THE IMPACT OF PRIVATISATION ON FIRM EFFICIENCY, LABOR MARKET AND BUDGET OF GOVERNMENT: CASE OF ERITREA

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Abstract

Privatisation has become a central feature of the economic policies of nations in the developed and developing world. Eritrea has also embarked on privatisation program for the state-owned enterprises. It privatised 39 manufacturing enterprises from 1997-2001 in the hope that the enterprises might be restructured into more efficient, profitable, competent and value creating private enterprises. This mini-thesis, therefore, assesses the impact of privatisation on the operating efficiency, profitablility, employment, wages and tax payment of the Eritrean newly privatised manufacturing enterprises.
Acknowledgement

It has been a year since I have started my thesis entitled “The Impact of Privatisation on Firm Efficiency, Labor market, and Budget of Government: The case of Eritrea.” During this period, many people have contributed to the success of this mini-thesis.

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Robel .N. Debessay

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Acronyms

AFP               Alpha Food Product
AGOA           African Growth Opportunity Act
BAT              British-American Tobacco company
BT                Baraco Textile company
EDDC           Ethiopian Domestic Distribution Agency
EPFDJ          Eritrean People’s Front for Democracy and Justice
EPLF            Eritrean People’s Liberation Front
GDP             Gross Domestic Product
GOE             Government of Eritrea
IMF              International Monetary Fund
KBL             Keih-Bahri Leather company
LDCs           Least Developed Countries
MNR           Megginson, Netter, and Rondenborgh
MTI             Ministry of Trade and Industry
MOF           Ministry of Finance
NASPPE     National Agency for Supervision and Privatisation of Public Enterprises
RSB             Red Sea Bottlers company
RSS            Red Sea Soap company
SAPE           Soaps Alikes Plant Electrochemici
Sh.Co          Share Company
SOEs           State-Owned Enterprises
TFP             Total Factor Productivity
UK              United Kingdom
UNIDO    United Nations Industrial Development Organisations
DECLARATION

I, the undersigned, Robel Netsereab Debessay, a masters student in the University of the Western Cape, declare that this mini-thesis entitled “The Impact of Privatisation on Firm Efficiency, Labor market and Budget of Government: The case of Eritrea” is my own work.

Signature:

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Date:

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Dedication

I dedicate this thesis to my beloved personal saviour, Jesus Christ.
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CHAPTER ONE

INTRODUCTION

1.1 Introduction

Privatisation defined as the transfer of productive assets from public to private ownership and control, has been at the forefront of economic policy debate in all parts of the developed and developing world for several decades [Cook and Kirkpatrick, 1995]. It has also been seen as a key policy instrument in the move to more market based economic systems. The international waves of privatisation begun in the United Kingdom and then rapidly spread to other industrial countries.

The process of transforming public enterprises to private ownership began more slowly in the developing countries, but the pace appears to have accelerated in the later years of the decade, and has continued during the 1990s. The other group of countries that has contributed significantly to privatisation has been the previous Socialist countries, now in transition, with the largest share accounted for by the Eastern European economies.

During 1980s and early 1990s, more than 15,000 state-owned enterprises (SOEs) have been privatized [Kikeri, Nellis and Shirley, 1994]. The world total sales of SOEs had already topped $185 billion by 1990. Moreover, as one commentator has predicted that at least $6 trillion of privatization assets will be sold over the next twenty years, with fully half of that coming from the Eastern Europe and China [Megginson, W., and Natter 1998].

Governments all over the world have embarked on privatization for different reasons. But most of them hoped that new private owners would increase the efficiency and decrease the financial demands made by the SOEs on strained government budgets [Kikeri et al., 1994]. Moreover, proponents of privatization argue that transferring public enterprises to the private sector will expose these enterprises to the discipline of the market thereby lead them to increase efficiency [Richard and Mansoor, 1998]. Moreover, privatised firms
employ their human, financial and technological resources more efficiently because of greater stress on profit goals and a reduction of government subsidies [Kikeri et.al, 1992].

In the same token, the loss-making state-owned enterprises in Eritrea became a burden to the meager economy of the new nation. Moreover, the macro-policy of the Government aims at the establishment of an efficient, outward looking, private sector-led market economy, with the government playing a proactive role to stimulate private economic activities [GOE, 1994]. To this end, the government has been committed in privatising 39 small, medium, and large state-owned manufacturing enterprises since 1997. By doing so, the Government hoped to create a more efficient, competitive, and profitable private sector.

1.2 Economic Background

Eritrea, located in the Horn of Africa, has a population of 3.8 million and an area of about 124,000 square kilometers. In 1997, the GDP per capita was US$210 [World Bank, 1998]. Eritrea was liberated on May 24, 1991 from an Ethiopian colonization. The population of Eritrea confirmed its support for independence in a referendum held in April 1993.

The Eritrean economy is largely based on agriculture, which employs about 80% of the population but which is currently contributing 22 percent to gross domestic product (GDP). According to UNIDO [1995b], the agricultural potential of Eritrea is promising. The western and eastern lowlands, with proper conservation and utilisation of water resources can produce large quantities of food crops as well as raw materials for industrial enterprises.

The manufacturing industries in Eritrea, which are predominantly located in Asmara (the capital city), primarily produce consumer goods and consist of public and privately owned enterprises. It is expected that the manufacturing industry will use the country’s
valuable human resources and contribute to Eritrean economic development by strengthening its linkages with agriculture and the construction sector (metal and wood industries) as well as by diversifying exports and increasing the country’s export earnings [GOE, 1998]. Moreover, Eritrea’s strategic location, which provides easy access to the regional and international markets, is the major advantage of establishing a competitive industrial sector.

