; Ma and Tayles, 2009). Ma and Tayles (2009) explore management accounting change and adoption of Strategic Management Accounting SMA in a large UK pharmaceutical company. This disclosed an increasing strategic task for management accountants to advise strategic decision-making, and how this task came into being. The SMA met the needs of all organisational members, and the new system cannot have successfully implemented without the directors' support. Ma and Tayles (2009) conclude that the external factors "seemed to indicate strong demand for new management accounting practices" (490). Moreover, the "competitive pressures impose strong demand on efficient conduct of commercial activities. SMA offered highly appealing solutions to enhance the accountability of these activities" (Ma and Tayles, 2009: 490).

3.8. Management Accounting Researches in Libyan context

In the Libyan context, there have been few studies conducted in the field of management accounting in general (Gzema, 1999 ; Bait-Elmal, 2000 ; Omar, 2005 ; Alkizza, 2006 ; Shareia, 2006). They adopt combination between research approaches, including qualitative and quantitative methods. For instance, Alkizza (2006) examines the change in management accounting practices used by Libyan public companies. He uses Innes and Mitchell's (1990) framework, contingency theory, to explore management accounting change in two Libyan public firms. The results show that some contingent factors have caused change in management accounting practices in Libyan public companies.

Gzema (1999) examines the understanding of management control within a Libyan public company which has worked in the oil industry as a case study. On the one hand, his quantitative research of the studied companies shows that there is an influence of different institutional arrangements on management control systems. The same approach demonstrates that some factors, for example, social, political and embargos, play a vital role in shaping management accounting systems. On the other hand, the case study demonstrates that accounting systems are elements of the central control system and play an important role in satisfying the external parties, rather than helping in planning, decision-making and control.

Bait-Elmal (2000) describes the role of management control systems in Libyan public organisations within their environmental context. Also, Omer (2005) explores the situation of the management control systems in four Libyan industrial companies during their transition from the public to the private sector. The researcher mentions that there is not only a change in the ownership of these companies but also a change sought in organisational objectives towards profit-orientation. Also, IT facilities were introduced with limited capacity. As a result, all accounting operations were manually recorded. Moreover, there has been a change in management accounting systems in terms of perceptions.

Shareia (2006) examines the role of accounting information systems in meeting the development needs, with a particular concentration on Libya. He uses an ideographic methodology to develop two case studies. One of these case studies is GCP[20], in order to examine the provider of information. His results mention that the accounting career does not play an essential role in the economic development in Libya. Also, accounting practices in Libya are basically institutionalised by government instructions rather than decision-making, planning and control (Shareia, 2006). He also confirms that there was no existing role for management accounting systems and nobody reads the reports as outputs of these systems.

The above studies concentrate on management control systems, using interpretive and systems approaches (Bait-Elmal, 2000 ; Omer, 2005), holistic theory and OIE theory (Gzema, 1999) or economic development theory (Shareia, 2006). Furthermore, there is a study focusing on the change in management accounting practices used by Libyan firms, using contingency theory and the questionnaire method with a cross-sectional case study (Alkizza, 2006). However, none look at management accounting change from an institutional perspective in Libya. As a result, no study of management accounting change in the Libyan context has adopted an integrative approach using OIE, NIS and power mobilisation.

3.9. Conclusion

The discussion of the management accounting literature shows that the processes of organisational change interact with many factors, including external and / or internal. These factors may contribute significantly to shape management accounting systems in

[20] Shariea had selected this company as a case study, which is the same company selected by the researcher of this thesis. However, Shariea examines the role of accounting systems in JSPC before it was being privatised.

organisations. Thus, it must be emphasised how important it is to study factors such as authority, power, politics and culture, in addition to economic and/or external factors. Moreover, various theoretical viewpoints have been discussed in this chapter. These various theoretical views have examined the change in management accounting systems such as agency, contingency, transactions cost, economics and the new institutional economics. Generally, most of these theories have proved that it is not possible to give in-depth understanding of the processes of change. However, they are considering the process of change as a static, linear and simple phenomenon. Furthermore, the change is a dynamic and complexity process, which can be studied by using the integration of old institutional economics and new institutional sociology theories. Thus, the fourth chapter discusses study and analysis of the two branches of institutional theory.

CHAPTER FOUR: THEORETICAL FRAMEWORK

4.1. Introduction

In previous chapters, the Libyan business environment, including history, geography, and politics and economics, was discussed. Also, the discussion was conducted in order to clarify some factors which influence management accounting practices in Libyan companies. Moreover, relevant literature relating to management accounting systems and practices were reviewed. Besides, factors affecting management accounting practices were discussed. Furthermore, the reviewing of different theoretical perspectives mentions that the neoclassical economic theories are unable to examine the processes of change. So a suitable manner to study the processes of change might be an institutional theory.

This study explores how management accounting processes in Libyan privatized companies have occurred. The theoretical framework is drawn by an institutional theory. Moreover, different institutional perspectives from new institutional sociology (NIS), old institutional economics (OIE) (Hassan, 2005 ; Siti-Nabiha and Scapens, 2005 ; Yazdifar *et al.*, 2008) and power mobilisation (Yazdifar, *et al.*, 2008) are drawn on to clarify the processes of change.The hybrid-theoretical framework, which has been used to explain, interpret, and understand effects which have occurred within organisations and/or external organisations, is used in this study (Yazdifar *et al.*, 2008).

Chapter four is structured as follows. The section which follows this introduction provides institutional theory, which consists of three branches, as will be discussed below. The first subsection presents a brief background of OIE. This is included by discussing several definitions such as institutions, habits, rules and routines. In addition to some definitions, there are some other subsections to identify the relationships between routine, actions and institutions. Also, it explains the processes of institutionalisation. Another subsection is NIS. This involves three main mechanisms of isomorphism. Finally, it justifies the integration between OIE and NIE, and uses power mobilisation.

4.2. Institutional Theory

Institutional theory has become an accepted choice of theory for management accounting research, seeking to understand why and how accounting change occurs, what it is, or is not (Moll *et al.*, 2006a). Thus, this may be concerned with change within specific organisations (OIE). In addition, legitimacy has played an important role in institutional theory as a power that limits change and pressures organisations (DiMaggio and Powell, 1983, 1991b). Legitimacy has also led organisations to accept management practices or organisational structures that other organisations have used and have not found to be different in credibility (Sherer and lee, 2002). So it might be confirmed that this is a type of change under NIS umbrella. According to Sherer and Lee (2002), institutional theory adds further understanding of institutional change. Therefore, the table below shows some differences between Old and New institutionalisms.

Table (4- 1) illustrates the variation between the Old and New institutionalism

Taken from: DiMaggio, P.J. and Powell, W.W., 'Introduction', In: Powell, W.W. and DiMaggio, P.J., *The New Institutionalism in Organisational Analysis*, Chicago: the university of Chicago,

	Old	New
Conflicts of interest	Central	Peripheral
Sources of inertia	Vested interests	Legitimacy imperative
Structural emphasis	Informal structure	Symbolic role of formal structure
Organisation embedded in	Local community	Field, sector, or society
Nature of embedded in	Co-optation	Constitutive
Locus of institutionalisation	Organisation	Field of society
Organisation dynamics	Change	Persistence
Basis of critique of utilitarianism	Theory of interest aggregation	Theory of action
Evidence of critique of utilitarianism	Unanticipated consequences	Unreflective activity
Key forms of cognition	Values, norms, attitudes	Classifications, routines, scripts, schema
Social psychology	Socialisation theory	Attribution theory
Cognitive basis of order	Commitment	Habit, practical action
Goals	Displaced	Ambiguous
Agenda	Policy relevance	Disciplinary

13.

There are three branches of institutional theory that are used in the accounting literature namely: old institutional economics (Burns *et al.*, 1999 ; Ahmed and Scapens, 2000 ; Burns, 2000 ; Burns and Scapens, 2000 ; Soin *et al.*, 2002 ; Ahmed and Scapens, 2003 ; Burns *et al.*, 2003 ; Scapens and Jazayeri, 2003 ; Burns and Baldvinsdottir, 2005 ; Siti-Nabiha and Scapens, 2005); new institutional economics (Spicer and Ballew, 1983 ; Colbert and Spicer, 1995 ; Walker, 1998); and new institutional sociology(Covaleski *et al.*, 1993 ; Covaleski *et al.*, 1996 ; Modell, 2003, 2005a, 2005b, 2006). Nevertheless, this study will be considered using old institutional economic and new institutional sociology, detailed as follows.

4.3. Old Institutional Economics (OIE)

The origins of old institutional economic history go back more than 100 years ago (Moll *et al.*, 2006a). Burns (2000) declared that Veblen (1898; 1909; 1919) founded OIE, a theory which is undergoing something of a revival in scholarly activities (see also, Coad and Cullen, 2006). In one of his publications, Veblen asked the question "why economics is not an evolutionary science" (Veblen, 1898: 374). The evolutionary process has been proposed by Darwin; later, these processes have been applied by Veblen (Hodgson, 2003 ; Johansson and Siverbo, 2009). "Veblen's conception of 'Darwinian' methodological principles led him to attempt to develop a theory of institutional evolution that was purely 'causal' in nature"(Rutherford, 1998: 463). Rutherford (1998) adds that this theory was never acceptably developed by Veblen.

In this context, it is necessary to compare old institutional economic OIE, new institutional economic NIE and new institutional sociology NIS. The OIE and NIE come out resulting from the lack of consideration given to institutions in predictable neoclassical economics (Rutherford, 1995: 187). Behaviour and performance of economics are the central focus of both OIE and NIE. Also, both of them respond to changes that occurred within economic factors. Although this shared concern is found within institutional economics, there are some differences between them. The main contributions of NIE are considered by North and Williamson, whereas, the main contributions of OIE are considered by Veblen, Commons, and Mitchell (Hodgson, 1993).

The assumption of OIE is that institutions shape economic behaviour, which contrasts the assumptions of neo-classical economics concerning profit-maximising actors and economic equilibrium (Johansson and Siverbo, 2009). Also, OIE appeared out of opposition to the dominant theorizing and refused neo-classical economics (Moll, *et al.*, 2006). Burns (2000) compares OIE with NIE. OIE began as resistance to "static" economic theorising and is not to be confused with that which has been employed previously in accounting research. Moreover, NIE remains firmly rooted in "static" neo-classical economic theory, whereas, OIE attempts to explain phenomena in terms of processes, teasing out why and how things become what they are, or are not, over time (Burns, 2000).

In the earliest times, old institutional economics applied investigation at the macro-economy levels (Moll *et al.*, 2006a). However, other researchers have asserted that OIE focuses on micro-economic levels and within particular organisations (Scapens, 1994 ; Burns, 2000 ; Burns and Scapens, 2000 ; Burns *et al.*, 2003 ; Scapens, 2006). So, OIE is useful to understand management accounting practices in individual organisations (Scapens, 2006). It is also particularly useful in studying management accounting change and studying changes in the rules and routines which shape organisational activities (Burns and Scapens, 2000 ; Busco *et al.*, 2006). It also offers access to some of the complexities of research, trying to obtain better understanding of management accounting change (Burns and Scapens, 2000 ; Scapens, 2006).

Several researchers have adopted the OIE perspective in their studies (Burns, 2000 ; Ahmed and Scapens, 2003 ; Johansson and Baldvinsdottir, 2003 ; Caccia and Steccolini, 2006). Caccia and Steccolini (2006) adopt institutional theory to study the changes and their influence, because they declared that it is useful to distinguish between informal and formal change. Johansson and Baldvinsdottir (2003) used case studies to assess performance evaluation routines in two small companies in Sweden. Ahmed and Scapens (2003) show how an institutional perspective can help us to understand the development of cost-based pricing. Burns (2000) investigates accounting change in a small UK chemicals manufacturer. The main deliberation of those studies was in accounting change.

Other researchers have implemented the OIE perspective in their studies (Ahmed and Scapens, 2000 ; Dietrich, 2001 ; Soin *et al.*, 2002 ; Scapens and Jazayeri, 2003 ; Burns and Baldvinsdottir, 2005 ; Siti-Nabiha and Scapens, 2005). Soin *et al.*, (2002) use institutional theory to understand the role of management accounting in organisational change. Dietrich (2001) presents a survey of possible interconnections between management accounting and the micro-economics levels. Burns and Baldvinsdottir (2005) describe the change of role through the 1990s for management accountants in the U.K. Ahmed and Scapens (2000) show the significance of social institutions in the development of cost allocation practices. Scapens and Jazayeri (2003) investigate the implications of this worldwide Enterprises Resources Planning ERP and examine the changes in management accounting. Siti-Nabiha and Scapens (2005) examine the relationship between stability and change in the process of accounting change. The major concentration of those articles was in management accounting change. According to the discussion above, it is necessary to argue the philosophical underpinnings of OIE.

4.3.1. The Philosophical Underpinnings of OIE

There are some differences in philosophical underpinning between OIE and NIE. For example, new-institutionalism is correlated with methodological individualism (Hodgson, 1993). On the other hand, methodological individualism is rejected by OIE (Dugger, 1990). OIE depends on methodological collectivism rather than on methodological individualism (Dugger and Sherman, 1994). Old-institutionalists believe that the behaviour of individuals and organizations is shaped by acceptable patterns of behaviours within societies. Dugger and Sherman (1994) stress that institutionalism is holistic, not reductionist (see also, Scapens, 1994 ; Burns and Scapens, 2000 ; Burns and Scapens, 2008).

This does not indicate that the role of individuals is not important, because the individuals shape norms and customs in societies (Abdulkhalid, 2000). Moreover, societal norms and customs and individuals' habits and behaviour affect and are affected by each other (*ibid*). This conforms to the puzzle '*which came first, the chicken or the egg?* ' (Hodgson, 1993: 7). Old-institutionalists view the economic in an holistic manner and have attempted to describe economic activities in a multi-disciplinary method (Samuels, 1995 ; Prasad, 2003). As Dugger and Sherman (1994: 107) mention:

> "Since institutionalism is a cultural science, the individual is seen as a product of culture. The individual is not a cultural marionette, because individuals can and do transform their culture through collective action and even through individual action. In fact, culture itself is continually changing through the myriad of actions, inactions, and choices of individuals separately and collectively. Nonetheless, individuals do not act or choose in a vacuum. They act and choose within a particular cultural context".

Institutionalism should begin with the context in which individuals find themselves (Dugger and Sherman, 1994). Old-institutionalists visualize the economy to be a component of a developing popularity—of a culture (Dugger, 1990). Dugger and Sherman (1994) add that it signifies that economics is not only the study of how individuals distribute limited resources to meet option uses, but also how institutional economics enquires how particular resources appear into use—how science and technology shape the accessibility of resources. Consequently, 'institutional economics is a cultural science in which the beliefs, values, and actions of individuals come from and make sense within a specific cultural whole'(Dugger, 1990: 427). Dugger (1990) confirms that the rational individual makes no sense of institutionalism, because individuals do not live independently from their society.

As mentioned above, individualism methodological underpinning and rational individual, as assumptions of NIE and neo-classical economic theorists, are refused by OIE. This does not mean that the role of individuals is not significant in OIE, because individual habits shape and is shaped by societal norms and customs. Moreover, institutionalism's approach makes institution a unit of analysis rather than the rational behaviour of individuals (Scapens, 1994). Parenthetically, Hodgson (1998:172) justifies the use of institution as a unit of analysis as follows:

> "The fact that institutions typically portray a degree of invariance over long periods of time, and may outlast individuals, provides a reason for choosing institutions rather than individuals as a basic unit. Most institutions are temporally prior to the individuals that relate to them. We are all born into and socialized within a world of institutions. Recognizing this, institutionalists focus on the specific features of specific institutions, rather than building a general and ahistorical model of the individual agent".

In order to make institution a unit of analysis, institutionalists adopt a processual approach in their analysis (Dugger, 1990 ; Gruchy, A. G., 1990). Also, according to the literature of organisational change, there is a need to examine the process of change within the organisational context, which cannot be obtained by planned approach (Burnes, 2004). The concept of processual approach indicates that change is a complex and dynamic process that cannot be described by "abstract" questionnaire surveys and "static" case studies (Dawson, 1994 ; Burns, 2000). "Much research on organisation change is ahistorical, aprocessual, and acontextual in character" (Pettigrew, 1990 269). The processual approach is one new method that is concerned to study organisational change (Abdulkhalid, 2000). Burns mentions that the processual approach

> "Stretching analysis beyond what might be expected from "abstract" questionnaire surveys and "static" case studies informed by conventional wisdom, the adopted processual approach demonstrably facilitates investigation into the inter-play of new accounting practices, routines, institutions, power and politics (2000: 592-593). "

Gruchy (1990) insists on implementing the processual approach in order to understand the factors shaping the change in analysis of economics. He states that:

> "It is clear that the most significant feature of the processual paradigm is its emphasis upon change and development over historical time. Since the processual concept is based on historical time, and history is continuously changing, one must inquire into the significance of the factors leading to change in the economic system" (Gruchy, AG, 1990: 365).

Therefore, any study focusing on internal processes of change is called a processual approach. However, this research attempts to study both internal processes of change and external factors. In this case, any research is able to combine both external and internal factors is known as the contextual approach (Dawson, 1994). After discussing the philosophical underpinnings of OIE, it is important to explain the relationships between habits, behaviour, routines and rules in order to explore the relationships between institutions and actions, which will be discussed in the next subsections.

4.3.2. Characteristic of Management Accounting Routines and Institutions

The habits of individuals in order to support the holistic methodological underpinning of OIE should be defined. Habits have been distinguished as essential for human activities. From an institutional point of view, the concept of habit links significantly with the analysis of institutions (Hodgson, 1998). Also, according to Hodgson (2008), there are two reasons to understand organizational routines. First, routines activate through triggering of individual habits. Second, routines are the organisational analogue of individual habits. So he confirms that routines could be seen as the structure of individual habits. Therefore, the discussion of organisational routines might start with the concept of habit. In this regard, Hodgson (2008: 19) distinguishes the relationship between habits and routines as follows:

> "Routines are organisational analogue of habits. But routines do not simply refer to habits that are shared by many individuals in organisation or group. Routines are not themselves habits: they are organizational meta-habits, existing on a substrate of habitual individuals in a social structure. Routines are one ontological layer above habits themselves".

On the other hand, there is a relationship between habit and behaviour. For instance, Hodgson (1998) links the notion of habits and concept of institutions (see also, Hodgson, 1988). He defines that "habit can be defined as a largely non-deliberative and self-actuating propensity to engage in a previously adopted pattern of behavior. A habit is a form of self-sustaining, non-reflective behavior that arises in repetitive situations (1998: 178)". Repeated behaviour is important in founding habit but habit and behaviour are completely different (Hodgson, 2008). In other words, behaviour does not constitute habit (Burns, 2009). Habit is a propensity for individuals to behave in a particular way in certain situations (Burns, 2009: 9). So it might be summarised that habits associate to individuals, whereas routines correlate to groups (Cohen *et al.*, 1996).

One area of firm behaviour that is clearly governed by a highly structured set of routines is accounting (Nelson and Winter, 1982). Reactive and proactive forms of firm behaviour must remain rather stable over time (Cohen and Levinthal, 1990). In a similar way to other routines of actual organisations, accounting processes have the significant characteristic that they can be utilized on the basis of information really accessible in actual situations (Nelson and Winter, 1982). The accounting process is a veil over the true phenomena of firm decision making, which is constantly sensibly oriented to the data of the unknowable future (Nelson and Winter, 1982). In a general sense, management accounting is a routine characteristic of organisational behaviour in most firms (Scapens, 1994). Budgets are arranged, performance monitored and reports produced in a regular and routine fashion, using clearly specified rules and procedures (Scapens, 1994).

Nelson and Winter (1982) noted that understanding of individual skills relates to understanding of organisational behaviour in two ways. First, individuals exercise skills in their roles as organisation members. Second, the inflexibilities of behaviour displayed by large organisations are attributable in part to the fact that individual skills become rusty when not exercised. They added that a routine may involve general direct interactions with the organisation's environment and many choices that are dependent both upon the state of the environment and the organisation itself but that these choices involve no process of deliberation by top management. The intervention of top management in the detailed functioning of lower levels is ordinarily symptomatic of an attempt to modify routine or difficulties with the functioning of existing routines, just as conscious awareness of detail and attempts at articulation are symptomatic of new learning or of trouble in the case of individual skills (Nelson and Winter, 1982).

Organisations are poor at improvising harmonised responses to narrative situations; an individual lacking skill appropriate to the situation may respond awkwardly but an organisation lacking appropriate routines may not respond at all (Nelson and Winter, 1982). If anything, one should expect environmental change to make manifest the sacrifice of flexibility that is the price paid for highly effective capabilities of limited scope (Nelson and Winter, 1982).

From the perspective of OIE, accounting change can be understood from aspects of the change in the routine procedure of accounting, which may or may not include the taken-for-granted assumptions and beliefs in the organisation (Yazdifar *et al.*, 2008). These assumptions and beliefs are called institutions. Therefore, the definition of institutions is 'settled habits of thought common to the generality of men'(Veblen, 1919: 239). According to accounting literature, there is no universal definition of institutions within OIE, but one commonly accepted definition is "a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of a people" (Hamilton, 1932: 84, cite in, Burns and Scapens, 2000 ; Hodgson, 2005 ; Moll *et al.*, 2006a ; Yazdifar *et al.*, 2008). Also, another definition of institution is ‘structures, matrices of rules and procedures that give consistency and pattern to behaviour’(Adams, 1994: 338).

Even though there are many definitions given to the concept of institutions, the accounting researchers have preferred to use the second definition. Therefore, it might be said that institutions are the rule which govern individual behaviour. Through this circle, individual habits reinforce and are reinforced by institutions (Hodgson, 1998). According to Burns and Scapens:

> “As such, institutions can be regarded as imposing form and social coherence upon human activity, through the production and reproduction of settled habits of thought and action. However, institutions themselves evolve through a process of routinization of human activity” (2000: 6).

In management literature, there has been an ambiguity in definitions of organisational routines. So this ambiguity has now become clear (Becker, 2008). Nevertheless, there are three concepts of organisational routines: recurrent behavioural patterns, rules or procedures and/or dispositions (Becker, 2004). Becker (2008: 5) explains the link between organisational routines and individual habits as follows:

> “Organizational routines capture stable structures in collective action that emerge from the interrelating of individual action. Such individual action can itself be patterned in stable ways, as expressed by the individual concept of habit. Habits can be building block of organizational routines”.

In this context of this study, it is important to explain the role of rules and routines in the relationships between action and institutions. Burns and Scapens identify routines as the way in which “things are actually done” (2000: 6). In other words, “routines are the (both formal and informal) procedures actually used” (Burns *et al.*, 2003, p. 18).

Furthermore, there is another significant issue which is rules. Burns and Scapens define rules as the formally accepted way in which “things should be done” (2000: 6). Another definition of rules is that they “are the formalised statement of procedures” (Burns *et al.,* 2003, p. 18). Burns *et al*., describe that “rules comprise the accounting systems as set out in the procedure manuals, whereas routines are the management accounting practices actually in use” (see also, Scapens, R. and Burns, J., 2000, p. 35). Burns and Scapens describe the relationship between rules and routines as follows:

> "By repeatedly following rules, behaviour may become programmatic and based increasingly on tacit knowledge, which the individual acquires through reflexive monitoring of day-to-day behaviour. Such programmatic rule-based behaviours could be described as routines – as they represent the habits of the group" (2000: 6).

However, routines may come to differ from the original rules. In this regard, Burns (2009: 11) argues the role of rules as follows:

> "rules are a propensity to do something in a particular way when faced by particular circumstances; they are enacted through behaviour but do not constitute behaviour per se[….] Rules can, and often will evolve to underpin routines and institutionalised ways and assumptions over time, but they can also change, or be changed[….]management accounting systems or techniques as being rules[….] These rule like potentialities will endure ongoing interaction with associated organisational routines, and will usually influence organisational behaviour but without constituting behaviour per se".

As mentioned above, Burns and Scapens (2000) state that organisational routines play an important role in shaping institutions and actions and their relationships. Thus, they define an institution as a set of taken-for-granted assumptions, as such institutions encompass the taken-for-granted assumptions that shape the individuals' actions. In summary, the processes of the change are the result of interactions between institutions and actions. As a result, actions are synchronically (*i.e.* at a specific point in time) shaped by institutions and institutions are diachronically (*i.e.* through their cumulative influence over time) produced and reproduced by actions (Burns and Scapens, 2000).

In this regard, Burns and Scapens (2000) discuss the relationships between rules and routines as follows. For example, the new rules are applied and the changes may be introduced either deliberately or unconsciously. Deliberate changes can take place owing to resistance within the organisation or because of a special event in that organisation (see also, Burns *et al.*, 2003). Changes may take place unconsciously when these rules are misinterpreted or they are not suitable in specific situations (see also, Scapens, R. and Burns, J., 2000). However, in the enactment process routines will appear and will be reproduced over time and 'passed on' to the new members of the organisation. In this method, rules are founded and, through the implementation stage, routines will appear. However, this process might be reversed.

On the other hand, Burns and Scapens (2000) describe the process which might be reversed. For instance, in various types of organizational activity, routines may arise that either deviate from the rules or were not explicitly set in the form of rules (Burns and Scapens, 2008). In such cases, it might be settled on to formalise the established routines in a set of rules. Thus, there can be two-way relationship between the rules and routines (Burns *et al.*, 1999 ; Burns and Scapens, 2000 ; Scapens, R. and Burns, J., 2000: 36; Burns *et al.*, 2003 ; Burns and Scapens, 2008 ; Burns, 2009). Obviously, there is a relationship between routines and rules but it is important not to confuse them.

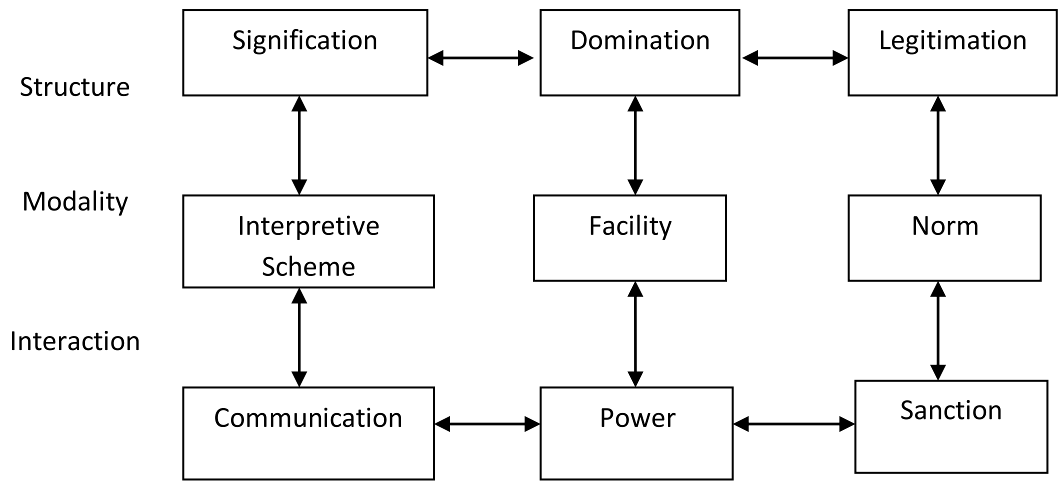
4.3.3. Actions and Institutions

According to Scapens (1994), management accounting has been seen as organisational rules and routines. Thus, this section will expand this perspective by exploring the role of routines and rules in the relationship between actions and institutions. The relationship between actions and institutions is basically an agency-structure relationship that the social sciences have discussed. Scapens and Burns (2000) state that structuration theory is concerned with the relationship between activities of human actors and the structure of social systems (see also, Giddens, 1984). Giddens (1984) differentiates between the systems, which include social practices which are reproduced across time and space through the actions of human beings, and structures, linking those social practices in systems. Therefore, systems and structures are not the same but systems have structures.

As mentioned above, Burns and Scapens (2000) prefer to use the second definition of institution. This definition of institution is a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of a people. Burns and Scapens (2000) state that this is the first part of the definition (thought or action of some prevalence and permanence) and comprises the concept of systems, whereas structure is contained (embedded in the habits of a group or the customs). In order to analysis the relationship between actions and institutions, Burns and Scapens (2000) modify Barley and Tolbert's (1997) definition of institutions. So institutions' definition after modification is as the shared taken-for-granted assumptions which identify categories of human actors and their appropriate activities and relationships'(Barley and Tolbert, 1997: 96; Scapens, R. and Burns, J., 2000). Scapens and Burns (2000) conclude the relationship that "institutions comprise the *taken-for-granted* assumptions which inform and shape the actions of individual actors. However, simultaneously, these taken-for-granted assumptions are themselves the outcome of social actions, i.e. they are socially constructed" (36) (see also, Burns and Scapens, 2008).

In the structuration theory, Giddens (1984) uses the concept of modalities to link knowledgeable capabilities of human actors with the structural characteristics of institutions (see also, Burns and Scapens, 2000 ; Burns *et al.*, 2003). Giddens (1984) identifies three inter-related dimensions of signification, domination and legitimation and each has its own modality, which is relied upon in the reproduction of systems interaction and thus re-forms the structural characteristics (see also, Burns and Scapens, 2000 ; Burns *et al.*, 2003), as represented in figure (4-1).

Figure (4- 1) Giddens' Sturcturation Theory



Taken from: Giddens, A. (1984). The Constitution of Society: Outline of the Theory of Structuration. Cambridge, Polity, p. 29.

Structuration theory has been used as a helpful framework for management accounting research, by some researchers (Giddens, 1984 ; Macintosh and Scapens, 1990). According to Macintosh and Scapens, "structuration theory is a more focused, informative, integrative, yet efficient, way to analyse how accounting systems are implicated in the construction, maintenance, and changes of the social order of an organisation, than many frameworks used in previous studies" (Macintosh and Scapens, 1990: 455). However, Archer argues that historical events are excluded by the structuration theory (Archer, 1995). Burns and Scapens (2000) confirm that the structuration theory is not useful for investigating processes of change.

Incorporating both institutional and structuration theories, Barley and Tolbert (1997) develop a model of institutionalisation as a structuration process. Subsequently, Burns and Scapens (2000) use a modified version of Barley and Tolbert's framework to develop their own framework for studying management accounting processes, which are shown in figure 4-2. In this regard, Burns and Scapens justify how to use their framework as follows:

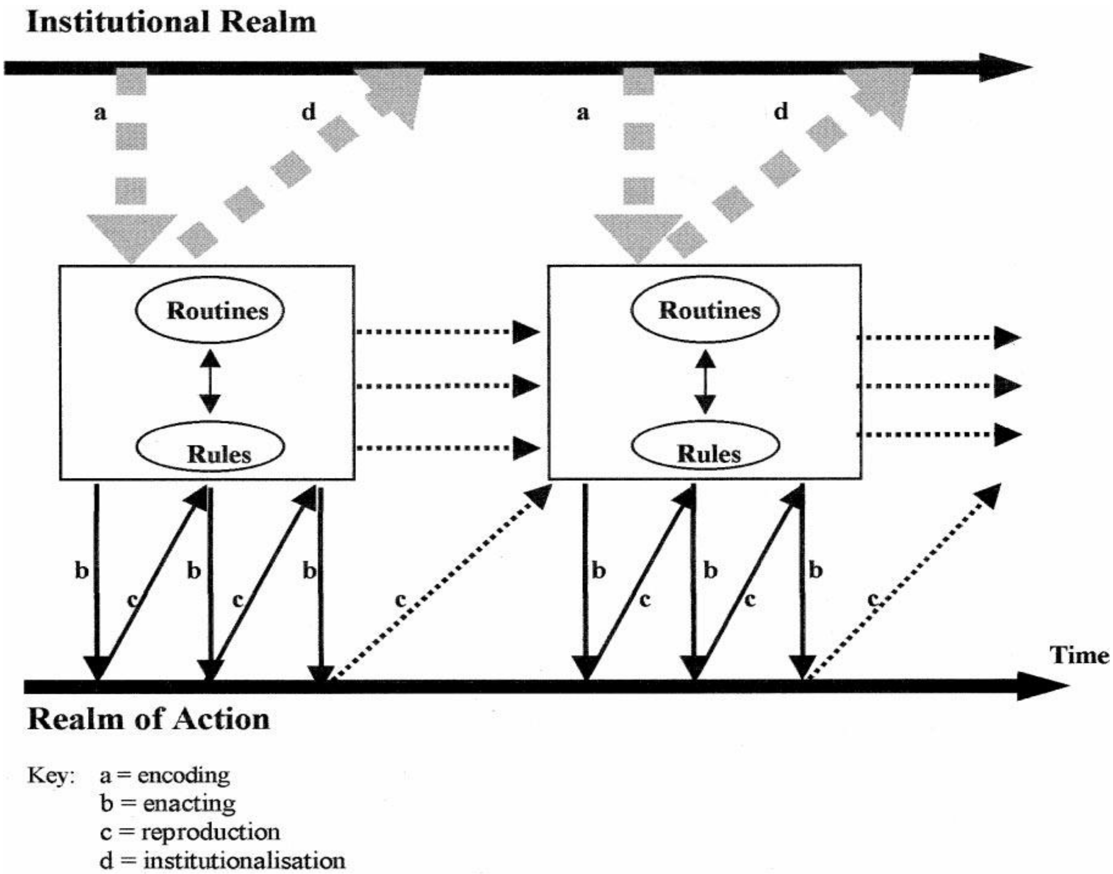
> "It should be emphasized that this framework is not intended to provide operational constructs for empirical research and hypothesis testing. Rather, its purpose is to describe and explain analytical concepts which can be used for interpretive case studies of management accounting change. These concepts will be useful in so far as they focus the attention of researchers (and also possibly practitioners) on the fundamental characteristics of change processes" (2000: 9).

4.3.4. The Processes of Institutionalization

Burns and Scapens' (2000) framework illustrates the institutionalization process in figure (4-2) which combines both synchronic and diachronic elements: while institutions confine and form action synchronically, actions produce and reproduce institutions diachronically through their collective effect. However, change procedures in the institutional realm occur over longer periods of time than change in the realm of action (Burns and Scapens, 2000). They add that the top of the figure represents the institutional realm, whereas the bottom represents the realm of action. They also mention that both realms are continuing in a collective procedure of change during time. They illustrate that the central component of the figure shows the way in which rules and routines proceed as the modalities which link the institutional realm and the realm of action. Burns and Scapens (2000) provide more explanation for rules and routines, which are also in a collective procedure of change, as will be described below. The processes of these interactions include encoding, enacting, reproduction and institutionalisation (see, Scapens, 1994 ; Burns, 2000 ; Burns and Scapens, 2000 ; Scapens, R. and Burns, J., 2000 ; Burns *et al.*, 2003 ; Busco, 2006 ; Scapens, 2006). So

Burns and Scapens (2000) explain the four processes of change in the following steps (arrows):

Figure (4- 2) represents the process of institutionalization.



Taken from: Burns, J. and Scapens, R. W. (2000) Conceptualizing management accounting change: an institutional framework, Management Accounting Research, 11, p.9.

The first process (arrow a) involves encoding of the institutional principles, taken for granted assumptions, into rules and routines. Overall, the current routines reflect (i.e. encode) the prevailing institutional principles and form new rules, which in turn lead to the construction and/or reconstruction of the ongoing routines. This encoding procedure illustrates taken-for-granted assumptions, including the institutional standards, through their instantiation in existing meanings, values and power.

The second process (arrow b) involves the actors enacting the routines (and rules), which encode the institutional principles. This procedure of enactment might comprise conscious selection but will more typically be a consequence of reflexive monitoring and the submission of tacit knowledge about how things are done. This is an enactment of rules and routines, particularly if the rules and routines confront existing meanings and values and actors have sufficient resources of authority and power to intervene in this procedure. However, in the lack of 'external' changes, such as advances in technology or a take-over crisis, there is unlikely to be a reopening of earlier agreed arrangements and therefore routines may become somewhat resistant to change. Nevertheless, change can take place.

The third process (arrow c) takes place as repeated behaviour guides to a reproduction of the routines. This reproduction might contain either intended (conscious) or unintended (unconscious) change. Conscious change is likely to take place merely if actors can collect the resources and rationales necessary to question collectively the accessible rules and routines. On the other hand, unconscious change might take place in the lack of systems to monitor the execution of the routines and where the rules and routines are adequately misunderstood and/or unaccepted by the actors.

The fourth and final process (arrow d) is the institutionalisation of routines and rules that have been reproduced through the behaviour of the individual actors. This entails a separation of the patterns of behaviour from their historical conditions, so that the rules and routines capture a normative and truthful quality, which obscures their relationship with the interests of the diverse actors. In other words, the rules and routines become simply the way things are, i.e. institutions. These institutions will then be encoded into the ongoing rules and routines and will shape new rules and so on.

4.3.5. Dichotomies in OIE

The remainder of Burns and Scapens' (2000) article explains three dichotomies established in OIE literature which present insights into the processes of change in management accounting systems or practices. These dichotomies are useful for studying management accounting change. The three dichotomies offer methods of categorizing and distinguishing between dissimilar kinds of processes of change. Burns and Scapens (2000) classify that the three dichotomies, correspondingly, are: formal versus informal change; revolutionary versus evolutionary change; and regressive versus progressive change.

4.3.5.1. Formal and Informal Management Accounting Change

Burns and Scapens (2000) distinguish between formal and informal change. Formal change happens by conscious design, usually through the introduction of new rules and / or through the actions of an individual or group. Informal change takes place at the implicit level; for instance, new procedures adapt over time to change the operating conditions. However, new ways of thinking might be requested in order to obtain the successful implementation of formal change. If the processes of informal change delay the formal change, this delay may cause a form of resistance, which may lead to the failure of implementation (see also, Scapens and Roberts, 1993).

Also, Burns and Scapens (2000) refer to the distinction between formal and informal change, which is related to the difference between intentional and unintentional management accounting change. As Burns and Scapens (2000: 19) describe "the intentional/unintentional difference focuses attention on: (1- change which flows from the introduction of new rules; and (2- change which evolves at a more tacit, subconscious level". Moreover, they confirm that "in studying management accounting change researchers need to explore the informal processes and unintentional change, as well as the formal processes and intended change" (2000: 19).

4.3.5.2. Revolutionary and Evolutionary Management Accounting Change

Also, an important thing for any study of management accounting change is to classify between revolutionary and evolutionary change. Burns and Scapens (2000) define that the revolutionary change entails a primary interruption to existing routines and institutions. Moreover, they describe that the 'evolutionary change is incremental with only minor disruption to existing routines and institutions' (2000: 20). Furthermore, there is some overlap with the difference between intentional and unintentional change but there are also significant changes. For instance, intentional changes in management accounting techniques might stay strongly grounded in existing institutions and routines, which may not be revolutionary. Besides, unintentional changes in informal processes in which some existing institutions and routines may be challenged can be revolutionary (see also, Scapens, R. and Burns, J., 2000).

4.3.5.3. Regressive and Progressive Management Accounting Change

In order to adopt regressive versus progressive institutional change, Tool (1993) discriminates between ceremonial or invidious behaviour and technological or instrumental behaviour. Burns and Scapens (2000) state that ceremonial behaviour appears from a value system which differentiates between human beings and preserves existing power structures, whereas instrumental behaviour appears from a value system which uses the best available knowledge and technology to solve problems and seeks to develop relationships (Bush, 1987 ; Tool, 1993 ; Bush, 1994). Bush distinguishes between regressive and progressive change as follows:

> "A regressive change occurs when new instrumentally warranted patterns of behavior are suppressed and additional patterns of ceremonially warranted behavior are instituted to secure the suppression; in other words, the value structure changes as ceremonially warranted values displace instrumentally warranted values in the correlation of patterns of behavior, thereby increasing the degree of ceremonial dominance in the institutional structure. A progressive institutional change occurs when the new instrumentally warranted patterns of behavior displace ceremonially warranted patterns of behavior. In this case, instrumentally warranted values displace ceremonially" (1994: 652).

According to Yazdifar (2004), the adoption of a new accounting system (in privatised companies) could be perceived to be affected powerfully by politics, society, and the cultural environment. OIE theorists argue that the adoption or rejection of a new management team (in privatized companies) must be studied in relation to relevant historical, cultural, social and political issues, to comprehend organisational change in its full complexity (Yazdifar, 2004).

Burns and Scapens (2000, p.8) conclude that, in the relationship between actions and institutions, it is useful to define an institution as 'the shared taken-for-granted assumptions which identify categories of human actors and their appropriate activities and relationships'. They add that the more deeply and widely the institution is acknowledged, the more likely it is to affect action and to resist change. Also, institutions are the structural properties which include the taken-for-granted assumptions about "the way things are done", which form and confine the rules and routines and establish the sense, values and also powers of the individual actors. Burns and Scapens add that "this ceremonial-instrumental dichotomy offers a conceptual starting point for researching the institutionalized nature of management accounting within organizations, and the embodiment of dimensions of power in change processes" (2000: 20).

4.4. New Institutional Sociology NIS

NIS appeared to ascend against NIE (Moll *et al.*, 2006a). Furthermore, a number of institutional theorists assume that, since organisations want to survive, they are forced to uphold the institutional rules that provide legitimacy and avenues for attaining resources (Schmid, 2001). As indicated previously, NIS searches to explain why organisations in particular areas appear to be similar (Scapens, 2006). In this regard, DiMaggio and Powell (1991-b: 8) describe the features of NIS as follows:

> "a rejection of rational-actor models, an interest in institutions as independent variables, a turn toward cognitive and cultural explanations, and an interest in properties of supraindividual units of analysis that cannot be reduced to aggregations of direct consequences of individuals' attributes or motives".

NIS specifies that 'people live in a socially constructed world that is filled with taken for granted meanings and rules. Much of their action is neither intentional nor conscious, for it is undertaken unconsciously and as a matter of routine'(Carruthers, 1995: 315).

In addition, NIS outlines its origins in the old institutional economics but diverges from that tradition significantly (DiMaggio and Powell, 1991a). DiMaggio and Powell (1991a) claim that both old and new approaches share scepticism toward rational-actor models of organisation and each views institutionalisation as state-dependent, which makes organisations less instrumentally sensible. They also argue that both emphasise the relationship between organisations and their environments, of course with some differentiations degree. Furthermore, both branches promise to reveal aspects of reality that are inconsistent with organisations' formal accounts. However, NIS maintains that all internal and formal systems and techniques within organisations, including organisational structure and management accounting systems, have been shaped by the external environment (Meyer and Rowan, 1991 ; Scott, 1991 ; Scott and Meryer, 1991)

In privatisation literature, Johnson, *et al.*, (2000) conceptualize privatization as the move from one institutional model to another. They discuss that institutional theory could be utilised to enhance the understanding of the processes of privatisation (Johnson *et al.*, 2000). They also argue that privatisation composes institutional change and recommends that mechanisms will emerge, not only through coercive mechanisms but also through normative and mimetic processes. Furthermore, they argue that, by understanding through the micro processes, actors are deinstitutionalized from the public sector and reinstitutionalized into the private sector.

NIS maintains that an organisation's internal and formal structures and processes – that is, all the procedures, rules and routines defining how the organisation's activities require to be done in order to realise aims – are shaped by external factors (Yazdifar, 2004). Meyer and Rowan (1977; 1991) argue that the formal structures of numerous organisations in industrial society significantly replicate the myths of the institutional environments as an alternative to the demands of work activities. In accordance with Meyer and Rowan (1977), (1991) formal organisational structures have two characteristics. First, they are rationalised and impersonal prescriptions that identify various social purposes as technical ones and specify in a rule-like way the appropriate means to pursue these technical purposes. Second, they are highly institutionalized and thus in some measure beyond the discretion of any individual participant or organisation. Scott (1995) declares that

> "All organizations are institutionalized organizations. This is true both in the narrower sense that all organizations are subject to important regulative processes and operate under the control of both local and more general governance structures, as well as in the broader sense that all organizations are socially constituted and are the subject of institutional processes that define what forms they can assume and how they may operate legitimately" (1995, p. 136).

4.4.1. Institutions Definition in NIS and its Assumptions

Carpenter and Feroz (2001) argue that an organisation's tendency towards conformity with predominant standards, traditions and social effects in internal and external environments will tend towards homogeneity among organisations in structure and practices and those successful governments are those that increase support and legitimacy by complying with social pressures. So the institutional perspective recommends that there should be a penchant for external financial reporting (Carpenter and Feroz, 2001). Essentially, an institution, according to NIS theory, is as follows:

> "Institutions consist of cognitive, normative and regulative structures and activities that provide stability and meaning to social behaviour. Institutions are transported by various carriers-cultures, structures, and routines- and they operate at multiple levels of jurisdiction. In this conceptualization, institutions are multifaceted systems incorporating symbolic systems-cognitive constructions and normative rules- and regulative processes carried out through and shaping social behaviour. Meaning systems, monitoring processes, and actions are interwoven. Although constructed and maintained by individual actors, institutions assume the guise of an impersonal and objective reality. Institutions ride on various conveyances and operate at multiple levels-from the world system to subunits of organizations" (Scott, 1995: 33-34).

Scott (1987) claims that environmental agents can describe the reigning types of institutional structure and will be concluded mainly by political challenges among competing interests. The term "political" as employed here must be interpreted in the broadest sense, while results not only will be affected by differential resources and sanctioning facilities but will also be powerfully formed by the agents' differential ability to lay successful claim to the normative and cognitive facets of political processes, those identified by such concepts as authority, legitimacy and sovereignty (Scott, 1987). Outcomes will also be affected by the structure of the state and relation to and penetration of society (Scott, 1987).

The assumptions of NIS seek to explain the similarity between organisations which work in a specific environment (Scapens, 2006). These assumptions have a greater focus on external factors rather than internal organisational factors (Moll *et al.*, 2006a). Thus, new institutionalists believe that the external environment shapes the internal organisation, including management accounting. In this context, the definition of institutions within NIS is completely different from that of the OIE's definition: Institutions, in NIS terms, consist of cognitive, normative and regulative structures and activities that provide stability and meaning to social behaviour. Institutions are transported by various carriers—cultures, structures and routines—and they operate at multiple levels of jurisdiction (Scott, 1995, p. 33).

4.4.2. Isomorphism in Management Accounting

In accordance with Hanan and Freeman's claim (1977) that the variety of organisational types is isomorphic to the variety of environments, DiMaggio and Bowel (1983) provide the concept that the best captures process of homogenization is isomorphism. Consistent with Hawley's (1968) explanation (cited in DiMaggio and Bowel (1983)), isomorphism is a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions. DiMaggio and Bowel (1983) recognize two kinds of isomorphism: competitive and institutional, discussed in the following subsections.

New institutionalists argue that organisations correspond to institutionalised structural forms and/or practice through the processes of isomorphism (Yazdifar and Tsamenyi, 2005). Thus, the meaning of isomorphism is, "the concept that best captures the process of homogenization" (DiMaggio and Powell, 1991: 66). Also, "isomorphism is the preferred new institutionalist term" (Carruthers, 1995: 315). DiMaggio and Powell (1983, 1991) distinguish between two types of isomorphism, which are competitive and institutional isomorphism (see also, Carruthers, 1995). Institutional isomorphism has two dimensions, which are called convergence and divergence factors (see table 4-2 for more details) (Granlund and Lukka, 1998a). These types of isomorphic will be debated in the following subsection.

4.4.2.1. Competitive Isomorphism

Hannan and Freeman (1977) and Aldrich (1979), cited in Mizruchi and Fein, (1999) have described that competitive isomorphism involves pressures towards similarity consequential from the competition of the market. Hannan and Freeman (1977) argue the similarity of competition or an aim of efficiency but rather as an outcome of organisations' quests in their environments (Mizruchi and Fein, 1999). "Competitive isomorphism concerns efficiency. When there is one best, cheapest or most efficient way to do things, then the forces of competition will eventually impose upon organizations that one best way" (Carruthers, 1995, p. 317). This efficiency mentions that organisational rationality and environmental rationality might correspond in the case of companies in competitive markets (Hannan and Freeman, 1977). Hannan and Freeman affirm that "the optimal behaviour of each company is to maximise profit and the rule used by the environment" (1977: 938). However, DiMaggio and Powell (1983) argue that this does not offer a fully sufficient representation of the modern organisations. Thus, the notion of institutional isomorphism is a helpful instrument for understanding the politics and ceremony that encompass much recent organisational life (DiMaggio and Powell, 1983).

4.4.2.2. Institutional Isomorphism

According to Meyer and Rowan (1991), organisations are structured by phenomena in their environments and tend to become isomorphic with them. The first explanation of such isomorphism is that formal organisations become matched with their environments. The second explanation for the parallelism between organisations and their environments is that organisations structurally reflect socially constructed reality. Mizuchi and Fein (1999) argue that institutional isomorphism originates in several conceptions of how behaviour spreads. DiMaggio and Powell "identify three mechanisms through which institutional isomorphic change occurs, each with its own antecedents" (1983:150). DiMaggio and Bowel (1983; 1991*b*) have presented the conception of institutional isomorphism, which is useful for understanding the politics and ceremony that suffuse much contemporary organisational life. This concept is divided into three classifications of institutional isomorphism change: coercive, mimetic and normative isomorphism (DiMaggio and Bowel, 1983; 1991*b*). The following subsections and the table above present some details about these classifications of isomorphism.

Table (4- 2) shows drivers of convergence and divergence of management accounting practices

	Drivers of management accounting practices			
	Economic pressures	Coercive pressures	Normative pressures	Mimetic pressures
Factors driving convergence	Global economic fluctuations/ recessions, deregulation of markets Increased competition (the globalization of markets) Advanced production technology Advanced information technology	Transactional legislation Transactional trade agreement Harmonisation of the financial accounting legislation Transactional ('especially global firms') influence on their subsidiaries Headquarters influence in general	Management accounting professionalisation University research and teaching	Limitation of leading companies' practice International/ global consultancy industry
Factors driving divergence		National legislation National institutions/ regulation (labour unions, financial institutions, etc)	National cultures Corporate cultures	

Taken from: Granlund, M. and Lukka, K. (1998) It's a small world of management accounting practices, Journal of management accounting research, 10, p. 157.

4.4.2.2.1. Coercive Isomorphism

According to DiMaggio and Powell, "Coercive isomorphism results from both formal and informal pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society within which organizations function"(DiMaggio and Powell, 1983, p. 150). In many cases, organisational change is a direct reaction to government authorisation (DiMaggio & Powell, 1983). With more explanations:

> "Coercive isomorphism is driven by two forces: pressures from other organizations on which a focal organization is dependent and an organization's pressure to conform to

> the cultural expectations of the larger society. Coercive isomorphism, at least in the first instance, is thus analogous to formulations of the resource dependence model, in which organizations are viewed as constrained by those on whom they depend for resources" (Mizruchi and Fein, 1999: 657).

The best example is the change in organisational practices and/or processes in direct reaction to government decisions (Abernethy and Chua, 1996). The Libyan government issued many regulations that directly impacted on companies' performance. For example, subsidiaries have to accept management accounting practices, measurement performance and budgetary plans that are compatible with the policies of the parent company (DiMaggio & Powell, 1983). In relation to our case studies, which will be discussed in chapter 6 and 7, the companies became a subsidiary after they were privatised. This is affected by laws and regulations which have been issued.

The existence of a general legal environment impacts on an organisation's behaviour and structure. Coercive isomorphism imposes external factors (e.g. government policies, regulation, supplier relationships) on organisations to adopt particular internal structures and processes (Moll, *et al.,* 2006). The fact that these changes may be largely ceremonial does not mean that they are inconsequential (DiMaggio and Powell, 1983). In brief, according to the NIS concept of coercive isomorphism, management accounting change can be conceived as a consequence of change in external factors which exert and/or affect the organisational level in privatised companies (Yazdifar, 2004).

4.4.2.2.2. Mimetic Isomorphism

DiMaggio and Powell (1983, 1991 *a*) state that not all institutional isomorphism is derived from coercive power. From coercive authority there has also originated a powerful force that supports imitation. The type of social structure, named "obligatory action", can also coerce mimetic isomorphism (Haveman, 1993: 595). DiMaggio and Powell (1983, 1991*a*) confirm that uncertainty is also a strong force which encourages simulation or imitation. Institutional theory supposes that organisations choose between substitute structures on the foundation of efficiency considerations, principally at the time when their areas are established or reorganised (Palmer *et al.*, 1993).

The features of mimetic actions in the economy of human activities are significant when organisations meet a problem or vague solutions (DiMaggio and Powell, 1983;

1991*b*). The mimetic isomorphism takes place when uncertainty has been faced (Abernethy and Chua, 1996). When organisational tools are not fully understood, the organisations might copy the internal structures and/or procedures adopted by other organisations (see, DiMaggio and Powell, 1983, 1991b ; Carruthers, 1995 ; Burns and Scapens, 2000 ; Yazdifar, 2004 ; Hassan, 2005 ; Siti-Nabiha and Scapens, 2005 ; Moll *et al.*, 2006a ; Ribeiro and Scapens, 2006 ; Scapens, 2006 ; Yazdifar *et al.*, 2008).

Subsequently, Palmer, *et al.*, (1993) adopt forms that are considered legitimate by other organisations in their field, regardless of these structures' actual efficiency. Abernethy and Chua (1996) confirm that organisations have a tendency to copy those that are perceived to be more legitimate or successful or those facing external organisational factors that are similar in complexity. In the Libyan context, there is a direction of adoption new computing systems, such as Enterprise Resources Planning (ERP).

4.4.2.2.3. Normative Isomorphism

"A third source of isomorphic organizational change is normative and stems primarily from professionalization….professionalization as the collective struggle of members of an occupation to define the conditions and methods of their work, to control 'the production of producer'" (DiMaggio and Powell, 1983, p. 152). There are two aspects of professionalization that are important sources of isomorphism. The first comes from formal education and legitimacy in the knowledge base produced by specialised universities. The second comes from the growth and development centres of professional training, which contribute to the dissemination of new tactics. Universities and professional training organisations are important to develop organisational standards towards professional managers and other staff.

According to Abernethy and Chua, normative isomorphism occurs "when professionals operating in organisations are subject to pressures to conform to a set of norms and rules developed by occupational/professional groups" (Abernethy and Chua, 1996: 574). Experience, education and participation in professional networks affect how professional people carry out their activities within the organisation (Carruthers, 1995). In Libya, for example, there are widespread training programmes in accounting, namely accounting for non-accountants. In addition, there is a master programme in administration for non-specialists. Moreover, the graduates of the universities are ready to implement new notions in the labour market.

4.5. Power and Institutional Theory

Basic ideas and in institutional theory can be confirmed explicitly in the realms of power. As mentioned above, power relationships might be the most significant relationships in organisation (Dugger and Sherman, 1994). Also, the debates in the institutional theory interest in different perspectives such as change and stability. This stability and change can be formulated as the power of factors of the institutional stability against power of factors of institutional change, and how these forces can become intertwined (Oliveira, 2010). So, OIE has focused on the power within organisational realm, whereas NIS has concerned on the power as pressures come from external environment.

4.5.1. Power and Political Factors

The importance of power and politics in organisational change has been extensively discussed in management literature. The importance of power is to shape the ongoing processes in organisational life (Yazdifar, 2004). Moreover, power is considered as pressures are practised in organisations by environmental factors. Yazdifar (2004) states that concept of power must be separated from that of authority. Thus, there are some differences between power and authority. According to the institutionalist paradigm, power relationships are the most significant relationships in society (Dugger and Sherman, 1994). So, it is necessary to discuss the definition of power and its relationship to authority and politics.

There are many definitions of power in management literature. In accordance with institutional perspective, the power relationships are very important relationships in society. The definition of power is “the ability to get others to do what you want them to do” (Dugger and Sherman, 1994: 103). So it is reasonable to provide simple definitions of power and politics; it is not easy to differentiate between the two concepts (Burnes, 2004 ; Yazdifar, 2004). In organisational terms, authority is the right to act, or command others to act, toward the attainment of organisational goals (Burnes, 2004). The right to act is given legitimacy by the authority figure's position in the organisation (*ibid.*). Therefore, the level of authority a person possesses is related to their job (*ibid.*). The concepts are often used interchangeably and thus the difference between the two has never been fully settled (Drory and Romm, 1988). The best example to distinguish between power and authority is that of the Secretary of the Executive Director (Burnes, 2004 ; Yazdifar, 2004). She does not have sufficient authority, according to organisational structure, but she has enough power to affect the decisions because she is very close to decision sources.

Politics describes the efforts of people in organisations to gain support for or against policies, rules, goals or other decisions where the outcomes will have some effect on them (Burnes, 2004). Politics is seen as the exercise of power (Pfeffer, 1981), whilst power is the capacity to affect decisions (Burnes, 2004). Power does not usually mean conflict but sometimes it indicates conflict when the interests are in disagreement (Collier, 2001). Giddens' concept of power is divided into power to do and power over others (Robert and Scapens, 1985; Scapens and Robert, 1993. It is significant to distinguish between the two types of power, as mentioned above, which can be used to focus on the use of accounting as both an enabling device and as a tool to accomplishing control (Scapens and Robert 1993).

Therefore, it could be summarised that organisational politics is seen as power in action. Power is the actual or potential ability to affect behaviour of others in order to achieve organisational goals, to change events, to overcome resistance of change and to impose decisions, whereas authority is the right to dispose and / or the issuance of commands not only for the purpose of achieving certain goals, but also to adopt a certain organisational change in order to adapt to the environment. So this phenomenon is worth studying, because the intervention and interaction between these factors offer in-depth understanding of the processes of change.

4.5.2. Culture and Organisational Change

"Many writers point out that managers and employees do not perform their duties in a value-free vacuum" (Burnes, 2004: 169). Burnes, (2004: 169) individuals' duties and the way of doing things "are governed, directed and tempered by an organisation's culture—particular set of values, beliefs, customs and systems that are unique to that organization". In social literature, there are numerous definitions of culture (Brown, 1995); for instance, "culture is how things are done around here" (Drennan (1992: 3) cited in Burnes, 2004:170), whereas Burnes (2004: 602) defines organisational culture as "the name given to collectives of basic assumptions, values, norms and artifacts that are shared by and influence the behaviour of organisation's members".

Many researchers, in management accounting areas, define culture. For example, "culture is a set of 'shared key values and beliefs'(Smircich, 1983) that convey a sense of identity, generate commitment, enhance social system stability and serve as a sense-making device to guide and shape behaviour" (Collier, 2001: 468). "Culture is typically defined as common learned meanings or meaning structures of certain groups of people, having both space and time dimensions and being realized in common beliefs, norms and values"(Granlund and Lukka, 1998b: 187). Hardy (1996) observes the power embedded deep within the organisational culture that organisational members take for granted. She adds that power is often beyond the reach of tampering by organizational members. "It lies in the unconscious acceptance of the values, traditions, cultures and structures of a given institution and it captures all organizational members in its web" (S8).

According to previous definitions of culture, it is noted that there are some similarities between the definitions shown above. Also, this similarity conforms to institutions' ideas in OIE. Institutions within OIE have commonly used the definition as "a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of a people" (Hamilton (1932: 84) cited by Burns and Scapens, 2000: 5-6). Furthermore, "people tend to adapt to their cultural environments so that their behaviour would not differ 'too much' from that of others around them"(Granlund and Lukka, 1998b: 188). Thus, the definition of culture mentioned above is in line with the notion of institution within NIS.

4.5.3. Power in NIS

NIS has focused on 'convergent change' involving outcomes or the diffusion of new practices (Granlund and Lukka, 1998a ; Hopper and Major, 2007: 64). Siti-Nabiha and Scapens (2005) declare that the NIS has attempted the simplistic action of power and politics. Beside, NIS has neglected issues of power and interest at the micro-level (Abernethy and Chua, 1996 ; Yazdifar *et al.*, 2008). DiMaggio and Powell (1991*a*) point up that it is a necessary "to place interests and power on the institutional agenda" (27). However, power and interests play vital roles in the change of organisational fields, because interest and power are institutionally shaped (Seo and Creed, 2002). Institutionalization, as an outcome, places organizational practices and characteristics beyond the reach of interests and politics (Dillard *et al.*, 2004: 510).

DiMaggio and Powell (1983) describe three isomorphic processes; coercive, mimetic, and normative. Also, it might be said that the "mimetic isomorphism has attracted the most attention" (Mizruchi and Fein, 1999: 657). However, it might be confirmed that coercive isomorphism reflects the notion of the power, but from a different point of view. In other words, the coercive isomorphism embedded the concept of the power that comes from external environment, whereas NIS ignores the interaction that occurs within organisations. Of course, the intra-organisational power is concentrated by OIE. Consequently, "the focus of neo-institutional theory is now shifting from the study of fields as relatively static and predictable units of analysis to the study of fields as arenas of power dependencies and strategic interactions" (Hensmans, 2003: 356).

4.5.4. Power in OIE

The relationship between power and OIE is a complex. In this context, the theory can analyse this complicated within organisations and explain conflict and power could be OIE (Yazdifar *et al.*, 2008). DiMaggio and Powell (1991*a*) compare between OIE and NIS in terms of conflict of interest and structural inertia. They describe that OIE "was straightforwardly political in its analysis of group conflict….emphasizing the vesting of interests within organizations as a result of political tradeoffs and alliances" (12). Power and politics is vital "to any OIE-grounded explanation of life's ongoing processes" (Burns, 2000: 571). Therefore, the majority of top management team from the necessity of exploiting their formal powers coercively or in some case can enact this coercion (Roberts, 1990).

Some of researchers prefer to use organisational culture rather than institution (Dent, 1991). According to his opinion, a new culture, institution, can be a main foundation of power, especially if it acquires power to become prevailing, for it successfully modifies the legitimacy of accepted manner for action. Covaleski *et al.*, (2003) focus on how rules and routines support power relationships by providing: the power to define the norms and standards that shape the organisational behaviour; and the power to demarcate suitable forms of structure and policy that run unquestioned over time. A significant element of this process action is the meanings and values (March and Olson, 1983).

In terms of this research's framework, the power may involve in the first and second processes of change. This is confirmed by Burns and Scapens (2000), "encoding process draws on the taken-for-granted assumptions, which comprise the institutional principles, through their instantiation in existing meanings, values, and power" (10). Subsequently, the "enactment of rules and routines may be subject to resistance, especially if the rules and routines challenge existing meanings and values, and actors have sufficient resources of power to intervene in this process" (10). In the process of enactment, it should be emphasised that the role of power mobilisation implements the change. Hardy (1996) develops Lukes' (1974) work. She classifies power into four dimensions.

The first dimension is the power of resources. According to this conceptualisation, power is exercised by actors to influence the decision outcome and achieve the desired behaviour through the dissemination and/or restriction of resources (Hardy, 1996). These resources can include "information, expertise, political access, credibility, stature and prestige, access to higher echelon members, the control of money, rewards and sanctions" (Hardy, 1996: S7). This type of power works to modify the individual's behaviour. As a result, it tends to be used in relation to specific task-oriented settings and often uses *carrot and stick* to secure the desired behaviour.

The second dimension is power over the processes. The main source of the power in this dimension involves the decision-making processes, participants and agendas (Hardy, 1996). The influence of this power is exercised on the participation of subordinates in the decision-making process. In general, this form of power resides in the processes of decision-making that integrate a diversity of rules and routines that can be implemented by top management to influence outcomes of decisions. The mobilisation of power can be undertaken in order to prevent, reduce or increase subordinates participating in decision-making processes (Hardy, 1996).

The third dimension is power over meaning. In this dimension, power can be applied to form cognitions, perceptions and preferences, so that individuals accept the status quo because they cannot imagine alternatives. Power over meanings can be used to prevent organisational conflicts from appearing. Interest groups begin their applications and do not initiate requests of others through the administration of meanings. The fourth dimension is power over the system that reflects the notion of OIE. Hardy's framework of power has been used by a number of researchers in the study of management accounting change (see, Burns, 2000 ; Yazdifar *et al.*, 2008).

4.6. The Main Limitations of OIE and NIS

Powell (1991) argues that institutionalisation is a constraining process that forces units in a population to resemble other units that face the same constraints. He mentions that institutional isomorphism appears from the external environment. He also wants to suggest that much of the imagery of institutional theory portrays organisations too passively and depicts environments as overly constraining. He also adds that there is a wide range of institutional influence and internal responses to that pressure are more varied than is suggested. Yazdifar, *et al.,* (2008) determine some disadvantages of new institutional sociology as follows. First, new institutional sociology is normally criticised for its concentrated of the role of active agencies and issues of power and interest at the macro-level. Second, the assumption that practices are intended to external legitimacy is only symbolic and constantly avoids internal operating systems. Third, the theory contemplates the change at an extra-organisational level; it does not focus on the change at an intra-organisational level.

There are two limitations that materialise from institutional theory. First is the incapacity at an institutional level to recognise sufficiently the disparities within the institutional environment, the relative power of different institutional actors and the conflict which can result from relationships of power. Second is the inability of analysis at an organisational level to provide a theory as to how these competing interests can be accommodated or reconciled by management (Collier, 2001).

Greenwood and Hinings (1996) claim that the institutional theory is not frequently considered as a theory of organisational change but often as an explanation of the similarity between somorphism and stability of organisational engagements in a given society or organisations. At this point they present the opposite view, agreeing with Dougherty that the theory contains an account of change, first, by providing a convincing definition of radical change, and second, by signalling the contextual dynamics that precipitate the need for organisational adaptation. As formulated, however, neo-institutional theory is weak in analysing the internal dynamics of organisational change (Greenwood and Hinings, 1996). As a consequence, the theory is silent on why some organisations adopt radical change, whereas others do not, despite experiencing the same institutional pressures (Greenwood and Hinings, 1996). Nevertheless, neo-institutional theory contains insights and suggestions that, when elaborated, provide a model of change that links organisational context and intra-organisational dynamics (Greenwood and Hinings, 1996).

Burns and Scapens (2000) principally focus on the intra-organisational processes of change. Their framework will also lead to an enhanced understanding of the intra-organisational processes of management accounting change. On the other hand, they cannot ignore the extensive extra-organisational institutional dimensions. They note that, to understand the institutional context, the latter must be recognised from both within and outside the organisation.

For this reason, this study will also adopt the perspective of new institutional sociology (Siti-Nabiha and Scapens, 2005). To understand the nature of institutional change from an OIE perspective, researchers must start by exploring the inherent stability and continuity of life's ongoing processes (Burns and Scapens, 2000). Burns and Scapens (2000) claim that the founding of OIE described as analogous to the biological gene emphasises sequence over time, while still recognising that institutions extend to be more malleable and mutate in different ways. Biological analogies and metaphors have re-emerged in more recent institutional economics.

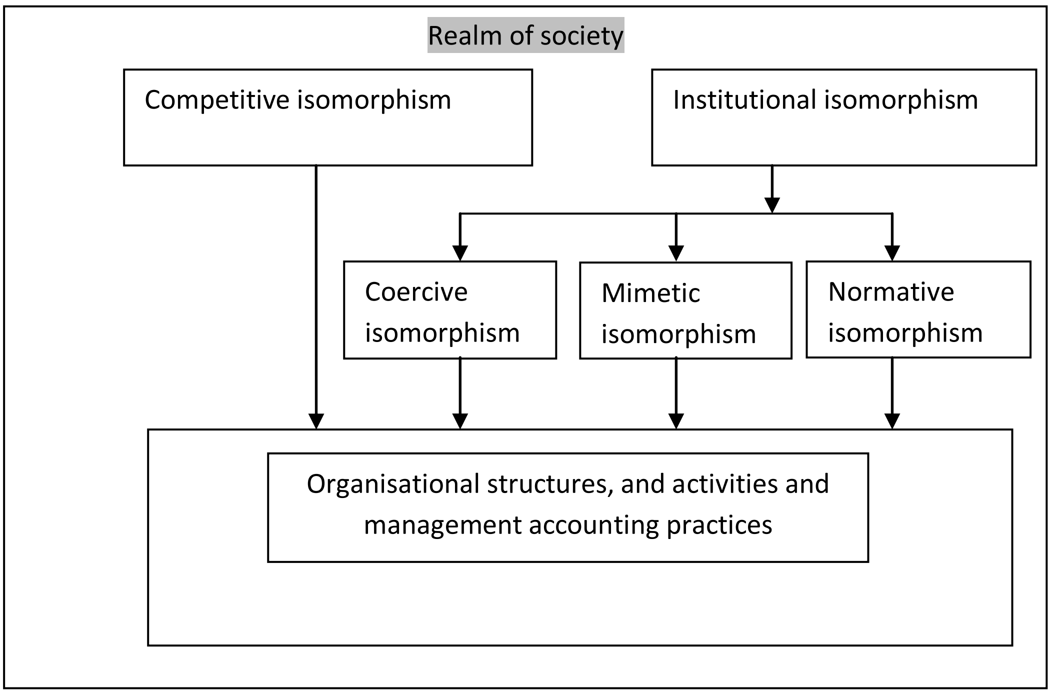
4.7. Integration between OIE, NIS and Power Mobilisation

This study uses an integrative theoretical framework from NIS, OIE and power mobilisation (Yazdifar et al., 2008; Hassan, 1996; Siti-Nabiha & Scapens, 2005), which concentrates on management accounting processes in Libyan privatised companies. The hybrid-theoretical framework utilised in this study helps to explain, interpret and understand effects that have occurred within the organisation, which involves rules and routines along the lines of Burns' and Scapens' theoretical framework. It also helps to explain, interpret and understand the external factors, including coercive, mimetic and normative isomorphism, following DiMaggio and Powell's theoretical framework. As Moll et al., state:

> "Both draw on board variety of insight from cognitive science, cultural studies, psychology and anthropology, and both draw attention to multiple levels of analyses ranging from the individual organisation to society" (2006:188).

According to Yazdifar (2004), from the institutional perspective, it could be argued for mainstream accounting researchers. New accounting systems, offered by a new management team, are being adopted in privatised companies to enhance organisational efficiency. NIS theorists, alternatively, would distinguish that privatised companies may accept the new systems not just because of their efficiency, but also as a consequence of coercive, mimetic and/or normative isomorphism pressures coming from a new manager (or consultants, government and regulatory agencies and professions). Yazdifar (2004) introduces the summary of the mechanism of management accounting change, as is shown in figure 4-3 below.

Figure (4- 3) Drives of homogeneity in organisational forms and practices: NIS view



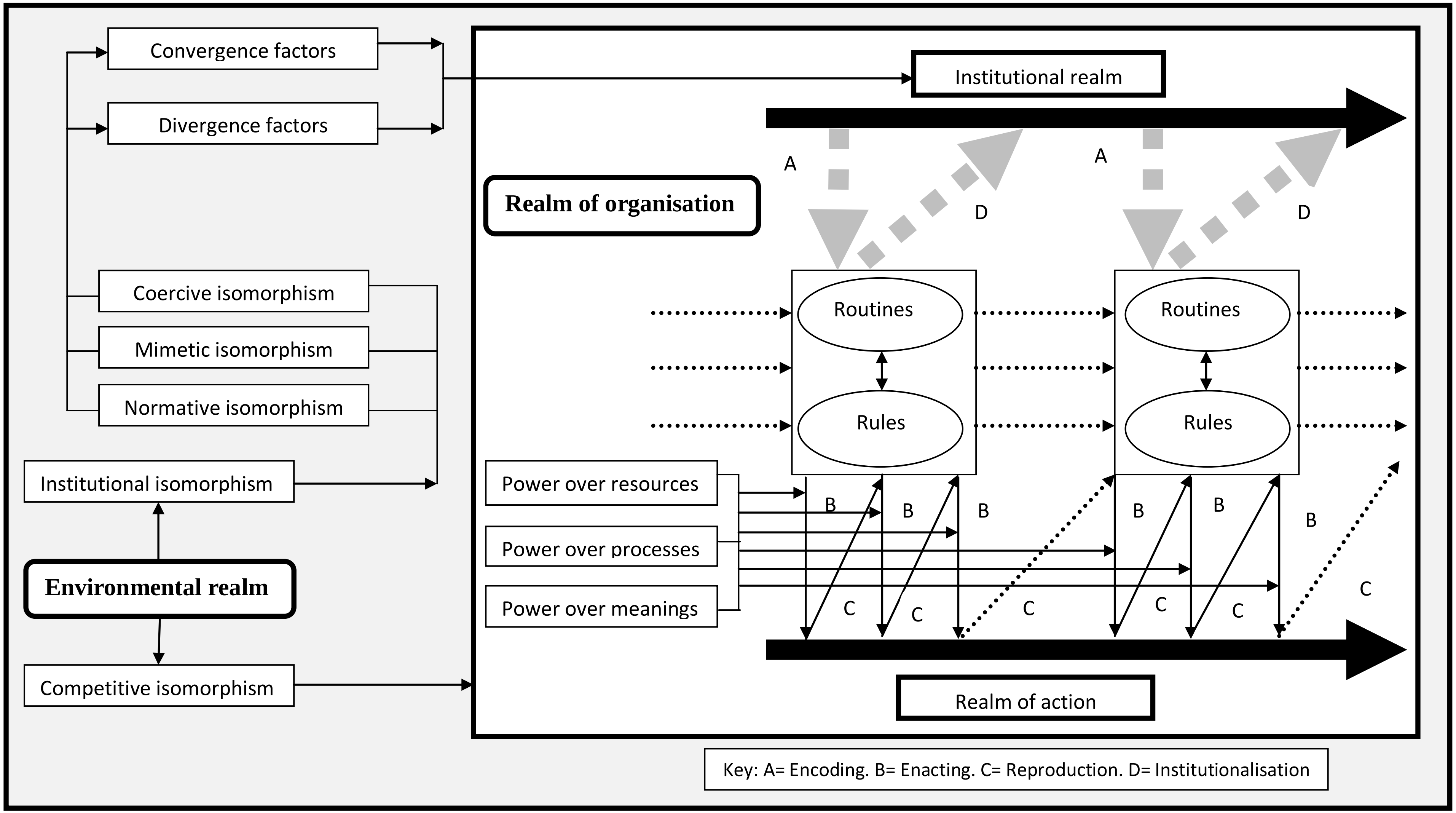
Taken from: Yazdifar, H. (2004) Insight into the dynamics of management in group, Ph.D. Thesis. Manchester University

Burns and Scapens (2000) offer a framework that is considered as a starting point for researchers who want to study management accounting change as process. They add that, as such, these new studies will improve and expand the framework. However, Scapens (2006) asserts that the framework of Burns and Scapens does not give sufficient attention to external factors or external institutions. So the attention to external factors is offered by NIS. On other hand, NIS ignores the internal institutions which shape the process of change. Furthermore, NIS adopts a static approach that cannot explain the process of change (Ribeiro and Scapens, 2006). Thus, the integration of OIE and NIS is deemed important. In institutional literature, there are many calls to adopt both institutional perspectives in studying management accounting change. As Siti-Nabiha and Scapens (2005) assert interactions between internal and external institutions form management accounting change within specific organisations. Thus, Yazidfar *et al.* (2008) propose a hybrid framework, combining OIE and NIS.

According to the institutionalist paradigm, power relationships are the most significant relationships in society (Dugger and Sherman, 1994). Dugger and Sherman define power as "the ability to get others to do what you want them to do" (1994: 103). Power relationships are taken into consideration by NIS. DiMaggio and Powell include different types of pressures, such as coercive, normative and mimetic (see also, Granlund and Lukka, 1998a). However, power relationships receive little explicit attention within Burns and Scapens' framework, because it focuses on rules, routines, actions and institutions, which create power over the system. Thus, Burns and Scapens tend to ignore the other three dimensions of power over resources, processes and meaning, identified by Hardy. Burns (2000) demonstrates that the dynamics of the processes of change can be understood by the combination of an institutional framework of management accounting change and a framework of power mobilisation. Also, Yazidfar *et al.* (2008) affirm that NIS and OIE are complemented by drawing on framework of power mobilisation. The figure (4-4) represents the hybrid theoretical framework used in this study, which comprises NIS, OIE and power mobilisation.

Briefly, this is an institutional theoretical framework that can be integrated together with OIE and NIS to explain how institutions form and confine the behaviour and actions of individuals and organisations and to analyse how individuals modify and transform the institutions and organisations (Yazdifar, *et al.*, 2006). NIE and NIS assume that pressure is applied from external environments that shape the organisation from outside (Siti-Nabiha and Scapens, 2005; Scapens, 2006). The OIE perspective adopted by Burns and Scapens (2000) enables the understanding of the change processes within the organisation (Siti-Nabiha and Scapens, 2005; Scapens, 2006).

Figure (4- 4) shows the hybrid framework using NIS, OIE and power mobilization



As mentioned above, the reason for adopting the research framework from the institutional perspective in this study is to explore the influence of privatisation on management accounting systems/practices in Libyan privatised companies. Moreover, institutional perspectives (old institutional economics and new institutional sociology) have afforded an opportunity to understand the influence from external and internal factors. Furthermore, other reasons behind adopting old institutional economics and new institutional sociology as a theoretical framework are that they are principally useful in studying management accounting change and that they present a way of dealing with some difficulties of structuration theory in research into management accounting change (Burns and Scapens, 2000; Scapens, 2006).

The old institutional economic and new institutional sociology dichotomies can assist in concentrating research on specific management accounting change (Scapens, 2006; Burns and Scapens, 2000). Burns and Scapens (2000) claim that to understand the complex nature of management accounting change in individual organisations requires a longitudinal case study in order to realise the diachronic nature of the processes of institutionalization and the continuing, cumulative nature of the processes through which management accounting rules and routines are reproduced. These case studies will be discussed in the chapters after next.

4.8. Conclusions

Using specifically the work of DiMaggio and Powell (1983), Hardy (1996) and Burns and Scapens (2000), this chapter reaches the conclusion that hybrid institutional framework is useful in order to explain the processes of change and stability of management accounting systems. Also, the chapter discusses the main weaknesses of OIE and NIS, because OIE is not suitable for studying processes of change at macro level and NIS ignores the processes of change within particular organisations. So the integration between these institutional perspectives avoids such limitations. Moreover, it offers the notion of power mobilization, including power over resources, meanings and processes, power over systems already covered by the idea of OIE.

In order to implement the hybrid institutional framework, appropriate methodology and research methods should be selected. Regarding methodological issues, the next chapter will consider these choices, including research philosophy, paradigm and approach. Furthermore, chapter five will envisage why this study adopts an explanatory case study as research strategy. Also, six steps in applying the case study will be debated. Finally, it will use triangulation of data collection methods and multiple sources of evidence, including interviews, observation and documentation.

CHAPTER FIVE: METHODOLOGY AND RESEARCH METHODS

5.1. Introduction

This study explores the processes of management accounting change in Libyan privatised companies. So, in order to achieve the aim of the study, the previous chapters discussed theoretical issues in this research. Chapter two outlined the characteristics of the Libyan business environment. The main factors that might affect management accounting systems and practices were argued. In chapter three, the relevant literature in management accounting was reviewed. In chapter four, the institutional framework was drawn. Chapter four discussed the selection of theoretical frameworks, where this study will be adopted by institutional perspectives from OIE and NIS and power mobilisation. The reason behind that adoption is to avoid disadvantages for each perspective.

As mentioned above, the aim of this study is to explore management accounting change after privatisation in Libya, which will be conducted as a case study of two Libyan privatised companies. In order to achieve this aim, there is a range of steps which should be implemented. These steps are basically concerned with the selection research paradigm (Hoepfl, 1997). In addition, the research approach, which the study will adopt appropriate to the research philosophy, will be discussed. Also, it will uncover the process of research design, including research strategy, research choices and time horizons. Thus, the research methods are divided into several components. Firstly, in strategy of research, this study will implement two case studies; this section also discusses advantages and disadvantages of case studies and the final point in this section is a discussion of the validity and reliability of case studies as a strategy. Secondly, data on triangulation methods will be collected; in this context, data collection methods are integrated interviews, observations and documentary and archival record. Thirdly, research design will consist of the case study steps for this research. The last sections will narrate the methods of data analysis.

5.2. Research Philosophy and Paradigm

Stating a knowledge claim means that researchers start a project with certain assumptions about how they will learn and what they will learn during their enquiry; these claims are referred to as paradigms (Creswell, 2003). Research is affected by previous assumptions and beliefs (Hoque and Hopper, 1994). Blumberg, et al., (2005) introduce the importance of thinking about what research is in a pragmatic way. This way will support research strategy and methods that the researcher selects as part of that strategy (Blumberg *et al.*, 2005). Saunders, et al., (2007) also discuss the premise that each contain important differences, which affect thinking about the research process. Furthermore, philosophy is used to increase the understanding of the way in the specific area (Saunders *et al.*, 2007).

There are various definitions of paradigm which have been found in sociology or business literature. The paradigm definition is "to be universally recognized scientific achievements that for time provide model problems and solutions to community of practitioners" (Kuhn, 1962: x). Hussey and Hussey (1997) present that as to help clarify the uncertainties; Burwell and Morgan (1979) propose that the term can be utilized at three distinct levels. At the philosophical level, it is utilised to reflect basic beliefs about the world. At the social level, it is utilised to offer strategy about how researchers should conduct their studies. At the technical level, it is utilised to identify the methods which should be adopted when performing research.

A paradigm is a general perspective or way of thinking that reflects fundamental beliefs and assumptions about the nature of organisations (Gioia and Pitre, 1990). A comprehensive definition of paradigm is, "it represents a world view that defines, for its holder, the nature of the 'world', the individual's place in it and the range of possible relationships to that world and its parts"(Guba and Lincoln, 1994: 107). The paradigm is usually taken to mean a way of searching for some phenomenon (Gill and Johnson, 2002). Gill and Johnson (2002) add that a perspective from distinctive conceptualisation and explanation of phenomena are proposed. Another definition for paradigm is as a process of 'scientific enquiry', based on people's philosophies and assumptions about the world and the nature of knowledge (Hussey and Hussey, 1997).

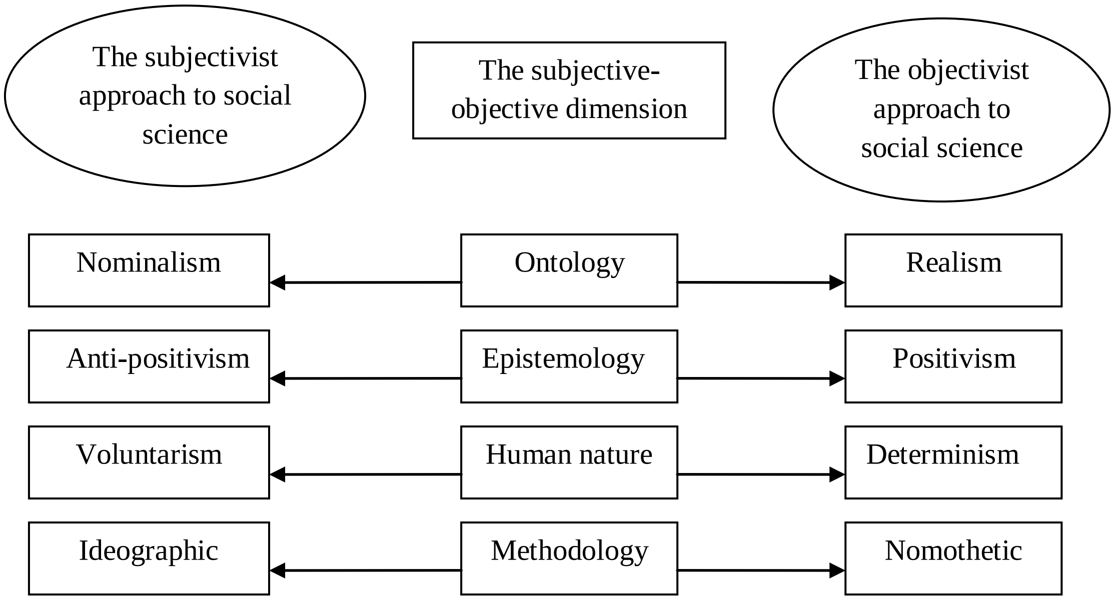
5.2.1. The Nature of Social Sciences

Burrell and Morgan (1979) build from two dimensions, based on assumptions concerning the nature of social science and the nature of society respectively (Hopper and Powell, 1985). The social science dimension in turn consists of four distinct but related elements: assumptions about fundamentals and assumptions about the nature of organizational phenomena (ontology); researchers make claims of what is knowledge (Creswell, 2003). The nature of knowledge is about those phenomena or how researchers know them (epistemology) (Creswell, 2003). Human nature refers to the nature of ways of studying those phenomena (methodology); in other words methodology means the processes for studying knowledge (Hopper and Powell, 1985 ; Gioia and Pitre, 1990 ; Creswell, 2003).

Additionally, there are different manners of thinking about research philosophy which have been recognised in the social science literature: ontology, epistemology, human nature and methodology, which are illustrated in the Figure 5-1, which searches for these in an accurate mode in terms of what Burrell and Morgan illustrate as the subjective-objective dimension (Burrell and Morgan, 1979 ; Hopper and Powell, 1985 ; Crotty, 1998 ; Kakkuri-Knuuttila *et al.*, 2008), and epistemology, ontology and axiology (Saunders *et al.*, 2007), and ontology, epistemology and methodology (Gioia and Pitre, 1990) and ontology, epistemology, axiology, and methodology (Hussey and Hussey, 1997 ; Creswell, 2003), and ontology, epistemology and human nature (Morgan and Smircich, 1980).

Another arrangement of assumptions about paradigms is provided by (Chua, 1986). The first assumption regards beliefs about knowledge which are involved, both epistemological and methodological. The second assumption regards beliefs about physical and social reality that include ontological beliefs, human intention and rationality, and societal order/conflict. The third assumption is the relationship between theory and practice. The next section will be focused on categorisation of Burrell and Morgan with contemporary additions; the reason behind that will be discussed later in their framework.

Figure (5- 1) shows a scheme for analysing assumptions about the nature of social science



Taken from: - Burrell and Morgan (1979) Sociological Paradigms and Organisational Analysis, Heinemann Educational Books, London, p.3.

5.2.2. Nature of Society

The regulatory standpoint is less judgmental and critical (Saunders, et al., 2007). Saunders, et al., (2007) claim that the regulation looks for explaining methods within organisational issues, which are organised and present propositions as to how they may be enhanced within the framework of the mode in which things are done. Cooper (1983) states the regulation concentrates on the fundamental of society. The regulatory standpoint concentrates on explanations and using concepts such as consensus, order, need satisfaction, integration, and equilibrium (Cooper, 1983).

At the opposite pole, the radical change perspective is more judgmental and critical. In terms of management and accounting, radical change correlates to a judgment about organisational issues which should be performed and proposes methods by which these issues may be carried out in order to create basic changes (Saunders, et al., 2007). In summary, the radical change dimension adopts a critical perspective on organisational life (Saunders, et al., 2007). In other words, the radical change dimension approaches organisational problems from the perspective of turning over the existing state of issues; the regulation dimension requests to act within the existing state of situations. Such a standpoint is concerned with potentiality as much as actuality, rather than acceptance of the status quo (Cooper, 1983).

5.2.3. The Burrell and Morgan Framework

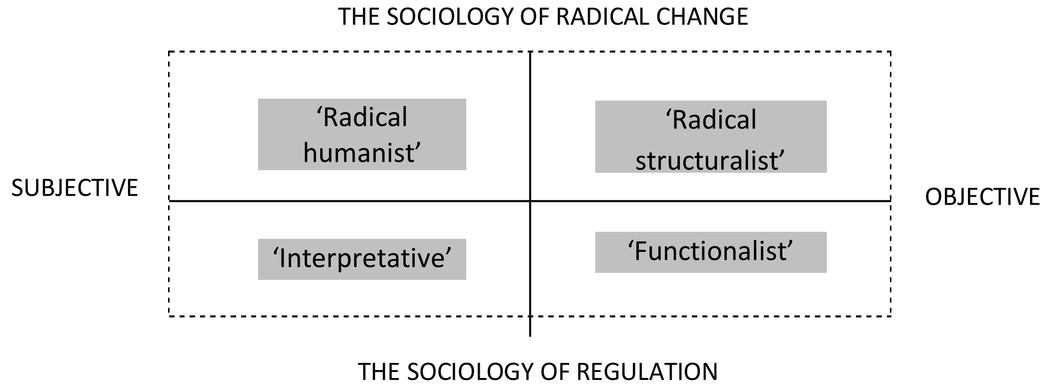
The central idea for Burrell and Morgan is that all theories of organisation are established on philosophy of science and theory of science (Burrell and Morgan, 1979). Burrell and Morgan (1979) discuss analysing approaches, as mentioned above, in terms of two dimensions. These dimensions are based on assumptions concerning the nature of social science and the nature of society (Burrell and Morgan, 1979). Hopper and Powell argue that features are involved in the Burrell and Morgan framework as follows:

> "First, the framework forms a map that can be used to find one's way through the wealth of research, the aims of which are sometimes confusing and the results conflicting… Secondly, a practically-oriented subject such as management accounting has often embraced theories from other areas with little concern for their philosophical underpinnings….Thirdly, commonly held views and taken-for-granted 'facts' often rest upon assumptions that are not recognized and thus not assessed… Fourthly, a map of classification of research according to its underlying assumptions may not only be useful as a way of organising previous literature, but it may also point the way towards new areas of investigation and the discovery of previously uncharted territory… Finally, in any research it is suggested that individual values, philosophical assumptions, theoretical backing, and research methods should all be related to each other and to the aims of the research (1985: 429-430)".

Burrell and Morgan (1979) build from two dimensions, based on assumptions about the nature of social science and the nature of society. The social science dimension consists of four components: assumptions about ontology, epistemology, human nature and methodology (Burrell and Morgan, 1979; Hopper and Powell, 1985). The other main dimension classifies two dissimilar approaches to the nature of society:

> "one is concerned with regulation, order and stability and sets out to explain why society tends to hold together, the other focuses on the fundamental divisions of interest, conflicts and unequal distributions of power that provide the potential for 'radical change' (Hopper and Powell 1985: p. 432)".

Figure (5- 2) shows Burrell and Morgan's (1979) theoretical framework



Taken from: Burrell, G. and Morgan, G. (1979) Sociological Paradigms and Organisational Analysis: Elements of the Sociology of Corporate Life. Gower, Aldershot (p. 22).

The horizontal axis, set out in Figure (5-2), represents substitute views about the nature of social science, from intense subjectivism to intense objectivism. The subjectivist position affirms to social science; it tends to be nominalist, anti-positivist, voluntarist, and ideographic (Burrell and Morgan, 1979; Cooper, 1983). The objectivist position assumes social science to be realist, positivist, determinist and nomothetic (Burrell and Morgan, 1979; Cooper, 1983). The vertical axis of Figure (5-2) illustrates assumptions about the nature of society, from regulation to radical change.