1.2.1. Brief Historical Profile of the Manufacturing Industries in Eritrea

Eritrea has a long history of industry and manufacturing. In the last one hundred thirty years, Eritrea has undergone socio-economic and politico-cultural transformations [Haile, 1992]. Manufacturing began first with large scale farming and processing of the agricultural products and with mineral extraction.

Modern industrial enterprises in Eritrea had begun with the advent of Italians. By the early 1930s, there were over fifty industrial enterprises in Eritrea. Among these, there were five flourmills, two pasta factories, three bakeries, a canned meat factory, two tanneries, a vegetable fiber plant, a button factory, a cement factory, two salt works, a soap factory, an edible oil factory and a liquid factory [World Bank, 1994].

Development of the industries in Eritrea suffered during the early years of the Second World War. After the defeat of Italy in Africa, the British military administration in Eritrea had increased the number of firms. For instance, the major set-up by the assistance of the British military administration were: Meloti Brewery, Maregnghi Glass Factory, Maderni Match Factory, Spinilli Boot factory, Mother of Pearl Trocas Shell industry, De Rossi Domnut Factory and Massawa Salt Company [Haile, 1992]. However, this revival was short lived due to a number of factors including competition form the export industries of other countries and lack of reinvestment in Eritrean industries to bolster its competitiveness. The problem was compounded when the British military administration dismantled and sold infrastructure installations in 1945.
During 1950s to mid 1960s, light industries flourished and reached 122 in number. Moreover, they employed 13,351 workers and had a total investment of about 139 million Ethiopian dollars [Haile, 1992]. During mid 1960s to mid 1970s, the number of firms also increased to 165 due to the availability of a transport infrastructure, raw materials and mineral deposits, and easy access to foreign markets due to the availability of ports.

In 1975, however, the socialist Government of Ethiopia conquered Eritrea and nationalised 41 large manufacturing industries in the country. The prospect for industrial development declined because the political climate and the prevailing economic condition were not attractive to the private investors. During 1975-1991, the Ethiopian regime deliberately neglected the factories and drained their resources without giving them the necessary inputs to develop. The regime imposed strict price controls and introduced import restrictions, which further reduced the scope for efficient business operations [Stifanos, 2000]. The Ethiopian Government policy had been to destroy the value of the Eritrean industries in order to prove that Eritrea is not economically viable and thus, could not be an independent nation.

On May 24, 1991, the Eritrean People’s Liberation Front (E.P.L.F) freed Eritrea from the serfdom of Ethiopian colonisation and adopted a free market policy to bring back the economy to life. In 1991, Eritrea was a devastated land. Moreover, according to the Africa Research Bulletin [1996, pp. 12482] “Eritrean industry, which made the Italian colony one of the most developed countries in Africa, is now obsolete and functions at two thirds of its capacity.” The thirty years of war of liberation (i.e. from 1961-1991) from Ethiopian colonisation has affected the industries and infrastructures of Eritrea.

At the time of liberation, the government of Eritrea inherited the inefficient 41 state-owned manufacturing enterprises and started to rehabilitate the economy. The government liberalised trade and prices, reformed its tax and investment policies and started Privatisation of the inherited state-owned manufacturing enterprises. In the
following section, we will discuss the Privatisation process in Eritrea with an emphasis on the manufacturing sector.

1.3 Privatisation in Eritrea

The government of Eritrea has been committed to the process of privatising public enterprises in keeping with its stated policy of promoting private sector led growth. Eritrea’s leaders agree that the public enterprises will function more efficiently and produce greater output of higher quality goods once they are privatised. The development of a vibrant free enterprise system and the expansion of privately owned firms are among the highest priorities of the Eritrea’s leaders in achieving an accelerated economic growth in the future.

1.3.1. Privatisation Policy

Eritrea has opted for an open, private sector led, free market economy. The Eritrean Government, as stated in its macro-policy, is aiming at developing a capital and knowledge intensive and export-oriented manufacturing sector as part of its socio-economic transformation. It has also been taking necessary policy and other supportive measures to promote, encourage and develop the private sector and protect its interests [GOE, 1998]. To this end, the Government issued proclamation No. 83/1995 for the establishment of the National Agency for the Supervision and Privatisation of Public Enterprises (NASPPE). The objectives of the privatisation policy are: increasing the role of the private sector in the economy, accelerating the adoption of new technology and production techniques, and improving the overall efficiency, competitiveness and product quality.

The Government entrusted NASPPE to optimise and transform the productivity of the enterprises and establish a competitive and conductive atmosphere in all the public enterprises for and in the enhancement of their privatisation. There was a board of Directors consisting of five members appointed by the president who administer
NASPPE. In 1996, the Government divided the 41 state-owned enterprises into three groups: (1) those that are retained by the state as the strategic industries; (2) those that are assigned to the Eritran Peoples Front for Democracy and Justice (EPFDJ the ruling political party) and (3) those that are offered for domestic as well as foreign buyers publicly.

1.3.2. Progress

After liberation of Eritrea in 1991, the Government has taken a number of necessary steps to improve the control framework of the public enterprises, and there has been a movement away from the centralised arrangement, which existed during the Ethiopian colonisation [Stifanos, 2000].

Based on its free market policy, the Government of Eritrea began to sell small co-operative shops in 1993 and liquidated a distribution agency known as Ethiopian Domestic Distribution Corporation (EDDC). This corporation was engaged in distributing goods produced in the country. In addition, it has also returned nationalised housing residences and other buildings to their private owners. In early stages, the Government approached privatisation on a case-by-case basis. To a certain extent, the process was demand driven and investors who could buy the small-scale shops were available locally. Moreover, the sale of state-owned small-scale firms to private entrepreneurs began in 1993, and by the end of that year all 700 small-scale shops were already privately owned.