Burrell and Morgan (1979) arrange these differences as objective-subjective and regulation-radical change dimensions (see also, Gioia and Pitre, 1990). These dimensions are combined to shape four different research paradigms: functionalist, interpretive, radical humanist and radical structuralist (Hopper and Powell, 1985). These research paradigms are used to classify organisational research (Ryan *et al.*, 2002). Chua (1986) represents that these dimensions combine to obtain three paradigms: mainstream accounting research, interpretive research and critical accounting research. Burrell and Morgan (1979, p. 23) describe paradigms as follows:

> "It will be clear from the diagram that each of the paradigms shares a common set of features with its neighbors on the horizontal and vertical axis in terms of one of the two dimensions but is differentiated in the other dimension. For this reason they should be viewed as contiguous but separate – contiguous because of the shared characteristics, but separate because the differentiation is of sufficient importance to warrant treatment of the paradigms as four distinct entities. The four paradigms define fundamentally different perspectives for the analysis of social phenomena. They approach this endeavor from contrasting standpoints and generate quite different concepts and analytical tools".

Saunders *et al.,* (2007) provide some purposes of the four paradigms that are noted by the Burrell and Morgan framework, as follows. First, the four paradigms are to assist researchers clarify their assumptions about their perspective about the nature of social science and society. Second, the framework offers a useful method of understanding other researchers' approaches. Finally, it helps researchers to understand where it is possible to go and where they are going. The next subsections will argue these paradigms in some detail.

5.2.3.1. The Functionalist Paradigm

In the bottom right corner of the figure (5-2) for Burrell and Morgan's framework is functionalism, which has its roots in the regulation sociology and functionalism approach from objectivism. Burrell and Morgan (1979) state that functionalism is distinguished by concern, introducing descriptions of the status quo, social order, consensus, social integration, solidarity, need satisfaction and actuality. The social science feature of the functionalist paradigm is rooted in positivism, which tried to utilise models and methods of the natural sciences to investigate human behaviour (Burrell and Morgan, 1979). Burrell and Morgan (1979: 26) summarise that "(T)the functionalist approach to social science tends to assume that the social world is composed of relatively concrete empirical artefacts and relationships which can be identified, studied and measured through approaches derived from the natural sciences".

From the definition above, the functionalist perspective on the social realm is that it is reality and that knowledge is tangible. Also, functionalism is unable to introduce descriptions of social change (Burrell and Morgan, 1979). Functionalism has at its heart the wish to explain phenomena in relation to the function served by the phenomena in support of the purpose of an organisation (Otley and Berry, 1998: S109). Otley and Berry (1998) acknowledge that functionalism is often rejected in the sociology and accounting literature. Otley and Berry (1998) also observe that functionalism has a lack of research accumulation.

5.2.3.2. Interpretive Paradigm

As mentioned in figure (5-2), in the bottom left quadrant corner is interpretive, which is located within subjectivism and regulation of sociology. This paradigm shares the functionalism paradigm in terms of its perspective of regulation of sociology as nature of society. On the other hand, functionalism and interpretivism have both adopted different assumptions about the nature of social science objectivism-subjectivism. In other words, the interpretive paradigm adopts the approach of what researchers have described as regulation sociology through a subjective dimension to analyse the social world (Burrell and Morgan, 1979). The analysis of the understanding of human action or social phenomena varies radically from the understanding of natural phenomena motivated by the subjectivist nature of interpretive social research (Kakkuri-Knuuttila *et al.*, 2008).

Burrell and Morgan (1979) declare that the interpretive paradigm is informed by a concern to understand the world as it is, to understand the fundamental nature of the social world at the level of subjective experience. Ryan, et al., (2002) specify that the interpretive paradigm is concerned with understanding the social world and seeks to understand the social nature of accounting practices. The interpretive paradigm encompasses subjectivism research, which obtains seriously the subjective meanings that people attach to things (Lukka, 2010). Ryan, et al., (2002) add that the interpretive paradigm is focused on making sense of the social nature of daily life. Thus, interpretive paradigm recognises that the world could be seen as socially constructed (Lukka, 2010). Table 5-2 presents dominant assumptions identified with interpretive accounting research.

5.2.3.3. Radical Humanist Paradigm

In the top right corner of the quadrant is the radical humanist paradigm, which is located between radical change and subjectivism. In other words, the concern of sociology of radical change is to develop a radical humanist paradigm from the subjectivism perspective. According to Burrell and Morgan (1979), humanist radical change approaches social science and shares the interpretive paradigm from a standpoint which tends to be nominalist, anti-positivist, voluntarist and ideographic. As was mentioned above, Saunders, et al., (2007) state that the radical change dimension assumes a critical view on organisational life. For instance, researchers adopting this paradigm would be concerned with changing the status quo. Burrell and Morgan (1979, 32) enhance that:

> "It is a brand of social theorising designed to provide a critique of the status quo. It tends to view society as anti-human and it is concerned to articulate ways in which

human beings can transcend the spiritual bonds and fetters which tie them into existing social patterns and thus realise their full potential".

5.2.3.4. The Radical Structuralist Paradigm

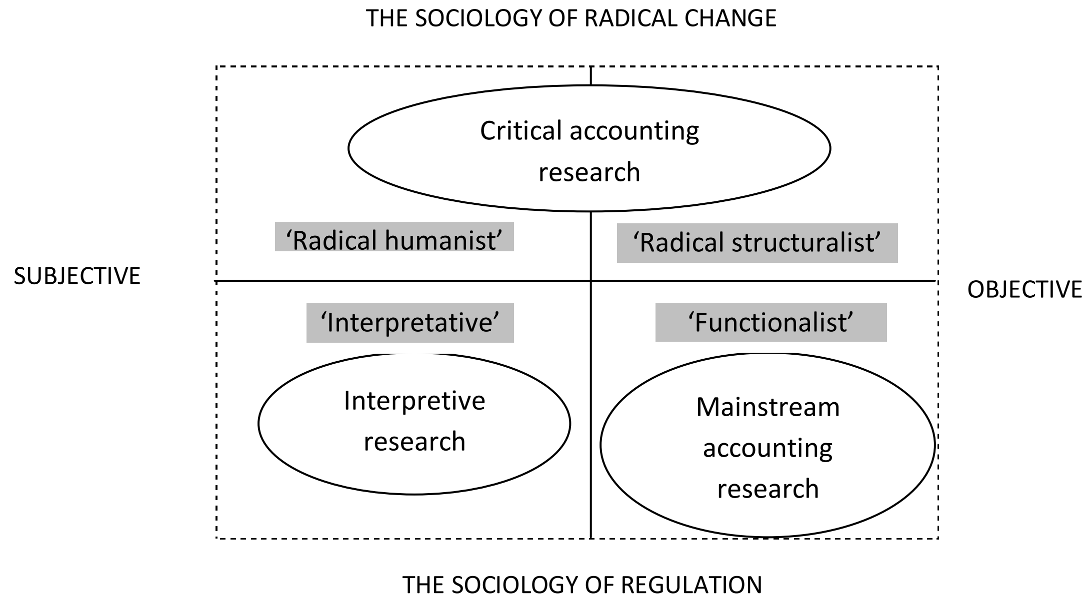
In the top right corner, the radical structuralist paradigm is located between radical change and objectivism. In other words, the structuralist paradigm promotes the sociology of radical change from an objectivist perspective. The radical structuralist paradigm shares the radical humanist paradigm in terms of the nature of society, unlike the radical humanist paradigm, which tries to understand the social phenomena from a subjective standpoint (Saunders, et al., (2007). Also, this paradigm shares the functionalist paradigm from a standpoint which tends to be realist, positivist, determinist and nomothetic (objectivist view) (Burrell and Morgan, 1979). Saunders, et al., (2007: 113) declare that "the radical structuralist paradigm is involved with structural patterns with work organisation such as hierarchies and reporting relationships and the extent to which these may produce dysfunctionalities".

5.2.3.5. Critical Accounting Research

Other authors, such as Chua (1986) and Ryan et al., (2002) incorporate both radical humanist and structuralist paradigms to obtain critical accounting research. The reason behind this integration is that they prefer to discuss 'radical theories' as one category of accounting research (Chua, 1986; Ryan et al., 2002; Hopper and Powell, 1985). Ryan, et al. (2002, 43) explain that "over the years the category that Hopper and Powell (1985) termed 'radical theories' has come to be labelled critical accounting research". Ryan et al. (2002) utilise the term that is derived from 'critical theory'.

Table 5-1 summarises four paradigm aspects: dimensions, goals, theoretical concerns and theory building approaches. Also, Table 5-2 compares three assumptions, which are adopted by Chua, (1986); Ryan et al., (2002); Hopper and Powell (1985): mainstream accounting research, interpretive accounting research and critical accounting research, and summarises these assumptions with three general categories: beliefs about knowledge, beliefs about physical things and the relationship between theory and practice.

Figure (5- 3) shows Hopper and Powell's taxonomy of accounting research



Taken from Ryan et al (2002:40)

Table (5- 1) the fundamental elements of the paradigms

	Goals	Theoretical concerns	Theory building approaches
Functionalist paradigm	To search for regularities and test in order to predict and control.	Relationships Causation Generalisation	Refinement through causal analysis
Interpretive paradigm	To describe and explain in order to diagnose and understand.	Social construction of reality Reification process Interpretation	Discovery through code analysis
The radical change humanist paradigm	To describe and critique in order to change	Social construction of reality Distortion Interest served	Disclosure through critical analysis
Structuralist paradigm	To identify sources of domination and persuade in order to guide revolutionary practices	Domination Alienation Macro forces Emancipation	Liberation through structural analysis

Taken from: Gioia and Pitre (1990: 590)

5.2.4. Selection of Research Paradigm

This study needs a methodology which assists the researcher to concentrate on explanation management accounting processes after privatisation in Libya. Also, the literature related to management accounting change states that there have been calls for more research to study this area with institutional perspectives. In addition, there has been no evidence about prior research in Libya focusing on this topic. So, the topic wants to study in-depth understanding of the field of the research. In order to accomplish that, the paradigm selected has to be able to realise the aims of the study. Furthermore, OIE recognise that knowledge is subjective (Scapens, 1994). So, interpretive paradigm seems to be suitable for this research, in order to obtain that in-depth understanding about the processes of management accounting practices. Therefore, the coming debate supports this selection.

Table (5- 2) illustrates the dominant assumptions with mainstream, interpretive and critical accounting research

	Mainstream accounting research	Interpretive research	Critical accounting research
Knowledge	Theory and practice are independent of each other and quantitative methods of data collection are favoured as based for generalisation	Theory is used to provide explanations of human intentions. Its adequacy is assessed via logical consistency, subjective interpretation and agreement with the actors.	Criteria for judging theories are always temporal and context-bound. Social objects can be understood only through a study of their history and change within the totality of relations.
Physical and social reality	Empirical reality is objective and external to subject and researcher. Human actors are essentially passive objects, who rationally pursue their assumed goals. Society and organisations are basically stable and dysfunctional behaviour can be managed through the design of control systems.	Reality is socially created and objectified through human intentions. Human action is intentional and has meaning grounded in the social and historical context. Social order is assumed and conflict mediated through shared meanings.	Empirical reality is characterised by objectivity but is transformed and reproduced through subjective interpretation. Human intention and rationality are accepted but have to be analysed critically, because human potential is alienated through false consciousness and ideology. Fundamental conflict is endemic in society, because of injustice.
Relationship between accounting theory and practice	Accounting is concerned with means, not ends, it is value neutral and existing institutional structures are taken for granted.	Accounting theory seeks to explain action and to understand how social order is produced and reproduced.	Theory has critical imperative, in particular, the identification and removal of domination and ideological practices.

Taken from: Chua (1986, pp. 605- 615)

As mentioned above, Burrell and Morgan's theoretical framework declares that the researchers who would like to study subjective domination as human science are likely to adopt radical humanist or interpretive paradigms. On the other hand, researchers who want to study objective domination as natural science are likely to adopt radical structuralist or functionalist paradigms. This is from an assumption of the nature of social science. Another assumption concerning researches is to find explanation for radical change, deep-seated structural conflict, modes of domination and structural contradiction. Those researchers are to be expected to analyse their work through the radical humanist or radical structuralist paradigm; for this reason, the explanation is to achieve change in the phenomenon being explained. Other researchers desire to generate in-depth understanding of what is happening merely to explore and investigate the situation. Those researchers will probably concentrate on interpretive or functionalist paradigms.

The nature of the study correlates to the end of the subjective standpoint (see Ryan, et al. 2002). The position at the end of the subjective standpoint tells us that this study might be established from radical change or interpretive. Moreover, the aim of this study concerns providing understanding and exploring management accounting change after privatisation in Libya, rather than generating change in the phenomenon under study. As a result, radical humanist, radical structuralist and functionalist paradigms will be disallowed and the interpretive paradigm will be appropriate to be conducted by this study. In this regard, Ryan, et al., (2002) start their argument that the starting point of interpretive research is the belief that social practices, including management accounting, are not natural phenomena. They add that this means that they must not look for universal laws and generalisations but for the rules which structure social behaviour; these rules are the outcome of the social behaviour. In other words, social structures are repeated as a result of social conditions and behaviour (Ryan *et al.*, 2002).

Ryan et al. (2002) add that, to study social practices, one has to look to the relationship between social action and dimensions of social structure. Moreover, Wichramasinghe and Alawattage (2007) claim that interpretive researchers should attempt to understand the relationship between the context and the role of accounting. Wichramasinghe and Alawattage (2007) also observe how people generate the meaning and value of organisational roles. Ryan, et al. (2002) claim that to study accounting from this perspective needs detailed study of accounting practices. For this aim, such studies do not provide the kind of predictive theory that is sought by positive researchers, as they are established on the belief that accounting practices are socially created and can be changed by social actors (Ryan, et al., 2002).

Ryan et al. (2002) claim to build theories to help researchers understand the nature of social structure, which shapes social practices. Such study can interpret management accounting as social practices (Ryan, et al., 2002). A deeper and richer understanding of the social context of researchers' work has to allow management accounting to manage a better role (Ryan, et al., 2002). At present a number of management accounting researchers investigate management accounting processes and organisational change, using institutional perspectives (Ryan, et al, 2002). This approach introduces Burns and Scapens' theoretical framework (Ryan, et al, 2002). Nowadays, there is a considerable number of accounting researchers who conduct their study in the spirit of interpretive paradigm (Kakkuri-Knuuttila *et al.*, 2008 ; Lukka, 2010 ; Lukka and Modell, 2010).

In management accounting literature, "interpretive accounting research is frequently characterized by what it is not, i.e., "non-mainstream" or "alternative""(Ahrens *et al.*, 2008: 841). So, interpretive researchers are looking for understanding of the nature of the management accounting practices and how practitioners exercise their management accounting knowledge (Scapens, 2008). "Interpretive researchers are advised to avoid emulating characteristics of the positivist research community and to meet the challenge of going beyond critique to policy and practice engagement" (Parker, 2008: 909). Vaivio and Sirén (2010) state that research paradigm plays a critical role. They argue that "the interpretive methodological paradigm serves important functions: it provides both a "methodological identity" and "paradigmatic economics""(Vaivio and Sirén, 2010: 131).

Interpretive accounting research can be conceptualised "as a loose alliance of many possible futures"(Baxter *et al.*, 2008: 885). Interpretive research has the potential to produce not only subjectivist but also explanations (Lukka and Modell, 2010). Lukka and Modell (2010) focus on the complex relationship between two central features of validation in interpretive management accounting research, namely authenticity and plausibility. They argue "the impression of authenticity can be enhanced through the construction of relatively holistic accounts giving voice to the ‘‘other"" (2010: 474). Plausibility is relevant for assessing the credibility of the explanations being developed. In North America, however, academic accounting research communities have not been impacted by interpretive accounting research (Merchant, 2008). After the research paradigm has been selected, the research approach should be discussed in the next subsection.

5.3. Research Approach

In the previous subsection, the research interpretive paradigm was selected and this one research approach will be argued. According to social science literature, there are two types of approach in methodology issues: quantitative and qualitative. Patton (1987) compares two types of research approach. He describes the quantitative approach as using standardised measures, that is, the suitable selections and experiences into predetermined response categories. On the other hand, qualitative research is a discipline of investigation in its own true right (Denzin and Lincoln, 2005). The qualitative and the quantitative approaches represent a fundamentally different enquiry paradigm and researchers' actions are based on the underlying assumptions of each paradigm (Hoepfl, 1997).

Qualitative studies have presented a comprehensive précis of the events in daily terms of those affairs (Sandelowski, 2000). Qualitative research varies to some extent from scientific study in being all-purpose. Methods involve research techniques and procedures utilised to acquire research data (Crotty, 1998 ; Silverman, 2001 ; Saunders *et al.*, 2007). These techniques include quantitative techniques, on the one hand, such as questionnaires, structure interviews, and statistical models, and, on the other, qualitative techniques like observation, unstructured interviews and archival records (Silverman, 2001 ; Saunders *et al.*, 2007). Ahrens and Chapman (2006: 822) argue that "the methodological literature has variously referred to qualitative approaches as naturalistic, holistic, interpretive, and phenomenological". The main divergence between quantitative and qualitative researches is the flexibility of qualitative methods (Mack *et al.*, 2005).

The main advantages of the quantitative approach can be measured but the quantitative approach has been limited in reactions with people (Browne, 2005). Hoepfl (1997) specifies that quantitative research uses experimental methods and quantitative measures to test hypothetical generalisations; also, quantitative researchers seek causal determination, prediction and generalization of findings. Saunders et al. (2007) propound that quantitative is a predetermined used data collection method, for example, a questionnaire, or data analysis procedure, like statistics and graphics, which generates or uses numerical data. Hussey and Hussey (1997) add that, in terms of the nature of social sciences, the quantitative approach is objective in its nature and concentrates on measuring phenomena. As result, the quantitative approach includes collection and analysis and dealing with numerical data and applying statistical tests. Therefore, this approach is not suitable for this study.

Qualitative research uses a naturalistic approach that seeks to understand phenomena in context-specific settings (Patton, 1987 ; Hoepfl, 1997). Saunders et al. (2007) affirm that qualitative is used predominantly for data collection methods, for example, interviews, or data analysis, for instance categories, that generate or use non-numerical data. In other words, qualitative can refer to data rather than words. Hussey and Hussey (1997) classify qualitative in terms of methodology, as an approach is more subjective in nature and involves examining and reflecting on perceptions, in order to gain an understanding of social and human activities.

Patton (1987) describes the qualitative approach as allowing the study of selected subjects, cases, or affairs in depth and detail; the truth that data collection is unlimited by particular programmes of analysis contributes to the depth and detail of the qualitative approach. Also, "qualitative research is an approach rather than a particular set of techniques, and its appropriateness derives from the nature of the social phenomena to be explored"(Morgan and Smircich, 1980: 491). Silverman (2001) compares sense and nonsense qualitative research. Sense qualitative research is methods used by qualitative researchers representing a common belief that can present a deeper understanding of social phenomena than can be obtained from quantitative research. On the other side, nonsense qualitative research is proposed that it should be considered at early or exploratory stages of study. From this perspective, qualitative research can be utilised to make sure with a setting before starting work on a long schedule of case study.

This may lead to another choice, between deductive and inductive approaches as types of research. Inductive and deductive reasoning are considered distinct logical and psychological processes (Goel and Dolan, 2004). Inductive reasoning is usually contrasted to deductive reasoning (Klauer *et al.*, 2002). In a qualitative approach, inductive rather than deductive analysis is needed (Thorne *et al.*, 1997). Deductive research is a study in conceptual and theoretical structure after that test data that was collected (Collis and Hussey, 2003). Otley and Berry (1998) provide definition for deductive that is, work generates hypotheses from theoretical assumptions and tests those hypotheses against empirical data. Deductive research is a study in which conceptual theoretical structure is developed and then tested by empirical observation; thus, particular instances are deduced by general inference. For this reason, the deductive method is referred to as moving from the general to the particular (Hussey and Hussey, 1997).

In another area, inductive research is a study in theory that is developed from empirical reality (Collis and Hussey, 2003). Otley and Berry (1998) present a definition for inductive that is, work includes attempting to create generalisations from observation findings in theoretical statements that try to interpret and explain what happened in specific phenomena. Hussey and Hussey (1997) report that inductive research is a study in which theory is developed from the observation of empirical reality; thus, general inferences are inducted from particular instances, which is the reverse of the deductive method. Since it involves moving from individual observation to statements of general patterns or laws, it is referred to as moving from the specific to the general (Hussey and Hussey, 1997).

Regarding the position as mentioned above, it cannot be described in terms of quantity approach, the role in the ongoing negotiation and interpretation, and the dysfunction or the effects (Wickramasinghe and Alawattage, 2007). An important aim of qualitative approach is the attempt at in-depth understanding of particular social phenomena (Patton, 2002). Also, qualitative research is related to interpretive paradigm "which seeks to describe, decode, translate and otherwise come to terms with meaning" (Van Maanen, 1979: 520; Easterby-Smith *et al.*, 1991: 71; Easterby-Smith *et al.*, 2008: 421). The qualitative approach is concerned with descriptions of how people are feeling about particular things and attempts to create ways to look at those things (Browne, 2005). Such an approach is normally related to sociologists to describe and interpret people's feelings (Browne, 2005).

The main authors in the management accounting field claim that the qualitative approach might be useful to apply in management accounting research, in which can be made a contribution to search how management accounting systems interrelate in the environment (e.g. Peters and Waterman, 1982 ; Hopwood, 1983 ; Kaplan, 1984 ; Hopper and Powell, 1985 ; Otley *et al.*, 1988 ; Scapens, 1990 ; Otley and Berry, 1994 ; Otley and Berry, 1998 ; Moll *et al.*, 2006b ; Hopwood, 2007 ; Vaivio, 2007). For this purpose, this study will adopt qualitative and inductive approaches, which attempt to understand and interpret the phenomena of management accounting change. After determination of research paradigm and approach, it should be launched using case study as the strategy, which is discussed in the next subsection.

5.4. Research Strategy

In the previous section, it was argued from the paradigm of research prospective. In that context, the study was focused on the interpretive paradigm that seeks to employ the end of the subjective standpoint as the nature of social science. Also, it concerned the sociology regulations as a viewpoint from the nature of society. Besides, the research approach of this study concentrated on qualitative methods. In this subsection, the research focuses on research strategy. In this context, there are some research strategies which have been utilised in management accounting research: case study, field study, field experiments *etc*. The case study as strategy has its roots in the broader field in social sciences, more specifically ethnographic researches and anthropology (Voss *et al.*, 2002). Moreover, the case study is a research strategy which focuses on understanding the dynamics present within single settings (Eisenhardt, K. M., 1989). Thus, this study will be concentrated on case study

There have been different definitions of case study in social science literature. Yin (2003, p.13) presents a definition for the case study that is 'an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries of the phenomenon and context are not clearly evident'. A quite similar one, "case study investigates predefined phenomena but does not involve explicit control or manipulation of variables: the focus is on in-depth understanding of a phenomenon and its context" (Darke *et al.*, 1998: 275). According to Yin (2003), the case study has been utilised in several positions to contribute to the knowledge of individuals, groups, organisations and social, political and related phenomena. In addition, the case study is found even in economics, in which the distinctive requirement for a case study begins out of the need to understand complex social phenomena (Yin, 2003). In brief, case study methods allow investigators to retain the holistic and meaningful characteristics of real-life events, such as organisational and managerial processes, international relations and the maturation of industries (Yin, 2003).

Some authors have determined some limitations of case studies as a scientific method (Scapens, 1990 ; Gummesson, 2000 ; Scapens, 2004 ; Adams *et al.*, 2006). These limitations can be summarised in the following three points: case studies lack statistics, case studies cannot test hypotheses and case studies cannot make generalisations (Gummesson, 2000). Scapens identifies some difficulties of case study as a research strategy:

> "First, there is the difficulty of drawing boundaries around the subject matter of the case. [….] The second difficulty for case study researchers stems from the nature of the social reality which is being researched. [….] This raises the problem of researcher bias. [….] The final difficulty of case study research [….] is the ethics of the researcher's relationship with his/her subjects. Many accounting case studies require access to organisations and to confidential information. Access may only be secured if confidentiality is assured" (1990: 276-277).

However, the reliability and validity of a case study is more significant than its generalisability, cited in (Bassey, 1981 ; Bell, 1987). On the other hand, case studies can be utilised to generate hypotheses (Gummesson, 2000). A good example of this role of case study is an exploratory case study. Scapens argues that:

> "In comparison with the more traditional forms of accounting research, it is important to recognise that case studies are concerned with explanation, rather than prediction. Researchers should avoid the temptation of thinking of case studies only in terms of statistical generalisations. Researchers who see generalisations only in this sense will either reject case study methods or not fully exploit their potential. Management accounting research will be greatly strengthened if case studies focus on explanation and theoretical generalisation" (1990: 278).

Management accounting provides information aimed at changing the behaviour of individuals. This effect on individual behaviour requires specific implementation to explore and understand reactions. Thus, case study in management accounting always concentrates on how people, acting individually or in groups, react to management accounting information, for example, cost or productivity data, or management accounting systems, for instance, control, planning or measurement performance systems (Atkinson and Shaffir, 1998).

Case study emerges to play the central role of exploration, which goes beyond that of mere description toward explanation from a positivist standpoint which shapes the cycle between theory (explanation) and data (description) to distinguish between deductive and inductive approaches (Otley and Berry, 1998). Otley and Berry (1998) follow that one reason for adopting a case study method in the research of accounting and control is that the function of accounting and other controls bring full understanding in separation. Besides, case studies have become regular in accounting research, particularly in management accounting (Ryan *et al.*, 2002).

According to management accounting change literature, there are diverse types of case studies which can be utilised in different ways by accounting researchers and can be summarized as follows (Scapens, 1990 ; Ryan *et al.*, 2002 ; Scapens, 2004 ; Adams *et al.*, 2006). First, in this types of case studies, the researcher tries to introduce descriptions of accounting practice. Second, illustrative case studies try to illustrate new or/and possible innovation practices. Third, experimental case study can be utilised to study the suggestions of researchers and assess the benefits. Fourth, exploratory case studies can be utilised to explore the reason for particular accounting practices. Finally, explanatory case studies try to explain the reason for observed accounting practices. Therefore, explanatory case study is suitable for the purpose of the study and consistent with interpretive paradigm and a qualitative research approach.

Ryan, et al., (2002) argue that accounting research has used a positive empirical methodology, relying to a great extent on the methods and theories of neoclassical economics. They add that case studies undertaken from an interpretive methodological position are likely to be quite different from case studies undertaken by positive researchers. They discuss and summarise some of differences in table 5-3 below. As discussed above, however, the suitable method of case study consistent with this research is an explanation case study. Cross-sectional studies are just able to recognise the relationships between variables at a specific point in time (Ryan, et al., 2002). Cross-sectional studies cannot explain how these relationships came about. Explanations of this nature need longitudinal case studies that look at relationships over long periods of time (Ryan, et al., 2002). However, longitudinal case studies and process studies of management accounting are now starting to appear within institutional theory.

Table (5- 3) shows difference in case study research

Type of research	Positive	Interpretive
View of the world	External and objective	Social construction
Type of study	Exploratory	Explanatory
Nature of explanation	Deductive	Pattern
Nature of generalisation	Statistical	Theoretical
Role of theory	Hypothesis generation	Understanding
Nature of accounting	Economic decision-making	Object of study

Taken from: Ryan, B., Scapens, R. W. and Theobold, M. (2002) Research method and methodology in finance and accounting, 2nd edition, London: Thomson Learning, p. 146

5.5. Research design

Yin (2003) states that every kind of empirical research has an implicit, if not explicit, research design. He adds that the design is the logical sequence that connects the empirical data to a study's initial research questions to conclusions. In other words, research design is a logical plan for getting from here to there, where here may be defined as the initial set of questions to be answered and there is some set of conclusions answering these questions (Yin, 2003). Between here and there the researchers will find some phases, including data collection and data analysis (Yin, 2003). Yin (2003) provides another way of thinking about research design as a "blueprint" of research, dealing with at least four issues: what questions to study, what data are relevant, what data to collect and how to analyse the results.

There are five critical steps (elements) of a case study research design as follows (Crosthwaite *et al.*, 1997: 5-6):

> "1 Presenting a clear and adequate specification of the theoretical issues and, from this, the questions that frame the study, 2 Clearly defining the unit(s) of analysis, including possible sub-units if these are warranted, 3 Deciding on the appropriate number of cases to explore within the study, 4 Clearly specifying the selection criteria for choosing the case studies, 5 Choosing an appropriate and effective data collection and analysis strategy, 6 Developing appropriate tests to ensure the validity and reliability of the approach taken in conducting the case study".

The previous steps or elements could be generally implemented in business research. In management accounting research, however, six steps have been identified (see, Scapens, 1990 ; Ryan *et al.*, 2002). These steps of case study are; preparation, collecting evidence, assessing evidence, identifying and explaining patterns, theory development and report writing. Therefore, these steps were suggested to follow-up in this research.

5.5.1. Preparation

According to Scapens (1990; 2004) and Ryan *et al.,* (2002), the first step of case study is preparation of theories which might be relevant to the case study. In this step, theoretical framework must be identified. In other words, the starting point for case study is the research framework and research questions (Voss *et al.*, 2002). In this regard, the researcher has to review theories that are available which might be relevant to the case and the subject of the study (Scapens, 2004). Chapter four has a discussion, the selection of institutional framework, with more details. Also, this step of the research was to specify clearly research question(s) to be addressed (see, Ryan *et al.*, 2002). Moreover, the researcher should decide on a suitable number of cases to explore in the research (see, Crosthwaite *et al.*, 1997).

According to Stake (1995), good research is not about good methods as much as it is about good thinking but an alternative is to dream up issues that are interesting. The researcher's greatest contribution, perhaps, is in dealing with research questions until they are just right (Stake, 1996). Also, Stake (1995) identifies issue questions. First, without previous experience with a case these are etic issues which have been brought from outside. Second, emic issues emerge; these are issues of people who belong to the case who have come from inside. Therefore, "how" and "why" questions are more likely to lead to the use of case studies (Yin, 2003). These questions can guide both theory testing and, more importantly, theory development (Voss *et al.*, 2002). On the other hand, theory building researchers need to have previous perspective of the general constructs or categories they intend to study.

Thus, the researcher's next pace in designing case research is the primary research questions beyond the suggestion study. This study seeks to explore management accounting processes after privatisation in Libya. In order to achieve this aim, the study addresses the following research question:

How do the processes of management accounting change take place in Libyan privatised companies?

In addition to the above research question there are other sub-questions as follows:

1. How can management teams and accountants understand and recognise any processes of change which have occurred in MAS and MAP since companies have been privatised?

2. How does the pressure from external factors affect the processes of MAS and MAP in the companies under study?

3. How can privatised companies adopt MAS and MAP from other successful companies in order to maintain the institutional stability?

Stake (1995) argues that it might be useful to try to choose cases that are typical or representative of other cases but a sample of one or a sample of just a few is unlikely to be a strong representation of others. Patton (1987) states that logic or purpose of selecting number of cases in qualitative methods is completely different from the logic probabilistic sampling in quantitative methods. Mintzberg (1979, p. 585), cited in Eisenhardt (1989, 536), noted: “No matter how small our sample or what our interest, we have always tried to go into organisations with a well-defined focus-to collect specific kinds of data systematically”. Patton (1987) discusses the strength of purposeful sampling lying in selecting information-rich cases for study in depth. Patton (1987, 52) states “Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of evaluation, thus the term ‘purposeful’ sampling”(Patton, 1987: 52). In summary, case study research is not sampling research (Stake, 1995). Therefore, this study focused on only two Libyan privatised companies as the cases numbered.

There are a number of reasons and conditions which have been taken into researchers’ consideration of selection sites: First, this study focused on Libya as one of the developing countries, the reasons for this choice showing that there is a lack of researches in that area. Second, companies were selected which had to be manufacturing companies. In other words, non-manufacturing companies may not have costing departments, which clearly implement some management accounting practices. Third, companies selected should have had experience in the application of management accounting systems and have a good costing system. Fourth, companies to be selected should be at least medium-sized Libyan companies[21] and the main headquarters located in Benghazi city, because the researcher already had accommodation in that city, the researcher having limited resources and time. Fifth, the researcher had to acquire access before starting the large stage of data-gathering, to read and obtain any documents from the companies. Sixth, the language spoken in sites of study is understood by researcher and interviewees.

5.5.2. Collecting Evidence

The second step of case study strategy is collecting evidence, by which is meant data collection methods or sources of data. The data for case study may come from six sources: documents, archival records, interviews, direct observation, participant observation and physical artifacts (Yin, 2003). This study used triangulation of data collection methods; interviews and observations as primary data with documents and archival records as secondary data. This is the same approach as has been adopted by (Lind, 2001 ; Marginson, 2002 ; Lukka, 2007). There can be given some details in the following context.

5.5.2.1. Interviews

One of the most significant sources of case study is the interview. It is an essential foundation of case study and it will be a led discussion rather than structured questions (Yin, 2003). In the literature of business, there are many kinds of interviews, each dissimilar from the others in structure, purpose, role of the interviewer, number of respondents involved in each interview and frequency of administration (Sarantakos, 1998). Furthermore, some kinds of interviews can be utilised in qualitative and quantitative research; for instance, semi-structured interviews and un-structured interviews can be utilized in qualitative research. The other example of an interview that is used in quantitative research is the structured interview (Bryman, 2004; 2008). The next subsection will discuss types of interviews with details.

According to Saunders, et al., (2007), therefore, there are diverse categories of interview. The first category distinguishes between informant and respondent interviews; whereas an informant interview mentions that the interviewee's perceptions

[21] This is according to Libyan measurement.

guide the conduct of the interview, in comparison, a respondent interview is one where the researchers lead interviews and the interviewees answer the questions. The second typology of interviews differentiates between standard and non-standard interviews. The last category is the most common and applies levels of formality and structure; this typology will be discussed in the next subsection.

5.5.2.1.1. Structured Interviews

The structured or formal interview is based on a pre-coded questionnaire or the interviewer has a list of prearranged questions (Sekaran, 2003 ; Browne, 2005). In other words, the interviewer asks the questions and then records the answers on a standardised schedule. It does not investigate further than the basic answers collected; it uses formal and standardised questions (Browne, 2005 ; Saunders *et al.*, 2007). Another typology distinguishes between standardised and non-standardised interviews (Saunders *et al.*, 2007). As a result, this type of interview is not useful to provide in-depth understanding. Also, it does not serve the purpose of the study. Therefore, there should be found another kind of interview that aims to obtain better understanding.

5.5.2.1.2. In-Depth Interviews

Under this class, there are three types of interviews; unstructured, semi-structured or informal interviews. These types of interviews depend on open-ended questions or simply a list of topics or themes which the researcher would like to discuss during interviews (Browne, 2005 ; Saunders *et al.*, 2007). The interviewees were asked open-ended questions that may have started discussions (see, Browne, 2005). The researcher attempted to put the interviewee at ease in an informal situation and encourage the interviewee to express his/her feelings and opinions (see, Browne, 2005). On the other hand, questions were generated in the flow of the conversation (see, Saunders *et al.*, 2007).

As mentioned above, the researcher obtains in-depth understanding and rich data if he utilises semi-structured or unstructured interviews. The aim of semi-structured interviews is to determine some initial topics, so that the researcher can decide what factors need additional in-depth exploration (see, Sekaran, 2003). As a consequence, the researcher would utilise to explore in-depth a universal field (see, Saunders *et al.*, 2007) in management accounting change. Several researchers have adopted in-depth interviews (Lapsley and Pallot, 2000 ; Lind, 2001 ; Kasurinen, 2002 ; Marginson, 2002 ; Scapens and Jazayeri, 2003 ; Ezzamel *et al.*, 2007 ; Lukka, 2007) to study management accounting change.

In accordance with Browne (2006), there are some advantages for semi-structured interviews. Firstly, semi-structured and un-structured interviews allow the interviewees more freedom and honesty. Secondly, the researcher can obtain valid information about the interviewees' feelings and opinions. Thirdly, semi-structured and un-structured interviews enable the ideas of the researcher to develop the interview. Fourthly, the researcher can adjust questions and change direction of the interview to follow the new ideas. Also, Yin (2003) affirmed that there are some advantages of interviews. The first feature is that the researchers can focus on the target directly. The other advantage is that the researchers can gain rich data from generating questions during the interview.

By contrast, limitations also exist. Firstly, the success of semi-structured interviews depends on the personality of the interviewer or the researcher, particularly when the interviewee answers the questions and introduces useful information and the researcher keeps the conversation going (Browne, 2005 ; Yin, 2009). In other words, this type of interview needs a high degree of training (Blumberg, et al., 2005). Secondly, there is a risk of researcher bias, which could affect the results, making them neither reliable nor valid (Creswell, 2003 ; Browne, 2005 ; Yin, 2009). Thirdly, in general, interviews are slower and more costly than postal questionnaires (Blumberg *et al.*, 2005 ; Browne, 2005). Fourthly, because interviews tend to be slow and expensive, for this reason the size of the sample usually is small (Blumberg *et al.*, 2005 ; Browne, 2005).

5.5.2.1.3. Interviews Themes

There are seven steps of interviews investigation, namely; thematising, designing, interviewing, transcribing, analysing, verifying, and reporting (Kvale and Brinkmann, 2009). Therefore, thematising is the first step in the interview procedure and is meant to formulate the purpose of the interview and prepare themes to be investigated before the interview start (Kvale, 2007). In this study, a variety of themes were discussed during the interviews between the interviewer and interviewees. These interview themes were divided into six sections or parts. In the first part, the interviewee was asked to present comprehensive historical background about the company. This was followed by an account of changes occurring during the past. Also, the main theme that the researcher wanted to argue with the participants was management and costs accounting systems and practices with measurement performance systems. It was not anticipated that each interview was requested to cover every theme (see, Yazdifar, 2004). The following introduces more details about each theme.

As mentioned above, the first section of the interview concerned historical background and objectives of the company. The interviewer introduced himself with some informal discussion. This discussion included general questions about: production, markets, customers, suppliers, competition, financial, resources, number of employees, sales trends, capital, operations systems and performance in the past, and the interviewer would ask about any changes to his or her function in the last few months. Also, the interviewer asked other questions, which related to strategies and goals, such as; the main aims of strategic, any changes in the strategic aims and aims instituted, assessed, and modified. These themes generated other questions during the interviews.

In the change part of the interview, the interviewee was invited to discuss important subjects, which is change that it included significant points such as: any effects of changes and whether they have affected interviewee functions; important changes in the current years; any effects of changes on the accounting systems and their functions; significant changes in the accounting systems in recent years.

The third part of the interview was integrated into two significant subjects, namely management and cost accounting systems. In this component, the interviewee would introduce more details about his or her job which related to accounting systems. On the one hand, the subjects under discussion that related to cost accounting systems and practices with the interviewee were as follows: kinds of costs systems that are utilised; managers persuaded by ways of calculating product costs; any changes the interviewee wanted to enhance current ways for calculating production costs; the way to improve calculation of product costs.

There were other themes which are related to management accounting systems and practices. These themes included some questions which are as follows: perceived aims of management accounting systems; coercion and the need to adjust these aims; kinds of management accounting reports which are received by managers, including usage; any departments other than the accounts department that have had responsibility for supplying financial and non-financial information; the major users of management accounting reports inside the company; management accounting systems that assist management in making decisions; satisfaction of managers with existing management accounting systems; helpfulness of the variety of management accounting reports; changes required to enhance the system and to make the accounting role more helpful to managers and decision makers.

In the interview component of performance measurement, the interviewer conversed with interviewees about performance measures. From this subject, there were devised some themes that can have been discussed with interviewees. These themes can be shown as follows: performance measures utilised within the company; performance measures changes in current years; kinds of financial and non-financial information being utilised; rewards and sanctions regulations; aims of performance measures; satisfaction of managers with existing performance measures systems; evaluation of the significance of the performance measures used; any changes occurring in recent years.

For the last part of the interviews, the interviewer opened other themes which were generated during the interview run. Moreover, these included some themes associated with the interviewee's job, for instance: role of budgetary and other financial information; monitoring of the department's performance; responsibilities and accountabilities; continuing education; training programmes; kinds of changes that interviewees considered to be happening in the company at this moment in time.

5.5.2.2. Mechanism of Collecting Interview Data

As mentioned above, the second to the fourth steps of interviews are designing, interviewing and transcribing respectively. In the designing stage, the researcher planned all procedures and techniques of interviews (Kvale, 2007). In the interviewing phase, the mechanics of conducting the interviews in the present study was undergone in three phases (see, Patton, 2002). The first stage is recording data; in this phase, tape-recording was utilized. In the second stage, notes during interviews were taken. In the final stage, processes after interviews were conducted.

Patton (2002) describes all these stages and they are detailed as follows: Interviews will take three stages: In the first stage, before the interviews themselves, the researcher prepares a list of themes which are discussed with managers and accountants. The second stage is during the interview itself; in this stage, the researcher is concerned to take notes that will appear from the discussions these notes were argued after the interviewee completes his/her conversation. Moreover, record tape is used. The last stage is after the interview, where the researcher transcripts and translates the interview before the data analysis phase.

5.5.2.2.1. Recording Data

Interview systems enable the researchers to take notes during and after interviews about interviewee responses (Creswell, 1998). Also, recording tape might be allowed to be used during the interview. In this case, the researcher has found more relaxation and flexibility to take notes and generate other questions. It does not matter what technique of the interviewing researcher will be utilised and it does not matter how carefully the researcher words the questions, it all comes to naught if the researcher is not successful in capturing the real words of the interviewee (Patton, 2002). Patton, (2002) stated that the data of interviews have to be real quotations conversed by interviewees. Nothing can replace these data: the real things said by actual people.

Saunders et al. (2007) presented that there are advantages and disadvantages of using audio-recording of the data of interviews. In terms of advantages, recording tape may be allowed; the interviewer can focus on listening and asking questions, questions can be formulated to be recorded accurately for using later, re-listen to interviews, direct quotes to be used, permanently record for others to use. On the other hand, disadvantages of audio- recording might affect the relationship between interviewee and interviewer, inhibit some interviewee answers and reduce reliability, needing a long time to transcribe the recording tape.

In this context, in accordance with the researcher's experience, the recording has many advantages. Most important of these advantages, it allows the researcher to generate questions from the participants' answers, rather than just write down what was said in cases of non- recording. On the other hand, the researcher has encountered many difficulties in convincing the interviewees to use the tape-recorder in interviews. For example, in the first case company, the tape-recorder had been refused by the Director of Internal Auditing Office, whereas the interview with the Assistant General Manager of Financial, Commercial and Administration Affairs had been stopped. Furthermore, in the second case company, the tape-recorder had been rejected by the Financial Director and Head of Costing Department.

5.5.2.2.2. Taking Notes during Interviews

Patton, (2002) affirmed that notes taking provides roles beyond the clear one of taking notes. Notes taking helps pace the interview by providing non-verbal cues about what's important, providing feedback to the interviewee about what kinds of things are especially "noteworthy" – literally (Patton, 2002). In opposition, the failure to take notes might point out to the interviewee that nothing of particular importance is being said (Patton, 2002). He/she will think the researcher is taking enhanced notes and will keep on talking (Patton, 2002). The position is that taking notes affects the interview process maybe during and after interviews. During the interview the interviewer has to take notes in order to generate other questions, regardless of whether it is being tape-recorded (Patton, 2002 ; Mack *et al.*, 2005). These notes were valuable when some interviewees requested the researcher to switch off the tape-recorder during discussion of specifically secret information (see, Mack *et al.*, 2005). As a result, taking notes associated with using a tape-recorder and they can have made the researcher's task easy to concentrate on the interview (see, Hoepfl, 1997).

5.5.2.2.3. After the interview

Afterwards, the researcher plans next stages of interviews and case study and some steps have been achieved. In this perspective, there are some issues that should be confirmed. Firstly, the majority of interviews were organised in companies' headquarters. Also, a tiny number of interviews were conducted out of official working hours[22]. Moreover, all interviews were run face-to-face; six of them were focus group and others were one-to-one. Consequently, there were no interviews conducted by telephone, because the costs of telephone calls are very expensive in Libya[23]. This is consistent with saying that "interviewers can be "expensive" if the number of completed interviews for the time spent on the phone" (Frey and Oishi, 1995 :143).

[22] The official working hours in Libya start at 7:00 am and finish at 2:00 pm.
[23] In Libya, there are two companies owned by the government; these companies monopolize mobile services. These companies have close prices and top-up systems are used, whereas contract systems are not available at all.

Regarding the interview processes, there is an intervention between steps of interview and case study. For example, transcribing is considered as the fourth step within interview steps, whereas it is deliberately included in the collecting evidence stage of case study. Also, there is a significant issue in these steps which is rather ignored by methodology literature. This issue is related to translation. So it should be narrated that interview questions and themes were principally formulated in English. These questions were sent to the supervision team in order to obtain its approval. After obtaining the approval, these themes and questions were translated into the Arabic language by professional translator (interpreter).