The Government faced a more difficult position with regard to larger enterprises in the industrial sector, particularly those with monopoly positions or considered strategically important. Thus, the sale of large state-owned manufacturing enterprises was delayed till preparation for privatisation was made. In the mean time, in 1995 enterprises were made autonomous and the Government established the NASPPE to administer these enterprises.
The Board of Directors of NASPPE started to privatise 39 manufacturing enterprises in 1997 and planned to finalise the sales program by the end of 1997. However, only 3 enterprises were sold in that year. In 1998, an additional number of 15 enterprises-most of them small and medium manufacturing enterprises-were sold. In June 1999, the government still owned 21 enterprises (most of them were large manufacturing enterprises). The agency had a difficulty in selling the large enterprises. By the end of 2001, the NASPPE privatised the 21 manufacturing enterprises and thus, completed its program.

The experience of Eritrea shows that small enterprises were easily sold because there were local investors who could afford to buy them while selling the large ones was difficult. This evidences that privatisation of large manufacturing enterprises where there is a weak private sector such as in Eritrea is difficult. Moreover, the experience of Eritrea also showed that privatisation has attracted only limited foreign investments. The foreigners, who purchased enterprises, bought mainly those of enterprises that have domestic markets rather than those oriented towards exports.

The privatisation policy listed several methods of selling the companies, but in practice the Board of NASPPE has been using a direct sales method. Enterprises are auctioned and investors bid for the companies. The Board evaluates the sales price offered and a business plan of investors regarding investments, technology transfer and jobs creation and finally it makes its decision. Usually, the companies have been advertised in local as well as intentional newspapers such as the Economist magazine. The bids were open for two months.

Though the Government entrusted NASPPE to transform the productivity of the enterprises and to enhance their privatisation, the Board of NASPPE did not restructure the enterprises. The Board was concentrating on selling the state-owned enterprises “as they are” and there was no attempt made to assess the performance of the enterprises and managers. Moreover, the agency was understaffed and under-funded [Stifanos, 2000].
Such a weak institution is thus likely to hamper the restructuring of the enterprises during the transition period. The agency is now liquidated. According to the director of NASPPE

The agency sold the enterprises as they are. We did not try to restructure the companies before privatising them. All the 39 manufacturing enterprises were sold to the private investors “as they are”. The agency is liquidated and its administration is now under the industry department of the MTI.”

1.4. Statement of the Problem.

Privatization has become a central feature of the economic policies of nations in the developed and developing world. Experience, however, has witnessed that the effectiveness of privatization all over the world has been a mixed blessing or is inconclusive. Eritrea has also embarked on privatization program for the state owned enterprises, in the hope that the enterprises might be restructured into more efficient, profitable, competent, and value-creating private enterprises. To date, there is no work done to assess the post privatization performance of these enterprises. There is lack of sufficient studies on the performance of the privatized enterprises. Abstracting form this deficiency, this study intends to bridge the research gap by assessing the firm efficiency, labor market, and fiscal impact of the privatization program in Eritrea. By doing so, this research is believed to shed some light on the future trend of the enterprises.

1.5. Aim of the Research.

This research aims on three main objectives. These are to explicitly:

1. Assess the major problems and/or constraints the target enterprises encountered at the time-of-handover, and explore what major post-privatisation restructuring measures they adopt in solving them.
2. Assess how does privatization affect: the firm efficiency, profitability, employment, wages and salaries, and budget of the government,
3. Identify the major bottlenecks, which are currently affecting the performance of the newly privatised sample enterprises.
1.6. Motivation.

The researcher has motivated to focus on this mini-thesis for the following good reasons:

First, the government of Eritrea embarked privatization program for the SOEs in the hope that the enterprises might be restructured into more efficient, profitable, competent, innovative and value creating private enterprises. However, no research has been conducted to understand the impact of privatization in the post-privatization period. Therefore, as an employee of the Ministry of Trade and Industry and as an economist, it is my concern to provide the government and the ministry with helpful information about the effect of the program on the overall performance of the industries under study.

Secondly, assessing the overall post-privatization performance and identifying the constraints the privatized enterprises are currently encountering can be helpful in drawing some key policy lessons for the government on its ongoing privatization commitments in general, and for the ministry on its ongoing industrial policy in specific.

Thirdly, although it is difficult to generalize from a simple scale work of this type, this research might serve to be helpful in providing information for further research work on the topic. Finally, it is also hoped that the outcome of the research might be very important to the enterprises under study.

1.7. Research Questions.

The central theme of the study is: “How does Privatization affect the firm efficiency, profitability, labor market, and budget of the government in Eritrea?”

This research has also the following sub-research questions:
Has the Post-Privatisation performance lived upto the expectation of the government?
What were the main constraints faced by the new investors at-the-time-of-handover?
What major restructuring measures do the new private investors adopt to solve the constraints they faced at-the-time-of-handover?
What are the major problems the firms under study facing at present?

1.8 Hypothesis

The major hypothesis of this study is that, the operating efficiency, employment and wages level, and fiscal performance (i.e. tax contribution) of the sample firms have increased in the years following privatization.

1.9 Research Site.

The manufacturing industries in Eritrea are concentrated (96%) in Asmara, which is the capital city of Eritrea. All the textiles, beverages, shoe and leather, food processing, tobacco, and the chemical factories are located in Asmara. Therefore, the study site is in Asmara only.

1.10 Limitations of the Research

This research has some limitations. Due to the non-availability of sufficient data, it has confined its scope on analysing the effect of privatization on three performance variables at a firm level and one variable at a national level only. In addition, the study has also focused on six manufacturing enterprises only due to logistic and data constraints.