The interviews were initially transcribed into Arabic, before being translated into English. The researcher played a significant role in discussing issues related to translation. This phase also included the translation of data from Arabic into English, because all the interviews were accomplished in Arabic to facilitate the communication process with the participants. Also, Arabic was the mother language of interviewer and interviewees, which helped to create a deeper understanding of the complexity of the issues discussed. The translation process was conducted by the help of language specialists.

5.5.2.3. Observation

Observations have been typified as the fundamental base for research methods in both quantitative and qualitative approaches (Angrosino, 2005). Angrosino, (2005) argues that observation based ethnographic research is not so much a particular method of inquiry as a situation in which new ways of managing qualitative research are appearing. Observation can obtain deeper understandings than interviews alone, for the reason that it presents knowledge of the situation in which outcomes arise and may allow the researcher to observe events that participants themselves might not concern with or are refusing to talk about (Patton, 1990 ; Hoepfl, 1997).

Mack, *et al.,* (2005) explain that the observation is one of the qualitative methods, which have roots in conventional ethnographic research. Saunders, et al., (2007) define that the observation is the method for observation, recording, description, analysis and interpretation of behaviour of people. Hoepfl, (1997, p. 53) describes that "observational data are used for the purpose of description—of settings, activities, people, and the meanings of what is observed from the perspective of the participants." According to social science literature, there are two common types of observation, namely; direct observation and participant observation (Browne, 2005). Saunders et al., talk about another type of observation, which is structure observation.

5.5.2.3.1. Direct Observations

A number of authors prefer to use non-participant-observation for direct observation (Browne, 2005). In this context Yin (2003, 92) describes this type of observation thus: "by making a field visit to the case study "site" the researchers is creating the opportunity for direct observation." In other words, researchers observe the group or activity in the organisation without taking part in any way (Browne, 2005), presuming that the interest phenomena have not been merely several relevant behaviours or environment conditions that will be accessible for observation (Yin, 2003). Browne (2005) enhances that researchers can observe people in their normal situations without influence or changes in their behaviour or environment. This observation supplies another source of evidence in case study (Yin, 2003).

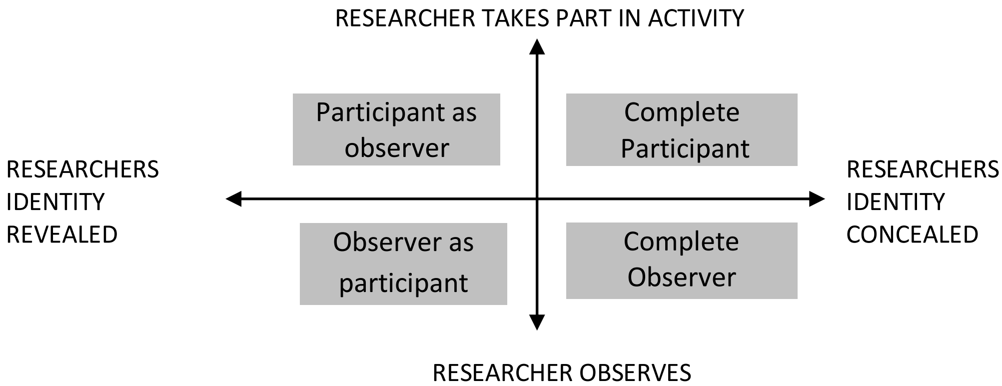
5.5.2.3.2. Structured Observation

Structured observation means that participants should not attempt to observe the whole thing but must observe what participants decide to observe. In this method the participant dose not attempt to change the environment being observed. Saunders et al., (2007) state that structured observation is systematic and has a high level of predetermined structure. They also add that the researchers who want to use this method in their data collection strategy will be adopting a more detached stance. Anyway, structured observation has a root from quantitative manners and it is concerned with frequency actions (Saunders, et al., 2007). As a result, this type of observation is not consistent with or for the purpose and approach of this study

5.5.2.3.3. Participant Observation

Participant observation can obtain deeper understanding than interviews alone, for the reason that it presents knowledge of the situation in which outcomes arise and may allow the researcher to observe events that participants themselves might not concern about or that they are refusing to talk about (Patton, 1987 ; Hoepfl, 1997). Saunders et al. (2007) and Gill and Johnson (2002) illustrate a fourfold categorisation of roles of the participant-observation in the figure below. They use the concept of the researcher's role and researcher identity. Each concept is considered as an axis and, at the axes' intersection, four different types of participant observation were obtained, see figure 5-4 below.

Figure (5- 4) illustrates taxonomy of participant-observation researcher roles



Source: Saunders, et al., (2007) Research Methods for Business Students, Pearson Education Limited, Harlow, p. 287.

In the top right corner, the complete participant is located within researcher takes part in activity and researcher's identity concealed. In the role of complete participant, the researcher is a full member of the group and participates in all the group decisions. No one in the group knows the observer's true identity or purpose. In other words, the researcher tries to become a member of group or community and takes a significant component of activities. On the other hand, the researcher's identity should be not revealed as that of the researcher, nor should anything about his/her research aim. This is the covert use of the researcher's identity mentioned to participants in the observation role (Atkinson and Shaffir, 1998).

In the bottom right corner, the complete observer is located within researcher observes and researcher's identity concealed. In this role the researcher identifies him/herself as an observer and intervenes in neither the social nor the decision-making process. Here, too, the researcher's identity should be not revealed as that of the researcher, nor anything about his/her research aim. However, in a completely different component to complete participant, the researcher has not taken part in activities of the group or community; it should have been sufficient to observe activities in the group (Saunders *et al.*, 2007). This is the overt of researcher's identity mentioned in the non-participant observation role (Atkinson and Shaffir, 1998).

In the top left the participant as observer is located within researcher takes part in activity and researcher identity is revealed. In the role of participant as observer, the researcher participates fully with the group but it is made clear that the observer is conducting research (Atkinson and Shaffir, 1998). In this type of participant observation the researcher must reveal him/herself and his aim as researcher. The researcher is particularly concerned to obtain the fact of the group or community (Saunders *et al.*, 2007).

In the bottom left, the observer as participant is located within researcher's identity is revealed and researcher observes activity. In the role of observer as participant, the researcher identifies him/herself as a researcher and takes part in the group's social process but takes no role in decision making (Atkinson and Shaffir, 1998). The researcher's identity as researcher should be obvious to the group or community, who must know his/her aim (Saunders *et al.*, 2007). This could be provided that a feature of the researcher is being able to be concerned in the researcher role (Saunders *et al.*, 2007). Finally, there is no direct similarity between participant as observer and observer as participant (Atkinson and Shaffir, 1998).

From different kinds of participant observations, the researcher's identity has to be revealed when he gathers the data from its sources. The reason behind this action is that the researcher is known by the participants[24]. Moreover, the researcher also cannot take a part in activities in companies being studied for this reason; he does not want to affect

[24] The researcher had been working as Financial Controller in the company which was selected as a first case study. Also, in the other company that was chosen as a second case study, the researcher has kept good relationships with some managers, accountants and employees.

the participants' behaviour. Furthermore, the researcher has limited time and resources. So, three types of participant observations, complete participant, complete observer and participant-as-observer, were refused. The fourth type, observer-as-participant, was adopted. In other words, the role of the researcher became a visitor (see, Ryan *et al.*, 2002 ; Scapens, 2004). Also, direct observation was implemented.

Browne (2005) and Mack, et al., (2005) sketch that participant-observation has some features. First, people can be studied in their job place rather than in another context of interview. Second, participant-observation provides much more in-depth understanding than other methods, such as interviews. Third, participant-observation needs a long period of time, which will give a more valid account of organisational behaviour. Fourth, participant-observation generates new ideas to explore that may appear during research itself. Yin (2003) specifies that the participant observation presents unusual chances for collecting case study data. First, a characteristic chance is correlated to researchers' ability to obtain access to events that otherwise would be unapproachable to scientific research. The second characteristic chance is the ability to perceive reality from the viewpoint of someone inside the case study rather than external to it. The third chances arise because researchers may have the ability to manipulate minor events, for instance, convening a meeting of group of people in the case study. Creswell, (2003) expresses that each type of participant-observation has specific feature. In complete participant, researchers have first-hand experience with participants. In observer as participant, researchers can record details as they are revealed. In participant as observer, researchers can notice unusual aspects during observation. Complete observers are useful in exploring a topic that may be uncomfortable for participants to discuss.

According to methodological literature, participant-observation has many problems. First, its being time-consuming is the major weakness point of observation (Browne, 2005; Mack, et al., 2005; Yin 2003). The second disadvantage of participant observation is the difficulty of documenting the data (Mack, et al., 2005); in other words, there is no real evidence (Browne, 2005). The third disadvantage of participant observation is that it is an inherently subjective exercise, whereas research requires objectivity (Mack, et al., 2005). The fourth disadvantage of participant observation is that sometimes the researcher may face a problem in obtaining the group's confidence (Browne, 2005).

Fifth, in participant observation it is difficult to make generalisations (Browne, 2005). Yin (2003) reports that the main weakness points correlated to participant observation have to act with the potential biases produced. First, researchers have less ability to work as external observers. Second, a researcher is likely to follow a commonly known phenomenon and become a supporter of the organisation being studied. Third, researchers may not have enough time to take notes. Fourth, if organisation being studied is physically dispersed, the researchers might face some difficulty in observing significant events. Creswell (2003) expounds that each type of participant-observation has a specific problem. In complete participant, researchers may be seen as meddling. In observer as participant, private information may be observed that researchers cannot report. In participant as observer, researchers may not have good attention and observation skills. In complete observers, researchers observe but without participation and certain participants might provide special problems in enhancing relationships.

5.5.2.3.4. Recording Data

The researcher relied heavily on the use of field notes, which are running descriptions of settings, people, activities, and sounds (see, Hoepfl, 1997). As a result, talking notes were planned during direct and participant observations activities. Acknowledging this, it was difficult to write down extensive field notes about what happened accurately at the same time (see, Mack *et al.*, 2005). Therefore, during the participant and direct observation period, brief notes were taken. Hoepfl (1997) recommends jotting down notes that will serve as a memory aid when full field notes are constructed. This should happen as soon after observation as possible, preferably the same day (see, Hoepfl, 1997). After observations, these notes were expanded and the majority of these notes were reflected as questions that were being asked through interviews.

5.5.2.4. Documents and Archival Records

Documents have usually been utilised as a source of data in social science study, either as the only way or in union with other ways (Sarantakos, 1998). Documentary information is likely to be appropriate to every case study theme and this kind of information can take many forms and should be the purpose of a clear data collection plan (Yin, 2003). These may be public documents, such as minutes of meetings, newspapers and private documents, such as journals, diaries and letters (Creswell, 2003). The most common documents utilised in case study are the following (Yin, 2003), (Saunders, 2004) and (Sarantakos, 1998) as the following: Personal documents, for example, letters, memoranda, notes, communiqués, autobiographies and diaries; Administrative documents, for instance, agendas, announcements and minutes of meetings, proposal reports and other internal reports; Formal studies that include other reports related to particular subjects.

An archival record frequently takes the form of computer files and records also may be significant (Yin, 2003). The archival records technique lets research questions, which lead the past and change over time, be responded to and an ability to respond to such questions will be limited by the nature of archival records (Saunders *et al.*, 2007). The most common archival records used in case studies (Yin, 2003) are the following: Service records, for example, those showing the details of clients served over a given period of time; Organisational records, for instance, organisational charts, financial statements and budgets over a period of time; Maps, flow charts and charts of the geographical characteristics or design of status; Survey data, for example, census records or data previously collected; Personal records such as diaries, calendars and lists of names with telephone numbers.

Accordingly to Creswell (2003), documents and archives have some advantages and disadvantages. Firstly, advantages include: Enable a researcher to obtain the language and the words of participants; can be accessed at a time convenient to the researcher as an unobtrusive source of information; Represents data that are thoughtful, in that participants have given attention to compiling; as written evidence, it saves a researcher the time and expense of transcribing. Secondly, limitations include: May be protected information unavailable for public or private access; Requires the researcher to search out the information in hard-to-find places; Requires transcribing or optically scanning for computer entry; The documents may not be authentic or accurate; Materials may be incomplete.

In this context, there have been some documents collected. These documents have been in forms such as hardcopy and others have received as softcopy. Therefore, documents were collected from the first case company as follows: monthly reports for the period of time from January 2008 until April 2009 from various administrations, departments and divisions; the opening balance sheet on 01/07/1976; the annual financial statements from 31/12/2002 to 31/12/2008; company budgeting for the year 2009; the new organizational structure of the company; the financial system, including the costs accounting system; the essential regulations; the establishment contract; a sample of the expenditure analysis report form; instructions issued by the parent company; the general activity report of the company for discussing in the general assembly meeting; the pricing model report (sample one class); the fixed assets report and its depreciation (sample one item); and the special report relating to re-distribution of costs to plants and products' pricing in flexible wires plant at different production levels.

On the other hand, huge numbers of documents have been collected as softcopy, which were associated with the second case company. Documents could be unconfined as follows: job descriptions and organizational structure; pricing reports; financial statements; general activity report 2009; production reports 2008-2009; sales reports from 2001 to 2009; interruptions and production loss reports; annual financial statements from 2002 to 2006; stack finishing production report 2008-2009; employees' functional mobility on cadre; employment power position report; new establishment contract; new essential regulations; the position of job leaving in accordance with qualifications and reasons 2008; the position of training plans 2008 and 2009; report of budgeting followed-up 2008; the payment to general people's committee for financial report 2008-2009; national expenditure report 2008-2009; report of dept position 2008-2009; report of industrial waste and disposal methods 2008-2009; monthly report of production quality 2008-2009; exporting report 2008-2009; and other huge documents as softcopy, such as letters, meetings minutes of certain committees and other specific reports have been obtained. Hardcopies documents were also obtained and some of these documents are attributed to the company's establishment.

The study employs triangulation of data collection methods, including direct and participant observation, semi-structured and un-structured interviews and documentation and archival records. First, the study employs participant observation, and, more specifically, the researcher was observer as participant. Second, archival records allow exploring any changes from the past over the time. So, the researcher examines the archival records in both companies under the study. Also, the researcher might have made inferences from documents. Finally, semi- and un-structured interviews are applied.

This study was conducted by interviewing multiple interviewees; the researcher may increase the validity of this source of data. In the first stage of data collection, including the pilot study, the researcher conducted over a period of less than three months about 20 interviews. Interviews were conducted and finished with managers and accountants of two Libyan privatised companies. Tables set out in appendices 1-5 represent information about the details related to interviews and interviewees, such as interviewee’s position, date and time and interview duration.

The following description relates to the first case study. The data collection was conducted in two stages: the first stage included a pilot study in 2008 and the second stage in 2009. Semi-structured and un-structured interviews were conducted with different organisational levels, including managers, accountants, and employees. Documents, related to specific issues that emerged from the interviews, were obtained. The interviews also included questions that were raised as a result of the direct participant observation previously carried out. 24 interviews were conducted, lasting 29 hours. Six Directors, Heads of Departments, and the Senior Cost Accountant were interviewed on more than one occasion.

The following description relates to the second case study. The data were collected over 6 months in two stages, in 2008 and 2009. The pilot study lasted for 2.5 months during 2008 and the main part of the study took 3.5 months during the summer of 2009. Open-ended questions were implemented and interview design was employed to collect data during the period of pilot study. Semi- and unstructured interviews were conducted in both stages of the study, which were supplemented by an analysis of documents, observations notes and direct observations. The interviews were accomplished during two stages, with 29 academic staff, managers and head of departments at different organisational levels. The number of interviews conducted was 19, four of which were in focus groups, and they lasted a total of 19 hours. Each interview took between 0.5 and 2 hours.

5.5.3. Assessing Evidence

According to some authors in methodology literature, there have been tests that the researchers can use to evaluate the quality of their studies design. These tests are validity and reliability, which have a number of measurements. In the perspective of Yin (2003), good case studies designs should sufficiently concentrate on what researchers' identify as construct validity, internal validity, external validity and reliability (McKinonn, 1988 ; Ferreira and Merchant, 1992 ; Atkinson and Shaffir, 1998 ; Reige, 2003 ; Yin, 2003 ; Saunders *et al.*, 2007). In the literature of methodology many authors have proposed some tactics that case study could be utilised to adopt for these tests in an appropriate method (Eisenhardt, K. M., 1989 ; Atkinson and Shaffir, 1998 ; Reige, 2003 ; Yin, 2003). In any study this is an important method to overcome possible problems of inaccuracy.

Yin (2003) declares that the research has to be supposed to represent a logical set of statements; the researcher also could judge the quality of any design according to certain logical tests (Yin, 2003). These tests consist of four types that are important tests for case studies and for empirical social science researches (McKinonn, 1988 ; Reige, 2003 ; Yin, 2003 ; Saunders *et al.*, 2007). These tests have been commonly utilised to establish the quality of case studies (Yin, 2003). Table 5-4 shows the four tests mentioned above, with widely used and recommended case studies strategies also cross-referenced to the research stage when the tactic is to be used. Yin (2003) states that case studies' important revelation is that the several tactics to be utilized in dealing with these tests must be used during the all stages of case studies.

Table (5- 4) illustrates case study tactics for four design tests.

Tests	Case study tactic	Stage of research
Construct validity	Use multiple sources of evidence Establish chain of evidence Have key informants review draft case study report	Data collection Data collection Composition
Internal validity	Do pattern-matching Do explanation-building Address rival explanation Use logic models	Data analysis Data analysis Data analysis Data analysis
External validity	Use theory in single-case studies Use replication logic in multiple-case studies	Research design Research design
Reliability	Use case study protocol Develop case study database	Data collection Data collection

Taken from: - Yin (2003), Case study research: design and methods, Thousand Oaks, CA, Sage Publications, 3^{d} edition, p. 34.

5.5.3.1. Validity

Mckinnon (1988) defines validity as concerned with the question of whether the observer is examining the phenomenon he/she claims to be examining. Mckinnon adds that validity is impaired if the design and/or conduct of the research are such that the researcher is unintentionally studying either more than or less than the claimed phenomenon. Silverman (2000) propounds that the general definition of validity is the degree to which an account exactly represents the social phenomena to which it refers. Gill and Johnson (2002) state that there are three kinds of validity; the following subsections describe those techniques.

5.5.3.1.1. Construct Validity

The first test in case study research is construct validity (Yin, 2003). Construct validity asks whether researchers are measuring what they want to measure (Atkinson and Shaffir, 1998). Saunders et al. (2007) define that construct validity is the extent to which researchers' dimension questions really measure the attendance of those constructs that they planned to measure. The major threats to construct validity are those created by bias, either through the process of observing itself or bias introduced by the observation method.

There are some tactics which must be taken into account when researchers test construct validity. First, researchers have to employ multiple sources of data collection, such as triangulation of interviews, documents, artefacts and observations (Atkinson and Shaffir, 1998 ; Reige, 2003 ; Yin, 2003). Multiple sources of evidence are clearly needed when little information is available on management accounting change after privatisation in Libya. Second, researchers should establish chain evidence in the data collection stage, that is, use of interview transcript and observations notes during visiting sites of the study (Reige, 2003 ; Yin, 2003). Third, researchers have to select clearly the observation method (Atkinson and Shaffir, 1998). Fourth, researchers have to demonstrate evidence of the consequence of the observed review of the data for exactness and rationality. Also, Yin (2003) declares that researchers should be sure to cover two steps to meet the test of construct validity. Firstly, they must select the specific types to be studied and relate these to the aim(s) of the research.

5.5.3.1.2. Internal Validity

This test, which has been given attention in case studies research, is internal validity (Yin, 2003). Atkinson and Shaffir (1998) assert that internal validity is required if researchers have taken steps to ensure that the evidence used to deduce the casual relationship is complete. Hoepfl (1997) notes that internal validity refers to the extent to which the findings accurately describe reality. Saunders, et al., (2007) declare that internal validity describes the extent to which findings can be attributed to interventions, rather than any flaws in research design. Yin (2003) focuses on two points in this field. Firstly, internal validity is only a concern for casual or exploratory case studies. Secondly, the concern over internal validity may be extended to the broader problem of making inferences.

Methodology literature presents some techniques that might be utilised to enhance internal validity, which are the following. First, it should be used for within-case-analysis and the cross-cases in the data analysis stage (Miles and Huberman, 1994 ; Reige, 2003). Second, it can be exhibited on illustrations and diagrams in the data analysis stage, to help explanation-building in the data analysis stage (Miles and Huberman, 1994 ; Reige, 2003). Third, the researcher has to ensure internal coherence of results in the data analysis stage that could be enhanced by cross-checking the findings (Reige, 2003 ; Yin, 2003).

5.5.3.1.3. External Validity

The third test deals with the problem of knowing whether a study's findings are generalisable beyond the immediate case study (Yin, 2003). Hopefl (1997) points out that external validity refers to the ability to generalise findings across different settings. Atkinson and Shaffir (1998) declare that external validity enquires if researchers identified obviously the population to which their results employ. The main problem in the case study is generally reported only with the small size of sample. Then, statistical generalisation, when outcomes of the sample are generalised to the larger population, is not obtainable in the case study (Atkinson and Shaffir, 1998). As an alternative, the approach is to use the case study to develop or build theory rather than to generalise the larger population (Atkinson and Shaffir, 1998). In this case, researchers should distinguish the boundaries beyond those findings that cannot carefully be applied (Atkinson and Shaffir, 1998).

Also, in terms of external validity, the same writers presented techniques that may be utilised to increase a study's external validity; those techniques are clarified in the following text. Firstly, utilising theoretical replication is logical in multiple case studies in the research design phase (Reige, 2003), or is there any logical discussion to expect influence (Atkinson and Shaffir, 1998)? Secondly, there have to be determined the scope and boundaries in the research design stage that will assist in achieving analytical generalization rather than statistical generalization research in the case study design stage (Marshall and Rossman, 1990 ; Reige, 2003). Thirdly, researchers have to explain clear evidence of the temporal location between cause and effect, thereby providing clear evidence that the cause precedes the effect in time (Atkinson and Shaffir, 1998). Fourthly, the evidence must be compared with relevant literature in the data analysis stage, to sketch an obvious contribution and generalise those within the scope and boundaries of research, not to a larger population (Reige, 2003 ; Yin, 2003). Fifthly, researchers have to state carefully in a cause and effect model whether the cause is necessary or sufficient or both and provide evidence that is consistent with the indicated model of cause and effect (Atkinson and Shaffir, 1998).

5.5.3.2. Reliability

In context of reliability, Scapens (1990: 274) provides comprehensive explanation of reliability as follows:

> When using quantitative research methods, researchers are concerned with the reliability and validity of evidence. In such research, reliability is the extent to which evidence is independent of the person using it and validity is the extent to which the data is in some sense 'true'. Such interpretations of reliability and validity may not be appropriate in case study research, especially holistic research. Reliability which implies an independent, impersonal investigator and validity which implies an objective reality are likely to be meaningless to a holistic researcher.

5.5.4. Data Analysis

There are several descriptions of data analysis in the literature of social science. Yin (2003) introduces a general definition for data analysis that consists of examining, categorising, tabulating, testing or otherwise recombining both qualitative and quantitative evidence to address the initial propositions of study. Creswell (2007; 1998) provides specific concept of data analysis in qualitative inquiry, which, analysing text and multiple other forms of data, presents a challenging task for qualitative researchers to decide how to represent the data in tables, matrices and narrative form, adding to the challenge. Saunders, et al., (2007) defined that data display and analysis is a process for the collection and analysis of qualitative data that includes three concurrent sub-processes of data reduction, data display and drawing and verifying conclusions.

Saunders, et al., (2007) indicate that there are two aspects arising from a cautionary note. First, researchers have to take the advice of Marshall and Rossman (1990), who involve data analysis as one of the issues that researchers must focus on at the time researchers are formulating a proposal to undertake qualitative approach. Second, the process of analysing data is likely to begin at the same time as data collection, which is preparing data for analysis. In this aspect, interviews are usually recorded and subsequently transcribed (word-processed).

Creswell (2007; 1998) argue for three strategies which are selected by three qualitative authors (Bogdan and Biklen, 1992 ; Miles and Huberman, 1994 ; Wolcott, 1994), the reason being that they represent different perspectives. Hussey and Hussey (1997) assert that the major methods used to analyse qualitative data have been divided into two categories, quantifying and non-quantifying methods of data analysis. They added that the researchers' selection depend on research paradigm. If researchers adopt a positivistic paradigm, they are likely to use one of these quantifying methods. On the other hand, if researchers applied a phenomenological paradigm, they might prefer not to apply quantifying methods; they are more likely to utilize non-quantifying methods.

In the same context, Yin (2003) argues that there are strategies which can be utilized in practising five specific techniques for analysing case study: pattern matching, explanation building, time-series analysis, logic models and cross-case synthesis. Yin (2003) added that the first four are applicable whether a study involves a single or a multiple –case design and every case study should consider these techniques. Also, Yin (2003) provides that, of three strategies, one of them will assist the researchers to treat the evidence fairly, produce compelling analytic conclusions and rule out alternative interpretations. Moreover, Yin (2003) identifies that the three strategies are as follows; relying on theoretical propositions, thinking about rival explanation and developing a case description.

In this study, the data analysis phase was started after the data collection was completed. This phase included detailing the interviews; observations were codified, and documents and reports were summarised. These data have been repeatedly consulted during the analysis. The data analysis process was initiated through open coding of all the translated data. The open coding process began by allocating the concepts and symbols of the main themes, paragraphs and sentences, following normal research methodology (Miles and Huberman, 1994 ; Strauss and Corbin, 1998 ; Mason, 2002 ; Yin, 2003 ; Bazeley, 2007). The researcher entered all the coded data into the QSR software.

A comparison between different methods of analysis makes an interesting debate. Key authors in the field of management accounting change do not agree with the use of computer software such as QSR. For instance, Scapens argues that:

> I have not found any them helpful for my research. But I understand that others do find them very helpful. They seem most appropriate when similar questions and issues are covered in number of different interviews—for example, when structured interviews are used. But in my case research I normally use unstructured interviews and work with the word-processed transcripts (2004:270).

The researcher, based on his experience with QSR, agrees with Scapens in relation to the latter's point concerning semi and/or unstructured interviews. However, QSR is a good idea to organise and manage a huge amount of data from different sources. Qualitative data can be analysed without any specific type of software, such as QSR, but this procedure will be accompanied by some risk including missing very important components of data (Bazeley, 2007).

Therefore, this study will take in its consideration to depend on theoretical framework from OIE, NIS and power mobilisation as a means to explore and explain the results of the study. In addition, data analysis of this research will be conducted in two phases. The first will be presented each of the two case studies in order to obtain a rich understanding of the case. In the second will be used across the two case studies to search for common patterns and unique features.

The important notions in case study research are analysis unit(s). The unit of analysis is the main unit which researchers are using as analysis in their researches. According to Yin (2003), in the classic case study, 'case' may be an individual person in the case being studied and individual is the primary unit of analysis. However, the main factor in choosing and making decisions about the suitable unit of analysis "is it to decide what the researchers want to be able to say something about at the end of the evaluation" (Patton, 1987: 51). On the other hand, "institutions constitute the principal unit of analysis"(Wisman and Rozansky, 1991: 718).

In this study, the researcher conducted interviews with managers and accountants in two Libyan privatised companies. Consequently, the study has not used the classic case study in early or latter stages of analysis. So the unit of analysis was not an individual manager or accountant. Furthermore, the study concerned with making cross-cases analysis between two Libyan privatised companies in the deferment pace of the study. Therefore, the unit of analysis in all phases is an institution; this is according to the theoretical framework adopted by this study. This is consistent with Scapens' (1994); the unit of analysis in institutionalism is an institution, rather than the rational behaviour of individuals (see also, Hodgson, 1998).

5.6. Conclusions

This chapter has discussed many issues that would determine the methodological features of this study. From the beginning, the research philosophy and paradigm settled on the adoption of a single paradigm instead of the multi-paradigm which is the interpretative paradigm. Various research approaches are discussed, which is appropriate to the research philosophy and paradigm that have been selected. In this context, it is clear that the qualitative approach fits the research paradigm and the subject of the study as well. The qualitative research approach has many strategies, including the case study strategy. On the one hand, the case study strategy is adopted by this study because it is appropriate to the subject of the study, research philosophy and qualitative approach. On the other hand, it is the response to repeated calls in management accounting literature to use this method to provide in-depth understanding of a specific phenomenon in society, such as management accounting.

A case study is designed, which includes six steps. The first step is the preparation, which includes identifying the theory by which to interpret the results of research. In addition, this stage must contain a clear demarcation of the research questions and the number of case studies that can be included in this study, while the data collection phase includes the use of triangulation data collection methods, which consist of the interview, observation and documents. This stage and subsequent stages comprise the mechanism by which the data collection checks the validity and conduct supplementary necessary tests, in addition to how the results of the study are explained by institutional theory.

In Chapters six and seven, case studies are discussed. Each case study has been listed in a separate chapter. In other words, steps have been identified in the case study design and have been reflected in the practical application of these studies. The next two chapters contain an introduction and give a brief historical background for each company, this is, as well as, reviewing the factors that would affect management accounting systems and practices. Also, each chapter contains a discussion of the most important changes and developments in management accounting systems and practices in each company**.** In chapter eight**,** these two case studies are compared with each other, as well as their results compared with the results available in management accounting literature.

CHAPTER SIX: THE FIRST CASE STUDY

6.1. Introduction

This chapter introduces the results of the first case study. The chapter begins with details of the historical background of the company under study. This section includes some information, for instance, company establishment, capital, number of employees and number of plants. It is followed by some sections which have shaped the main factors that affect the management accounting systems, such as raw material and suppliers, marketing, customers and market, organisational structure, company's objectives, training and technology used in production. Moreover, the chapter concludes by focusing on the main theme of this study that is management accounting systems, change and measurement of performance systems.

6.2. Historical Background of the Company

In the 1970s, the Libyan government focused on development projects, particularly in the manufacturing sector. In this regard a number of laws were issued, including Law No. 11 of 1976 by the Revolutionary Command Council (RCC), establishing the public company, GCC,[25] with its headquarters located in Benghazi city. The law of establishment determined that the company's life was 25 years; however, this could be extended by the General People's Committee (GPC). The company's life was increased by 25 years in 1992. The law also determined the objectives of the company, namely the issuance of agencies; the manufacture and marketing of the cables for housing use both at home and abroad; implementing projects; and importing and exporting.

The company was established with a capital of LD7m, distributed into 70,000 shares i.e. LD100 for per share. The shares were fully subscribed to by the General Authority for Industry. In accordance with the Secretary of the People's Committee for Industry and Minerals resolution of 1993, the company's capital was increased by LD25.7m to LD32.7m. Initially the company had only one factory but a number of further factories had been subsequently established between 1985 and 1992, funded through loans rather than the state. Despite these additional plants, the company's capital was not increased until 1993.

[25] The commercial name of the company has been disguised.

In 2007, the company's name was changed to JSCC, at which time the company was re-valued at LD78.85m, based on the decision of the GPC No. 425 of 2007. In addition, the company was transformed from a fully state-owned company to a joint stock company. The Technical Consultant declares that "this was not an addition to capital but rather is a result of the re-evaluation process". Also, the former Director of the Planning and Follow-up Office[26] proclaims:

> "A big mistake has been made regarding the revaluation process, as the evaluation is based on the replacement value, which will affect the price and costs of products. In other words, unrealistic costs are incurred, with the subsequent inflation of the book value of machinery and equipments".

The Commercial Director Affairs provides his view regarding to re-evaluation issues as follows:

> "The main reason is the revaluation using the replacement value, which means the re-evaluation is based on the current prices. For example, the land plot on which the company is established has a book cost of LD1m, while it is valued at more than LD5m based on current land prices, and the same can be said about the rest of the assets. In this regard, it is worth mentioning that, even though some of the assets have zero book costs, they have been reassessed".

Initially, the company had a dispute with the supplier over the specifications of some equipment, which continued until July 1976, the date of the first budget, at which stage a resolution was issued to declare the company independent. Until the end of 2006, the company was in the public sector and under the supervision of the Secretariat of the General People's Committee of Industry and Minerals. During the first half of 2007, the company was supervised by the PCOTCEU .[27] The role of PCOTCEU was to assess the value of the company and then transfer it to the Social and Economic Development Fund (SEDF),[28] which it did in the second half of 2007 after the company had its file accepted by the Libyan Stock Market management. The SEDF's mission was developed along the lines of other privatised Libyan companies. Thereafter, the company was transferred from the SEDF to become a subsidiary of the Industrial Investment Holding Company (IIHC).

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[26] This person became Executive Director during the second stage of data collection.

[27] As mentioned in chapter 2, PCOTCEU's role was to determine the value of public companies. PCOTCEU formed a committee which consisted of a group of professionals to correct the mistakes which had been made during the re-evaluation of the task.

[28] The main task of SEDF was to transfer companies from the public to the private sector.

The company has 900 workers approximately, who are distributed between the four plants and service divisions. The Senior Cost Accountant, in this context, proposes that "analysis must respond to the following questions: First, does the company need this size of employment? Second, has the employment been fairly distributed? Third, does the cadre really exist?" The Director of Human Resources tries to justify the number of employees as follows:

> "The company was intended to create employment opportunities for Libyans, in addition to contributing to the general development that was taking place within the country. This project has been fully funded by the state and employs a national work force, while the technical assistance has been provided through contracts with international companies specialising in this area".

6.3. Changes

The company's dependency has witnessed some changes during its life, as mentioned above. The changes in this dependency have affected some rules, routines, norms and culture within the organisation. For example, before and during the privatisation stage, the previous administration made efforts to control and audit expenditure, which has increased the administration load. In response, centralisation occurred; however, the Director of Information Technology Office remarks that:

> "When centralisation was created, everything was negatively affected. The employee cannot even apply for a vacation without the permission of the Executive Director. This coincided with control of expenses, which have become more centralised, even on leaving the company. This centralisation has affected the production and, in particular, the human resources".

The Technical Consultant discusses the change after privatisation:

> "There has been very little change in fact the only exception being that the administration was freed from the restrictions and measures that were imposed when it was a subsidiary to the public sector. It was anticipated that, when the company turned into a joint-stock or private company, it would focus more on the subject of profits and profitability but this did not happen at all".

The Director of MVC Plant talks about the current change by saying that "with the exception of salary, there is no significant change. Unfortunately, the expectations of salaries have been increased in line with tender increases but it does not happen".

Commercial targets have become important; however, the Director of Information Technology asserts that this importance "exists only through meetings and conversations". He adds that "there has been no tangible change, for example, a particular procedure to follow when costs increase". The Director of Information Technology Office presents his concern about IT that "there was a movement to establish a network system within the company; at least some people listened. Administration is now considering the role of information systems and the technology side is extended". The Commercial Director asserts his main concern about the change in the company's status quo, that "some changes are taking place which may be worrying to most of the workforce but as yet we should cope with the new situation and that needs time". The Director of GP & FW Plants identifies the changes in the company objectives as follows:

> "In the past, production was the main objective. Now the situation is quite different, as production is dependent on the demand. For example, demand is approximately non-existent on specific products; therefore, we have been instructed only to produce these in this plant if there is a request".

In the past, goals were set by the Libyan Government that focused on social welfare, in contrast to those companies in other countries which focus on economic targets, such as profit. To align the company with these countries, contracts and basic regulations were changed to set out new economic objectives for the company. As part of these targets, the company had to reduce costs without undermining quality. The company's organisational structure was reconsidered after it was noted that it was more suitable for a larger firm. A committee was formed for this purpose and it recommended new organisational structure which is appropriate for the company's size. A further committee was formed to study salaries based on cadres rather than on functions. The Director of MVC Plant discusses this issue:

> "Our technical people in the cadre are classified as specialist. So, some employees receive a high salary and do not work at all. One plant is no longer working but its employees are still being paid. It is possible that one of the factories will be closed in the near future".

The Senior Costs Accountant comments on the change when the company became private.

> "For a short period, we did not feel that there was any change in the functional performance. However, after the transition to the private sector, salaries have been increased. The purpose of the company is to meet the needs of projects. Now this has to be done by using a business mentality. In the past, the social goals have met the

needs of the commodity produced, returns achievement and the creation of job opportunities".

6.4. Markets and Customers

The company produces several types of product. However, with respect to cables, the electric power company is the main consumer of the product and has signed a contract with the company. Also, the company produces some types of plastics used by the mat industry. In the past, however, the company used to be the only producer of wires. But these days the market is open, where wires are imported from abroad which are less than our products in terms of quality and price. In other words, the market has become competitive. Consequently, the company has reviewed its prices by readjusting them, so that they can compete with other market prices.

The reason for this plan is that the Electricity Company's requirements outweigh the company's capability. These days, the markets are opening to focus, first on consumer satisfaction through the price, and then on reducing costs. Employees of the company must abandon their public sector mentality and non-innovative approach and just care about receiving their salary at the end of the month. In other words, it should focus on competition, whether it comes from products manufactured within or outside the country. There have been different outlooks between the members of the company. For example, the Researcher of Planning and Following-Up asserts the strengths of competition in the company's products, in that 'the main competitive product in terms of price is the wire filament, which is also imported'. Also, the Commercial Director explains the main competition that has been faced; he states that:

> "Indeed, competition in quality and price together and especially the quality is no longer seen as much as looks at price, which has become the standard of competition. Actually, we intend to beat the two together, bearing in mind that price, rather than quality, is the focus of attention these days. In other words, despite the fact that bad quality might be sometimes disastrous, the Libyan consumer is always in favour of cheap prices".

The main problem is that the company has faced strong competition with its products. Other products are imported and are available in the local market. As a result, the prices of imported products are lower than the prices of company products. According to international standards, the quality level of the company's products is higher than that of the imported cables. The Head of Costs Accounting Department affirms the quality of the company's products that 'the best proof of the high quality is that the Electricity Company buys most of the company's production and does not complain of any defects in manufacturing'. There is an upswing but there is competition from overseas products, especially in relation to price. The Director of Information Technology Office clarifies the Libyan position regarding to competition and declares that:

> "There is also a culture and awareness of the Libyan consumer. It is negatively affected because the company is working under high specifications. An educated and aware consumer has a measure of choice. The company has a responsibility to educate the consumer".

The company started as the only company in the market, with no competitor, having monopoly over the business in terms of production, export and import. However, since its establishment, the company has been making great efforts to cover the needs of individuals as well as the need of companies for this commodity. Eventually, the company so far has covered a great part of these needs, matching international standards in terms of quality.

The major client of the company is the Electricity Company. In addition, the company provides for the needs of individuals and companies working in the construction sector and the General Company for Post. Products are supplied to the Electricity Company, which is the main consumer of the product and has signed a contract with the company. The Senior Costs Accountants analyses the sales of the company and states that 'an analysis of the company's revenues noted that the percentage of sales to the Electricity Company was about 90%, whereas sales to other consumers did not exceed 10%'. Whereas, the Head of Costs Accounting Department identifies what the company should do, as follows:

> "The company must focus on clients through the price, services and quality. Therefore, adding a new plant is not a solution and does not fill the State's need for wire. The capability of the private sector is very basic and there is no specification".

6.5. Organisational Structure

The organisational structure has witnessed some modifications since 2006. The company was a subsidiary to a public sector-implemented horizontal organisational structure. After dependency on PCOTEU, the organisational hierarchy had been modified and had adopted a new version of vertical hierarchy, which merged some departments into one. In this regard, the Training Director explains, "the philosophy behind the merger of the three administrations into one and also putting four factories under the charge of one administration is that the general manager prefers to meet with two rather than seven managers". He concludes that

> "I had some reservations as to the organisational structure of the company. In the past the organisational structure, the job description and the job cadre were all designed by the company to be approved by the department of the cadre of the People's General Committee following the advice of the People's General Committee for industry. Now, all that takes place without the department of cadre and has been approved by the board of directors despite some reservations; I mean, the merger of three administrations which include the financial, administrative and commercial in one administration, is an impossible task. Also, the industrial safety and security office should become part of the proposed administration and instead should be part of the director general's office".

The previous organisational structure included general administrations which had been introduced for a short period of time. The reason for the change was that there was an expansion of functions in order to narrow the scope of the Executive Director, who supervised two general administrations and a number of offices. As the Director of Human Resources Administration explains, "When supervision scope is narrow, the Executive Director can apply supervision functions accurately and monitor work closely". Therefore, the organisational structure was reconsidered by the committee formed for this purpose. Also, the production capacities and marketing possibilities were studied.

Previously, the plants were supervised by the Administrative of Technical and Production Affairs. On privatisation, each factory became independent, headed by a Plant Director. The directors of the plants supervise the Production Department, the Maintenance Department and the Laboratories Department. The Director of MVC Plant describes the changes in the organisational structure as follows:

> "At the organisational level, in the past, the organisation adopted general administrations and there was a sense of production, maintenance and quality control administration. In the current management of each plant, this is self-contained and includes sections on production, maintenance and laboratories. This change in the organisational structure has been issued by the board of directors".

The previous organisational structure included general administrations which had been working for a short period of time. The reason for the change was that there was an ambitious expansion of functions that aimed to narrow the supervision scope of the Executive Director. The Executive Director supervised two general administrations and a number of offices. Thus, he was responsible for control and determined responsibilities. Also, when supervision scope is narrow, the Executive Director can apply supervision functions accurately and monitor work closely. Previously, this was combined with the company’s additional burdens, for example, the establishment of general administration; thus the supervision scope was broad. Therefore, the organisational structure was reconsidered by the committee formed for this purpose. Also, the production capacities and marketing possibilities were studied.

According to current organisational structure, the communication between staff should be conducted horizontally but vertical communications had become the norm with the previous management and have become a tradition in Libya. The communications take place with the higher levels. In this regard, some problems between the different administrations need to be sorted out and the top management should not be wasting time and energy to undertake unnecessary duties which are a matter for lower management levels. Horizontal communication and cooperation between the different administrations should be the focus of attention. The most important point is that the staff of a specific administration need to practise all the duties and jobs within that administration, given the fact that monopoly of jobs could cause problems, particularly with regard to holidays. The Director of Human Resources gives an example that “any member of staff of the administration in which I work can provide you with the information you ask for”.

The JSCC has used the committees’ work, which has some advantages, such as improvement and development of personnel skills. The company suffers from some kinds of specialisation. The Director of Human Resources demonstrates that “management is a science and thus a particular multi-disciplinary job cannot be done by a specific employee or two”. However, committees are formed to accomplish this job. The committees will deal with this in addition to the original daily work. The company is attempting to cover some of its shortages in certain disciplines through the formation of committees. This work could be the development of employees’ skills to carry out new jobs. Also, good opportunities will be provided, for example, contact with employees who have experience in certain areas. In addition, the second row of the administration will be formed. On the other hand, the committees' work includes a kind of dependency and these responsibilities cannot be accurately determined.

6.6. Management Accounting Systems

6.6.1. Costing Systems

The costing system in this company has passed on three stages. The first was when the company was established. The second had been started when experts from Egypt had regularly visited the company and made some modifications on written systems. The third stage began when computer systems were used by the company. From its establishment until 1982 all the qualified accountants in the costing department were from Egypt. After 1982, Libyan accountants replaced them but these did not have sufficient experience, were not qualified and were limited in number. In order to suit the abilities of the accountants, a non–technical cost accounting system was introduced in response to the many calls for change. The Head of Financial Statements Department describes the situation of accounting systems when he was appointed in the costing department in 1980:

> "Sometime in the past, when I joined the company, some experts from Egypt made regular visits to the company and provided advice in the area of accounting and in some cases recommended some improvements to be made to the system [….] The accounting systems were there before I joined the company but accounting systems have been continuously updated […] For every system to survive it has to cope with the development that take place worldwide. For example, the existing systems were relatively long, so they were made shorter by omitting any unnecessary processes. Hence, the different administrations opted for a written system. As for the one who introduced the system, the process took place following directives by the company management and advisers that systems should be improved".

The accounting systems were evolutionally changed. This happened when new computerised systems were introduced. The Planning Researcher explains the historical issues related to the accounting systems and compares between old and new systems as follows:

> "I would say the GPCI was responsible, as it issued the directives for changing the system and that was a long time ago. In this regard some academic staff designated the system and the Economics Researches Centre undertook and covered the job. The

> main reason for the change was that members of staff were under qualified [...] the old system was good and its only disadvantage was that it was mainly dependent on the human element. So, the current system can be described as good in the short term but as though it will become inaccurate in the long term".

A deficiency in the cost accounting system is the lack of a sufficient number of qualified experienced accountants. Increasing the number of accountants is impossible at the present time, as a number of interviewees mentioned. Thus, the solution is to re-train the existing accountants. Until now the company has lacked a management accounting administration but has a costing department, which is currently attempting to satisfy the financial accounting objectives but not the management accounting ones. This backs up the assertion (Johnson and Kaplan, 1987) that external financial reports have encouraged a financial accounting mentality in many of the managers of companies, resulting in management accounting practice becoming part of financial accounting practices.

The Head of Cost Accounting Department states:

> "There has been a system of costs and it has been readjusted by the company management to cope with modern developments, such as the use of computers. This system features the idea that every factory is a control centre per se in order to facilitate the process of general control [...]. In the next stage the system will be improved, so that it can cope with developments and the introduction of computerisation. The need suggests these improvements".

The industry and company's business systems impose appropriate costs accounting systems. The nature of the company's industry could use a mixture of production processes and/or job orders systems. This industry, for example, has five processes. When each process finishes, the product may be deemed to be a final product. The company employs processes of production system but the existing system assumes that, in some cases, the process of production is one process, which then achieves results in accordance with the total costs theory.