1.11 Organisation of the Research.

This study is organised in 5 chapters. Chapter one dealt with introduction and chapter two deals with review of the literature. Chapter three deals with the conceptual framework for the study and research methodology. Chapter four deals with the empirical analysis of the privatised enterprises in Eritrea. Finally, chapter five summarises and concludes the study.

This chapter has introduced the recent phenomenon of privatisation, economic background of the Eritrean economy, and the historical profile of the manufacturing
industries in Eritrea. It also explored the privatisation process in Eritrea, the statement of the problem, aim of the research, cite of the research and posed research questions.

In the chapter 2, the vast literature on privatisation is reviewed. It reviews the various definitions of privatization and tries to address the question: Why Privatization? It also reviews the relationship between privatization and performance.

In chapter 3, the conceptual framework upon which the performance of the firms under study can be assessed is designed and the methodology of the research is presented. The research methodology used for this study is a combination of quantitative and qualitative data analysis. The primary data like financial statements, questionnaire, an in depth interview and other secondary data are used to gather relevant information.

In chapter 4, we present the empirical results of the sample firms. The major constraints faced by the firms at-the-time-of-handover and the major post-privatisation restructuring efforts are investigated. We also document the impact of privatisation on the operating efficiency, profitability, employment and wages level, and some fiscal variables of the firms. Finally, we explore the major problems currently affecting the performance of the firms are discussed.

Finally, in chapter 5, a synthesis of the results of the study is presented. The findings are elaborated, implications of the study are assessed and some policy recommendations are derived from the findings. Finally, areas for further researchers are identified.
CHAPTER TWO
REVIEW OF THE LITERATURE

2.1. Introduction

The past decade has witnessed a dramatic change in our view of the legitimate role of the state in various economic activities. Privatisation has become a central feature in the economic policies of nations, in both developed and the developing world [Gist and Laidlaw, 1996]. In 1979, Britain’s Thatcher government coined the terms and modern policy of privatisation. At that time, the public and professional economists met it with great skepticism. Twenty years later, however, privatisation has been accepted as a legitimate...often a core tool of Statecraft by the government of more than 100 countries [Megginson, Price and Netter, 1998]. To this end, during 1980s and early 1990s, more than 15,000 state-owned enterprises (SOEs) have been privatised [Kikeri, Nellis and Shirley, 1994].

Despite this growing experience, however, the empirical knowledge of some critical issues had been fairly limited: Why privatisation? Aside from the practical predictions, how well does privatisation work in practice? Has Post-Privatisation performance improved as expected? How does privatisation affect the firm efficiency, employment, wages and salaries, profitability, and budget of the government?

The aim of this chapter is, therefore, to address the above critical questions by reviewing a vast theoretical and empirical literature on the topic, and to provide a base for establishing a framework for the study.

This chapter is organized as follows: section one reviews the various definitions of privatisation. Section two tries to address the question: Why Privatisation? Finally, section three reviews the relationship between privatisation and performance.
2.2. What Does Privatisation Mean?

Privatisation as a modern political construct is often traced back to the comments of Peter Drucker. He first coined the term “reprivatis” in the late 1960s. Drucker argued “the best we get from the government in the welfare state is competent mediocrity,” and that “more often we do not even get that; we get incompetence.” “Government” he concluded, “is a poor manager.” In his view, government was good at making decisions, but not good at executing them. Therefore, Drucker contended, government ought to “reprivatise,” and separate decision-making in areas of public policy from the execution of service provision. The government ought, in Drucker’s mind, to return as many activities as possible to the private sector [Hodge, 2000].

A clear definition helps in avoiding ambiguity and facilitates a comprehensive analysis for an in-depth investigation of the issue in all its aspects. In the literature, several authors define privatisation differently. Some authors define privatisation narrowly to mean the sale of state-owned enterprises (SOEs). Kikeri, Nellis and Shirley [1994] defined privatisation as the transfer of a majority ownership of SOEs to the private sector by the sale of ongoing concerns or assets following liquidation. Ramamurti [1992, p.225] argues that privatisation “refers to the sale of all or parts of a government’s equity in state owned enterprises to the private sector.” According to World Bank [1996, p.viii], Privatisation is also defined as “the divestiture of the state enterprises, land or other assets.”

Several other authors see privatisation as a wider phenomenon encompassing interconnected activities that reduce the government ownership and control of enterprises and that promote private sector participation in the management of SOEs. Vickers and Wright [1998] view privatisation as an umbrella term for a variety of different policies that are loosely linked which mean the strengthening of the market at the expense of the state. Hartley and Parker [1991, p.11] defined privatisation as “the introduction of market forces into an economy in order to make enterprises work on a more commercial basis.” They argue that privatisation embraces denationalization or selling-off state owned assets, deregulation (liberalization), competitive tendering, as well as the introduction of private ownership and market arrangements in the Ex-Socialist States. Cook and
Kirkpatrick [1988, p.3] defined privatisation as a “range of different policy initiatives intended to change the balance between the public and private sector and the services they provide.” In general, Figure 1 below shows the classification of activities associated with privatisation.