The costing system is relatively good, according to members of the financial administration, but the main disadvantage is that it cannot be fully implemented. This might implicitly indicate that there has been loose coupling between rules and routines (see, Lukka, 2007). Its deficiency resulted in difficulties in obtaining sufficient information. Overall, this system is working satisfactorily. The lack of qualified accountants means that it is difficult to apply all systems. As a rule, the full cooperation of all departments is the main task of the new administration in order to increase the efficient use of human resources. The company's role is to develop a financial management system that can develop employees' skills fully.

It can be argued that the cost accounting system of the company combines the two systems of cost accounting: the job order system and the production processes. The current method of calculating the cost of the product in the company is assumed to be satisfactory. As such, it shows flow systems for the three cost elements from job order through to costs direction. Each job order is the centre of costs directed towards cost elements and the conclusion of the costs of job order compiles and identifies a total cost per unit. The Head of Cost Accounting verifies that:

> "It is supposed to be there to improve the role of the cost accounting system […] The important difficulties that have been facing the costs accounting system in the company's departments are that they have lacked commitment to implement the documentary procedures. There are orders of business; they must be developed and automation must be imposed".

The costing system has an important task in determining the cost of the product, both total and per unit. The costing system calculates, analyses and addresses the cost centres' responsibilities according to three costs elements: raw materials, direct labour costs and overhead costs. Because of this, production heterogeneity has been implemented. Therefore, a single production line can produce multiple production methods and different types of products in response to demand, using the same production tools. However, there are a number of deficiencies in the Costing System. For example, the Director of Information Technology Office declares that "there is no complete and accurate record of how much each machine produces daily. So the production quantity can be reversed in the costs statements and non-recording is the most important obstacle". Also, the Head of Financial Statements Department provides the main limitations within the costing system as:

> "Unfortunately, correction has not been considered insofar as no solutions are available, particularly with regard to the inadequately qualified and skilled accountants. For the time being, however, it will not be possible to recruit more accountants and the only solution is to provide intensive training for the existing staff".

Also, there has been some satisfaction about costing system. For instance, the Technical Consultant argues that:

> "At least from what I hear, people say that the costing system is fine but fault lies in not implementing it fully. This failure has resulted in obtaining inadequate information. In general, there is satisfaction with the current costs accounting system".

The Head of Costing Department discusses the possibility of improving the costing system as follows:

> "The role of the costing system must be improved. This can be done by putting the right man in the right place. I am not the right man because my knowledge of the subject is not sufficiently developed. The company did not allow me any opportunity for self-development through training courses in costs accounting. The training course was not available and this is one of the major difficulties that the company faced in the development process. These difficulties, which have been faced by the costing accounting system in the company, are the failure of the departments to implement".

Overhead costs include all items except direct raw material and labour costs. This element of the costs has the important characteristic that there is not a direct correlation between cost and production. Therefore, it requires using the estimated allocation rate, which is calculated at the beginning of the year. Also, the same estimated allocation rate is used during the year to allocate production a share of indirect manufacture costs. However, the variety of the company's products has created an urgent need to use a different allocation rate for each plant, rather than using the allocation rate for the whole company.

1. Overhead costs estimate the costs that are expected during the next year. Therefore, each centre takes into account the fixed and variable components, along with the additions and exclusions.

2. Where service centres are providing services to productivity centres, the estimated indirect costs should be re-distributed, according to the basic distribution method of each centre.

After allocation the overhead costs in the four plants are determined; these consist of two parts: estimated overhead costs (1 above) and the plant's share of re-allocated costs from the service centres (2 above).

3. The basis of allocation is chosen per plant. This is achieved according to the nature and type of products produced. Therefore, this is a common factor for all the products

and brings equality. This means that the share of each product is allocated in proportion to the degree of complexity in the production process. The allocation basis proposed for each of the company‘s plants is based on machine operating hours.

4. According to the targets of the production plan set at the beginning of the year, the number of units is estimated on the basis of allocated hour/machine. This process was created with the assistance of production and technical affairs.

5. Calculation of the allocation rate is estimated for each plant.

It can be said that the use of experts from abroad falls within the scope of normative and mimetic pressures. So, the change may be deemed as the outcome of normative isomorphism, owing to the use of experts from Egypt in the area of costing accounting at the regional level. Also, this pressure can be pondered on as factor deriving convergence between organisations working in the same environment. Moreover, it might be said that the pressure is understood as mimetic, because, at that date, Libyan organisations attempted competitively to utilise the professional bodies in order to maintain the institutional stability. Also, there was a lack of understanding of the processes of costing accounting for new accountants. DiMaggio and Powell (1983) confirm that the organisations imitate each other when organisational systems are poorly understood.

Accounting systems can be supposed as rules. However, the rules being applied in the company did not correspond with new routines. Therefore, the gap between formal structure and actual work reveals the loose coupling (Meyer and Rowan, 1977). Loose coupling means and posits that an organisation can have both rational and indeterminate elements simultaneously (Lukka, 2007). In other words, some steps prescribed by the rules were undermined by emerging routines. The deviation of the routines from the original rules may have occurred unconsciously. Burns and Scapens (2000: 6) clarify the reason behind the deviation between rules and routines by saying that “the rules are misunderstood or are inappropriate to the circumstances”. This deviation resulted in the re-writing system, including the new routines that have emerged. Rewriting the system (rules) was due, to avoid the knowledge being lost.

Consecutively, new rules were created when the new accounting system, including a cost-accounting system, was introduced. This effect was in line with processes that have become institutionalised, i.e. the taken-for-granted assumptions that help establish ways of doing and thinking (see, Burns and Scapens, 2000). In general, new rules of the new accounting system did not conflict with the existing institutions as represented by the new routines. Thus, new routines have become ways of thinking and action and taken-for-granted assumptions. In this regard, the management used the power over the meaning, which includes symbols, rituals and language. In this power, the change was given new meaning to make it legitimate, desirable, rational or inevitable (see, Hardy, 1996).

This highlights that coercive pressure was applied to the company's management to adopt both the old and new costing systems. This pressure was in the form of instructions from the General People's Committee for Industry (GPCI), which oversaw all industrial companies (before privatisation). According to Granlund and Lukka (1998*a*), this type of pressure might be classified within factors deriving convergence between organisations. Also, the statement highlights that the Economics Researches Centre was used to write new rules for the accounting system, including the costing system. Granlund and Lukka (1998*a*) state that the effect comes from universities and research centres may categorise issues deriving convergence. Therefore, this clearly mentioned that the interaction between internal and external environment appeared. For example, the change of rules came from GPCI (external) to the company (internal), then from the company to Economic Researches Centre (external) and finally it returned to the company.

Economic Researches Centre completed its task and provided the new systems. This change can be regarded as a formal change. According to Burns and Scapens (2000), formal change occurs by conscious design through new rules. So these were new rules encoding to the existing rules and routines. In this case, the company exploited the power over the resources. For example, the company had the ability to hire the Economic Researches Centre in order to write new systems. Also, the company was able to fund the project and authority to be imposed on accountants to implement the new rules. This power was exercised to enact and reproduce the new rules. However, the abilities of the accountants were taken into account by the new rules. Thus, the new rules were not shaped harmonious routines, which partly deviated on the new rules. This indicates that the abilities of the accountants were not adequate to use the system, as they did not have the capacity to prepare the accounting or/and costing system.

The processes of the costing system indicate that the system is a traditional one, which is clearly affected by professionalisation. DiMaggio and Powell "interpret professionalisation as the collective struggle of members of an occupation to define the conditions and methods of their work, to control 'the production of producers'" (1983: 152). This effect seems to be a factor driving convergence to normative isomorphism (Granlund and Lukka, 1998a). Moreover, the processes are rules of costing systems, albeit these rules are not completely implemented. Thus, the rules have been misunderstood.

6.6.2. Pricing System

The Production Programming Office specialises in calculating the quantity of raw materials used in production. Also, the Costing Department plays a very important role in the pricing. There are specific rates which are used to calculate the standard cost of, for example, copper. The standard cost of plastic and packaging materials are also calculated. In this regard, the former Director of Production and Maintenance defines the relationship between pricing and standard costing as follows:

> "All items are calculated per unit. I will give you example; the waste percentage of copper is 3%. If it was 5%, this means that 2% wastage is abnormal. If this waste continues over time, the standard cost must be amended because pricing is based on this cost. If the pricing has assumed the cost of a record low, this would result in losses for the company".

There are two elements to be taken into account in pricing: the cost of raw materials and conversion costs. The pricing system presents information in reports and informs which raw materials should be used in production or which product should be produced. There is also a report which shows the cost of raw materials involved in the production, giving their unit weight or length. The conversion cost includes additional costs but excludes the direct cost of the raw materials. This cost is identified on the basis of a fixed value cost per kilogram. The former Director of Production and Maintenance highlights a specific issue in the pricing method: "In the past, there were details covering all costs elements but the cost accountants facilitated the calculation of procedure costs to them and now calculate the raw material and conversion cost only".

The quantity of raw materials needed to produce any product is calculated according to the specification of the Production Programming Office. The report is prepared on this basis and includes two parts: raw materials including waste and raw materials excluding waste (i.e. the net weight). For example, the waste percentage in copper material is 2.5%. Therefore, the system must take into account the net weight of the materials. The report compiles weights that represent the product weight and gives an average of conversion cost per kilogram of the product in its final form. The Production Programming Office, from time to time, issue new standards that emerge from a specifications change.

In any case, the system collects conversion and materials costs and then adds a profit margin of about 10% of these costs. The number of kilograms produced is divided to obtain the price per kilogram of a particular product. For example, a client requests a product with specific characteristics but the plants have not produced this type of product in the past. In this situation, the Costs Department requires the Production Programming Office to prepare production estimations. Production costs are determined by quantities cost of raw materials and conversion costs. The profit margin and output are then combined to obtain the price.

The costs of all products are determined by an analysis report in a particular period. The analytical report determines the quantity of raw materials used in production in that period. Several options are offered by the analytical report, regardless of whether the production is of one product or a variety of products. There is no problem in preparing an analytical report on one product because this requires only entering the product number. However, the analytical report of several products is more complex, as the accountant has to enter each product number. Therefore, it takes longer to obtain a detailed report on the raw materials used in production in terms of quantities or costs.

A Senior Researcher of Planning and Follow-up gives the following critical observation of the system:

> "The pricing system has been built on the basis of production targets and the existing machinery productive capacity. However, it is supposed to be a pricing preparation

> based on production quantities according to budget; therefore the pricing practice is not correct. The position is bound by the proposed plan, so that there is no price variation. Anyway, the estimation price is less than the real price... The company in this position is going to achieve losses. The conversion cost includes overhead costs, which consist of two parts, variable and fixed. The problem lies in the fixed part because it is hard to verify production quantities. So, for large capacities, fixed costs per unit will be lower and pricing at this level will be distorted".

The Senior Researcher of Planning and Follow-up indicates that the costing process is not accurate enough. Therefore, this is consistent with Scapens and Roberts' (1993) findings that point out that the estimation of the cost was usually wrong in their case company. The Costing Department calculates the raw materials cost and then adds specific cost per kilogram of product, which represents the conversion cost. Also, the Costing Department adds a specific percentage as the profit margin. This is consistent with Drury and Tayles' (1997) findings that cost-plus pricing is used by a number of organisations. The Prior Director of Production and Maintenance explains the process of pricing as follows:

> "The indirect costs as a whole, whether service or productivity costs, are charged to cost centres. The cost of service centres should be distributed to the production centres. Therefore, the total production cost for each plant has to be calculated. Also, each plant production has a capacity; the production cost in each plant will depend on the plant's productivity. The value obtained represents the share of one ton of the indirect costs. The conversion costs and raw materials costs are the total cost. In addition 10% of the total cost is added as a profit margin to reach the sale price".

There was an effect on the pricing from the coercive pressure applied by the General People's Committee of Economy (GPCE) on the company. Previously, before setting a product price, the company had to obtain approval from the GPCE after sending it a pricing study. The pricing study included all the cost elements and profit margin rate. The GPCE reviewed the pricing study and may have given some comments. These comments had to be taken into account by the company; otherwise the pricing study was not approved by the GPCE. If the GPCE did not provide any feedback, then the company gained approval for the pricing study; thus it was able to use the price to sell its products. These instructions may be presumed as factors deriving convergence among organisations within the same business environment (see, Granlund and Lukka, 1998a).

Generally, this process became part of the existing routines and institutions. The Costing Department has been preparing a pricing study and the department is supported by a Financial Manager and Senior Manager. The Costing Department, Financial Manager and Senior Manager have employed their power over the resources in the form of experience, which the Costing Department characterises in the complexity of cost calculation. Also, the rest of the organisational members are prevented from participating in making pricing decisions. Thus, the power over the processes is manifested in order to maintain the existing norms and values. Notwithstanding the competitive pressures and a transition to the private sector, the existing routines and institutions have not changed and it can be said that there has been a stable process in determining the selling price. These processes have become institutionalised i.e. take-for-granted assumptions.

In studying the costs structure, it is concluded that the overhead cost in modern organisations has become too large. Burch (1994) compares the cost elements between traditional and modern organisations and the data related to the case company is added. Burch (1994) distinguishes between the characteristics of the two types of organisations. He argues that modern organisations use automated machinery, employees are used primarily in supervisory functions rather than actually working directly on the product and overhead costs and direct materials are a higher proportion of total costs. In traditional organisations, the production is small and they focus on craft production and using employees' skills rather than automated machinery, which minimises indirect expenditures or overhead costs. In the case study company, direct labour costs are similar to those of the modern organisation, while overhead costs are similar to those of traditional organisations. Raw material costs in the case study company are larger than those in both traditional and modern organisations. Therefore, it can be argued that the case study company is neither a traditional nor a modern organisation but falls between the two types. Furthermore, no association was found between the level of cost system sophistication and cost structure, product diversity and quality of information technology (Al-Omiri and Drury, 2007).

6.6.3. Diffusion of Accounting Knowledge

As a significant observation in this regard, there are a number of interviewees who have a good accounting background. Despite this, they do not specialise in accounting. However, the accounting background between organisational members is varied. So, it can be said that some of them speak accounting language very well, whereas others avoid talking about such issues. On the other hand, it should be noted that the Planning Researcher, Director of Information Technology Office, and Prior Director of Production and Maintenance speak and use accounting vocabulary very well, exactly like accountants. In this regard, the Prior Director of Production and Maintenance explains how to improve his accounting background as follows:

> "I have benefited through contact with accountants who have expertise in accounting in general and in evaluation of companies in particular. In addition to working with the Cables and Wire Company, accounting is considered to be the field that people wish to learn. Also, there are opportunities available to us, especially as we have worked in a period which has a shortage of accountants and engineers…..I attended meetings with accountants. This compelled me to buy accounting books in the area of costs accounting. I read these books in order to discuss these matters during the meetings. In addition, I participated in the preparation of economic feasibility studies for all the company's plants before they were established. Through this kind of study I was familiar with the investment aspects and operational costs. So the project could be a cost assessment and not just an evaluation of technical terms".

In this regard, it might be corroborated that the accounting knowledge has not been diffused among organisational members. Exceptionally, the Director of the Office of Information and Systems and Prior Director of Production and Maintenance have spoken and used accounting vocabulary. The main reason behind non-diffusion of accounting knowledge is that current accountants have not educated other members of staff (see, Scapens, 2000a). Scapens (2000: 21) affirms that:

> "In part, decentring of accounting knowledge is the result of accountants educating other people in the organisation but it has been made possible by the availability of financial information at all levels in the organisation. Furthermore, it has important implications for the role of the management accountant".

6.6.4. Budgeting

The company has prepared a budget every year since it was established. However, the aim of the budget preparation was not planning and monitoring but was concerned with access to financial resources. This direction was prompted by the government, as represented by the General People's Committee of Finance (GPCF), which appointed some Financial Controllers (FCs) who had worked in Libyan companies as observers. The FC was independent of the company as his/her salary had been paid by GPCF. This policy was adopted in the mid-1980s. The main task of the FCs was to monitor daily operations and implement tight controls on these procedures. Also, they had been given the powers of cheque signing and thus they had obtained "control of money" (Hardy, 1996: S7), which is the key to power over resources.

In this period, in contrast to the situation in the company, the budget has been used by governmental units for planning and control. Based on these differences, organisational conflicts occurred between the organisation's members and the FC. Overall, there were two aspects to consider: first, the FC saw that there had been a need to use budgeting in planning and control as a scientific way of practice. The Country's Law of Financial System (CLFS) and the Regulation of Accounts, Budgets and Stores (RABS) provide that it is necessary to use budgeting in planning and oversight. Second, however, members of staff within the company believed that the law was useless and was valid only for governmental units. They thought that the nature of work and the company's activities required flexibility, which would be constrained by adherence to those laws. However, the FCs[29] insisted on the use of budgeting in planning and control, despite the lack of support from company members, especially at senior management levels. This forced the FC to maintain his own records, in order to follow-up the implementation of budgeting.

Thus, this obligation can be seen as coercive isomorphism forced on the company by CLFS. This is consistence with DiMaggio and Powell's description of the concept that "coercive isomorphism results from both formal and informal pressures exerted on organisations by other organisations upon which they are dependent" (1983: 150). It can be revealed that national legislations seem to be into setting limits to complete the convergence factor (Granlund and Lukka, 1998a). Furthermore, this could be deduced as new rules. These rules failed to shape or to be shaped by new routines, because they were opposed within the existing institutions. There was a conflict about power over resources. This conflict between senior management and the FC conforms with Hardy's classifications of power over resources, such as "information, expertise, political access, credibility, stature and prestige, access to higher echelon members,…., rewards and sanctions" (Hardy, 1996: S7). On the other hand, senior management used its power over processes to prevent the FC from participating in decision-making processes. Moreover, senior management failed to use power over meanings to prevent conflict from appearing.

[29] GPCF had appointed number of FCs in the company before the privatisation period.

The General Assembly held an emergency meeting to discuss this organisational conflict. It concluded that the company's administration needed to use the budget for control. Therefore, the budget became one of the most important management accounting systems used by the company, in order to monitor what was being spent within the company. The company has a duty to produce an annual budget, which implies the formation of a committee to prepare the budget. The committee includes representatives from all departments and is based on a sales forecast. The Senior Costs Accountant clarifies that "the general policies of the company will be translated into future plans outlining the targets and the rest of the budget, such as wages, production etc. In this regard, fluctuating raw material prices has caused the main problem for the planning processes".

The budgeting system uses standard costs. If a variance is found, then the reason should be known, otherwise it affects performance if not addressed. The company prepares an annual budget, which is considered to be only a small component of the strategic structural scheme. The preparation of the budget begins with the distribution of a questionnaire to departments and divisions. All departments and divisions have to determine their expenditure requirements. In addition, the budget committee studies and compares actual with estimated data. It is translated into future plans and identifies targets. The budget is allocated to salaries, production cost and other costs. Every item of the budget is estimated by taking the average of the previous three years, taking into account any considerations. On the other hand, all information is zero based. For example, with regard to the raw materials, the actual needs are estimated according to the production plan. As for other costs, they are estimated by the experts, based on the actual need by making use of statistical methods. Also, the preparation of the budget takes into account the state of machinery and equipment, the market requirements and the electric power consumption. In addition, the cash flow is also important, so that the level of borrowing can be ascertained.

The Head of the Accounts Department explains, "Some of the reports focus on planning with regard to the estimated budgets, which are not a matter for the Planning and Follow up Office but a matter for a committee involving the Director of the Planning and Follow up Office as a member". Therefore, planning is a matter for the Office of Planning and Follow-up. The Director of Human Resources supports that:

> "The main duty of the Planning and Follow-up Office is to translate plans into budgets […] preparation should involve accountants, managers and technicians, who also follow up the execution of plans taking into account the defined goals, which is more important than planning *per se*".

The Executive Director explains the change that occurs in the process of preparing budgets as follows:

> "In the past the budget was based on the potential maximum productivity, no matter whether this production was sold or accumulated in the store, with the subsequent high costs of storage and insurance against risks. Now, in the aftermath of contracts with the Electricity Company, the production is planned to satisfy requirements of these contracts and nothing will be left for storage; instead, a system for bonuses is in place. In other words, production is directly linked with the sales".

Issues of budgetary control are important. The new computerised system is heavily considered. In this system, the stock movement, such as spending, receipts, returns, orders, and re-orders, is registered. In addition, the annual inventory process has been facilitated. The Costs Accounting Department depends on the system for the extraction of results. Simultaneously, the actual and estimated data has been analysed. The Former Director of Production and Maintenance remarks that "the actual costs have to be compared with estimated values monthly. Periodic meetings are held and the budget executive position report is considered. Finally, variances are identified, which are usually positive". However, the Head of Accounts Department expresses his view "that is not the case in reality. Yet it is possible that the department of costs undertakes the appropriate analysis to follow up the execution of the budget and determines any variances that take place".

The company's activities are supervised by external agencies, such as the Securities and Economic and Social Development Fund, the Libyan Stock Market (LSM) and the General Assembly. The company should not follow policies which conflict with the laws, legislations and regulations of these organisations. On privatisation, the company was released from the control of the FC; thus, an existing routine disappeared. There is an Oversight Committee but this does not work on a regular daily basis. Also, new rules are associated with new tasks of control, which create new routines.

New rules have emerged, which have created new routines. It could be imagined that this has been a revolutionary change, because this type of change includes essential disruption to existing routines and institutions (see, Scapens, R. and Burns, J., 2000).

These new routines began with the enactment process, which was enhanced by power mobilisation. Previously, the process of enactment faced resistance, when rules and routines had challenged the existing norms, meanings and values (see Burns and Scapens, 2000). Moreover, the process was witnessed using the power over resources by different organisational actors as organisational conflict (see Hardy, 1995 ; Burns, 2000 ; Burns and Scapens, 2000). Also, the processes of new routines have been generated as repeated behaviour, which has led reproduction of new routines over time. Budget control has become an institutionalised way of thinking and doing and taken-for-granted assumptions, which replaced the existing institutions.

6.6.5. Measures for Performance Evaluation

Net income has been employed as a performance measurement at the end of each year in the company. Also, measuring profitability has provided important evidence about the level of performance. However, performance measurement in each area could use different tools, which include financial targets, such as return on investment, cost of products, profitability and cash flow. Therefore, different financial indicators can be used to measure the performance. It is important to choose the appropriate financial indicator for the task being measured, as the Researcher of Planning and Follow-up demonstrates: “if we focused only on the net profit, it would be insufficient because the net profit may be high, whereas the return on investment may be a little low”.

The performance evaluation of employees of the company is assessed by measuring non-financial performance but is not applied strictly. The assessment covers a number of points, including attendance, absences and the employee’s relationship with other staff, holidays and appearance. Hence, as a number of interviewees described, this is in effect an annual employee assessment report and not a measurement of performance. Therefore, there is no real measurement within the company related to employees’ performance. This assessment of employees has been related to specific type of rewards in general and annual bonuses in particular. Consequently, in order to obtain these bonuses, certain conditions should be achieved by the employee, who has to achieve an excellent rating in the assessment report. However, emotional and social relationships have dominated the assessment procedures. Furthermore, the process was established when the company was part of the public sector. The Director of Training compares the previous and current assessment of performance:

> "Formerly, workers used to be given their full wages, no matter how they performed their duties, as assessment was non-existent, so that, even in cases where the worker proved to be under-performing, he would still remain in the job and would not be dismissed by the company, even if the company was intending to do so. Now things have completely changed following the system of assessment, which is linked to the bonus system, which implies that under-performance will be subject to punishment, including dismissal in extreme cases".

The Head of Financial Accounts Department interprets the individual assessment:

> "The assessment follows a model consisting of a number of sections, in which every section is given a number of marks, with the total marks adding up to 100. Two models are used, one for assessing the general staff and the other for assessing the senior staff".

Performance measurement systems in relation to employees are provided by the Labour and the Civil Service Law No. 55 for 1976 by the RCC. This law can be assumed as coercive pressure, as it is compulsory. This type of coercive pressure is exerted on all public companies. The coercive pressure comes from national legislation or law and might be classified under setting of total convergence (see, Granlund and Lukka, 1998a). These pressures can be regarded as rules applied to all public companies. Also, these rules have shaped new routines. The operation of the new rules and the emergence of new routines have been affected by both the encoding of institutions and the reproduction, as repeated behaviour, of existing routines (Burns and Scapens, 2000). Although the company has become a joint stock subsidiary company, its method of evaluating the performance of employees has remained stable in application.

There is also a rewards system which is linked to good performance, especially in production. Also, a system of sanctions regulation, based on those issued by the People's General Committee, has been implemented and the measurement of performance process is governed by these regulations. These new regulations can be imagined as new rules. There are also changes in the Basic Regulation and the Establishment Contract, which can be classified as rules of organisational change. In general, the company needs to evaluate performance properly. However, the Technical Consultant confirms that "the current performance measurement is the same as before". This view is opposed by the Director of Training:

> "Changes may have happened but I am not aware of all aspects of these changes. Yet, as far as training is concerned, the important change is the great attention given to training, which had been completely ignored by the prior administrations".

The rewards system is mainly associated with production but other administrations can also benefit from it. The Commercial Director exemplifies the notion of rewards in his administration:

> "The commercial administration includes the Department of Foreign Purchase, which is responsible for the import and clearance of goods at the port. If this process is completed within a short period of time, the company will avoid paying extra costs in form of storage duties, in which case the staff who undertake the duty of clearance of the goods will be entitled to a bonus".

Also, the staff of the financial administration that accomplishes the preparation of the financial statements quickly will be rewarded. Thus, all members of the accounting staff involved in the preparation of the financial statements are entitled to a bonus. The Director of LVC Plant clarifies the motivation system that is implemented:

> "Assessment of performance is through the annual reports of employees. The plant's performance is assessed through whether or not the plants have achieved the productivity targeted. There is a system of rewards based on achieving or exceeding targets. For example, there is a monthly reward for employees if the actual production exceeds target productivity by 10% for two consecutive months. This motivation has had a positive effect on production and the whole company".

Performance is closely related to the bonus system, particularly with regard to production. Therefore, the rewards system is linked to good performance, particularly in relation to production, with staff rewarded when output exceeds the target level. In this regard the methods of reward are provided for by certain regulations. The company has also introduced sanctions regulations, which have related to individuals' behaviour. The sanctions regulation can result in punishment varying from cautions to deduction of wages to dismissal. The former Director of Planning and Follow-up Office criticises the system: "The two [rewards and punishment] are linked but the important point is that, in the absence of a job description, performance becomes difficult to assess. The former tends to provide a basis for assessment of performance and the ensuing management accounting".

Performance (based on financial and non-financial work) is measured in a number of ways, including the achievement of production targets, the act of meeting the sales budget, the completion of business on time, the company's ability to repay and collect its debts and the level of sales. The Technical Consultant compares the different types of measurement performance as follows: "Performance measurement is in net income at the year-end. Furthermore, non-financial performance measurement in each area is used, although, as a full value of what has been achieved, profit is a good financial indicator of performance measurement".

The main customer is the Electricity Company and one of the most important services provided to this customer is the free delivery of wires and cables to its stores. Also, the Electricity Company is provided with the sale on credit until the contracting procedures are completed. Other clients who have bought the company's products are offered free consultation in relation to connection to housing. It can be said that services are becoming driven by private sector mentality. The Head of Costs Accounting Department identifies some issues related to opportunities:

> "Another issue is that the company did not exploit the opportunity to bring down the prices of raw copper. The price of copper is established on the Stock Exchange and is dependent on factors such as crude oil. Also, there are certain periods when copper prices are low. As a result, in these periods the company faced liquidity problems. In contrast, the private sector mentality is to exploit such opportunities. Another problem is the lack of consumer focus and products definition by the company through publicity, advertising and promotion".

Performance is measured in terms of achieving production targets or whether the sales budget has been contained. Performance is also measured by the completion of business on time. Measurement performance is also based on the company's ability to repay its debts to others, collect debts from others and show the ability to sell, and production. Process performance is linked by the rewards system, especially in production, in cases where productivity exceeds targets. Sanctions are not directly linked to performance but the company has established a sanctions system which includes all kinds of penalties.

Non-financial data is used to evaluate performance. With regard to performance evaluation of employees, this is under the scope of non-financial performance measurement but does not apply in reality. In other words, this is carried out annually but does not evaluate performance. The performance evaluation report contains points such as attendance and leave; employee relationships with colleagues; and uniform. The Technical Consultant compares different types of measurement performance as follows:

> "That is to say, there is no real measurement of performance systems within the company, either for staff or managers…Performance measurement is in surplus at the year-end. Furthermore, non-financial performance measurement in each area is used, although, as a full value of what has been achieved, profit is a good financial indicator of performance measurement".

The Director of Human Resources expresses how the company assess its performance:

> "Performance is evaluated through monthly reports, which usually focus on productivity. In the past the reports were being referred to the Ministry of Industry, which was the body which monitored the company. With respect to punishment, it is considered to a very limited extent, while bonuses are relating more to a function of productivity rather than other functions".

Usually the Annual General Assembly Meeting discusses budgeting and the adoption of the financial statements after debating the report of the External Auditor, as well as a report on the year, focusing on the technical and management status. This report has been called the Report of the Company's Activity, which uses profit indicators. If production has declined, the reasons behind the decline must be established: these could be technical or due to a fall in market demand. The former Director of Production and Maintenance explains the mechanism of assessing performance through using reports:

> "Performance evaluation is undertaken through the reports which are provided to the management team. Comprehensive reports contain the reasons for shortcomings, proposals and the capacity to respond to further comments. These requirements reflect the positive evaluation of the Directors of Administrations".

The Commercial Director explains his opinion that, related to measurement performance:

> "Our general performance is evaluated according to a certain plan as to the extent to which the goals defined in the plan are met. One of the methods of evaluation involves the assessment of the performance through the implementation of the budgets. As a matter of fact, the real performance of the company can be evaluated in relation to other companies operating in same area of industry. However, unfortunately, in our case that will not be possible as this company is the only one of its kind in the country".

New rules, such as the Establishment Contract and Basic Regulation, have been re-issued by the company's management and imposed by the General Assembly. These rules have shaped new routines, some of which can be regarded as organisational routines, for instance, a focus on economic goals. Others seem to be seen as accounting routines, for example, measuring the financial and non-financial performance. The new rules include regulations of rewards and sanctions. These rules also set up an organisational routine, such as motivations for increasing production, and the latest accounting routines, such as calculating performance-related bonuses. Generally, these routines are consistent with the existing routines. New routines have been repeated over time and have thus become institutions.

6.6.6. Reporting

There are a number of changes in reporting, especially since the company was privatised. The agency that was responsible for supervising the transition process requested reports in order to assist with the decision-making processes. The SEDF and the LSM also require data in form of reports. This data is of a very sensitive nature, on which financial and technical indicators are built. This change comes from the external environment and can be classified as coercive isomorphism (DiMaggio and Powell, 1983). These kind of reports now conform to existing routines; thus, over time, they have been institutionalised, which Burns and Scapens take to mean that "management accounting can, over time, come to underpin the 'taken-for-granted' ways of thinking and doing" (2000: 5).

The preparation of the financial statements of the company requires coordination between accounting and costing departments, stock taking, responding to queries by the external auditor and taking into account any comments made until the final approval of the financial statements. The Head of Financial Statements Department illuminates the processes of inventory valuation: "a committee has been formed, whose duty is the stock taking of finished products and the products in progress on a quarterly basis, so that the accounting journals can be fixed". The Director of Information Technology Office explains the requirements of LSM: "As a result of the change, the costs statements are now required quarterly by the Libyan Stock Market. They can be modified but in previous years the costs statements were prepared annually. The change has occurred at the request of the LSM".

Coercive isomorphism and new routines have emerged. The Head of the Department of Financial Statements explains that

> "In the past we used to prepare the financial statements once every year i.e. at the end of the fiscal year. However, these days the LSM requires the financial statements as an initial stage or otherwise the company has to provide a report of its financial status on a quarterly basis, so that these documents constitute part of the process of decision-making in relation to the company in terms of profits and liquidity".

The cooperation between the two departments has become institutionalised as a series of taken-for-granted assumptions. This change has taken place following the transformation into a private company. The preparation of the financial statements every three months is imposed by LSM; this can be classified as coercive pressure from external factors. As a result, new rules have emerged and new routines have been shaped by these rules. The new routines have become existing routines. Therefore, quarterly financial statements have become taken-for-granted assumptions.

There is a series of procedures to be followed by the company, in order to maintain a certain performance level. Various departments prepare reports on their activities and an overall plan is generated. Reports are the most important means of achieving targets, which are aimed at delivering important information to the different administrative levels of the company. Reports include data about deviations from the actual performance on planning and an analysis of these deviations and their causes and suggested solutions. The Planning and Follow-up Office has the duty to gather reports, which are partially analysed without devising any solutions for a specific problem.

In relation to the reports, the current administration has a duty to report on its activities, particularly the technical aspects. All these reports are collated by the top management, which refers them to the General Assembly in the form a single report. This report is called the General Report of Company's Activities and discusses any difficulties and possible solutions. The ordinary meetings of the General Assembly discuss two reports, the General Report of the Company's Activity covering the period since the previous meeting and next year's budget. In addition, the General Assembly will discuss any new items on the agenda. The main concern of the General Assembly is to ensure the profitability of the company.

The average actual production is available within annual plants; this includes the actual productivity per machine. According to this information, the period of implementing an order can be counted. The Production Programming Office prepares several reports, including production reports, raw materials variances reports, machinery productivity reports and faults and stops reports. The work of the Programming Production Office is very important but unfortunately it is seen as a partition profile. If the office is working properly, any defects can be traced.

Formerly, the GPCI requested that its affiliated companies and those under its supervision prepared monthly and periodic reports. These reports included data related to financial indicators and non-financial performance evaluation. The requests for such reports can be considered as a convergence of coercive pressures exerted by the GPCI as an authority which supervised the activity of public industrial companies. This type of pressure has established new routines (without rules). These routines have been initiated, enacted and repeated over time until they have become institutions i.e. new ways of thinking and doing. As a result of the company moving from the public to the private sector, the GPCI's task of oversight has ended; however, some of the periodic reports are still sent, especially those relating to data on production.

6.7. Information Technology

There have been attempts to introduce new technology, either in administration or production, but these attempts were not properly planned; they were implemented reactively as a result of problems and stoppages. The role of the Director of the Information Systems Office is not seen as a key role by the company's management, despite the fact that information is an asset in the modern business environment and should not be treated merely as a document. The company has not implemented a comprehensive IT system, because it is too expensive. According to the Director of Information Technology Office, "The return on the investment must be assessed by the number of the transition years". The Director of Information Technology clarifies the changes which are associated with computerisation:

> "In Libya, the factors leading the change are external factors. The Director notes that the majority of Libyan companies have agreed to use the salaries system. The digitalisation is the same; of course, external factors have affected the spread of information. The Director of the Computers General Company contributed to extending the use of computers. One factor that limits the spread of information is the lack of laws because, now, information is accessible to everyone. Laws must be issued to protect information; even with the proliferation of technology associated with these laws, the situation will become better than now".

This type of change came from mimetic pressure, because the organisations in the same environment imitate each other (Granlund and Lukka, 1998a).

Overall, the Director of Information Technology Office acknowledges that "during the coming years, the IT system cannot be correctly applied". As a result, several constraints have arisen, such as misunderstanding, dimension of knowledge and resistance to change. In Libya, there is resistance to any new idea on the basis that "the thing that you know is better than the thing that you do not know". There have been a number of types of resistance to change, including fierce resistance, negative resistance and apathy. The Director of Human Resources explains the status of employees in the company:

> "Our human capacity needs to be updated or upgraded and the traditional employee needs to be modernised. The traditional employee works alone and team spirit does not exist; also a complementary role that has been non-existent. Of course, they need to be literate in computers. The potential resources allow this but the decision-maker must be satisfied. However, the person responsible is under the influence of others who believe that the system will dispense with their services".

Resistance to change, misunderstanding and dimension of knowledge can be overcome over time. Also, many workers feel that the aim of implementing an IT system is to reduce employment levels. This is the main reason for resistance of change. The Director of Information Technology Office asserts the need to overcome resistance to change through training:

> "Training including specialisations is required but should not be so narrow that there is a monopoly of jobs to overcome. Computer efficiency has to be raised to cover how it deals with the system. Here, it must be noted that the change was faced with resistance. This resistance depended on whether the person wished for change and what the speed of change was".

Thus, training is very important and there has been a qualitative leap in this field as most employees have received training courses related to the use of computers. Exceptionally, machinery workers received training in the operation and maintenance of IT technology related to their job. After the appropriate training the relevant information can be obtained at any time. The Director of Information Technology Office explains the reasons behind the daily use of IT:

> "One of the things which are important is the inability of the company to achieve sales through the internet. In particular, the payment system is impossible in the absence of development in the Libyan banking system, particularly in the use of machine cards,

> such as debit or credit cards, because the Libyan banks do not apply e-management, e-government or IT. The non-application of these is one of the barriers to using IT".

The Director of Training describes the training status as follows:

> "The development does not include the exclusion of records but instead includes new things, a so-called engineering procedure. Also, another issue that remains is the employees' mentality. In the plan, there are training programmes to raise efficiency and correct mistakes".

As the Director of Information Technology Office argues, "everything cannot be changed at once". For example, the company is now seeking to change particular aspects of the accounting and cost accounting systems. There are also changes proposed in the form of and processing of documents, using new technology. The work is being done by addressing the changes in the existing systems and, when this is completed, the company will introduce a process of reverse engineering of the system. Previous experience shows that systems are not fully applied but are applied in phases, especially the partial costs.

CHAPTER SEVEN: THE SECOND CASE STUDY

7.1. Historical Background of the Company

The state-owned company was established in 1976, based on the decision of the General People's Committee[30] on 4 February that year, and was subordinated to the General Manufacturing Institution (GMI). Actual production began in 1978. The company is located 15km to the west of the city of Benghazi. The total area of the company site is approximately 50 hectares. During its establishment the company recruited staff and sent a group of engineers and technicians to Germany to be trained in the use of the relevant machinery. The legal name of the company, JSPC[31], and the overall objectives of the JSPC were established by government regulation. It also specified that the main purpose of the establishment of the JSPC was to provide pipelines for the supply of oil and gas in the hydrocarbon sector.

At that time, the GPC was interested in promoting the industry in Libya. The General People's Congress set up two General Public Committees of Industries: the General People's Committee of Light Industries (GPCSI)[32] and the General People's Committee of Strategic and Heavy Industries (GPCSHI)[33]. GPC was run by the GPCSHI, indicating that GPC was one of the largest companies at the state level. However, JSPC is smaller than the largest companies, such as the Cement Company, the Iron and Steel Company and the Chemical Industries Company. However, JSPC is larger than other companies, such as those related to dairy and food industries. Thus, the JSPC could be classified as medium-sized in Libyan state-owned terms.

The JSPC's capital at that time was LD10m.[34] According to the People's General Committee resolution no. 358 of 1992, the JSPC's capital was increased to LD 42.596m, at which level it remained until 2007. In that year, the JSPC was moved to the Sociology and Economic Development Fund (SEFD), prior to which it was under supervision by the PCOTCEU. The capital of the JSPC decreased from LD42.596m to

[30] General People's Committee is the name given to the Libyan government or cabinet of ministers.
[31] The current commercial name of the company has been disguised.
[32] This has since been renamed the Ministry of Light Industries.
[33] This has since been renamed the Ministry of Heavy Industries.
[34] LD is short for Libyan Dinar, which is the currency in Libya.

LD32.7m,[35] based on a decision by the GPC and the recommendation of the PCOTCEU. The reduction of the company's capital was decided at a meeting of the General Assembly, during which the Director-General presented a new project for establishing a high voltage tower factory, with the aim of connecting Libya with the rest of Africa. Eventually, the factory was established in the Tajoura municipality, near Tripoli[36]. A new branch for the company near Tripoli was established (for lamp posts, cable towers and galvanisation). The factory became a part of the company assets, even though it was located outside the company headquarters. It is worth noting that the total costs of this branch stand at LD13m. However, this branch has been annexed to the Tripoli administration in accordance with the GPC resolution no. 72 of 2003.

Libya's economy began to shift from socialism to capitalism at the end of the 1980s. In this context, several laws and decisions were issued to encourage this step. For example, Law No. 9 of 1992 was issued, which set the regulatory environment for the privatisation process. Promulgation of the law coincided with the imposition of international sanctions on Libya by the UN. However, the law was not activated after the suspension of UN sanctions in 1999. As a result, the PCOTCEU was established in accordance with General People's Committee decision No. 198 for year 2000. The main task of PCOTCEU was to execute proposals for the transfer of ownership of companies for which authorisation had been granted consistent with the evaluation programmes. The duties of PCOTCEU in relation to the rules of ownership transfer were determined by General People's Committee decision No. 52 for year 2005.

At the beginning of 2007, the JSPC was among of a number of companies chosen for evaluation by PCOTCEU. The work of evaluation was completed on 1 July 2007 and the results were adopted. Before the JSPC became privatised and transformed on the Libyan Stock Market, a decision was taken by the General People's Committee, stipulating that all companies located within the boundaries of a municipality should belong to that municipality. In other words, this decree would make the high voltage tower factory an independent entity under the administration of the Tajoura municipality. The outcome of this decision was that the company lost huge sums of money. Subsequently the capital of JSPC was dropped by the value of the high voltage

[35] When the company was established, one LD was equivalent to US$3. By 2007, when the company was privatised, the value of the LD has changed to US$0.77.

[36] Tajoura municipality located to the east of Tripoli.

tower factory. Such decisions can be attributed to the administrative instability in Libya. Finally, on 1 March 2009 the JSPC became a subsidiary of IIHC, which obtained the majority of JSPC's capital.

7.2. Objectives

The company was a publicly-owned enterprise; its goals were social aims, which were mainly concerned with the creation of job opportunities. As the Head of Accounts Department states: "Among the social aims is the creation of job opportunities and yet this aim no longer exists". The other social aim was to increase production in order to achieve self-sufficiency. Also, targets became focused on increasing the productive capacity and raising employees' productivity efficiency. However, these economic goals were ignored, because there was a lack of liquidity, as a result of labour market conditions. Since the JSPC was privatised, the objective is not solely about output but also about production, in accordance with the requirements of market demand. The Head of Accounts Department observes:

> "Among the social aims was the creation of job opportunities but this aim no longer exists. The other social aim was to increase productivity in order to achieve self sufficiency but this is now secondary, as production has become a function of market demand. The consumer and the market are the main focus nowadays".

Now, new goals are being created. The JSPC is currently trying to focus on a new set of objectives. The most important of these goals is to achieve the highest profit rates possible. The Assistant Director of Production and Technical Affairs declares: "Now attention is greatly focused on profitability". To achieve this goal, there should be a focus on other goals that act as subsidiary targets, the most important of which is to satisfy the customer; this comes through study of the market by undertaking market research and studying consumer behaviour. The Head of Accounts Department states that "the secondary aim as production has become a function of market demand. The consumer and the market are the main focus nowadays". Also, these subsidiary goals aim to achieve the highest rates of productivity efficiency of both workers and machinery. The JSPC is trying to reconcile the need for liquidity to the need to achieve acceptable training targets. Furthermore, the JSPC is trying to keep abreast of developments, especially in bringing in modern technology.

7.3. Change

The main procedures are still stable. This can be seen by the fact that the JSPC has not changed its organisational structures, cadre or job descriptions. However, statutory regulations and establishment contracts have both been changed to set up a JSPC and new statutory regulations and establishment contracts have been issued. There have been attempts to improve working conditions, increase the workers' efficiency and look for alternative sources of funding. In this area the Financial Director[37] emphasises: "There is no specific change, except that the JSPC entered the stock market. The JSPC's name was changed in 2007...So, there is no other change and there is no notice of further change".

The transition from a public to a privatised company has not been accompanied by significant change; the best proof of this is that the JSPC still depends on previous systems. However, this does not mean that no changes have taken place in the external environment. The most important change was the arrival in the form of competition which had not previously existed. Imports of the relevant inputs were opened up, having previously been limited to the PGC. In addition, there were changes in the local currency exchange rates against foreign currencies, leading to increased costs. These factors have affected the need to boost the plants' productivity. As the machinery is more than 30 years old, it needs to be modernised. The previous Financial Manager comments:

> "In this regard an important question needs to be answered: what is the main purpose of the change? However, we can hardly find a person in the company to answer this question….In most cases the market requirements should dictate the system. For example, the invention of a system to provide reports featuring the market competition and costs should imply the stability of the company before the system updating".

Previously, the JSPC delayed the preparation of its financial statements. Furthermore, there was then a delay in reviewing and auditing these financial statements. The GPC decided to carry out a preliminary evaluation of the JSPC prior to its privatisation. All the delayed financial statements were reviewed and approved. Among the reports needed for the evaluation were a number of performance indicators,

[37] The functional role of individuals has been used in the following to highlight their perceptions of the change.

which depend heavily on financial statements. This data could not be taken from non-approved financial statements. Despite all these issues, the Head of the Accounts Department stresses optimistically that "the nature of reports is requested, whether financial or non-financial and should include accurate data. The important change means that reports have become a request with more details." She also adds:

> "Significant changes have occurred apart from the fact that in the past there was a financial inspector designated by the government to monitor the daily spending, which supported the role of the financial manager.….The financial inspector tends to control spending through checking the relevant invoices and other documents, as well as monitoring the budget and overseeing any other measures in relation to budget control. However, it can be seen that there are more reports now than previously".