Figure 1. Activities Included In Defining Privatisation

| Market Liberalization, liberalization of prices and trade, and encouraging competition in an economy. |
| Transfer of the operations of state-owned assets to private entrepreneurs, such as contracting out. |
| Sales of state-owned assets to private investors |


The Eritrea government in its macro policy outlined that the government is aiming at reducing the role of the public sector and increasing the role of the private sector in the economy. In 1991, the government adopted a free market policy and liberalized trade and prices. In 1995, reformed the manufacturing enterprises into separate entities and had established a National Agency for Supervision and Privatisation Program in Eritrea (NASSPE). Moreover, the government has managed to sell or privatise 39 state-owned manufacturing enterprises in the period between 1997-2001. In most cases, the government wholly sold its equity in the enterprises, and in some cases, it has established a joint venture. Due to this, in this research, we define privatisation broadly to mean the process of transferring of state ownership to the private sector, the transfer of operations of state-owned assets to private entrepreneurs, and the liberalization of prices and trade to encourage competition.
2.3. Why Privatisation? History and Evidence

Is Privatisation necessary? Does it matter whether property is public, private, or something in between? There are arguments in favor and against privatisation. Some of the arguments in favor of privatisation summarized by Wright and Perrotti [2000, pp.xviii] are: “1. Privatisation fosters the enterprise’s efficiency and its domestic and international competitiveness. 2. Privatisation reinforces new technologies and promotes innovation. 3. Privatisation upgrades plant and equipment. 4. Privatisation increases productivity and improves the quality of goods and services produced. 5. Privatisation maintains or creates employment. 6. Privatisation gives a budgetary advantage.”

On the other hand, Boorsma [1994, pp.29] presents the following arguments against privatisation: “1. Privatisation leads to higher costs. 2. Privatisation leads to a reduction of employment. 3. Privatisation leads to quality lose.” However, according to Boorsma [1994, pp.28] “The arguments in favor of contracting out and the efficiency gains that can be achieved in that case have a theoretical underpinnings and have been tested empirically.”

2.3.1. History: State-Led and Neo-Classical Approaches

In the 1950s and 1960s, the dominant view in development economics was that markets frequently failed to work efficiently in less developed countries (LDCs) [Cook and Kirkpatrick, 2000]. The stress was on the need for active state intervention and participation to offset these market failures. This led to the expansion of the public enterprise sector to balance or replace a weak or ideologically unacceptable private sector, to produce higher investment ratios and yield a capital surplus for investment in the economy, and to transfer technology to “strategic” firms in mining, telecommunications, transport and heavy industry [Kikeri et.al, 1994]. This interventionist approach was actively supported by the major international and bilateral aid agencies, which allocated investment funds to public sector projects.
Thus, the government became the principal actor in economic activities and the major instrument of the development. This has increased the size of the public sector through the creation of numerous government agencies and state-owned or public-sector enterprises. Such an expansion of the public sector in the economy was also rarely challenged. However, the situation changed drastically in the mid-1970s. Both the efficiency and effectiveness of public sector activities began to be questioned seriously when the inability of economies to adjust to external price shocks led to a marked deterioration in macroeconomic performance. Subsequent recovery was slow, and therefore part of the blame was leveled at large public sectors, which, it was argued, robbed the economy the flexibility it needed to achieve the necessary adjustment.

Moreover, with very few exceptional SOEs performers, evidence a wide range of countries showed that far too many SOEs have been economically inefficient and have incurred heavy financial losses. According to Cook and Kirkpatrick [2000], the results of the state-led approach strategy were disappointing. Consequently, the international donor organizations and creditors, such as the World Bank, the European Union, and the United States government, required certain structural reforms as a condition for an economic adjustment along with privatisation normally being a major component of this structural adjustment packages. Hence, many countries have been increasingly reducing the size of the public sector and are turning to market-oriented reforms.

The perception that state-led strategy had failed led to a shift in the dominant paradigm towards a neo-classical market-oriented view of the development process and policy. The policy prescriptions, which flow from the neo-classical analysis, involve an increase role for markets. This requires a strategy of ‘economic liberalization’, involving the removal of various forms of government intervention in product and factor markets that are seen as ‘distorting’ the price signals and ‘repressing’ the market mechanism. In the context of privatisation debate, the neo-classical analysis translates into policy prescriptions directed towards a reduction in the size of the public sector, the removal of government regulation and controls, the fostering of competition, and a great reliance upon the market [Ibid, p.104].
Historically, therefore, many governments being driven by the structural adjustment program, neo-classical’s market-oriented view, and disappointed with the high costs and poor performance of SOEs, have turned to privatisation. They hoped that new private owners would increase the efficiency and decrease the financial demands made by SOEs on strained government budgets. Thus, governments have embarked on privatisation to increase the size and dynamism of the private sector; to distribute ownership more widely in the population at large; to encourage and facilitate private sector and investment from both domestic and foreign sources, for modernization and rehabilitation; to generate revenue for the state; to reduce administrative burden on the state; and- in case of Socialist countries- to launch and sustain the transformation of the economy from a command to a market model [Kikeri et.al, 1994].

2.3.2. Evidence: Why Have Governments embraced Privatisation programs?

Privatisation has recently become the policy option of several governments in both developed and developing countries, and an urgent necessity for some economies. As we know, national governments make core economic policy decisions with their interest in mind. So why have governments throughout the world embraced privatisation so enthusiastically? According to Megginson et.al [1998] one simple answer is of course the money that divestment can raise. Based largely on data provided by Privatisation International, they indicated that governments have raised over two-thirds of a trillion dollar just through shares offerings and direct sales (excluding voucher privatisation) since 1977. The world total sales of SOEs had already topped $185 billion by 1990. Moreover, as one commentator has predicted that at least $6 trillion of privatisation assets will be sold over the next twenty years, with fully half of that coming from Eastern Europe and China [Ibid, p.9].

On the other side, divestment cannot be the sole reason that privatisation has become popular. After all, if governments were selling highly profitable SOEs, the revenue they received from entire sales would be offset by lost profit remittances in the future. The
deeper answer must therefore lie in a recently changed perception about the effectiveness of state ownership of economic assets that has occurred in many different countries. To understand the reasons for this global reconsideration, we must attempt a survey of the recent literature on the relative efficiency of state versus privately owned firms. Given the breadth of this literature, however, all we can hope to achieve is a sampling of the most influential articles.

2.3.2.1 Recent evidence on the relative performance of State-Owned and Privately-Owned firms.

What is surprising about quick spread of privatisation as an accepted doctrine is that much of the academic literature through the late 1980s supported state ownership either theoretically or empirically. The conclusion of the empirical papers supporting for the optimality of state ownership was that government ownership did not necessarily lead to poor performance and that other methods of reforming SOEs, such as injecting more competition or providing more consistent oversight, might either have been more effective or entailed few social costs [see Boardam and Vining (1989), Caves and Christensen (1980), Färe, Grosskopf, and Logan (1985), Atkinson and Halvorsen (1986), Kay and Thompson (1986), Yarrow (1986), Vickers and Yarrow (1988), Bishop and Kay (1989), Bessley and Littlechild (1989), Caves (1990), and Kole and Mulherin (1997)]. However, among these supporters for state optimality, Yarrow [1986], and Viving and Boardam [1992] admitted and/or acknowledged that the gains achieved with out privatisation would have been difficult to sustain.

In contrast, many other critical economists since Adam Smith, have developed theoretical and empirical evidence that have contributed to the movement towards the market. Viving and Boardam [1992] take issue with theorists who feel that “competition (deregulation) is more important than ownership (privatisation)” in improving the economic performance of SOEs. They argue theoretically, and then show empirically, that performance enhancement requires private ownership and control. Another paper, which looks theoretically at the choice between privatisation versus deregulation, is Friedman [1997], who examines the choice between divestment and price liberalization.
as a transition tool for developing market economy. The author concludes that privatisation is better than liberalization.

Boycko, Shleifer, and Vishny [1994] also find that SOEs are rendered unprofitable by deliberate government policy choices. In their model, politicians value SOEs because they can use them to favor their political supporters through excessive employment, regionally targeted investments, and deliberate under pricing of products or over pricing purchased inputs (from politically-connected suppliers). Politicians have an incentive to bribe managers—in order to increase excess employment—and managers have incentives to bribe politicians for promotion or tenure in office, so corruption arises endogenously in the model. Hence they concluded that, SOEs are high inefficient and this can only be resolved by transferring the firms to private ownership. Furthermore, in the following section, we will see the outcome of privatisation empirically

2.4. Privatisation and Performance

The literature reviewed in the previous section generally found that governments all over the world have embraced privatisation programs for different goals. The theoretical battle has been overwhelmingly in favor of private over state-ownership despite the lack of convincing empirical support. Recently, however, academic and professional researchers have been able to generate a wide range of empirical studies on the impact of privatisation on the overall performance of the divested enterprises. This section, therefore, seeks to answer the following critical empirical questions: Aside from theoretical predictions, how well does privatisation work in practice? Has Post-Privatisation performance improved as expected? How does privatisation affect the firm efficiency, labor market, profitability, and budget of the government?

Many researchers, all over the world have employed various techniques and methods to address the above empirical questions. For instance Megginson and Natter [1998] employed financial indicators including profitability, sales levels, operating efficiency, capital investment, leverage ratios and dividend payout figures. LaPorta and Silanes
[1997] have used financial statements, written questionnaires and other primary documents to empirically answer some of the above questions based on the privatisation that has taken place in Mexico. These all authors ultimately compared the pre-and post-privatisation performance data of their sample enterprises.

2.4.1. Privatisation and Efficiency

“The arguments for privatizing the corporations, of course, is that private owners, driven by the profit incentives, will operate the company more efficiently.”

“Few privatized companies have become more efficient or profitable”.
---Venyamin Sokolov on Russia, The New York Times, June 1, 1998

Privatisation is seen primarily as a means of improving the efficiency of enterprises [Bartel and Harrison, 1999]. Proponents of privatisation argue that transferring public enterprises to the private sector will expose these enterprises to the discipline of the market, and thereby lead them to increase efficiency [Richard and Mansoor, 1998]. Following privatisation, firms employ their human, financial and technological resources more efficiently because of greater stress on profit goals and a reduction of government subsidies [Kikeri et.al, 1992].

It is also generally expected that at the start of transition the privatized firms will be associated with greater reform and efficiency gains than state enterprise for the reasons suggested by Barberis et.al [1996]. First, private owners have a greater incentive to improve efficiency because they bear the financial consequences of their actions. Second, managers of the state-run firms are usually chosen for the reasons other than their ability to operate the firm efficiently, such as ideological purity, the ability to make political contacts and to lobby effectively for assistance. Managers of private firms are, however, in principle chosen on their ability to run the enterprise efficiently. The arguments were buttressed by recent empirical analyses of both developing and advanced industrial
economies where privatisation efficiency gains have been confirmed. For example, Viving and Boardam [1992] and Megginson et.al [1994], in two seminal papers, report on strong evidence showing that privatized firms do better than state-owned enterprises on several efficiency criteria [Havrylyshyn and McGettigan, 1999].

2.4.1.1. Efficiency and Ownership

The popular conception of privatisation suggests that there is a clear and well-defined body of theory, which explains the superiority of private over public ownership on achieving a greater efficiency. This argument can be distilled into two main ideas: Principal-Agents, and market forces (competition).

2.4.1.1.1. Principal-Agent Relationships

A useful starting point for the efficiency and/or economic analysis of privatisation is principal-agent theory [Martin and Parker, 1995]. Agency situation arise when one party (principals, such as owners or share holders) delegate to another party (agents, such as managers) decisions over the use of their property or property rights. The principal-agent theory attempts to establish a clear relationship between ownership and efficiency [Nellis.J., 1994].