Another major change is the installation of a computing system, covering all aspects of the JSPC's operations, including the administrative, technical, financial and commercial sectors. The purpose of using these systems is to reduce time and effort and create cooperation between the departments of the JSPC. These systems have achieved their goals with respect to minimising time and effort. Unfortunately, these systems have not succeeded in creating cooperation between the departments. The Director of Commercial Affairs says that "coordination between departments should be more formal…And, in the absence of this kind of coordination, we cannot carry out marketing, distribution and production".

The Legal Counsel of the JSPC has a pessimistic view on the subject of the change in the JSPC and he concludes:

> "Everything in this company has changed, even the name; there is no longer a PGC. The name is now JSPC…dependence has changed…the General Assembly changed. Departments' names have completely changed. In the past, there was the People's Committee. Now there is the Board of Directors. The Secretary of the People's Committee became the General Manager. In spite of all these changes, we are still working with the previous regulations…One of the most important things missing after the company became a joint-stock company is the lack of control in any forms…I think that the main reasons behind losses which have occurred are that the company has a lack of control".

7.4. Market and Customers

According to the organisational structure, there is a Marketing Research Unit (MRU), which the JSPC is now trying to activate. The main objectives of the MRU are marketing orientation and customer satisfaction. The current work of the Marketing

Department is just selling through the issuance of sale bills. This department does not use other actions, such as advertising and/or market research. Practical steps to activate the MRU include the appointment of two staff (one of whom has experience but no formal qualifications) with the power to travel, collect information from the local market (which they have already obtained) and focus on the consumer rather than wait for the customer to approach the company. However, in general, Libyan industrial companies suffer from a lack of marketing skills. Therefore, these companies should not focus solely on experience but also on relevant qualifications.

At present the JSPC continues to dispose of old stock through the sales and exports of pipes, which are not used in Libya. The JSPC has to reduce its inventory in order to be able to achieve transition to a focus on customers and marketing. The consumer may now impose not only a simple change to the production line but also a change of the product to, for example, new type of pipes, such as PPR[38]. As a result, the JSPC is currently studying the possibility of introducing a PPR plant and is actively looking for the appropriate funding. However, in recent years the JSPC has been reporting losses, owing to its marketing problems and high labour cost of labour resulting from its large workforce. The number of workers is approximately 1200 but the optimal number should be 800. Therefore, the JSPC has developed plans for an expansions reasoning order to absorb the excess.

In relation to customers, there is a certain group of traders who deal with the JSPC. The only competition comes from imported products, which have caused the JSPC several marketing problems. Previously, imports were allowed only with permission of GPC, who also inspected the imported pipes. Now, imports are permitted from Europe, India and China. There are several factors that affect the competition for GPC. The first element is the price, as imported products are cheaper than JSPC's products. As a result, the JSPC is trying to reduce its prices, particularly in the export market. However, the costs of the JSPC's inputs are increasing, owing to higher raw material prices, labour costs and the need to meet the approved international standards. The JSPC has had a problem with quality, because of the absence of a Quality Control Office to test production.

[38] This is the name of a new product, which uses plastic as raw material, rather than iron or zinc.

The major marketing problem is the loss of customers, such as the oil sector. In the past, this sector was the main JSPC customer; however, oil companies have stopped using SWPP products (although these are still used for agricultural purposes), preferring instead LWPP. As a result, the oil sector discontinued dealing with GPC from 1994. At the present time, JSPC is studying the establishment of other types of plant. Accordingly, JSPC has attempted to keep abreast of developments by sending a group of engineers to South Korea. Hence, the products of JSPC are becoming less popular, owing to changes in market demand the flexibility of production has been affected.

7.5. Organisational Structure

After the JSPC became a joint stock company, it created a new organisational structure, although this is very similar to the previous structure. The structure is divided into two under the General Manager. The first is under the Assistant Manager of Production and Technical Affairs, who is concerned with the administration of the three main plants. The second is under the Assistant Manager of Administration, Finance, Trade and Materials and Stores. In addition, there are a number of offices which supervise activities within the JSPC, such as planning and follow-up, internal audit, quality control, legal, security safety and research and development (for more details see Appendix B).

Simultaneously, the JSPC reviewed the workforce by preparing data related to the job and its job requirements and hiring consultants to develop a complete picture of cadre and job descriptions. However, on completion of the review, the JSPC used the existing job descriptions, although it changed its internal regulations, such as Basic System and Establishment Contract. Accordingly, the JSPC has introduced a new written cadre featuring job descriptions, though nobody except the executive manager knows about the new job descriptions. In other words, all members of staff can describe their day-to-day duties but stop short of giving an accurate and scientific description of their actual job. The exceptions to this are the heads of departments but this is based on their previous experience rather than their knowledge of the new plan. Furthermore, none of the heads of departments or managers were able to answer a question relating to the number of vacant jobs in their departments, as they simply had no idea about the new levels of employment. This remains one of the mysteries of the top management, with even the executive manager and the head of the board of directors not fully aware of the new employment cadre, as it has not been elaborately discussed. The Director of Material clarifies this issue:

> "The companies in Libya are suffering from a chronic problem of overstaffing, which has resulted in high production costs, high prices for the products and failure to compete in the open market. However, overstaffing could be due to social factors, as the state policies consider social prosperity rather than economic returns as a top priority".

7.6. Management Accounting Systems

7.6.1. Total Quality Management TQM

As mentioned earlier, the objectives of the company has been modified from social to economic goals. Economic targets are mainly based on increasing profit. This target, profit, cannot be accessed without focusing on the goal of increasing production capacity and reducing waste. Also, the profit target cannot be accessed without paying attention to marketing, where the company suffers from such problems. As was also underlined, the company has lost the oil sector with all its companies. Therefore, market needs must be linked mainly to production.

The company is hardly trying to attract the oil companies to re-deal with the company and buy its products. In order to achieve this, the company attempts to satisfy existing customers and maintain them. In addition, the company is trying to concern itself in marketing, to acquire new clients and gain a larger share in the domestic market. In return, the company did not create more effectiveness and operational efficiency. Also, with the lack of adequate liquidity, the company has been unable to develop a system of incentives and raise the morale of the employees. Accordingly, it can be said that the new objectives that the company has been trying to focus on are converging with the advantages of total quality management.

The Assistant Manager of Production and Technical Affairs is responsible for the supervision of the plants in terms of production, operation and maintenance, as well as the development of new projects. The General Administration of Production and Technical Affairs controls three plants, each of which has a director and a technical unit to study the issues of spare parts, maintenance and technical problems. LWPP was established in 1976 and is one of the oldest plants. Second, SWPP contains two production lines and a cutting line. The first production line was established in 1986 and the second in 1997. The products of plant are used in agriculture. Third, IPP is responsible for producing oil pipelines and other industrial outputs. Each product is submitted to several tests before it is transferred to storage as a final product.

The most important consideration has taken into account in the production process is quality, for which the JSPC uses two inspection systems. The first system is used for raw materials, in order to ensure conformity within acceptable specifications. This task is conducted by the JSPC specialising in inspection. The inspection work, with a proportion of error not exceeding 1%, is performed before the materials are shipped to JSPC. The second inspection system is used on production lines, to ensure that the production meets the technical specifications. Inspectors observe the production lines and follow up the Quality Control Office. However, in practice, often inspectors' observations have been negligent, especially in relation to welding. The reason is that timely delivery takes priority. Faults in all the sections are not allowed, because the production will become defective. In general, all JSPC's production lines are sufficiently flexible to produce various types of products. However, some of the plants and their machinery are old and, as a result, their productivity is extremely weak. Thus, productivity could be increased by replacement and development of machinery.

In this context, the JSPC has attempted to sell to the oil sector but this has been rejected. Oil companies explained that the criteria requirement cannot be ignored in any circumstances. One of the most important issues requested by the oil companies was that a certificate ISO-9000 must be obtained. However, JSPC directors and managers explained that such a certificate is very costly and they feared that, even if they obtained the certification, the oil sector could still refuse to deal with JSPC, as there were no guarantees from the oil sector to deal with JSPC if it obtained the certificate. Additionally, this correlated with the JSPC's failure to identify its products in other industrial sectors.

The JSPC has hesitated to adopt ISO-9000 as a result of the divergent views of managers. The ISO-9000 concerns quality management, which means that the JSPC should be prepared to perform to meet the customer's quality requirements; apply organisational requirements; enhance customer satisfaction; and achieve improvement of its performance in pursuit of these purposes. In relation to this issue, the Quality Control Manager observes that:

> "The fact that the oil sector requires the ISO certificate proves that it is very important...whether the oil companies do business with us or not, we have to get that certificate as an important requirement to be fulfilled...there must be some standards to control the production process, as the company is now working randomly".

The Assistant Manager for Production and Technical Affairs states that:

> "The company has yet to get the ISO-9000 certificate, which is the main excuse of the oil sector for not doing business with us. In fact, huge sums of money are involved for obtaining this certificate, so the fear of the company is that, after paying out these sums and getting the certificate, there is no guarantee that the oil sector will do business with us. In other words, the oil sector has not shown good intentions to do business with us".

Whereas, the Director of Internal Auditing Office expresses the view that:

> "Other problems which have emerged recently include the request of the oil sector that the company should obtain the ISO certificate, which requires the company to improve its products to match certain standards, and that the company should expect surprise [inspection] visits".

The General Report of Company activities states that:

> "In its bid to achieve the ISO brand for 2008/2009, the office has contacted some of the companies specialising in the qualification of factories. The main aim is the qualification of the spirally-welded pipe factory to obtain that brand for excellence, in order to improve the chances for the market competition of its products".

In the middle of 2009, a new Executive Director was appointed. The former Executive Director has become Assistant Manager of Production and Technical Affairs, whereas the former Assistant Manager of Production and Technical Affairs has replaced the Director of Quality Control Office. The former Director of Quality Control Office, who is the leader of the project campaign, has returned to work as an engineer in one of the plants. In the debate above, there is a conflict in changing the mentality of some organisational members, such as the Directors of Plants.

This type of conflict eliminated the new project before it was born. As a result of this conflict and managers' replacement, the project failed. One of the most important causes of the divergence is a conflict of interests between managers in the higher organisational levels. Also, the power over resources has been widely used, in particular to persuade the Executive Director to reject the project funding in an attempt to prevent change. “This form of power [power over resources] works along the lines of behaviour modification” (Hardy, 1996: S7), whereas JSPC implemented power over resources, in order to maintain behavioural stability. Moreover, the top management team used the power over processes in order to prevent the former Director of Quality Control Office from participating in decision-making which related to adopting TQM. This is consistent with Hardy (1996: S7) states that:

> “The form of power resides in organizational decision making processes which incorporate a variety of procedures and political routines that can be invoked by dominant groups to influence outcomes by preventing subordinates from participating fully in decision-making”.

The main reason behind this failure is that the desire for change contradicted and challenged existing institutions. So this result is mentioned by Burns and Scapens (2000: 16), who reanalyse the preceding case study, which confirms that:

> “These different assumptions about the nature of the business were to become a source of conflict as the implementation of PCCP challenged the taken-for-granted assumptions of the operating managers who, as a result, continually frustrated the implementation process, and this ultimately led to the failure of the project” (see also, Scapens and Roberts, 1993).

7.6.2. Just in Time JIT

Another problem is the purchase and storage of raw materials. In the past the company used to buy big quantities of zinc and iron and try to manufacture these quantities to achieve as much as it could be maximum production possible for the sake of production. Now things have changed and the zinc purchases are made in accordance with the market demand for a certain product, so that these materials cannot be used for other products. This might be inconsistent with the orders as the JSPC tries to apply JIT. In other words, production is for sale and not for hoarding. Therefore, the JSPC is now using Just in Time methods (JIT). The Head of the Purchasing Department explained the idea of applying the JIT system as follows:

> “This idea originated in Japan. It is very simple to implement, depending on two elements i.e. production according to demand and zero inventory stock. What is required is the purchase of service instead of producing it and there needs to be more than one source for raw materials”.

The Executive Director identifies the problems related to JIT: “Generally speaking, the JIT is inherently suffering from problems and these problems are out of the JSPC’s control. For example, the agent-system is not successful in Libya". Whereas, the Director of Internal Auditing Office clarifies the change that has occurred in production processes, according to JIT: "The situation has now completely changed as production has become a function of the market, particularly following the application of JIT, as some products might not be in market demand and should not be produced".

A change in goals led to production according to demand. Therefore, the JSPC applied JIT, so that the production went according to market needs. Generally, it can be said that the JSPC applied the molecules of JIT but not the system as a whole. For example, JSPC has overlooked some molecules in JIT, such as purchase of services, for instance, maintenance and preparation of financial statements. The management accounting systems and practices have not been affected by the use of JIT but this change has shaped the new institution among the organisational members. It may be asserted that there have been strong environmental factors, which have led to such change as is represented in intense competition faced by the company. As Ma and Tayles (2009: 490) mention, "[t]he external environment … seemed to indicate strong demand for new management accounting practices. Competitive pressures impose strong demands on efficient conduct of commercial activities".

Accordingly, this pressure can be regarded as driven by competitive and/or institutional isomorphism. On the one hand, Hannan and Freeman (1977: 937) argue that "organizations develop the capacity to adapt at the cost of lowered performance levels in stable environments. Whether or not such adaptable organizational forms will survive (i.e., resist selection) depends on the nature of the environment and the competitive situation". On the other hand, DiMaggio and Powell (1983: 150) criticise the concept of competitive isomorphic and confer that:

> "It explains parts of the process of bureaucratization that Weber observed, and may apply to early adoption of innovation, but it does not present a fully adequate picture of the modern world of organizations. For this purpose it must be supplemented by an institutional view of isomorphism of the sort introduced […] "the major factors that organizations must take into account are other organizations." Organizations compete not just for resources and customers, but for political power and institutional legitimacy, for social as well as economic fitness. The concept of institutional isomorphism is a useful tool for understanding the politics and ceremony that pervade much modern organizational life".

Accordingly, the procedural steps can be traced to this change within the company. First, once the JSPC became subject to competitive pressures, it became necessary to search for a way out of the crisis. It had been agreed between organisational members that the company should start the actual change in beliefs, values, norms and the ways of thinking and doing things. This change required shifting the emphasis from production to market orientation by adopting JIT. Consequently, this step can be deemed as a stage of encoding institutional principles into the existing routines. Routines prevailing in the past represented production-for-production just as if it were taking place when the government established public companies. Burns and Scapens (2000: 10) clarify the encoding process as:

> "[…] the existing routines will embody (i.e. encode) the prevailing institutional principles, and will shape new rules, which in turn will lead to the formation and/or reformation of the ongoing routines. This encoding process draws on the taken-for-granted assumptions, which comprise the institutional principles, through their instantiation in existing meanings, values, and power".

Scapens and Burns (2000) add that using power over resources derived from the institutionalised structures of domination might be involved in this process.

The second is enacting to adopt some parts of JIT. In this context, the JSPC enacted its campaign at various organisational levels to activate the adoption of this technique, which is important for the JSPC's survival and its continuing to perform its functions. Continuation of this process is linked to employees' salaries. In other words, if the JSPC wants to continue its work, the workers will earn salaries. So, the power over resources was used by the administration. These trends have not focused on production- for-production as the main purpose. There was no feasibility in production-for-production, where the production was accumulated in the stores. Therefore, it can be supposed to have been defective cash and caused the monetary crisis in liquidity experienced by the JSPC.

In addition to the use of the power over resources, other types of power were used. The JSPC's management was cooperated with and supported by the General Assembly in the use of power over the processes of decision-making, which includes a range of routine procedures. These routines have been invoked by the administration of JSPC to influence the results, in order to prevent subordinates from full participation in decision-making. In addition, the administration had to cause changes in its agenda, which includes new perspectives, and raise the level of awareness about the process of market-orientation rather than production-for-production. Also, the JSPC used the power to shape perceptions and preferences of the organisational members to accept the status quo and this was affecting them. So, they cannot imagine an alternative way. This confirmation includes the power over meanings.

The implementations of JIT routines have taken place as repeated behaviour, which has led to reproduction of the routines. This institutional change has two aspects, conscious or unconscious change (see, Burns and Scapens, 2000 ; Scapens, R. and Burns, J., 2000). Intentional or conscious change has occurred as a result of the JSPC's ability to compile the sources and rationales necessary to change the existing rules and routines in which production orientation was grounded. The other face of this change can be presumed as unintentional or unconscious and occurred in the absence of regulations for implementation of all control measures appropriate to JIT. Moreover, there are rules and routines which are misunderstood and have been ruled out. Finally, the fourth process was institutionalisation; some parts of the routine of JIT have been reproduced by members of the organisation as a repeated behaviour and have been become institutionalised.

7.6.3. Costing Systems

The task of the Costing Department includes determining the cost of units of production, monitoring cost centres and, in particular, controlling raw materials and spare parts. In addition, it participates in the preparation of the budget and uses these budgets as a control tool, as well as conducting other studies, such as product pricing, which are prepared manually. The JSPC operates through two Costing Systems, which are the Job Orders Costing System (JOCS) and Production Process Costing Systems (PPCS). In other words, the JSPC has applied a mixture of costing systems, which has employed both JOCS and PPCS. The Senior Costs Accountant points out that "the Company uses a combination of systems, such as JOCS and PPCS". Of course, the PPCS has considered standard costs. Therefore, it should be used in production processes. The JOCS include oil and gas pipelines, which are utilised by LWPP.[39] Some parts of these orders' costs are standard and the other parts are non-standard. The previous Financial Manager demonstrates:

[39] Also, the names of plants have been partly disguised.

> "It is worth mentioning that the JSPC uses two costing systems, i.e. the flow production cost system and the one-off production cost system….Some of these orders are standard, while others, such as the oil pipes, are produced with various diameters according to demand".

As mentioned above, the JSPC has three plants. In the LWPP and the SIPP it is necessary to apply costing relating to production processes, such as the cutting and the welding stage, where production costs are calculated separately for each phase. However, the SWPP is more suited to the job orders costs system, which determines the cost per unit of production that can then be used in the pricing procedure. Also, the costs systems are used to control the inventory of raw materials, of finished production and in the process of production. The previous Financial Manager illustrates: "The flow production cost or the standard cost system uses production stages featuring two factories. The production of the other factory is made as required by the oil and gas industries".

These systems have been available when the company was established. The original costing system was prepared by accountants from Egypt. The costing system was compulsorily imposed by GPCI. It can be argued that this formal pressure exerted on GPC by GPCI (DiMaggio and Powell, 1983, 1991b) was a type of coercive isomorphism (see also, Carruthers, 1995 ; Granlund and Lukka, 1998a). Preparation of systems by accountants from abroad (Egypt) resulted from the absence of national accountants who were qualified for the preparation of such systems. At that period, Libyan companies imitated each other in using experts from abroad and the state had been encouraging such procedures. Also, resorting to the accountants from abroad can be classified among the factors of convergence within both normative and mimetic pressures. Therefore, there is interplay and overlap between different kinds of pressures. In this regard, DiMaggio and Powell (1983: 152) identify the relationships between these pressures as follows:

> "Professions are subject to the same coercive and mimetic pressures as are organizations. Moreover, while various kinds of professionals within an organization may differ from one another, they exhibit much similarity to their professional counterparts in other organizations. In addition, in many cases, professional power is as much assigned by the state as it is created by the activities of the professions".

Whereas Granlund and Lukka (1998: 163) clarify how diffusion of specific practices occurs among organisations in the society:

> "The recent trends of *professionalization of management accountants* have included the promotion of the ideas of cost management and nonfinancial measures, for Instance. Professions not only imply similarity between organizations, but they also represent media through which similarity is spread from one organization to another".

Later on, a team of local university lecturers at the Department of Accounting[40] designed a whole financial system, including an accounting system, a documentary cycle and a costing system. This change could have been deemed as conscious because the top management team intended to change the rules. In this context, Burns and Scapens (2000: 10) declare that "conscious change is likely to occur only if actors are able to assemble the resources and rationales necessary to collectively question the existing rules and routines". Although the system operated for a short period, there were issues with emerging routines which needed to be sorted out. So, the costing system had to be reviewed. However, some of the inconsistencies resulted from misunderstanding of the rules. The misunderstanding reproduced new routines, which were not represented by original rules. Thus, these routines might have been deemed as unconscious or unintended change. In this background, Burns and Scapens (2000: 10) state that "unconscious (i.e. unintended) change may occur in the absence of systems to monitor the execution of the routines and where the rules and routines are not sufficiently understood and/or accepted by the actors".

The costing system was also developed in 1982, many years after the company was established. At that time, the GPC had appointed a group from the oil sector to manage the JSPC. A group of experts from Petrochemical Company was designated to undertake the management of the JSPC. However, after the system was designed, the designated group was unable to cope with it, particularly the costing system. This group brought with them technicians and accountants. As a result, all the managers and directors came from the oil sector. However, these managers and directors found many difficulties in operating and understanding the existing systems. Consequently, the

[40] In the late 1970s, the diplomatic relations between Libya and Egypt had been suspended as a result of some political differences between Qaddafi and Sadat (see chapter two).

designated group sought the advice of the financial experts from the oil sector. The group was requested to make the necessary amendments or improvements or, if necessary, to scrap the whole system and replace it with a new system. The Director of the Internal Auditing Office points out that

> "The group borrowed the system of one of the oil companies and introduced some amendments to fit with our company. The documents that have been used by the oil companies have been slightly amended and are being used today".

As DiMaggio and Powell argue, "Uncertainty is also a powerful force that encourages imitation. When organizational technologies are poorly understood […] organizations may model themselves on other organizations" (DiMaggio and Powell, 1983, p. 151). This example is a type of mimetic isomorphism, because JSPC copied the specific systems of the oil company. Granlund and Lukka (1998: 167) explain the relationship between social behaviour and mimetic processes as follows:

> "Mimetic processes are linked to the cognitive and socially constructed side of human behavior [...] Individuals and organizations seek their identities in a net of competing modes of social behavior, of which the most prevalent or successful alternatives are often the ones imitated/adopted. Imitating others typically is an effective strategy for social conduct".

The change made by the JSPC's administration was associated with the developments in the financial accounting system and the costs accounting systems. Consequently, the accountants were able to work with the existing systems. The JSPC was assigned specialists from oil companies to make changes to the costing system until the system was understood by the JSPC's administrators. Also, many documents were brought from oil companies, such as purchase orders, exchange stores and other documents. Therefore, this group of individuals introduced new formal rules through their powerful position. This type of change was revolutionary because it involved major "disruption to existing routines and institutions" (Burns and Scapens, 2000, p. 20). Moreover, conflict between the managers and accountants generated specific resistance involving new routines that were in opposition to new rules.

The task of this group was completed at the end of the 1980s and another group was assigned as the new management team. The new group did not understand the systems, which came from the oil sector. Therefore, specialists and consultants were employed; they drew on the expertise of academic staff from the University of Garyounis. In this case, there was a lack of alignment between the original written systems, the changes that were made by the specialists and consultants of the oil company and the amendments which were made by the consultants from the university. Thus, the new rules were shaped by existing routines, because existing routines were understood by organisational members according to past actions, the existing rules and their routines, and also in terms of their taken-for-granted assumptions (Burns *et al.*, 2003).

In the 1980s and 1990s, mechanisation began to expand through use of computing systems in the JSPC. At that time, the phenomenon of systems changes from manual to computing systems was fashionable (mimetic isomorphism). This trend in transfer from manual to computing systems resulted in an increase the recruitment of administrative staff. For example, in the JSPC stores there were more than 50,000 items in one store. Therefore, computing systems were utilised but the manual systems were simultaneously continued. In this case, using the computing systems resulted in a lack of confidence. Subsequently, many problems dramatically emerged. The major problem was that the manual system generated results that were completely different from those produced by the computing systems. As a temporary solution, additional work was created, which involved matching the two results. All this happened because the JSPC was afraid of computerisation and losing information.

Systems that are written are of no use if they cannot be applied, as was the case in the study. In addition, aspects of the documentation were neglected, while other aspects were developed, especially in the preparation of reports. The recording of some of these changes was ignored; this can be regarded as a defect (rules disregard). In other words, the changes were not taken into account and did not modify the original system. The recording of the accounting system must include all the changes made and the record must be accessible to all. It might be stated that this message confirmed that this is as loose decoupling between rules and routines.

There are proposals that include changes to writing systems, regulations, documents and job descriptions. However, these changes are not easily introduced and must take place over time. In this case, new routines were enacted, and thereby reproduced, as repeated behaviour in their day-by-day use by both managers and accountants. In other words, reproduction routines did not create new rules. It can be stated that these reproduction routines involved unconscious change, which occurred in absence systems to control execution (see Burns & Scapens, 2000). Burns & Scapens emphasise that "routines themselves can be institutionalized. In other words, they become the taken-for-granted way of behaving" (2000, p. 11). The previous Financial Director emphasises:

> "It must answer the important question that is 'What do you want from systems change?' It's hard to find someone in the company to answer this question…Often market requirements impose rules, such as reports quality, output of the system and, in particular, competition and cost. Therefore, the company's position must be stabilised and then there should be experience of developing systems".

This is emphasised by the Senior Costs Accountant:

> "The function of the cost accountant is to control the inventory of all types and determine production cost. In addition, he or she assists in other works, such as preparing budgets and costs statements. Also, all costs including industrial, administrative and sales are allocated to production...so, the administrative and industrial expenditure are distributed to plants with different basic outputs".

The JSPC is now considering linking the different departments through the Internet. The main purpose of this project is to practise tighter controls through linking the auditing office to the different company's departments, particularly the financial and cost departments. The cost department is particularly important, as it reduces prices from time to time in coordination with the marketing department. The reductions are always made following a survey of the market prices; however, the continuous reduction of prices may cause financial damage to the company, as sale prices could possibly be less than the actual production costs. However, controversially, the financial department withholds such surveys on the grounds that they are classified by the company as confidential and should not available to everyone.

There have been several changes in the costs accounting systems. These changes did not affect the written systems but came about because of routines used between accountants. The aim of these changes was that they facilitated speed and action. Overall, in the JSPC there is no satisfaction from working with the existing costing systems. There are reservations related to costing systems. The Head of the Purchasing Department has concerns that the costs accounts are not sufficiently accurate. In this context, he gives the following example:

> "I am not an accountant but I can say that the costs accounts are not accurate. I will explain a particular example, about what happens when a spare part is withdrawn from stores. Usually the department which requires the spare part is the maintenance department. In this case, a load of spare parts requested was recorded by the maintenance department and then costs of this department were distributed to plants. Here, accuracy and fairness in distribution has been lost. More correctly, the costs of the spare parts should be uploaded by the plant that used these spare parts…It is impossible to determine the correct cost of expenditure capital per machine. The reason is that it has not been correctly allocated and this is the problem. . . There is a depletion of spare parts from some machines. The role of costs accounting systems should be to warn of such errors. An indicator of the continuing spending on this machine should be provided, which would have been changed for an optimal solution".

The Head of the Accounts Department mentioned the kind of difficulties that faced the costs accounting department:

> "Of course there are obvious shortcomings and multiple problems related to the assessment of inventory at the end of the year. Also, alignment between accounts and costs departments was at the end of year…this alignment took a relatively long period. Now, an important change has been introduced, which means that alignment is conducted monthly, because the stock market requires financial statements every three months…The transition from manual systems to the computing systems in the accounts and the costs accounting departments must be accompanied by systems development to meet managers' requirements of information (Coercive isomorphism)".

The Financial Director criticised the performance of the Costs Accounting department; he states:

> "In any industrial company the costs accounting department is considered as the cornerstone, because it provides cost data to the company's management at any moment. Generally, in this company, there are shortcomings in the performance of the Costs Accounting department, because it provides costs data at the end of the year. In this case, the company's management does not know whether profits or losses have been achieved until the end of the year. This information must be available at any moment…I do not think that there are obstacles but it can be said that there has been no serious action taken to address this shortcoming. This could be due to lack of officials' knowledge of the significance of the Cost Accounting department".

The Previous Financial Director explains some of the associated difficulties:

> "There are malfunctions as well as other problems in relation to the evaluation of the inventory stock at the end of the fiscal year. Another problem is associated with matching between the accounts and the costs. This matching used to be made at the end of the fiscal year, which led to the accumulation of duties. Nowadays the

> matching is made on a monthly basis to meet the requirements of the stock exchange market, which asks for quarterly financial statements".

These systems are written but as yet have been made not available to all users. Furthermore, the systems were developed during the early days of the JSPC but a number of changes have been taken place that have not been recorded, although they are practised by the accountants as a matter of daily routine. Some reforms have been made for simplifying and speeding up procedures. For example, a number of analytical journals have been phased out, to be replaced by the new systems. Both the accounting and the costing systems used to be manual by cards and are now computerised. However, these systems still need to be upgraded to meet the information requirements of managers. The manager of the financial administration has ordered improvements to be made to the systems, acting on comments made by the external auditor, and the control and follow up authority which used to undertake the role of auditing and control. This was a kind of coercive isomorphism, because the pressure came from the external environment (DiMaggio and Powell, 1983).

The JSPC also suffers from a number of internal problems in relation to the costing systems. One of the problems is a discrepancy in the system of ordering between the factories and the stores on the one hand and the sales invoices on the other hand. In this regard, while the former takes place by length (per metre), the latter takes place by piece, which is the standard length of a piece. Furthermore, in practice pieces often differ in length, thereby affecting the stores and needs to be readjusted occasionally. To eradicate this problem is relatively easy by introducing one standard measure based on either length or piece.

7.6.4. Pricing

The JSPC had been subsidiary to the public sector from the establishment until transferring to privatisation. During that period, the pricing process had been supervised by GPCE. This meant that the approval of products' prices must have been obtained by GPCE before it started the selling process. Previously, a special study about the price for each product would have been prepared. This study had usually been submitted to GPCE in order to review and ratify it, if there had been any reservations. In the case that reservations existed, the JSPC had to respond to these reservations and treat or modify some or all of them. Therefore, this is a clear signal that the JSPC had been subjected to coercive pressures, which came from formal pressures exerted on JSPC by GPCE, upon which both were dependent (see DiMaggio and Powell, 1983). Also, this pressure might be imagined as factors convergence that leads to harmonisation between companies working in the same environment (see Granlund and Lukka, 1998a).

One must return to the special study that the JSPC prepared in order to obtain the approval of its prices. This study depended on costing data that was available in the costing department, which was supervised by Financial Management. Costing data used in the pricing consisted of three elements of production costs, raw materials, direct labour and overhead costs, in addition to selling and administrative expenditure. Consequently, the Costing Department was assigned to prepare such pricing studies. Based on this authorisation, the Costing Department had dominated the pricing processes and the intervention of any member of the organisation was not allowed at all. Accordingly, the pricing processes had been conducted by the Costing Department and had become the taken-for-granted way of doing things in JSPC, i.e. these processes had become institutionalised (see Burns and Scapens, 2000 ; Scapens, R. and Burns, J., 2000).

This situation had lasted for a relatively long period since inception and until the market opening. This happened when SC was lifting economic sanctions that were imposed on Libya during the nineties of the last century. There was an appointment with the opening market, which resulted in the local products becoming exposed to marketing risk. JSPC, as part of Libyan companies, had faced marketing problems. Also, the production had accumulated in the storages and had become an inactive asset. In the midst of these debates and the reality of fierce competition, the company tried to find a way out of this crisis. This was synchronisation with the transition of JSPC to the private sector and salvation from the dominance of the public sector. So, it could be stated that the company was liberated from the constraints imposed by GPCE, especially in prices control. Overall, among some sets of proposals as solutions, there were attempts to review and evaluate the pricing processes that had been identified by the Costing Department.

The JSPC uses a standard costing system for products pricing. Also, it uses a cost-plus pricing method. The pricing system involves using power over processes to influence the outcome of the decision taken by the JSPC. The administration has been persuaded by accountants that there is no substitute for the pricing style referred to above. The power-over-processes exists "in organizational decision making *processes* which incorporate a variety of procedures and political routines that can be invoked by dominant groups to influence outcomes by preventing subordinates from participating fully in decision-making" (Hardy, 1996). Also, the Costing Department and Financial Administration have benefited from using power over meanings, to prevent the Marketing Department and Commercial Administration from participating in decisions on pricing. Power-over-meaning "is often used to shape perceptions, cognitions and preferences so that individuals accept the status quo because they cannot imagine any alternative" (Hardy, 1996). This is exactly what Costing Department had done with other organisational actors. All kinds of powers were used to cover the management decisions relating to change.

In JSPC, the Costing Department supports the idea that it is a price-maker, while the Marketing Department wants to adopt the position of a price-taker. In JSPC, however, the latter position has received support and power over meanings has been exercised in order to overcome marketing difficulties. The JSPC is currently reviewing its prices through a method of price-taker. This technique relies on data of demand, supply and the price prevailing in the market. JSPC was forced to adopt this style as a result of exposure to strong competitive pressure. So there has been significant debate of these different views of members of JSPC. For example, the Head of Marketing Department discusses:

> "To continue selling prices determined by the Department of Costs does not give us any adequate flexibility to attract new customers. In addition to that, we lose our existing customers. We must look to the long run and try to attract new customers and, more importantly, maintain them by meeting their requirements".

On the other hand, the Head of Costing Department has a different opinion about this issue, that: "the selling process carries out below-cost results in achieving the losses, which affect the liquidity in the long term. So such irresponsible acts, which drain the company's assets, must be stopped". It could be conceptualised that the processes of pricing change started its first process, which is encoding process (arrow (A) in figure (4-4) p. 131). The second and third processes (arrows B and C) must be followed according to the institutional framework. The process of pricing change has faced conflict or resistance to change. This is referred to conflict between Costing Department and Marketing Department. This conflict prevented the change to "take place as repeated behaviour leads to a reproduction of the routines" (see, Burns and Scapens (2000): 10). Therefore, the price-taker practices have not been an institutionalised or taken-for-granted assumption. In this regard, Scapens (2006:15-16) states that

> "Central to this framework is the notion that management accounting practices are part of the organisational rules and routines, which enable organisational members to make sense of their actions and the actions of others. Furthermore, if they are widely shared and underpinned by accepted meanings they reduce the potential for conflict in the organisation".

In JSPC, however, the opposite direction occurred and emerged when each department has had specific assumption about the nature of pricing, which is consistent with Burns and Scapens' (2000) analysis that states:

> "These different assumptions about the nature of the business were to become a source of conflict as the implementation of PCCP challenged the taken-for-granted assumptions of the operating managers who, as a result, continually frustrated the implementation process, and this ultimately led to the failure of the project" (see also, Scapens and Robert 1993).

7.6.5. Budgeting

The JSPC has its own objectives from the budget, which make the control process easier, through planning budgets. In the past the budget used to be based on production, more or less depending on the design capacity. Every year the JSPC has to prepare budgets for the following financial year. This plan takes into account all the expenditures that will be required for the next year. In September each year, the JSPC begins to estimate its budget. Previously, the budgets were prepared as a result of a production basis. Now, the situation is completely different, because the budget planning process starts in the Marketing Department. The Executive Director contacts all the departments regarding an assessment of their requirements during the next year. The budget is then prepared by the Marketing Department, which sets the number of units to be produced for the coming year.

The second step is to transfer the estimation of the number of units to be produced to the Assistant Manager of Production and Technical Affairs. The Assistant Manager of Production and Technical Affairs has identified the total requirements of raw materials, other necessary inputs, machine operating hours and labour hours and costs required to complete the planned production. This work has been done by the efforts of a professional committee, which has been composed of managers, engineers, technicians, accountants, administrators and salesmen. The result of the budget process is that production is based on market needs and the required quantities of the inputs are set. Then the data is sent to Financial Affairs, which in turn translates the quantities into costs. In this context, the current Financial Director stresses the importance of preparing and using budgets as planning and follow-up tools:

> "The company is trying to spend within the budget...when the purchase order is submitted to Financial Affairs for payment. It is necessary to refer to budget allocations to make sure that the item in the budget is a permitted payment. If the allocation for the item is already fully used, then it will require approval from the Board of Directors (BD) before it can be paid. If the cost of any item in the budget is exhausted for any reason, the BD will transfer value from another item that still has a positive number. The shortcoming is that the bookkeeping is still being used to monitor budget implementation. However, it must be used and also some computer systems are used to monitor budget implementation".

Each plant has a separate budget and these are combined to prepare one budget. Monitoring is implemented through preparing monthly reports where variances are identified. The report containing these variances is called 'The Report for Following-Up and Implementing the Budget'. It includes the estimated and actual data for each item of sale and expenditure, whether a commodity or service. In addition, variances are represented as desirable or undesirable and the report also contains the reasons and the responsibility for the variances. The Financial Director emphasises the importance of the report and the analysis of the variances:

> "Desirable variances are not, in some cases, reassuring. For example, a positive variance in the raw materials indicates that the output is completed under specification or there is a reduction in raw materials involved in the production process. This would negatively affect the production quality...Variance reasons must be clearly defined".

With regard to Production and Technical Affairs, a report on what is produced during a certain period is prepared and then compared to the estimates set in the budget. If the variance indicates that there is an undesirable or negative output, the JSPC's management takes procedures to correct the position. All departments within the JSPC use these reports and the Marketing Department also prepares a report about what is actually sold, in comparison to the budget plan. There is also the Office of Planning and Follow-up, the role of which is to collect reports from all offices and departments in the

JSPC. These are then summarised in a single report which is submitted to the JSPC's senior management team to assist its decision-making. Variances analyses, standard costing and budget plans have been influenced by what organisational members have learnt in universities and professional training centres.

This has resulted in characteristics of professionalisation, which are significant sources of normative isomorphism (DiMaggio and Powell, 1983, 1991b). The steps for conducting budgetary work have been institutionalised, along with other organisational routines, grounded in a more marketing-orientation (see, Burns and Scapens, 2000). Moreover, the existing routines and institutions of both managers and accountants have encoded their taken-for-granted assumption about their understanding of variances analysis and standard costing (see, Burns and Scapens, 2000).

In 2002, a flexible budget was prepared on the basis of several production levels; however, this was never repeated. The JSPC staff justified this by saying that the reasons for applying the flexible budget were that there was a lack of awareness about market conditions at that time. They added that, since that time, the JSPC has been fully aware about what is occurring in the market. Arguably, if it did have this knowledge, then it might not have faced problems in marketing its output. In this case, the rule did not shape nor was it shaped by the routine and neither became institutionalised (resistance to change). Burns and Scapens (2000) argue that resistance might be due to a lack of knowledge and/or experience of adopting this type of change (see also, Scapens, R. and Burns, J., 2000 ; Siti-Nabiha and Scapens, 2005). The most important issue in this context is that the company did not use sufficient power in order to implement this practice.

As part of its duties, the auditing office undertakes a follow up to the budget by highlighting any variances. Conversely, the control process should go beyond this step and determine and investigate the causes for the variances, in addition to determining who should be called to account whenever possible. However, expanding those duties could create problems among the different departments, which otherwise work in a cordial atmosphere. Furthermore, as a consequence, the vertical communications between the different organisational levels and the general manager will increase at the expense of horizontal communication.

The control side of the JSPC appears to be inadequate. This deficiency is usually discussed by the board of directors. The different organisational divisions of the company forward proposals or recommendations to the board of directors. However, these proposals, whether they involve the adoption of new systems or improvements to existing systems, are always frustrated by the limited financial capabilities of the company. These constraints curtail the introduction of new systems, the training of the staff on the existing systems and the creation of new job opportunities for highly skilled and qualified personnel.

7.6.6. Measuring Performance

There are many performance measures that have been used, such as a profit measure, a liquidity measure and a production targets measure. For example, performance has been measured in departments that monitor what is made and what targets are achieved. There is a sanctions regulation, which has been issued by the JSPC's Management. This sanctions regulation governs employees' behaviour in the JSPC and is also applied to the work within the JSPC. Sanctions are not directly related to performance but are associated with the individual behaviour of employees during their work. There is a close link between performance and the rewards system. For example, when the Financial Management prepared its financial statements within a specific time, the JSPC gave a bonus to the staff who participated in the reports preparation. The rewards system is also implemented in the production departments, especially in cases where targets are exceeded. Generally, there are no regulations concerning rewards but the bonuses paid are dependent on the individual managers rather than JSPC's regulation.

The evaluation of performance in the company seems to be of clear interest in assessing the performance of individuals. This interest stems from the application of the Labour and the Civil Service Law No. 55 for 1976 by the RCC. This law can be supposed to be part of the coercive pressures that were binding on the application. As a result, it was taken as factors of convergence between the organisations working in the same business environment. This law is considered as binding and the application of these rules is an administrative routine, not an accounting one. This application of the administrative routines is characterised by stability, in spite of the company's transition to the private sector. This law was binding on the application on all government units and public companies.

It becomes a difficult task to assess individual performance in relation to the overall performance of JSPC. For example, some individuals undertakes their full duties as required while others, probably in the same department or even in the same section, do not care and rely on others to do the job for them. Consequently, as highlighted by many interviewees, any assessment of individual performance should be made with total transparency at all levels. The other problem is that the bonus system should be related to production and performance. A worker who is assessed as very good in the annual report will be provided with an annual wage increment, otherwise that increment will be held back. However, personal relationships remain a decisive factor in the assessment of individual performance.

In the last four years, the JSPC has been burdened by heavy losses, after achieving profits for many years. The main reason was the high cost of labour, as the number in the workforce currently stands at 1200, while the actual requirement is 800. What makes this even worse is the fact that one of the factories is almost stopping, as there no market demand for its products. Future plans feature expansion of production activities, to accommodate the exits workforce surplus. But, as yet, the JSPC is currently looking for sources for funding to upgrade its factories as well as establish new factories.

The most important change that occurred when the JSPC was a public company was to the delay in the preparation of balance sheets and income statements and delays in the application of the budgets. Suddenly, the evaluation was made on time and all the delayed financial statements were prepared. As for the reports, they involve the performance and the indicators of performance. Some of these indicators depend on the financial statements, so that information from unapproved financial statements is unreliable. The nature of these reports is financial, as they include detailed financial information. As far as these reports are concerned, the most important change that has occurred is that these reports are requested in more detail.

It was noted that there was a lack of clarity of measurement performance systems in administrative and strategic decision making. For example, there are no clear policies to achieve customer satisfaction. The evidence is that the company has failed to agree on the subject of TQM. Such an issue as TQM, or ISO-9000, is one of the requirements of the oil sector in re-dealing with JSPC. Moreover, there is narrow use of measures of evaluating financial performance. Also, the potential of the company, especially in terms of liquidity, has played a pivotal role in ignoring developments which have occurred in the field. These issues have disallowed a high degree in the training policy to promote effectiveness and efficiency, which would raise the operational efficiency and find a suitable system of motivations.

7.6.7. Training

Despite the importance of training, the JSPC has not given it any attention. The main reason is that the JSPC suffers from liquidity problems but also, the JSPC has other priorities. In the past, employees were sent to study on medium and long-term training courses, rather than short-term home study courses. In addition, there are conflicting views on the subject of training among the managers of the company. The Head of the Accounts Department declares that:

> "In my experience in accounts, I noted that the person who receives a training course does not benefit at all. For this reason, the employee has not attempted to improve his level during a training session but seeks only to get away from the pressure of daily work…. It has been noticed that those who have given training opportunities have not improved in terms of performance. This is for the simple reason that the trainees look at these training sessions as a means to relax from work pressures".

The Assistant Manager of Production and Technical Affairs emphasises the importance of training:

> "We believe that training is significant, but unfortunately we do not implement it…There are priorities, such as paying salaries on time, and also, there must be supplies of spare parts…There is a Training Department, which is controlled by Administration Affairs, but it does not implement any training plans".

The General Report of Company Activity refers to the fact that the JSPC has failed "to implement the training programmes, particularly in relation to electronic maintenance, owing to lack of ready money" Furthermore, the report mentions that the "staff of the quality control department need training". The Director of Material confirms:

> "The perfect investment should be in the human element through training and qualification and the right person should be in the right job…As for the second generation of administrators, this has no place in real planning in Libya. The creation of the second generation should materialise through training, which is not always available, owing to a lack of ready money".

It can be argued that Libya is no longer ignored by international professional institutions, because these organisations now conduct training courses in the country. For instance, there are many national training centres linked to American networking bodies such as the Balanced Scorecard Institute.[41] Therefore, the main training difficulties of JSPC are divided into two components: first, the JSPC has suffered from the lack of liquidity, especially when the JSPC lost its western branch; and second, national and corporate cultures. National and corporate cultures have played significant roles as factors driving the divergence regarding management accounting systems and practices. As Granlund and Lukka argue, "At the micro level of management accounting practices, the influence of national cultures has been and still is, in the direction of driving divergence" (Granlund and Lukka, 1998a, p. 165).

7.6.8. Reporting

In relation to reporting systems, specific types of reports have been imposed by the IIHC. Additionally, particular kinds of financial statements have to be prepared quarterly for the needs of the Libyan Stock Exchange. The models of the different reports featuring the activities of the companies associated with the IIHC have been reviewed and some changes have been introduced. The management of the IIHC has agreed to generalise these changes officially, to include all the associated industrial companies. In this case, new rules have been issued by both the IIHC and the Libyan Stock Market. The models of the different reports featuring the activities of the companies associated with IIHC have been reviewed and some of changes have been introduced as follows:

1) The sales form (industrial and commercial activities): a new column has been added for the sales of the previous year, given that these sales are worked out on the prices of the current year.