In both the public and private sectors, there are agent-principal relationships, which can be characterized by asymmetric information leading potentially to adverse selection and moral hazard as a result of hidden information and hidden action respectively [Ross, 1973; Mitnick, 1980; and Jackson, 1985]. However, it is argued that the private owners are clever investors and are interested on one goal: profit maximization. The managers of private firms also know this goal; there is no uncertainty about weights that should be given to various other objectives. This necessitates the creation of efficiency incentive.

Furthermore, the state-owned firms are less efficient and profitable than their private counterparts mainly due to two main issues. The first stresses on a more severe principal-agent problem in state-owned than private firms. Under state control there are several
layers of principal-agent relationships: the general public, its elected political representatives, non-elected civil servants, and the managers of state-owned firms. Thus, principal-agent problems are compounded which in turn leads to large inefficiencies [Viani. B.E, 2002]. The second reason is that politicians would use these enterprises as a mechanism to transfer resources to their supporters [Shleifer and Vishiny, 1994; Boycko, Shleifer and Vishiny, 1996; Shleifer, 1998]. In this view, the manager becomes the agent of the politicians. Therefore, the manager’s objective function includes political arguments that make his decisions diverge from the profit maximizing solution.

Moreover, supervising management (agent) and monitoring its productivity is costly for enterprises’ owners (principals). Under public ownership, it is costly in terms of time and human resources for the objectives of an enterprise are complex and the information on performance is hard to measure.1

In contrast, private ownership is equated with a higher level of managerial supervision, and more commercial financial decisions (in terms of pricing, investment, research and development, innovation, product marketing). This outcome results directly from generally better-defined profit maximization objectives of private ownership that leads to higher level of managerial performance. Since managerial efficiency can be more directly related to enterprise performance, so more effective efficiency-enhancing incentives can be instituted. This, essentially, is the crux of the argument for privatisation: the switch from public ownership to private ownership results in more precise, and more measurable objectives on the part of the owners which then create the environment and incentives to encourage, monitor and control management (agent) more effectively.

2.4.1.1.2. Market Forces

The Neo-classical economic theory suggests that efficiency is seen mainly as a function of market and incentive structures [Nellis, J., 1994]. This argument is actually more closely linked with the issue of market liberalization and competition. According to this
theory, any firm is likely to enhance its efficiency as long as: (1) it operates in a competitive or contestable market without barriers to entry or, just as important, barriers to exit. (2) the owner instructs management to follow the signals provided by the market and gives it the autonomy to do so. (3) and, management is rewarded and sanctioned on the basis of performance. Thus, changes in the performance of an enterprise have as much to do with the issue of market liberalization and competition as with the form of ownership.

A starting point for an analysis of competition is the idea of ‘contestable markets’, which identifies the necessary conditions required to ensure that firms operate efficiently both in terms of managerial or cost-reducing efficiency, and also in terms of welfare improving pricing and investment [see Baumol et al., 1982]. Essentially, a contestable market is one in which any firm is constantly exposed to actual or threatened competition from more efficient producers who can enter the market easily, undercut the incumbent’s price and acquire market share. The threat of this profit-reducing competition is thus the spur to efficient operations by all firms in the market.

Experience has witnessed that governments do not encourage entry, exit and competition among SOEs. In contrast, however, privatisation wide opens the door for competition thereby minimizes the barriers to entry and exit in the market. Moreover, it is often felt that only with the flexibility and responsiveness of private management can an enterprise successfully exist in a competitive market environment. Therefore, privatisation accompanied by competition increases both the productive and allocative efficiencies that are absent in public enterprises. Thus, far more efficiency gains can be expected if privatisation is accompanied by increased competition and/or competition policy.

Empirically, many authors have assessed privatisation in terms of its effect on economic efficiency. In doing so, they define efficiency in various ways. For instance, Megginson, Nash, and Van Randengorghi [1994], Boubaki and Cossett [1994], and D’souza and

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1 the more diverse the objectives of the enterprise, the less effective the monitoring of performance will be, and the lower the level of managerial efficiency.

Megginson, Nash, and Van Randengorh [1994], Boubakri and Cossett [1994], and D’souza and Megginson [1994], together compared pre- and post privatisation financial and operating efficiency measures of 204 companies from 41 countries that were divested during 1961-1989. All these three studies generate remarkably similar results. Efficiency (defined as sales per employee) increased from an average of 97.3 percent of pre privatisation to an average level of 177.1 percent during the post privatisation. Other studies by Laporta and Silanes [1997], Phol [1997], and Viving and Boardam [1992] also document significant post privatisation efficiency (i.e. TFP) improvements in Mexico, Eastern Europe and in several developing and industrial countries respectively.

In contrast, some few authors like Martin and Parker [1995], Bishop and Thompson [1992], Bishop and Green [1995], Waddams and Price [1999], and Green and Haskel [2000] took TFP as a good measure of efficiency in dealing with the British telecommunications and post office during 1989-1994. The authors seen to agree that privatisation itself does not seem to be correlated with TFP growth. Therefore, they conclude that pre-privatisation restructuring was an important source of productivity and/or efficiency gains.

Altogether, therefore, privatisation has proven its economic worth. The shift to private ownership generally improves a firm’s efficiency. There are few exceptions, but the superiority of private firms over public on several efficiency criteria holds up in most countries, including some that are very poor, and many of the former socialist economies. In their extensive literature review, covering 65 empirical studies at the firm level, and across firms within and across countries, Megginson and Natter [2001] conclude smoothly that privately-owned firms are more efficient and more profitable than otherwise-comparable state-owned firms.
2.4.2. Privatisation and Labour Adjustments

Privatisation can affect an enterprise’s work force, salary levels and structure, working conditions, and employees’ benefits [Gupta, Christian, and Hennery, 1999]. Drawing on the experiences of many countries, this section of the chapter examines the relationship between privatisation and labor. It addresses the research question of the study: What effect does privatisation have on the labor of the privatized firms?