2) The export form: a column has been added showing the quantity and amount of the target exports according to the approved budget for the year.

3) The model of the inventory stock of the complete production (industrial activity) and the model of the inventory stock of the ready production (commercial activity).

[41] For more details, see the links below:
http://www.ebs.ly
http://www.balancedscorecard.org/Training/CourseSchedule/tabid/71/Default.aspx

4) The production model: the achieved production is worked out using the sale price of one time and the budget price of another time.

5) The operating status, showing the status of the factories stopping for a period of one month or over.

6) The model of breakdowns and stoppages defining other types of breakdowns.

7) The model of the follow-up of projects under establishment and other projects under study for contract. This model is for the company projects only; another model will be added for other projects to be executed by the company for clients.

8) The open and confirmed credit model and the model for the movement and costs of open credits: the credits are listed as cash or documentary credit and also include the standing credits for the previous years.

The IIHC for the development of industrial investment has agreed to generalise these changes officially, to include all the associated industrial companies. Therefore, these rules have been imposed by external actors, which can be classified as coercive isomorphism (DiMaggio and Powell, 1983, 1991b).

These new rules have been resisted by organisational members within JSPC. As a result, new rules have not become institutionalised, because the routines have not been reproduced. Also, new rules have not shaped or been shaped by new routines, because these rules challenge the existing institutions. So, that is occurred in the second process of change (enactment process). This is given clear signal that the parent company has not implemented sufficient power, whereas the parent company preferred to extrapolate the reactions of subsidiaries companies. Also, non-use specific form of power appeared the ability of JSPC, as subsidiary company, for resistance to accounting change. Therefore, the existing challenge must be resolved by using the power-over-resources.

7.7. Conclusion

Chapters Six and Seven addressed the two case studies of the two Libyan industrial companies, which have been privatised. These companies are located in the same city. Therefore, it can be considered that the surrounding environmental circumstances are the same. Also, both companies are subsidiaries of the same parent company. Therefore, during these chapters, similar topics were discussed. For example, a historical overview was given, through analysis of change in the objectives and the change in the organisational structures of companies and the change in the marketing environment. The chapters also discussed the management accounting systems and practices and the most important changes that have occurred in both companies. Also, theoretical explanations were provided for such changes. In the next chapter, there will be a comparison between the two companies and explanations of the main findings of this study will be provided. Besides, the findings of the study will be linked, with results available in management accounting literature

CHAPTER EIGHT: CROSS-CASES AND DISCUSSION

8.1. Introduction

In the previous chapters, the details of two case studies were addressed; each case study highlighted a Libyan industrial company which had recently been privatised. Analysis focused on internal and external factors that may affect management accounting systems and practices, such as organisational structure, information systems techniques used in administration and production, competition, markets and customers. Furthermore, there was an in-depth study of management accounting systems, their role in decision-making and the extent of reliance on the information provided by these systems. It mainly focused on the major changes in the practice of management accounting, highlighting the stability and the reasons why the systems continued.

In this chapter, there is a comparison of the most important results reached by the case studies which are referred to previous chapters. The selected companies studied are both located in the city of Benghazi. This means that the social, economic, political and environmental conditions are quite similar. This similarity provides a great opportunity for in-depth comparisons of the internal procedures, in order to understand the differences that enhance the understanding of the nature of management accounting systems. As well as that, the results of the case studies are interpreted and compared in the context of the study and both positive and negative links are found between them and the accounting literature.

8.2. Establishment of the Companies

Both companies were founded around the same time in the mid 1970's. There are several reasons for the establishment of industrial companies from which self-sufficiency and self-reliance can be achieved. One is to create employment opportunities for members of the community, which relies on production rather than consumption. In particular, that period coincided with the implementation of socialism and the abolition of all laws that had been in place during the era of capitalist individualism (see, Vandewalle, 2006). That period also witnessed the nationalisation of foreign companies and the confiscation of individual national companies (see, Otman and Karlberg, 2007).

Generally, these measures met with disapproval in the West, particularly in the United States, which took some deterrent measures. These measures can be considered as among the many reasons to found various sizes of industrial companies. They could also have been the impetus for these companies to look at the political leadership, and the need to establish an industrial base in an attempt to reduce dependence on Western countries. The political leadership was also expected to impose economic sanctions from the United States, especially with the beginning of tension in bilateral relations between the two countries. This analysis is supported by the fact that one of the companies studied was established in order to provide the oil sector with tools necessary for the supply of oil and gas from oil fields to export terminals, as this sector had previously depended entirely on U.S. companies, whilst the other company was interested in supplying the Electricity Company with basic materials to complete the development plans that had been put in place.

8.3. The Companies' Capital

The capital of both companies was quite similar at their establishment: that of JSCP was LD 12 million, while that of JSCC was LD 7 million. Both companies began their work with one plant and then added a number of plants by self-effort. Given the monopolistic nature of the marketing policy that had prevailed in the 1980s and 1990s, both companies grew rapidly. JSCP's capital reached LD 42 million in 1992, while that of JSCC reached LD 32.7 million in the same year. The capital of the two companies then remained the same until 2007. The situation had continued as it had been until 1999, when international sanctions were suspended (see, SC, 2003), and the market became more open and competition was fiercest (see, Otman and Karlberg, 2007); for more details see Chapter Two.

In the meantime, JSPC lost its main customer in the oil sector, because the company had no access to ISO 9000. The company also lost its branch which had been established in Tajoura region, with investment losses amounting to about LD 13 million, the main reason leading to the re-evaluation[42] of the company at less than the actual capital, whereas the company's capital after the re-evaluation is LD 35 million. On the other hand, JSCC maintained its main customer, the EC and tried to improve in

[42] Re-evaluation was conducted by PCOTCEU in order to prepare the companies to be privatized; for more details see subsection (2.4.8.).

every way and provide all the facilities that would make the EC continue to deal with JSCC. This meant that the capital of the JSCC after the re-evaluation amounted to LD 78.85 million.

8.4. Objectives of the Companies

The case study shows that the objectives of JSPC have changed completely from social to economic. “These objective-based theories suggest that privatization insulates management from political and social goals. Hence, new private owners are more likely to focus on financial objectives and to redirect incentives to enhance financial performance” (Cragg and Dyck, 1999: 479). Fundamentally, JSPC has faced several serious problems in many areas, before and after privatisation, including the lack of liquidity, foreign competition, the high costs of labour and other problems related to the production process. The cores of these difficulties have generally related to issues of quality, customer satisfaction, responsiveness, and productivity (Burch, 1994).

There are also religious reasons which have prevented the company obtaining loans with interest. In the last four years JSPC has been burdened by heavy losses. This is reflected in the decline in its financial performance. There have been similar findings in the literature, that profitability, employment and efficiency decreased significantly after privatisation (Harper, 2001). In the Czech Republic, Hungary and Poland, privatisation has not had a significant effect on the performance of companies controlled by insider-owners (Frydman *et al.*, 1999), whereas other studies on privatisation support the idea that financial performance has been improved by privatisation (Boubakri and Cosset, 1998 ; Tsamenyi *et al.*, 2010).

The companies changed their goals when they moved into the private sector. The main change was in shifting the objectives of the companies from political and social goals to economic ones. These changes were reflected by amendments to its basic regulation and contract of establishment. Social and political goals were represented by Libyan self-sufficiency, reducing dependency on the industrialised countries and creating job opportunities for Libyan nationals. Arguably, over time these goals decreased in relevance and in many cases became non-existent. In the private sector, achieving high profitability levels has become the main focus of management and shareholders.

8.5. External Factors

An embargo was imposed by the UN on Libya during the 1990’s. The marketing situation of both companies was excellent, especially when the market was closed. It was also the case that import was conducted within the narrowest limits and was allowed only with the consent of the national companies producing goods. These conditions created significant growth in all national companies, including those in our case study, through their focus on production alone. In particular, that period saw the practical embodiment of the principle of Product Sold. This meant that the production item was produced and sold and industrial companies did not find any inconvenience in production marketing.

In any case, this situation did not continue for long. When the international sanctions which had been imposed on Libya were lifted the oil sector found development and searched for modern technology. Also, the oil sector contracted the major international companies to insure the oil and gas supply lines. This resulted in all companies in this sector ceasing to deal with JSPC on the grounds that it did not have the ISO 9000 certificate. This certificate is required by all insurance companies where there is exposure to risks that require compensation. There was a dilemma for the company as obtaining the certificate required them to spend large amount of money. Also, the requirements for obtaining the certificate are believed to change some of the prevailing concepts and emphasis on quality, reducing defects and the intensification of production quality control and, most important of all, customer satisfaction (remaining customer-oriented).

However, the changes in targets were not accompanied by a new focus on marketing and market orientation. The company still uses primitive marketing methods. Perhaps one of the most important reasons for using these methods is the absence of someone who specialises in marketing. The lack of know-how in modern marketing tactics has resulted in financial difficulties for JSPC. Furthermore, the lack of marketing skills is a problem throughout the country. This is consistent with the findings of (Jazayeri and Hopper, 1999), whose case study company faced marketing problems, especially in terms of customer satisfaction and product development.

On the other hand, the EC wants to follow the oil sector and has taken advantage of opportunities in the use of global technologies. However, this course has met with opposition by local officials in the Libyan government and they have forced the EC to deal with JSCC, where contracts of significant financial value are signed. These contracts have made the issue of change from productivity to marketing concepts, which have been returned to the initial step. This means that the interest of all organisational levels in JSCC has focused on production-orientation and is neglecting the trend of the marketing-orientation. However, it should be said that the company has other clients and there are new contracts with some local companies and foreign businesses, such as a Chinese company, have been signed up.

Another reason for the lack of focus on marketing aspects is the continuity of the Electricity Company's contracts. These contracts focus JSCC's attention on production rather than market orientation. Thus, there are attempts to move towards a market orientation conflict with the existing institutions, based on production. This is reinforced by the small number of transactions with customers. The number of customers does not exceed 10% of total sales. Although competition has increased as a result of changes in the business environment, these changes have not had a direct impact on management accounting systems. In this context, the meaning of market orientation appears as a marketing concept-- customer focus and coordination (Kohli and Jaworski, 1990). They confirm that customer focus is the central component of marketing orientation.

Overall, the company's position can be considered as non-reassuring, because there are no guarantees of continuity for the contracts of the Electricity Company since the company intends to construct a plant at a cost of LD 100 million in Tripoli, with the participation of some companies from Egypt. The objective of participation is not funding but getting the technical assistance in the operations. Therefore, if the plant is established and the production operation is started, the cable company will lose a large component of its sales, although there are assurances, in that the EC has mentioned that it wants to purchase the company's production.

The companies in the case study have faced some marketing problems related to global competition. The same findings have been noted by many researchers in the management accounting change field. For example, Yazdifar confirms that the "UK-based textile industry was vulnerable to economic cycles, exchange rate fluctuations, the strength of the £ sterling, excessive labour costs, difficult trading on UK high streets and cheaper foreign competition. These factors made the textile market tough for UK-based manufacturers" (2004: 165-166). Also, Jazayeri and Hopper assert that the managers in their case study in 1990 "perceived their problems thus: high competitive pressure from domestic and foreign competitors; poor delivery on time; products not approved by the quality standard" (1999: 273).

The management accounting systems in the case study companies have not been affected by economic pressures. However, there is some concern among the members of the organisations about inability to face competitive circumstances. In contrast with this outcome, Amat *et al*., (1994) describe the competition, as an external factor, playing a key role in the design and implementation of management accounting systems. Also, Hoque *et al.*, (2001) indicate that there is positive relationship between competition and management accounting systems, although, the latter adopts a static method that fails to explore the processes of change according to this positive relationship.

8.6. Institutional Factors

Some findings were related to the three types of isomorphism contained by institutional pressures. This demonstrates that the influence came from institutional pressure. First, coercive isomorphism appeared three times. For example, in the past, there was coercive pressure on companies by the GPCI to adopt costing systems during the 1980s. The second example happened when financial statements were required quarterly by the Libyan Stock Market. The third occurred when new rules concerning specific types of financial and costs statements were issued by the IIHC. Also, certain reporting structures were imposed by the GPCI on industrial public companies in order to apply specific forms of control. This created a degree of consistency between Libyan companies. The Secretariat of the People's Control has also used coercion through forms of control.

All the examples above highlight the importance of power relationships, because the most important relationships within societies are concerned with power, which, as Dugger and Sherman point out, "means the ability to get others to do what you want them to do" (Dugger and Sherman, 1994 p. 103). At present, these institutional pressures still affect companies, despite some authors arguing that such pressures exist only in the public sector. "The early research which applied institutional theory to organisations was largely concerned with not-for-profit and public sector organisations, such as schools, hospitals and other governmental organisations" (Scapens, 2006: 12). In this context, there is an alternative view which is as follows:

> While it is true that institutional theory has more commonly been used for the analysis of not-for-profit organizations - where the effects of global competition and other economic forces are less significant than in for profit organizations - recent empirical studies informed by institutional theory show that it can also be applied to explaining the behavior of for profit organizations (Granlund and Lukka, 1998a: 158).

Second, mimetic isomorphism can be seen in several events. The first was when the systems of the oil companies were employed by the oil sector managers when they took over control of JSPC. The second example was the change from manual to computing systems, which arguably was fashionable at the time. Hence, in both, change was the result of copying systems applied outside JSPC. Furthermore, the role of mimetic pressure has to be considered. These pressures played a prominent role in imitation amongst companies. For instance, there was a race to acquire technical and computer applications. Each of these factors has helped in the convergence of management accounting systems in Libyan companies.

The findings mentioned above are inconsistent with those of Yazdifar *et al* who concluded that "Omega[43] undertook mimetic isomorphism and modelled itself on the parent company's structure and systems [….]. However, this mimetic isomorphism was not due to uncertainty', or to fads and fashions." (Yazdifar *et al.*, 2008: 421). In contrast, the results are consistent with the following outcomes:

> The model of mimetic processes [....] looks particularly fruitful... It compresses the idea that companies imitate generally accepted models of operation from each other in order to gain as much legitimation for their operation as possible from their operating environment (Granlund and Lukka, 1998b: 206).

The third type of isomorphism is normative. Management accounting systems have been influenced by what employees have learned in universities and professional training centres. This has resulted in characteristics of professionalisation, which are important institutional elements of normative isomorphism (DiMaggio and Powell, 1983, 1991b). Also, the impact of normative pressure has to be acknowledged. As mentioned above, these pressures highlight the role of universities and research centres

[43] Omega is an alias name of the company that is selected by Yazdifar (2004) as a case study.

as professional bodies in the convergence towards the homogenisation of management accounting systems in Libyan companies. Professions not only invoke similarities between companies but they are also a channel through which the similarity is expanded from one company to another (Granlund and Lukka, 1998a).

Despite these normative pressures, it is indicated in the management accounting literature that normative pressures leads to change the role of management accountants. However, this has not happened in the companies in our case study and the barriers still exist between accountants and other members of the organization. However, our evidence is conflicting with some of the outcomes of previous studies, where the role of the MA has changed (Scapens, 2000a). For instance, Granlund and Lukka (1998b: 201) describe the situation referred to earlier as follows:

> A lot has recently been written especially in the U.K. and the U.S.A., about the change in the accountants' role, arguing for the need for this change in a normative style. Empirical evidence on the realization of these pleas, or on their emergence or change tendencies in practice, is so far scarce. Our evidence indicates that these claims are increasingly finding their real life counterparts in Finnish management accounting practice. Overall, it seems that the Finnish management accountant profession is trying to actively answer the current managerial challenges and information needs".

8.7. Internal Factors

8.7.1. Organisational Structure

JSPC has maintained the organisational structure which was determined after its establishment in 1978. Its version of organisational structure could be considered as hierarchical (see appendix 8). All companies were forced to implement this organisational structure during the transitional period[44]. It could be argued that JSPC has organisational stability as it is still applying the same organisational structure. On the other hand, JSCC has implemented of that organisational structure which was imposed by PCOTCEU. This organisational structure increased the centralisation problem that faced the company in the past. It emerged in the form of resistance to change from direct criticism of the lengthy administrative processes and to narrow the powers. Also, there was a multiplicity of heads of one subordinate.

[44] In that period all companies to be privatised were supervised by PCOTCEU

After acquisition by the parent company, subsidiaries companies were given freedom to design their own organisational structure, which was appropriate to their circumstances. JSPC has continued with the same organisational structure. Its current organisational structure reflects the management's point of view, exercising balances between the leadership's functions. Therefore, it does not necessarily reflect the actual requirements, which work to achieve management objectives in the long and short term, to the best possible degree of efficacy. It also varies in some respects with the scientific principles for the organisation, such as a specialisation principle, organisational relationships and flexibility that allow potential diversification and expansion of future activities. Authority has been focused on specific members of the company. In a sense, the authority and power of the workers are minimal and decisions always need a high-level manager for approval. Centralisation makes decision-making very slow but it might be suitable for control.

JSCC chose to design a new organisational structure that defines the various organisational levels and responsibilities required to achieve the goals of the company. Therefore, the flat organisational structure has been adopted (see appendix 9). Changes in the organisational structure should have been absorbed by staff within a short time. JSCC does not appear to have succeeded in creating harmony between organisational changes as a result of the re-engineering processes and attributes that must be met in the human element upon which the company relies for implementation of these changes. The company will not add anything to the implementation of change processes if it does not support these adaptation processes of the human element with the new requirements. Different parts of the company must conduct a comprehensive review.

It might be concluded that change or stability in organisational structure has shaped the 'management process' (see, Scapens *et al*., 2003: 6), but may not have affected the processes of management accounting. In this regard, this result is consistent with that of Cassia *et al* who state that "the evolution of the organisational configurations is not always coherent with the relevance assumed by management accounting systems" (Cassia *et al*., 2005: 373). However, this finding is in opposition to the confirmation mentioned that the changes in organisational structure have important implications for the nature of management accounting, particularly the manner in which traditional accounting techniques are now being used (Scapens, 2000a). Also, Alkizza (2006) concludes that the changes in organisational structure motivated the change in management accounting.

Both companies have suffered from the process of vertical communication and doing business individually and have not carried out the tasks in the form of collective action teams. In the same context, Ribeiro (2003) identifies some problems in his case study, one of them being that the company has an inadequate organisational structure. The solution is proposed that a new, horizontally based organisational structure is required (Ribeiro, 2003). Although JSCC has adopted a horizontal organisational structure, issues related to vertical communications still exist, even though, attempts have been made to create a spirit of cooperation between members of the organisation.

8.7.2. Technology Used in Production and Administration

Both companies have attempted to introduce, to some extent, new information technology systems. The objective of the introduction of information technology is to improve ease of access to information. In other words, the purpose is to achieve the decentralisation of management accounting information in particular, such as budgeting and analysis deviations. So this information should be readily accessible at all organisational levels and without accountants' intervention. However, the actual practice has proved the opposite. Centralization in management accounting information still exists. Accountants are worried about their future careers, while the rest of the organisation members fear going into accounting issues. The role of accountants has been the preparation and submission of reports to managers.

The result mentioned above is inconsistent with the relevant literature; for instance, the role of management accountants has changed "from scorekeeping role to proactive consultancy role" (Burns and Baldvinsdottir, 2007: 131). Moreover, another finding in the literature contrary to our result is that "from around 1995 onwards, a new hybrid accountant emerged – an accountant whose multi-faceted role was primarily located within the product stream. In fact, there was a rise in the number of hybrid accountants" (Burns and Baldvinsdottir, 2005: 738). Also, there is "the emergence of the controller accountant as an important player in organizational decision-making" (Granlund and Lukka, 1998b: 185). Granlund and Lukka (1998*b*) provide an explanation for this transformation that can be traced to intense internationalisation of Finnish companies in recent years. In contrast, our findings suggest that there is no, or weak, support for the changing role of management accountants (Yazdifar and Tsamenyi, 2005).

The centralisation of management accounting information has resulted in the reduction or mitigation of responsibilities of managers at different organisational levels to manage costs. These responsibilities are still under the control of accountants. Additionally, the financial administration or costing department has not contributed to raising awareness of accounting between the members of the organisation. This is reinforced by the presence of all accountants in specific offices, in isolation from other organisational levels and, more particularly, production. This means that the distribution of accountants to the rest of the administrative units in order to achieve the decentralisation of management accounting information is not applied at all. Although there is a difference in organisational structures between the companies in the case studies, where the hierarchical structure style has been applied by one or another, its organisational structure is relatively flat but both companies have failed to achieve decentralisation. This result is contrary to Granlund and Lukka's (1998*b*: 194) findings, which confirm that "the recent tendency has been towards an increasing decentralisation, in particular with regard to management accounting".

Despite the developments in the business environment, there is a variation in the technology used in production and administration in both companies, from primitive technology to relatively advanced technology. Also, both companies have been subject to strong competitive pressure, resulting in the loss of clients, the emergence of competitors and market opening. Moreover, one of the companies, JSCC, has changed the organisational structure, while the other kept it, in an attempt to attain organisational stability. Generally, these factors have had a relatively weak influence on management accounting systems. However, there is a factor of technology used in the administration which has had a relative impact on management accounting systems.

Commonly, it can be said that the relative progress in information technology has contributed to strengthening the independence of management accounting to work in isolation from financial accounting. On the other hand, information technology has not affected the routines performed by the accountants - taken-for-granted assumptions. In this regard, Omer (2005: 233) confirms that "computer facilities were only recently introduced and in a very limited capacity. As a result, all accounting transactions were recorded manually". The case studies show that some interviewees have a good accounting background but are without the relevant qualifications. However, their accounting knowledge is dissimilar. The majority speak simple accounting language, while others avoid technical accounting terms. Nevertheless, the Planning Researcher, Director of Information Technology Office and the former Director of Production and Maintenance use accounting terminology effectively, through contact with accountants in various committees. "This decentring of accounting knowledge is the result of accountants educating other people in the organisation" (Scapens, 2000a: 21).

8.8. New Management Applications

The companies in the study have been affected in different ways by the competitive pressure placed on them. For example, the first case company (JSCC) has not had difficulties with the marketing of its products, because all its products are sold according to its contract with the EC. On the other hand, JSPC has had faced many marketing challenges, because it has lost its share in the local market in general and the oil sector in particular. As a result of competitive pressure, JSPC has tried to sort out its issues related to the market share. So, JSPC has attempted to introduce two new management applications, TQM and JIT.

With regard to JIT, the external pressure came from competitive isomorphism. This concept depends on useful assumptions such as zero inventory and production-based demand. Therefore, the introduction of this concept has been successfully passed and accepted by the majority of individual actors in the organisation. Although the change diverges from the existing rules and routines, board directors imposed this application to maintain organisation and institutional stability. The main reason behind the success is that the top management team used all forms of power in order to ensure the survival of the company. The change could be considered an organisational rather than an accounting change, because it has affected the organisation as a whole. However, the effect of the JIT concept on MAS and MAP might be inadequately seen.

On the other hand, the implementation of TQM and obtaining the ISO-9000 certificate was unsuccessful even though it was required by the oil sector. Although TQM would enable the company to provide better customer satisfaction, the company did not adopt it for financial reasons. Some managers expressed concern that there was no guarantee that the oil sector would deal with the company, while others were keen to have this certificate. The disagreement between members of staff prevented the introduction of TQM. Also, sufficient power was held by the team who rejected the project. In this case the project did not reach the first stage of the process of change.

It is important to mention the integration between JIT and TQM. In this regard, Johnson (1992) clarifies that a company indentifies new strategies for organising work - usually correlated with JIT that introduces breakthroughs which generate substantial on-time gains in production. Also, he adds that the firm explores improvement strategies involving team-building and problem-solving processes - usually correlated with TQM (see, also, Ezzamel (1994). So, activities including organising work, problem solving and team building are significant in order to improve any strategic issues within organisation and that is exactly what the company is looking for. However, JSPC failed to adopt such a management concept to improve the production processes and obtain clients satisfaction. Therefore, it can be stated that the project was aborted before it was born.

8.9. Management Accounting Systems and Practices

8.9.1. Costing Systems

Financial and costing systems were available when both companies were established. Both companies in the study faced the same circumstances with regard to the costing systems and practices at their establishments. Both companies had their costing systems compulsorily imposed on them by GPCI, which is considered as coercive isomorphism. The preparation of the systems in JSCC and JSPC were made by experts from Egypt, which might be deemed as normative isomorphism. Moreover, both companies adopted the use of computer systems in all areas within the organisations generally and in accounting particularly. Thus, it may be reflected that this type of pressure reflects mimetic isomorphism.

However, there are some differences regarding the costing systems and practices of JSCC and JSCC in the early stages. These divergences illustrate that JSPC attempted to implement the export financial system, including the costing system, from the Oil Company. This reflects mimetic isomorphism. On the other hand, JSCC has rewritten its systems after some steps prescribed by the rules were undermined by emerging routines. The deviation of the routines from the original rules may have occurred unconsciously. The Economics Research Centre was hired to rewrite the modifications that occurred in the system after deviations emerged between the original rules and the routines which were followed. So, this type of pressure could be considered as normative isomorphism. Granlund and Lukka (1998*a*) state that the effect which comes from universities and research centres may categorise issues deriving convergence.

With regard to intra-organisational details, new rules were created when the new accounting systems, including costing systems, were introduced. These effects were in line with processes which have become institutionalised, i.e. the taken-for-granted assumptions that help to establish ways of thinking and acting (see, Burns and Scapens, 2000). Beside, the rules of the new accounting systems did not conflict with the existing institutions as represented by the new routines. Thus, new routines became ways of thinking and acting and taken-for-granted assumptions. In this regard, the management used power over meaning, which includes symbols, rituals and language. In this power, the change was given new meaning to make it legitimate, desirable, rational or inevitable (see Hardy, 1996).

In the first company, the Economic Research Centre completed its job and the new financial systems, including costing system. This could be described as a formal change. According to Burns and Scapens (2000), formal change takes place by conscious design through new rules. So, these were new rules encoded to the existing rules and routines. In this case, the company used power over resources. For instance, the company had the ability to hire the Economic Research Centre in order to write new systems. Also, the company was able to fund the project and impose its authority on accountants to implement the new rules. This power was exercised to enact and reproduce the new rules. However, the abilities of the accountants were taken into account by the new rules. Thus, the new rules formed unbalanced routines, which partly deviated from the previous ones. This indicates that the accountants did not have the adequate ability to use the system, as they did not have the capacity to prepare the accounting and/or costing system.

In the second company, a team of local university lecturers from the Department of Accounting designed a financial system, including a costing system. This change could be seen as conscious because the top management team intended to change the rules. Although the costing system operated for a short period, there were issues with emerging routines which needed to be arranged, so the costing system had to be reviewed. However, some of the inconsistencies resulted from a misunderstanding of the rules. The misunderstanding reproduced new routines, which were not represented by the original rules. Thus, these new routines might have been deemed as unconscious or unintended change.

The costing system was also developed in 1982. At that time a group from the oil sector had been hired by GPC to supervise the JSPC. The group was requested to make the necessary amendments or improvements or, if necessary, to scrap the whole system and replace it with a new one. The task of this group was completed at the end of the 1980s and another group was assigned as the new management team. The new group did not understand the systems, which came from the oil sector. Therefore, specialists and consultants were employed; they drew on the expertise of academic staff from the University. In that situation, there was a lack of association between the original written systems, the changes that were made by the specialists and consultants of the oil company and the amendments which were made by the consultants from the university. The final outcome of these changes was a complex *mish-mash*. Thus, the new rules were shaped by existing routines, because the existing routines were understood by organisational members according to past actions, the existing rules and their routines, and also in terms of their taken-for-granted assumptions.

Burns and Scapens (2000) state that “three dichotomies, respectively, are: 1. formal versus informal change; 2. revolutionary versus evolutionary change; and 3. regressive versus progressive change” (2000: 18). This study distinguishes between formal and informal change. Some of these dichotomies are found in JSCC. For example, there is formal change through a revolutionary change approach in the costing system. “Revolutionary change involves a fundamental disruption to existing routines and institutions” (Burns and Scapens, 2000: 20). The change in the costing system can also be considered as a revolutionary change, because it includes disruption to existing routines and institutions. Furthermore, the adoption of IT systems can be seen as a revolutionary change, because it involves a challenge to existing routines and institutions.

Additionally, in JSCC, there is an informal change represented in the calculation of product prices. Formerly, cost elements included raw materials; labour and overhead costs were separated. Informal change occurred when the accountants facilitated the calculation process that merged labour costs with overhead costs together, under conversion costs. In general, the distinction between formal and informal change is similar to the distinction between intentional and unintentional change (Burns and Scapens, 2000).

In JSPC, there is formal change. In this context, Burns and Scapens confirm that "in studying management accounting change researchers need to explore the informal processes and unintentional change, as well as the formal processes and intended change" (2000:19). Formal change occurred when new rules and a new accounting system, including a costing system, were issued by managers from the oil sector; however, these did not become part of the day-to-day activities used by accountants. In a further example, new rules were issued by the management team to apply flexible budgeting during 2002. Again, this rule faced resistance from the managers and accountants. Informal change was also in conflict with a pricing decision between the costing and marketing departments. It was found that the marketing department had taken pricing decisions based on the prices prevailing in the market but there are no rules governing these processes.

The main findings of the second case study show that there were no revolutionary changes in the management accounting systems of JSPC. Although Burns and Scapens argue "change is likely to be possible only as a result of major external change, e.g. take-over, economic recession, market collapse, and so on" (Burns and Scapens, 2000, p. 13), the one major change at JSPC was that it became managed by members of the oil sector. In this case, conflict and resistance resulted between managers and accountants which inhibited change in the management accounting system. These findings are similar to those of a case study by Burns and Ezzamel (2000)[45] (see also for similar findings about unsuccessful change, Burns, 2000 ; Ezzamel and Burns, 2005). Whereas Jazayeri and Hopper (1999) mention that the support of top management and other organisational levels is the main reason for successful change (see also, Burns *et al.*, 2003), in the case of JSPC, it was the opposite in that only top management supported

[45] This is an unpublished paper cited by Burns *et al*, (2003).

the change. With regard to conflict between managers and accountants in JSPC, a similar example was explored by Burns and Scapens who mention tension between a production manager and a sales manager (see, Burns and Scapens, 2000). Burns and Scapens identify this type of conflict and resistance as “formal and overt resistance due to competing interests” (2000:17).

Generally, in the case companies, there were several changes in the costs accounting systems. These changes did not affect the written systems but were routines exercised between accountants. The aim of these changes was that they facilitated speed and action. Overall, in JSCC and JSPC there is no agreement about the existing costing systems. There are reservations related to costing systems in the companies.

8.9.2. Pricing

As mentioned above, both companies had been subsidiaries of GPCI from their establishment until privatisation. During the public sector period, there was an effect on pricing from GPCE for all Libyan companies. Therefore, all public companies had to prepare a specific study in clouding costs elements with marginal profit. This study had to be approved by GPCE; otherwise the company would have to repeat the pricing study again. In this process pricing was overseen by GPCE. So, this is a clear message that JSCC and JSPC were subjected to coercive pressures, which came from formal pressures exerted on the companies by GPCE (see, DiMaggio and Powell, 1983). Also, this pressure might be seen as a factor in deriving convergence that leads to harmonisation between companies working in the same environment (see, Granlund and Lukka, 1998*a*).

Generally, the previous pricing process had become part of the existing routines and institutions. As mentioned above, the rules had come from the external environment, which shaped the existing routines. The Costing Departments in both companies, each supported by a Financial Manager and Senior Manager, prepared a pricing study. The Costing Departments, Financial Managers and Senior Managers in both companies employed their power over the resources in the form of experience, which the Costing Departments characterise in the complexity of cost calculation. Also, the rest of the companies’ members were prevented from participating in pricing decisions. Thus, power over the processes was manifested in order to maintain the existing norms and values. Accordingly, the existing routines and institutions have not changed and it can be said that there has been a stable process in determining the selling price. These processes have become institutionalised i.e. take-for-granted assumptions.

Later on, there was differentiation in the pricing practices within JSPC. This differentiation emerged due to the competitive pressures experienced. Also, different views about the pricing process emerged between the Costing Department, which supports the notion of price-maker and the Marketing Department that wants to implement the idea of price-taker. It could be conceptualised that the processes of pricing change started its first process, the encoding process (arrow (A) in figure (4-4) p. 131). The second and third processes (arrows B and C) must follow according to the institutional framework. The process of pricing change has faced conflict or resistance to change. This conflict prevented the change from taking place "as repeated behaviour leads to a reproduction of the routines" (see, Burns and Scapens (2000): 10). Therefore, the price-taker practices have not been an institutionalised or taken-for-granted assumption.

In JSPC, however, the opposite direction occurred and emerged when each department had specific assumptions about the nature of pricing, which is consistent with Burns and Scapens' (2000) analysis of Scapens and Robert's (1993) conclusion that the dissimilar perspectives about the business' nature grow to be the main sources of conflict and resistance for the implementation of a new project. Consequently, as a result of conflict and resistance, the new rules (project) challenged the existing institutions and the taken-for-granted ways of thinking and acting. This eventually led to the failure of the new rules.

With regards to actual pricing practices, the companies use a standard costing system for product pricing. It also uses a cost-plus pricing method. The pricing system involves using power over processes to influence the outcome of the decision taken by the company's administration. The administration was persuaded by accountants that there was no substitute for the pricing style referred to above. Also, the Costing Department and Financial Administration benefited from using power over meanings to prevent the Marketing Department and Commercial Administration from participating in decisions on pricing. All kinds of powers are used to cover management decisions relating to change. Kohli and Jaworski (1990) suggest that the equilibrium of power across divisions has to be supervised carefully in any attempt to become more market-oriented. In our case, this kind of equilibrium did not exist. In other words, there was no role for a Marketing Department in identifying product pricing.

Both companies apply the same style of pricing, which is cost-plus margin of profit, as a way of pricing their products. This finding is consistent with the result related to the cost-plus pricing approach that "only 50% of the [UK] companies report using it in their price setting"(Al-Hussari, 2006: i). Other studies report that 84% of UK companies use cost-plus pricing with some flexibility (Drury *et al.*, 1993). In practice this technique has become a way of thinking and doing, including taken-for-granted assumptions, and it has become institutionalised. For example, the Marketing Department in JSCC cannot make any change or modify the prices which have been specified by the Costing Department. Generally speaking, if the company wishes to make any changes in prices, it must be done by the Costing Department. In other words, a price-maker style is used and this technique is mainly based on cost data to determine the price. However, Al-Hussari's (2006: 9-10) findings mention that "support was only found for those firms that are price-makers attach a higher importance to cost-plus pricing".

With regard to JSPC, the situation may vary somewhat. The similarities between both companies are that each uses a method of cost-plus profit margin. In other words, the style of price-maker is adopted which depends on costing data. This resulted from coercive pressures that were exerted on the national companies during the period of subordination to the public sector. The previous situation of pricing processes is explained by a study conducted in the Libyan context, the details are as follows:

> The privatised factories used to prepare product cost twice a year and sent it to the Ministry of Economy. This cost preparation was not taken into account in determining the final sales price. On many occasions, the sales price was determined at less than the cost of the product....Product cost also had a very limited implementation in the factories' decision-making process especially given the way the product pricing function was carried out externally (in the Ministry of Economy) (Omar, 2005: 237-240).

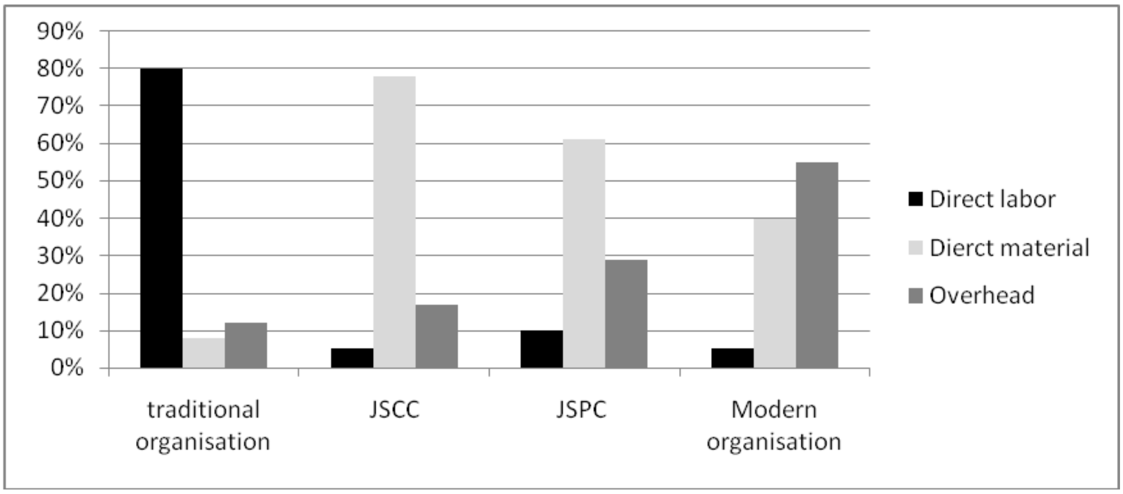
In our case studies, the Costing Department supports the idea that the company is a price-maker, while the Marketing Department wants to adopt the position of a price-taker. In JSPC, however, the latter position has received support and power over meanings has been exercised in order to overcome marketing difficulties. JSPC is currently reviewing its prices through a price-taker method. This technique relies on data of demand, supply and the price prevailing in the market. JSPC was forced to adopt this style as a result of exposure to strong competitive pressure.

In the management accounting literature, there is some discussion of the differences between price-makers and price-takers (Guilding *et al.*, 2005 ; Al-Hussari, 2006). Guilding *et al.*, (2005) consider it reasonable to expect that companies of primary industries tend to be price takers rather than price makers. As noted above, however, the pricing decision is a complex process and many factors play a role in making the final decision. These procedures contrast with the perspective of economic theory, which assumes that the pricing decision is a simple action and depends on the relationships between sellers and buyers or demand and supply (Cunningham and Hornby, 1993).

8.9.3. Cost Structure

In modern organisations overhead costs have become too large; Figure 8-1, below, compares traditional and modern organisations (Burch, 1994). Burch recognises the difference between the two types of organisation. Modern organisations present automated machinery and employees are increasingly used in supervisory functions, rather than actually working directly on the product. Also, other costs of overheads and direct materials have increased. In traditional organisations, the product is small and they focus on craft production and employees' skills rather than automated machinery and that decreases indirect expenditures or overhead cost. The figure below shows that the percentage of direct material exceeded 60% of production cost. This result is consistent with the conclusion that "direct material represented at least 50% of production costs and was frequently substantially more than … 90%" (Innes and Mitchell, 1990: 11). Also, "the majority of costs consist of materials and overheads, and that labour represents the minority of costs" (Brierley *et al.*, 2001: 223).

Figure (8- 1) Comparison between the case companies and traditional and modern companies



The case studies indicate that there is a slight change in their cost structures. For example, in JSCC, the proportion of direct materials to the total cost of production has increased, while the proportion of both direct labour and overhead cost has declined. In contrast, in JSPC, it is noted that the proportion of the overhead cost to the total production cost has slightly increased, while the proportion of direct materials to the total production cost has declined and there has been stability in the proportion of direct labour. However, cost structure has not had the effect of the adoption of a particular system, such as ABC. This result is consistent with the percentage of overhead costs within the cost structure and not "significant variables in influencing the choice of cost systems" (Drury and Tayles, 2005: 76). This result contradicts the cost structure and is a very important factor in adopting new systems such as ABC (Bjornenak, 1997).

8.9.4. Budgeting

Regarding budgeting, there are some differentiations between the companies studied. In the implementation of control-based budgeting, JSPC has not faced any problems. This application, over time, has become taken-for-granted assumption that shapes and has shaped the actions of organisational members. However, the top management team attempted to use flexible budgeting in 2002. Thus, this is considered as a new rule that has been issued. In this case, deliberate stability occurred due to resistance to the new rule. The main reasons for resistance to change were the company's circumstances and the new rule was misunderstood.

JSCC highlights the conflict between the senior management and FC[46] over the application of the budgetary control approach. The conflict started when the FC wanted to impose the use of control-based budgeting. During the conflict the senior management used some of its power over resources, in addition to the power over meanings and processes. The FC used part of its power over resources, which were related to the control of money. This conflict ended when the company was being privatised. However, after the company was liberated from the domination of the FC, the General Assembly of the company implemented the idea of the FC. Although the company and its top management team responded to the coercive isomorphism and have implemented a new rule (control-based budgeting), the resistance under the table still exists.

The top management team thought the use of budgetary control would enhance the performance of the companies. This is consistent with Ferreira and Otley's (2009: 271) analysis that "budgetary control provides a good guide to the major issues involved […], and it is also applicable to a wider set of non-financial targets". Also, the top management team in our case companies made the decision to adopt budgeting as a tool to help to improve performance. In this regard, King *et al.*, (2010: 53) find that the "performance will in fact be related to the suitability of a business's budgeting practice and not just its decision to adopt a practice".

At the lower organisational levels, the employees and accountants have seen, in many circumstances, budgeting as far from the reality. Also, the companies have not reviewed the budget periodically in response to environmental development. In the management accounting literature, some authors support this view. For example:

> In short, the same companies that vow to stay close to the customer, so that they can respond quickly to precious intelligence about market shifts, cling tenaciously to budgeting-a process that disempowers the front line, discourages information sharing, and slows the response to market developments until it's too late (Hope and Fraser, 2003: 109) .

8.9.5. Reporting

Many reports are prepared by the companies for third parties, such as the parent company and the stock market. Although these reports are prepared using the data and

[46] FC came from outside the company and was appointed by GPCF

information available, they are not used in the company's business. This result is identical to those reached by (Busco *et al.*, 2002: 44), who state that "it had had to produce budgets and various reports for both the head office and the state. But the systems it used were not integrated into its management processes". Yazdifar, *et al.*, (2008) declare that the subsidiary company reports to the parent company, not to subsidiary managers. They also find that managers prepare and use the reports and accounting information, rather than accountants, while Jazayeri and Hopper state that "Business Performance Reports are the basis for overall performance evaluation of each subsidiary" (1999:274).

A final example occurred when rules concerning specific categories of financial reports, including costs statements, were enforced by the IIHC but were resisted within the various subsidiaries companies. Thus, the new rules issued by the IIHC have become deinstitutionalised, because new routines have not been reproduced. The reason behind this resistance may have been a lack of knowledge on the part of those implementing the new rules and/or cultural legacies. In Libya, there is a popular proverb which says *the thing that you know is better than the thing that you do not know*. On the other hand, informal change occurred on a number of occasions, especially in the cases of traditional management accounting techniques becoming institutionalised: these have become the taken-for-granted assumptions that have established the norms for thinking and doing.

8.9.6. Measurement Performance

The first case study shows that performance measurement systems consist of a number of components. The first is financial performance, which is measured by profitability that in turn is derived from other financial indicators, such as production costs, contribution margin, financial ratios, profitability ratio and return on investment. Overall, financial performance is applied after the completion of financial statements. Non-financial performance measures are also used but financial performance measures are considered the cornerstone of the company, as a number of interviewees asserted that, without good financial performance, the company cannot continue in business. This is in line with the emphasis on multiple measures for performance evaluation being associated with businesses facing high levels of competition and making greater use of computer-aided manufacturing processes (Hoque *et al.*, 2001).

JSCC is also concerned with business problems that result from individual behaviour that has been prevalent in the past and still exists. Thus, operational support has been devised through the formation of committees from different disciplines to reduce reliance on specialisation. For example, discussions between members of committees enhance the decentralisation of accounting information. Thus, accounting information and technical information have been circulated among non-specialist members of the organisation and become a common language.

JSCC also places an emphasis on training as a priority in this phase, after privatisation. The belief in the company is that the best investment lies in human resources and this can be achieved through training. However, it has been observed that the training is concentrated on technical and productivity aspects. Although this does not mean that training in areas of administration, finance and accounting is ignored, it has been minimal. Furthermore, although a new system of motivations has been implemented, its application in the technical departments has been criticised and it is directly related to production.

Another issue which has been carefully considered is the customer satisfaction rating in the EC. This satisfaction is achieved by meeting the demands from the EC for new products and also a fast response to complaints in order to improve its products. The company provides free advisory services to individuals and companies, along with free delivery services. However, measuring this goal is difficult, as understands if the clients are happy with the service provided; surveys do not give realistic results. The company focuses on four objectives to measure performance levels: training, production, clients and finance. These elements form the basis of the BSC technique. However, it is interesting to note that nobody from accountants or management has any idea of this technique.

8.10. Management Accounting vs. Financial Accounting

This study confirms that management accounting serves financial accounting purposes and, in particular, external financial reporting. However, it does not follow that management accounting is dominated by financial accounting. Rather, the opposite is found in the case studies, with management accounting dominating financial accounting. The preparation of financial statements requires cooperation between financial accounting and management accounting. For example, indirect costs have to be allocated, in order to determine the cost of production and evaluate the inventory. The evidence from the companies is that financial accounting could not prepare external financial reports without the assistance or intervention of cost accounting.

This supports the view of Johnson and Kaplan (1987), who confirm that financial accounting is serviced by management accounting. However, the results of this study do not verify the other perspective of Johnson and Kaplan (1987), which is that management accounting is dominated by external reporting but opposes the findings of researchers, such as (Drury, 1990 ; Drury and Tayles, 1997). They concluded that there was little evidence to support the hypothesis that management accounting is dominated by financial accounting. In contrast, Drury *et al.*, (1993: 77) prove that 84% of UK companies use “absorption costing for monthly internal profit measurement”(financial purpose).

8.11. Management Accounting and Slow Changing

In general, management accounting systems in the case studies have changed very slowly. Scapens asserts that “it is probably reasonable to say that accounting practices are generally rather slow to change. An interesting question is: why (1994:317)?” Both companies are still operating traditional management accounting systems. Traditional accounting systems have become the way of doing and thinking among employees in their day-to-day practices and in their taken-for-granted assumptions. Arguably the modern systems of management accounting are not used in either company and can be traced to a lack of familiarity, experience and knowledge. “Lack of environmental scanning and external knowledge can reduce the ability of an organization to introduce innovations as a response to change” (Kloot, 1997, p. 68).

The case study found that there was a lack of perception of the importance of innovation or advanced management accounting systems, such as ABC, BSC, SMA and so on, within the top management team and accountants. The research also confirms that there is a lack of organisational learning.[47] In this context, Dr. Jumaa El-Hassi[48], a member of staff of the accounting department at the largest university in Libya, states that:

> Generally, many assumptions have emerged following the introduction of activity-based cost. The number of transactions has reached 120, which is cost prohibitive regarding classification and grouping. This is where the returns as opposed to costs become important. In other words the return from the process should at least cover the costs.

There are alternative explanations for the slow pace of change in management accounting systems within companies. Furthermore, the absence of current revolutionary change in management accounting systems within both companies can be attributed to several factors, especially the isolation imposed on Libya by the international sanctions led by the US and the UK during the 1990s (see, SC, 1992b, 1992a, 1993). This isolation resulted in a lack of contact with western countries and, therefore, access to advances in technology and management thinking. Libyans were unable to participate in journals, conferences and seminars and learn about the latest innovations in all scientific areas, including accounting. Furthermore, the period of the air embargo and economic sanctions occurred at a time when there was a lack of telecommunications infrastructure in Libya. As Twati and Gammack state:

> Libya is rated low in the number of telephone lines compared to other countries in the region….Mobile cellular telephone systems became operational in 1996 with limited access and coverage. Until recently these services covered only certain areas of Libya, and the country is not widely networked for this service….use of the internet, which was introduced into the country in 1999 with less than 300 users then, most being government agencies or organisations (Twati and Gammack, 2006, p. 179).

It should also be noted that most of the management accounting systems used in both companies are traditional systems. There are several reasons why the companies have not adopted modern methods of management accounting, such as Activity Based Costing (ABC) and the Balanced Scorecard (BSC). Although ABC offers information that is accurate and helps the administration to make decisions regarding planning and control costs, the company has no intention of adopting such a system for several reasons. First, ABC is just an extension of the traditional systems which rely on loading and cost allocation of overhead costs. Second, the efficiency of ABC depends mainly on

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[47] The concept of organisational learning is "the process whereby members of the organization respond to changes in the internal and external environments of the organization by detecting errors which they then correct so as to maintain the central features of the organization"

[48] Dr. Jumaa El-Hassi was a dean of Economic Faculty at the University of Garyounis, and his area of expertise is in management and cost accounting.

a suitable choice of the cost causes. This is not easy, especially in the current situation where there is a lack of qualified accountants. It is also necessary to determine the best cost cause of the activity and study its behavioural effects. Third, the application of ABC is expensive and requires significant effort by both staff and accountants. Thus, the costs are high in comparison with the potential benefits gained. Fourth, there is difficulty in applying and choosing the cost causes, which requires the use of specialised expertise and re-training of the accounting cadre. Overall, the company's previous experience shows that applying the ABC system cannot be conducted without a revolutionary management change. This change would have to be associated with other systems, such as total quality management, with a focus on the issue of customer satisfaction as the key element of production.

The practical experiences of some companies have proved that the application of the ABC system does not give a higher return than the cost of the application in every case (Innes and Mitchell, 1995 ; Granlund, 2001). This is particularly so for small businesses, with immediate production facilities and multiple small orders, as the collection of the relevant data to provide the cost information by activity is very expensive. This is contrary to the goal of cost reduction. It gives a convincing justification for implementing the system. Overall, the acceptance of ABC is not widespread, approximately 25 years since its introduction (Askarany *et al.*, 2009: 2).

The prevailing beliefs are that when companies are privatized all the internal systems will be changed. These systems include the administrative regulations, such as organisational structure, cadre, job descriptions and management information systems. Furthermore, the changes would affect the accounting systems, such as the financial system, documentary circle and traditional management accounting systems, including the costing systems, standard costs and variances analysis. In the case study, the majority of these changes did not occur. Hence, the lack of change in a company might be because the engineers assigned to manage it were brought in from other public sector companies. Therefore, their experience was in similarly-operated companies, in which they were accustomed to the existing systems and would not take responsibility for any change. As a result, they have no spirit of innovation in areas outside their technical expertise, such as accounting and marketing. This confirms the idea that, "private owners think that it is not sufficient to change incentives but that personnel also need to be replaced" (Cragg and Dyck, 1999: 494).

8.12. Conclusion

Several findings have been discussed in this chapter starting by identifying the reasons behind the establishment of the two companies. It follows the historical development of the capital in both companies, from foundation to re-evaluation. The objectives of the companies and how these objectives have changed since the companies were privatized are all discussed. The main body of this chapter consists of interpreting the outcomes of the processes of management accounting change in the two Libyan privatised companies, which include several processes such as costing system, pricing decisions, cost structure, measurement performance and other issues related to change dichotomies. The chapter concludes with argument discussion of the relationship between management accounting and financial accounting and why management accounting has been slow to change in Libyan companies.

CHAPTER NINE: CONCLUSION

9.1. Introduction

The previous chapters have shown different themes discussed by this study. Chapter One provides an outline of the work reported in this study. The Libyan business environment, including its geography, history, political and economic factors, are analysed in Chapter Two. In Chapter Three, factors and their relationships with management accounting systems and practices are discussed. To achieve the study's purpose, literature in the field of management accounting change was reviewed. In Chapter Four the different theoretical perspectives were discussed which dealt with management accounting change. The literature review has been extrapolated and the theoretical framework of institutional theory has been selected focusing on OIE and NIS. Moreover, power mobilisation was used to assist in the analysis some processes of change.

In order to implement the hybrid institutional framework, appropriate methodology and research methods were selected. Chapter Five considers these choices regarding methodological issues, including research philosophy, paradigm and approach. It also looks at why this study adopts an explanatory case study as research strategy. Also, six steps in applying the case study will be debated. Finally, it is used triangulation of data collection methods and multiple sources of evidence, including interviews, observation and documentation. In Chapters Six and Seven the two case studies are discussed, with each one being listed in a separate chapter. These steps have been identified in the case study design and have been reflected in the practical application of these studies. As a final point, connections between the findings of the case studies and the previous literature were linked, in Chapter Eight. This chapter is a conclusion, which consists of the main results of this research, research contribution, research limitations and future research.

9.2. The Main Findings of the Study

The aim of this study has been to explore the processes of management accounting change within the organisational context after privatisation. In addition, the objectives of the thesis were to analyse the perceptions of the management team and accountants in influencing the changes that occur in management accounting systems after privatisation. It also investigated the effect of institutional factors on management accounting systems and practices. The following paragraphs provide the main results reached in the thesis.

The case studies show that the objectives of the companies have changed completely. These objectives have shifted from social to economic. More specifically, the companies changed their goals when they moved into the private sector and the main change was that they shifted their objectives from political and social goals to economic ones. These changes were reflected by amendments to the basic regulations and contracts of their establishment. So, the changes in objectives were not accompanied by a new focus on marketing and market orientation.

Also, the companies faced several serious problems in many areas, before and after privatisation, which included lack of liquidity, foreign competition, high costs of labour, and other problems related to the production process. It could be said that the main reason for all these problems is lack of liquidity. One of the available solutions to the problem of liquidity is bank borrowing. There are also religious reasons preventing the companies from obtaining loans with interest. In addition an embargo was imposed by the UN on Libya during the 1990's. The marketing situation of both companies was excellent, especially when the market was closed. The international sanctions were lifted then the oil sector and EC commenced development and began to pursue modern technology. Moreover, the companies in the case studies faced some marketing problems related to global competition.

Some of the findings were related to the three types of isomorphism contained by institutional pressures. Mimetic isomorphism can be seen in the systems of the oil companies employed by the oil sector managers when they took over control of JSPC. Also, the change shifted from manual to computing systems, which arguably was fashionable at that time. Change resulted from copying systems applied outside the companies. Isomorphism is normative when management accounting systems have been influenced by what employees learn in universities and professional training centres. These pressures highlight the role of universities and research centres as professional bodies in the convergence towards the homogenisation of management accounting systems in Libyan companies.

There were coercive pressures on the companies by the GPCI to adopt costing systems during the 1980s. Furthermore, the financial statements were required quarterly by the Libyan Stock Market. Additionally, new rules concerning specific types of financial and costs statements were issued by IIHC. Certain reporting structures were imposed by the GPCI on industrial public companies, in order to require specific forms of control. This created a degree of consistency between Libyan companies. Also, some management accounting routines have been influenced by local laws. For example, the measurement of individuals' performance has been entirely affected by the Labour and Civil Service Law. In addition, the CLFS has declared that all companies and governmental units must follow it especially with regard to preparing their budget and its use in the control of activities. Another example for coercive isomorphism is that public companies should set up a pricing study, including cost-plus method, in order to have their prices approved. So, all the above patterns indicate coercive isomorphism resulting from formal pressures exerted on the companies by government agencies.

In some sets of circumstances new routines have become ways of thinking and acting and taken-for-granted assumptions, principally the costing systems in both companies at the early phase and JIT in JSPC. In this regard, the administrations have used power over meanings, which include symbols, rituals and language. In this power, the change was given new meaning to make it legitimate, desirable, rational or inevitable. Further, power over resources has been exploited. The companies have exercised this power to enact and reproduce the new rules. Thus, the changes in costing systems and adopting new concepts such JIT have been assumed to be successful, because there is a match between the new rules and the emerging routines with existing institutions.

Power prevented TQM being applied as a new rule. In other words, power played a vital role in supporting the idea of some individual actors against others. In the case of TQM, power over resources was widely used, in particular to persuade the Executive Director to reject funding for the project in an attempt to prevent change. JSPC implemented power over resources in order to maintain behavioural stability. Moreover, the top management team used power over processes in order to prevent the former Director of the Quality Control Office from participating in decision-making related to adopting TQM. It might be supposed that in the case of TQM, new rules, failed due to the resistance and the organisational conflict. Also, the new rules conflicted with existing institutions.

In the case of pricing decisions with JSPC, the Costing Department, Financial Manager and Senior Manager have employed their power over the resources in the form of experience, which the Costing Department characterises in the complexity of cost calculation. Also, the rest of the organisation's members are prevented from participating in making pricing decisions. Thus, the power over the processes is revealed in order to maintain institutional stability with existing norms and values. This attempt at change could be considered informal change. As such, informal change takes place at a tacit level, because the standpoint of the Marketing Department has been conceptualised as changing pricing conditions.

Before privatisation and within JSCC, FCs were assigned by the GPCF. Some LCFS contents state that all Libyan companies should adopt control-based budgeting. Thus, the FC believes that the idea of control-based budgeting was put forward by the LCFS. There was a conflict about power over resources between senior management and the FC. On one hand, the FC had been given the powers of cheque signing and thus they had obtained "control of money". On the other hand, senior management used its power over processes to prevent the FC from participating in the decision-making processes. Moreover, senior management failed to use power over meanings to prevent conflict from occurring. These rules failed to shape or to be shaped by new routines, because they were opposed within the existing institutions.

After privatisation, JSCC was released from the domination of the FC. However, the General Assembly of the company imposed the idea of the FC on the company, of course, by using all kinds of power. Therefore, new rules emerged, which created new routines. This could be seen as revolutionary change, because this type of change includes essential disruption to existing routines and institutions. These new routines began with the encoding and enactment processes, and were enhanced by power mobilisation. Previously, the process of enactment faced resistance, when rules and routines challenged the existing norms, meanings and values. Moreover, the process was witnessed using power over resources by different organisational actors as organisational conflict. Also, the processes of new routines have been generated as repeated behaviour, which has led to the reproduction of new routines over time. Control-based budgeting has become an institutionalised and taken-for-granted way of thinking and doing things, which has replaced the existing institutions.

There is a difference between the organisational structures of the companies in the case studies. Where the style of the hierarchical structure has been applied its organisational structure is relatively flat but both companies have failed to achieve decentralisation. JSPC has maintained the organisational structure which was prepared after its establishment in 1978. All companies were forced to implement this organisational structure during the transitional period. After acquisition by the Parent Company, both case companies were given the freedom to design their own organisational structure, which was appropriate to the circumstances. JSCC chose to design a new organisational structure that defines the various organisational levels and responsibilities required to achieve the goals of the company. It might be concluded that the change or stability in organisational structure has shaped the management process, but may not have affected the processes of management accounting. Both companies have suffered from the process of vertical communication and doing business individually and have not carried out the tasks in the form of collective action teams.

Both companies have attempted to introduce, to some extent, new information technology systems. The purpose was to achieve the decentralisation of management accounting information. The role of accountants has been to prepare and submit reports to managers. Barriers still exist between accountants and the other members of the organization. Centralisation of management accounting information has resulted in the reduction or mitigation of responsibilities of managers at different organisational levels to manage costs.

Despite the developments in the business environment, there is a variation in the technology used in production and administration in the two companies, from primitive technology to relatively advanced technology. Also, both companies have been subject to strong competitive pressure, resulting in the loss of clients, the emergence of competitors and market opening. The relative progress in information technology has contributed to strengthening the independence of management accounting to work in isolation from financial accounting. In contrast, information technology has not affected the routines performed by the accountants. None of these factors have had a particularly strong influence on management accounting systems. However, some participants who have a good accounting background but are without the relevant qualifications in accounting.

The change in the costing system can also be considered as a revolutionary change, because it includes disruption to existing routines and institutions, as can the adoption of IT systems. There is an informal change represented in the calculation of product prices in JSCC. This informal change occurred when the accountants facilitated the calculation process that merged labour costs with overhead costs under the name of conversion cost.

There has been a formal change in JSPC. This formal change occurred when new rules and a new accounting system, including a costing system, were issued by managers from the oil sector; these did not become part of the day-to-day activities used by accountants. New rules were issued by the management team to apply flexible budgeting during 2002. This rule faced resistance from the managers and accountants. The informal change has also been in conflict with a pricing decision between the cost and marketing departments.

The main findings of the second case study show that there were no revolutionary changes in the management accounting systems of the two companies. The first case study highlights the conflict between the senior management and the FCs over the application of the budgetary control approach. During the conflict the senior management used some of their power over resources, in addition to power over meanings and processes. The FC used part of the power over resources, which were related to the control of money

Both companies use a standard costing system for product pricing. They use a cost-plus pricing method. The pricing system involves using power over processes to influence the outcome of the decision taken by the company's administration. Administration has been persuaded by the accountants that there is no substitute for the pricing style referred to above. Also, the Costing Department and Financial Administration have benefited from using power over meanings, to prevent the Marketing Department and Commercial Administration from participating in decisions on pricing. All kinds of powers are used to cover management decisions relating to change. Both companies apply the same style of pricing, which is cost-plus margin of profit, as a way of pricing their products.

The similarities between both companies are that each uses a method of cost-plus profit margin. In other words, the style of price-maker is adopted depending on costing data. In our case studies, the Costing Department supports the idea that the company is a price-maker, while the Marketing Department wants to adopt the position of a price-taker. With regard to JSPC, the situation may vary slightly. In JCPC the latter position has received support and power over meanings has been exercised in order to overcome marketing difficulties. JSPC is currently reviewing its prices through a price-taker method. This technique relies on data of demand, supply and the price prevailing in the market. JSPC was forced to adopt this style as a result of exposure to strong competitive pressure.

The case studies indicate that there is a slight change in the cost structure of companies. For example, in JSCC, the proportion of direct materials to the total cost of production has increased, while the proportion of both direct labour and overhead costs has declined. In contrast, in JSPC, it is noted that the proportion of the overhead costs to the total production cost has slightly increased, while the proportion of direct materials to the total production cost has declined and there has been stability in the proportion of direct labour. However, cost structure has not been affected by the adoption of a particular system, such as ABC.

Many reports have been prepared by the companies for third parties, such as the parent company and the stock market. Although these reports are prepared by the company using the data and information available, they are not used in the company's business. Another example occurred when rules concerning specific categories of financial reports, including costs statements, were enforced by IIHC but were resisted within the various subsidiary companies. Thus, the new rules issued by IIHC have become deinstitutionalised, because new routines have not been reproduced. The reason behind this resistance may have been a lack of knowledge on the part of those implementing the new rules and/or cultural legacies.

This study finds that management accounting serves financial accounting purposes, and in particular external financial reporting. In our case studies, however, although management accounting serves financial accounting, it does not follow that management accounting is dominated by financial accounting. Rather, the opposite is found in the case studies, with management accounting dominating financial accounting. The preparation of financial statements requires cooperation between financial accounting and management accounting. For instance, indirect costs have to be allocated in order to determine the cost of production and assess the inventory. The evidence from the companies is that financial accounting could not prepare external financial reports without the assistance or intervention of cost accounting.

Generally, management accounting systems, techniques and practices in the companies in our study have changed very slowly. Both companies are still operating traditional management accounting systems. Traditional accounting systems have become the way of doing and thinking among employees in their day-to-day practices and in their taken-for-granted assumptions. Modern systems of management accounting are not used in either company and can be traced to a lack of familiarity, experience and knowledge. The study found that there was a lack of perception of the importance of innovation or advanced management accounting systems, such as ABC, BSC, SMA and so on, within the top management team and accountants. The research also confirms that there is a lack of organisational learning.

The absence of current revolutionary change in management accounting systems within both companies can be attributed to several factors, in particular the isolation imposed on Libya by the international sanctions led by the US and the UK during the 1990s. This isolation resulted in a lack of contact with western countries and, therefore, access to advances in technology and management thinking. Both companies use traditional management accounting systems used in both companies. There are several reasons why they have not adopted methods of modern management accounting, such as Activity Based Costing (ABC) and the Balanced Scorecard (BSC).

9.3. Contributions

This study has made the following contributions to the management accounting literature. It contributes to the growing accounting research in developing countries in general and in Libya in particular. It is the first study to focus on the processes of management accounting change in the context of Libya after privatisation. It also contributes to the existing knowledge on the processes of management accounting change in less developed countries in general, and in Libya in particular, which has previously been completely ignored as a field of management accounting research. This responds to the call for more management accounting research in developing countries (see, Scapens and Bromwich, 2001 ; Uddin and Hopper, 2001 ; Hopper *et al.*, 2009).

The study has focused on the developments that occur in traditional management accounting systems and practices, rather than new or so-called innovative management accounting systems, such as ABC and BSC. This is consistent with the mainstream management accounting change literature. For example, Burns *et al* (2003: 5) declare that "in many UK companies change was taking place in management accounting practices, though it was frequently change in the manner in which (traditional) management accounting was being used, rather than the use of new management accounting systems and techniques". So the main purpose of this direction is to try to understand the complications of processes of management accounting change.

Furthermore, it has contributed to the understanding of how management accounting has changed in response to institutional, internal and external factors. Also, this is a response to many calls in the management accounting literature (Libby and Waterhouse, 1996 ; Scapens, 2000a ; Williams and Seaman, 2001 ; Scapens, 2006 ; Lukka, 2007). Moreover, its contribution is related to a hybrid theoretical framework of institutional theory including OIE, NIS and power mobilisation. The use of these theoretical perspectives has contributed to emphasising their strengths when used in combination (Yazdifar, 2004 ; Hassan, 2005 ; Siti-Nabiha and Scapens, 2005 ; Scapens, 2006 ; Yazdifar *et al.*, 2008), which overcomes the weakness of these perspectives.

In terms of methodological issues, this thesis has provided a significant contribution to the use of case study strategy based on a qualitative approach to the study of management accounting change. Several researchers (Otley *et al.*, 1988 ; Scapens, 1990 ; Ryan *et al.*, 1992 ; Otley and Berry, 1998 ; Ryan *et al.*, 2002 ; Scapens, 2004 ; Scapens, 2005, 2006) have supported the use of this type of strategy. Thus, case studies aligned with qualitative research can provide an in-depth understanding of a specific phenomenon in society such as management accounting change (Eisenhardt, K. M., 1989 ; Scapens, 1990 ; Darke *et al.*, 1998 ; Otley and Berry, 1998 ; Yin, 2003).

The research contributes to the management accounting literature as the study is carried out using comparative case studies between two companies, previously state-owned and newly privatised, working in the industrial field and under the same environment, both supervised by the same parent company, IIHC. This will offer an in-depth understanding of the role of management teams and management accountants in subsidiary companies in response to the same institutional pressures regarding change in management accounting systems. This contribution responds to a specific call in the management accounting literature by Yazdifar (2004: 301), who states that:

> Further research concerns the undertaking of comparative case studies of companies in the same industry and under the same parent company's management and disciplines. This method will provide a better understanding of the role of actors in subsidiary companies in responding to the same institutional pressures regarding change in their MAS, MIS and the role of management accountants.

Another contribution to the management accounting literature is that this study adopted the strategy of explanatory case study based on qualitative research and using two Libyan industrial companies which were recently privatised. This might be considered a response to the calls in the management accounting literature, for example, Alkizza

> For further research on management accounting change in Libyan companies using both the questionnaire and case study methods [….] as more state-owned firms are being privatised at present and the process of privatisation is planned to be completed in 2008, future studies should concentrate on the change in privatised companies by comparing the management accounting practices used and performance of these companies before and after privatisation (2006: 246).

Also, Scapens states that

> "Although my research on management accounting change has focused on large, usually multinational companies, it would be of interest to broaden the research to study management accounting change in public sector organizations that are in the process of being privatized [….] Such studies would involved extreme cases for the theoretical insights that I have developed in my case studies of large private companies" (2004:262).

9.4. Limitation

The most important limitation of this study, especially as it uses the case study strategy, is that the results lack generalisability statistically. In addition, another limitation is related to the period of the field research. Longitudinal case study is needed for OIE analysis and to study change. Conducting such studies needs at least two or three years which is not available to PhD students, who have limited time and resources. Moreover, the researcher faced many difficulties in taping interviews as the staff were not convinced that the researcher would keep the recording confidential, which reduced the accuracy and depth of the information obtained. Another limitation is that no access was acquired from the parent company.

Moreover, this research is limited in that the number and hours of interviews are insufficient to provide a comprehensive picture of the processes of organisational change in general or management accounting change in particular. Also, the researcher did not obtain access to interview the organisational members in the IIHC. The use of direct observations and participant observation enabled the researcher to observe what was going on around him, but a lot was taking place in different parts of the companies which could not be observed. These limitations could not be addressed during the period of data collection.

9.5. Future research

From the limitations mentioned above, future research can be extrapolated. In new Libyan circumstances, comparative case studies of two or more organisations might be useful especially if the organisations are under the same supervision body. This comparison would provide an in-depth understanding of their responses to the same new institutional pressures. This research might be replicated in other developing countries, either focussing on a single country or comparing two or more countries. In addition to institutional perspectives, the processes of management accounting change might be interpreted from other theoretical viewpoints such as actor-network, structuration and political economy theories

This research mentions that there have been no applications of so-called advanced management accounting systems such as ABC, BCS and SMA. Therefore, further study might be recommended to focus on the opportunities of implementing these systems in Libyan companies and in North Africa and the Middle East. Also, it may be recommended that action research be adopted in order to explore the processes of management accounting change. Action research strategy combines action with research to overcome the limitations of case study which concentrates on research and disregards taking action.

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Bibliography

APPENDICES

Appendices

Appendix 1: illustrates Managers, Accountants, and Employees who conducted interviews within first stage of data collection period in JSCC

	Interviewees' position	Date of interview	Time of interview	Period of interview
1	Assistant Manager for Production 1	15/10/08	09:25-10:25	1:00
2	Director of Longitudinal Welded Pipes Plant 1	15/10/08	09:25-10:25	1:00
3	Director of Irrigation Pipes Plant 1	15/10/08	09:25-10:25	1:00
4	Director of Spiral Pipes Plant 1	15/10/08	09:25-10:25	1:00
5	Financial Director	14/10/08	12:40-13:50	1:10
6	Director of Material 2	14/10/08	11:00-12:12	1:12
7	Head of Finishing Goods Store 2	14/10/08	11:00-12:12	1:12
8	Head of Spare Parts Store 2	14/10/08	11:00-12:12	1:12
9	Director of Planning and Follow-Up Office 3	16/10/08	09:20-10:44	1:24
10	Planning Researcher 3	16/10/08	09:20-10:44	1:24
11	Planning Researcher 3	16/10/08	09:20-10:44	1:24
12	Director of Quality Control 3	16/10/08	09:20-10:44	1:24
13	Commercial Director 4	14/10/08	09:00-10:27	1:27
14	Head of Purchases Department 4	14/10/08	09:00-10:27	1:27
15	Head of marketing department 4	14/10/08	09:00-10:27	1:27
16	Previous Financial Director	15/10/08	19:13-20:29	1:16
17	Cost Accountant	12/10/08	11:10-12:00	1:00
18	Head of Accounts Department	15/10/08	10:35-11:35	1:00
19	Counsellor Legal	16/10/08	11:50-13:01	1:11

1, 2, 3 and 4 are focus group

Appendix 2: illustrates Managers, Accountants and Employees who conducted interviews within first stage of data collection period in JSPC

	Interviewees' position	Date of interview	Time of interview	Period of interview
1	Director of human resources	27/08/08	09:45-10:50	1:05
2	Director of training	30/08/08	10:45-11:51	1:06
3	Commercial director 1	27/08/08	11:00-12:23	1:23
4	Director of the office of planning and follow-up 3	26/08/08	09:05-10:07	1:02
5	Director of the office of information and systems	26/08/08 28/08/08	11:30-12:42 09:50-12:00	1:12 1:10
6	Director of the auditing office	She answered questions as writing method		
7	Head of costs accounting department 2	19/08/08 21/08/08	11:30-13:01 11:00-12:29	1:31 1:29
8	Head of financial statements department	25/08/08	11:45-13:19	1:34
9	Head of accounts department	28/08/08	11:15-12:17	1:02
10	Head of purchases 1	27/08/08	11:00-12:23	1:23
11	Head of marketing department 1	27/08/08	11:00-12:23	1:23
12	Head of stores 1	27/08/08	11:00-12:23	1:23
13	Cost accountant 2	19/08/08 21/08/08	11:30-13:01 11:00-12:29	1:31 1:29
14	Planning researcher 3	26/08/08	09:05-10:07	1:02
15	Financial statement accountant	02/09/08	11:25-13:00	1:35
16	Technical Consultant	03/09/08	11:00-12:08	1:08

1, 2 and 3 are focus group

Appendix 3: illustrates Managers, Accountants, and Employees who conducted interviews with them in the second stage of data collection period within JSCC

	Interviewees' position	Interview date	Interview time	Interview period	Notes
1	Executive Director*	01/10/2009	11:10-12:15	1:05	Unrecorded & Semi-structured
2	Director of Medium-Voltage Cables Plant	23/07/2009	11:15-12:17	1:02	Semi-structured
3	Director of Low-Voltage Cables Plant	28/09/2009	12:15-13:30	1:15	Semi-structured
4	Director of Granulated Plastic and Flexible Wires Plant	30/09/2009	8:15-8:56	0:41	Semi-structured
5	Director of Information Technology Office	09/09/2009	8:30-9:47	1:17	Unstructured
6	Director of Human Resources	24/09/2009	9:15-10:11	0:56	Unstructured
7	Director of production and Maintenance (previously) Director of Development Bank (currently)	30/09/2009	12:00-13:10	1:10	Semi-structured
8	Head of Financial Statement Department	01/10/2009	8:30-9:11	0:41	Unstructured
9	Head of Costa Accounting Department	25/08/2009	12:00-13:08	1:08	Unstructured
10	Senior of Costs Accountants	17/08/2009	11:20-12:26	1:06	Unstructured
11	Costs Accountant	11/08/2009	11:35-12:32	0:57	Unstructured

* He was Director of Planning and Follow-Up Office last year 2008. Also, he has appointed as Executive Director at the first of April 2009.

Appendix 4: illustrates Managers, Accountants, and Employees who conducted interviews within the second stage of data collection period in JSPC

	Interviewees' position	Interview's day and date	Interview time	Interview's period	Notes
1	Executive Director	05/10/2009	9:15-10:20	1:05	Unrecorded & Semi-structured
2	Assistant General Director for the Financial, Commercial and Administrative	12/10/2009	9:00-9:40	0:40	Unrecorded & Semi-structured
3	Assistant General Director for Technical Affairs	21/07/2009	11:30-12:15	0:45	Unrecorded & Semi-structured
4	Director of Administrative Affairs	18/07/2009	10:05-10:50	0:45	Unrecorded & Un-structured
5	Director of Internal Auditing Office	23/07/2009	10:38-12:18	1:40	Semi-structured
6	Head of Marketing Department	25/07/2009	11:30-12:09	0:39	Semi-structured

Appendix 5: shows other interviews were conducted with some university staff

	Interviewee's name [49]	Interview date	Interview time	Interview period	Interview type
1	Dr. Jumaa K. El-hassy [50]	07/10/2009	18:15-18:55	0:40	Recorded & unstructured
2	Dr. Abdalsalam A. El-kizza [51]	03/10/2009	12:45-13:29	0:44	Recorded & unstructured
3	Mr. Ahmed M. Saleh [52]	06/10/2009	10:50-12:15	1:25	Recorded & unstructured

[49] All interviewees who mentioned above are staff at Accounting Department Economic Faculty in Garyounis University. Also, they are interesting with management accounting subject. Furthermore, each one of them has permission as Chartered Accountant and Auditor.

[50] Dr. Jumaa K. El-hassy was the Economic Faculty's Dean last year 2008. Moreover, he was one of the group who designed Pipes General Company' old costs accounting system. Finally, he also has different memberships for several Libyan Companies, among of them, he now appoints as Chairman of Control Committee of Wires & Cables Company.

[3] Dr. Abdalsalam A. El-kizza was Chairman of the supervisory committee of the Libyan Stock Market previously.

[4] Mr. Ahmed M. Saleh was financial advisor for several companies previously. At the moment, he is a Member of the General Assembly of the Parent Company.

Appendix 6: Technical specifications of Production in JSCC

	Low-Pressure Cable Plant (LPCP)	Fine Cables Plant (FCP)	Granulated Plastic Plant and Limestone Unit	Medium-Pressure Plant Cables and Phones
Production started	1st June 1976	1st October 1985	1st February 1989	1st June 1993
design capacity	4500 tones/year	is 2000 tonnes/year	9,000 tonnes/years	
Production description	cables with a maximum of 1000 volts	wires up to 1,000 volts	PVC and granular plastics	cables up to 60 kilovolts
Specifications standards	IBS 6004, VDE 0250, VDE 0271, and IEC228	BS 6500/69 and VDE 0250/69.	VDE 0207, LSS 319-320-321-322-323	IEC 502
Main raw material	plastic and copper	8 mm copper and PVC	plastic powder, limestone, soft materials, colour focusing, installing materials and coloured materials	copper, polyethylene interconnected XEPE, foam and solid polyethylene, low-density polyethylene, PVC, copper tape, galvanized tape, soft polyester tape, and polymerized aluminium tape
Additional raw material	galvanized steel tape, adhesive tape, and non-adhesive plastic	galvanized steel tape, adhesive tape, and non-adhesive plastic		polyester linking tape and, polypropylene tape
Production process	Withdrawal, conversion isolating, filling, and packaging of the collection.	Withdrawal, conversion isolating, filling, and packaging of the collection.	breaking and processing of limestone, limestone mobilization in storage silos or bags, balances and combination, granulation, and finishing-storage production in silos or in bags	Withdrawal, with polyethylene insulation foam solid, compiled couples and soft polyester tape, polymerized aluminium tape and packaging with polyethylene material.

Appendix 7: Technical Specifications of Production in JSPC

	Longitudinal welded pipes	Spiral welded pipes	Irrigation pipes
Production started	1976	1978	1983
Designing productivity	60000 ton /year	75000 ton /year	6 million meter of pipes
Plant description	2) Production lines, and (4) galvanizing lines.	(2) Production lines, and (3) forming and welding line.	production line
Pipe diameter	⅜ " to 4 "	6⅝ " to 48 "	50,70,89,108,133,159 mm
Pipe thickness	1.0 to 5.4 mm	3.96 to 15.88 mm	0.7 to 2.0 mm
Pipe length	6 to 8 m	6 to 12 m	5 to 6 m
Material specification	Cold Rolled Coils. Hot Rolled Coils (Black or Pickled) Carbon Steel Din 17100 & Bs 4360 & Din 1544	Grad (A) , Grad (B) , (X42) , (X46) , (X52) , (X56) , (X60) , (X65) , (X70)	Cold Rolled Coils. Hot Rolled Coils. Aluminium Coils
Tape of production	Round pipes (Galvanized & Black) Square & Rectangular Sections	Spiral welded pipes for oil and gas purpose	Galvanizing steel pipes and Aluminium pipes for irrigation purpose. Square & Rectangular Sections. Irrigation pipe fittings.
Specifications	Din 2440 , Din 2441 , Bs 1387 , ISO R65	API5L	Din 19651/ 19653 / 19654 / 2440 / 2441 /2444 / 2395

Appendices

Appendix 8: List of documents

<u>Some documents have been picked up related to the first case study JSCC</u>

1. Monthly Reports for the Period of Time from January 2008 until April 2009 from Various Administrations, Departments, and Divisions.
2. The Opening Balance Sheet in 01/07/1976.
3. The Annual Financial Statements from 31/12/2002 to 31/12/2008.
4. Company' Budgeting for Year 2009.
5. The New Organizational Structure Of The Company
6. The Financial System Included the Costs Accounting System.
7. The Essential Regulation.
8. The Establishment Contract.
9. A Sample of Expenditure Analysis Report form
10. Instructions Issued by the Parent Company.
11. General Activity Report of the Company for Discussing in General Assembly
12. Meeting.
13. Pricing Model Report (Sample One Product)
14. Fixed Assets Report and Their Depreciation (Sample One Item)
15. Special Report Relates to Re-Distribution of Costs to Plants and Products' Pricing in Flexible at Different Production Levels.

Appendices

Some documents have been picked up, which related to the second case study JSPC

1. Job Descriptions And Organizational Structure
2. Pricing Spiral Welded Pipe
3. General Activity Report 2009
4. Production Reports 2008-2009
5. Sales Reports From 2001 To 2009
6. Interruptions And Production Losing Reports
7. Annual Financial Statements From 2002 To 2006
8. Stack Finishing Production Report 2008-2009
9. Employees Functional Mobility On Cadre
10. Employment Power Position Report
11. New Establishment Contract
12. New Essential Regulation
13. The Position of Job Leaving in Accordance with Qualifications and Reasons 2008
14. The Position Of Training Plan 2008 And 2009
15. Report of Budgeting Followed-Up 2008.
16. The Payment to General People's Committee for Financial Report 2008-2009.
17. National Expenditure Report 2008-2009
18. Report of Dept Position 2008-2009

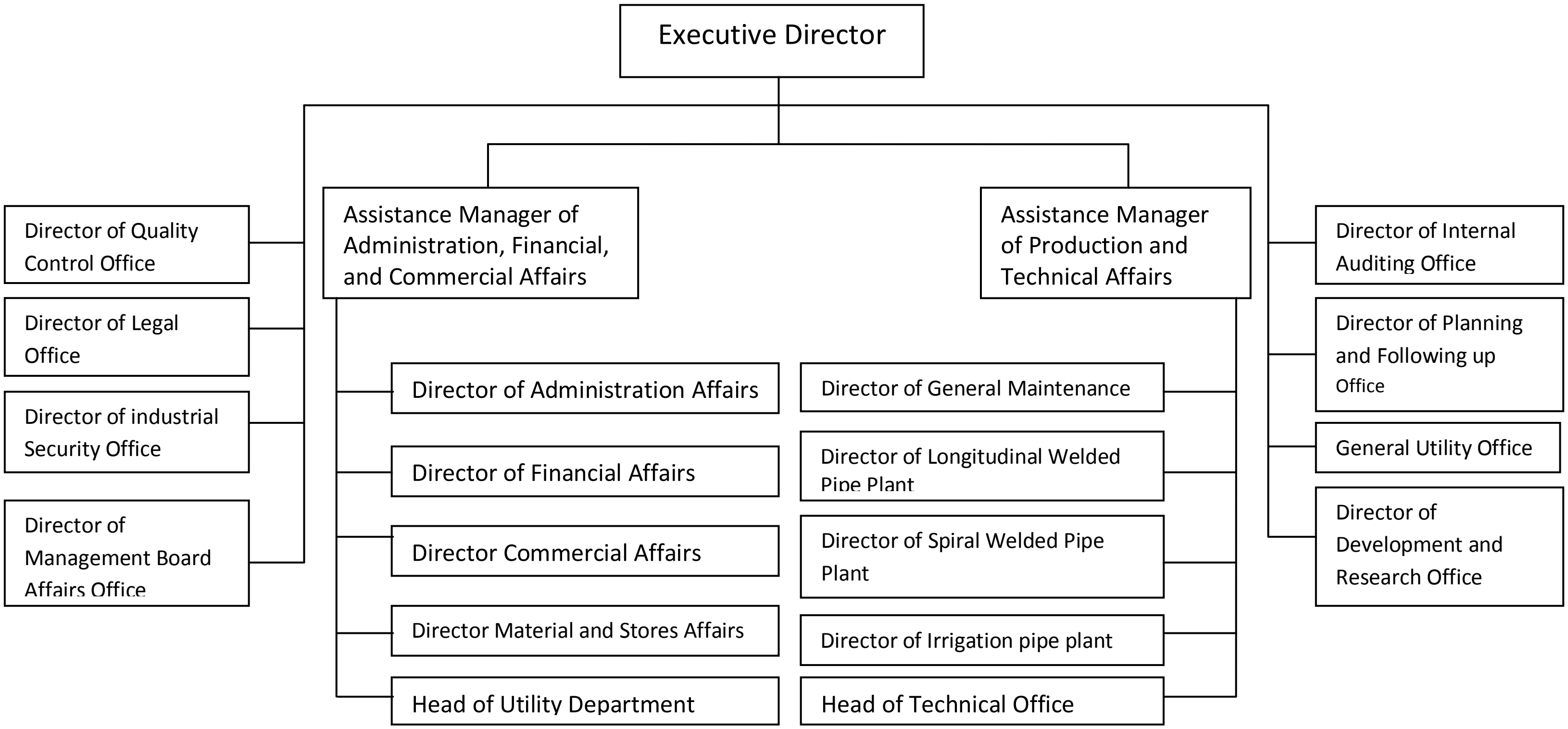
19. Report of Industrial Wastes and Disposal Methods 2008-2009.

20. Monthly Report of Production Quality 2008-2009

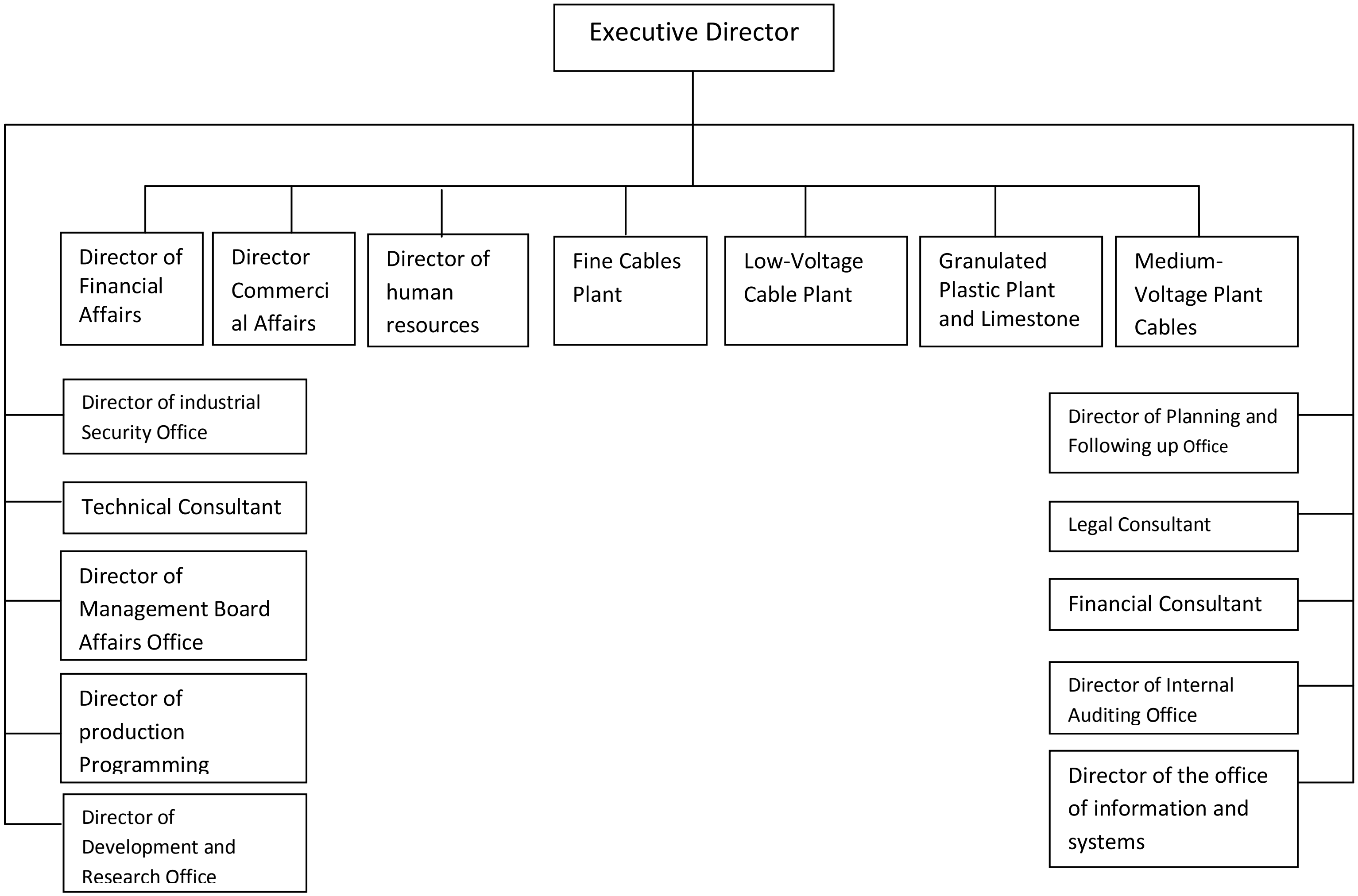
21. Exporting Report 2008-2009.

22. Other Huge Documents as Softcopy, Such As Letters, Meetings Minutes of Certain Committees, and Other Specific Reports.

Appendix 9: the Organisational Structure of JSPC



Appendix 10: The Organisational Structure of JSCC



Appendix 11: Project Summary Report (First Case Company)

Description This is the first case study

Users

Name	Initials
azoubi	ONBZ91

Created On	08/01/2010 12:41	**By**	ONBZ91
Modified On	16/09/2010 23:59	**By**	ONBZ91
Location	P:\Cables and Wires Co..nvp		

Attributes

Sub-folders 0

Items 0

Cases

Sub-folders 0

Items 22

Document, Observations, and Interviews

Sub-folders 0

Items 24

Externals

Sub-folders 0

Items 0

Free Nodes

Sub-folders 0

Items 8

Internals

Sub-folders 1

Items 0

Matrices

Sub-folders 0

Items 0

Memos

Sub-folders	0
Items	4

Models

Sub-folders	0
Items	0

Queries

Sub-folders	0
Items	0

Relationship Types

Sub-folders	0
Items	1

Relationships

Sub-folders	0
Items	0

Results

Sub-folders	0
Items	0

Sets

Sub-folders	0
Items	4

Texts

Sub-folders	1
Items	0

Tree Nodes

Sub-folders	0
Items	1,151

Appendix 12: Project Summary Report (Second Case Study)

Description The second case study

Users

Name	Initials
azoubi	ONBZ91

Created On	12/01/2010 11:33	**By**	ONBZ91
Modified On	16/05/2010 20:13	**By**	ONBZ91
Location	P:\Pipes Co..nvp		

Attributes

Sub-folders	0
Items	0

Cases

Sub-folders	0
Items	20

Documents, Oservations and interviews

Sub-folders	0
Items	20

Externals

Sub-folders	0
Items	0

Free Nodes

Sub-folders	0
Items	17

Internals

Sub-folders	1
Items	0

Matrices

Sub-folders	0
Items	0

Memos

Sub-folders	0
Items	5

Models

Sub-folders	0
Items	0

Queries

Sub-folders	0
Items	0

Relationship Types

Sub-folders	0
Items	1

Relationships

Sub-folders	0
Items	0

Results

Sub-folders	0
Items	0

Sets

Sub-folders	0
Items	26

Texts

Sub-folders	1
Items	0

Tree Nodes

Sub-folders	0
Items	677