2.4.2.1. Employment

Countries the world over have launched ambitious privatisation programs to improve the efficiency of state enterprises, free up resources of social services, and mobilize capital for expansion and modernization [Kikeri, S., 1998]. A universal concern in this process is the effect privatisation has on labor. Policy makers (and workers) fear that privatisation will cause major job losses as new owners of privatized firms shed excess labor to improve efficiency and as divesting government cut the work force to prepare for privatisation.

Fearing unemployment and the loss of benefits, state enterprises workers and unions are often among the most vocal and organized opponents of privatisation, taking actions to delay or block reform [Gupta, Christian, and Henery, 1999]. In many countries the difficulties are compounded by the absence of social safety nets and functioning labor markets. These factors can often led governments to delay privatisation, particularly of large state enterprises in infrastructure and heavy industry where major labor adjustments may be needed, but where the gains from privatisation for the society as a whole are the largest.

Despite its importance, however, labor is the least addressed issues in privatisation. In deed, the lack of information on the employment impact of privatisation has exacerbated
the fears and concerns of the government and workers alike [Kikeri, S., 1998]. To fill this gap, this study addresses the issue in the following section.

The effect of privatisation on labor depends on the initial conditions. Large-scale labor force reductions often occur when large, poorly performing state enterprises are prepared for privatisation and when privatized entities are exposed to greater competition. The more governments privatize such firms, and the greater the exposure to competition, the larger those reductions are likely to be [see London Economics, 1996, and Boubakri and Cossett, 1998].

But in many instance workers can and do gain from privatisation. Many enterprises have been privatized with their labor force intact, either because increasing competition led to labor force adjustments under public ownership or because new private investors were willing to take on modest levels of overstaffing that could be absorbed by new investments and dynamic expansion. More important, particularly in sectors with large investment backlogs, privatisation and investments that accompany it can create new jobs at both the enterprise and sectoral levels. Workers remaining with privatized firms in many countries have benefited by obtaining better-paying jobs, company shares, and improved training and career development prospects [Sunita Kikeri, 1998].

At the same time, new ownership and management may lead to an expansion of activities. Hence, the workforce may actually increase over time. In a study of firms in Czech Republic, Hungary, Poland, and the Slovak Republic, it was found that the transition progressed the elasticity of employment with respect to sales increased [Estrin and Svejnar, 1998]. This suggests that poor performance in public firms requires a period of restructuring resulting in cuts in employment, part of which might occur before the actual sale. But the jobs reductions phase would be temporary; under more dynamic private ownership total employment numbers would eventually recovery, and even surpass the number originally employed. That is to say, the level of employment in the firm could follow a U-curve. This can be illustrated by the following figure 2.
Adopted from an example by Gupta et al. [2000, pp.23].

In addition, where efficiency improvements require sizable labor force reductions, privatisation can proceed smoothly if governments make early efforts to develop a labor strategy that secures employee support for privatisation and provides a social safety net. According Sunita Kikeri [1998, pp. viii], employees can support for privatisation when efforts are made to: “(1) inform and involve worker and labor unions in the reform process. (2) Ensures that workers share in the gains of privatisation through mechanisms such as employee share ownership schemes. (3) Compensate laid-off workers by providing severance pay and other income support. (4) Help workers on a reintegrate into the labor market. (5) Eliminate obstacles to private job creation.”

The choice of measures, however, depends on country and enterprise circumstances. In the middle income countries with rapidly growing economies and a well-developed private sector, measures such as severance pay and employee share ownership schemes might be all that is needed. By contrast, in low income countries (like Eritrea) where state enterprises dominate the labor market and where social safety nets are lacking, more fundamental macroeconomic and labor market reforms aimed at eliminating obstacles to job creation and improving labor mobility, combined with the development of a social safety net, are needed to facilitate restructuring and minimize the negative impact on workers.
The most thorough empirical analysis of privatisation is the World Bank study by Megginson, Nash, and Van Randenborgh [1996]. They analyzed the post privatisation performance of 61 companies in 18 countries (6 developing and 12 industrial) to determine whether the transfer to private ownership increased performance. Perhaps the most surprising and important finding of the study is that employment actually increases after privatisation-by an average of 2,346 employees (6 percent)-rising in almost two-thirds of all firms. Other studies by Gupta, Schiller, and Ma [1999], and Boubakri and Cossett [1998] also document a significant (10 percent) increase in employment in post privatisation period in different countries [see also Johnson, 2001].

In contrast, some other studies in different countries reported a negative impact of privatisation on the employment level. For instance, Laporta and Silanes [1997] and Ramamurti [1997] took a pre-and post privatisation data on employment. These authors document a significant decline in employment during the post-privatisation period. However, the level of employment was steadily falling throughout the pre-privatisation period. Seemingly, the pre-privatisation fall in employment was the result of the government’s efforts to revamp the firms before divesting them. It also matters how the competitive environment and the budget constraints faced by an enterprise change when privatisation occurs. Boubakri and Cossett [1998] find that privatized firms newly exposed to competition are likely to reduce employment.

2.4.2.2. Wages, Salary, Working conditions and Benefits

Privatisation can also have an impact on salary levels and structure, working conditions, and pay supplements [Gupta et al., 1999]. Again, the time frame is an important factor: initial pay cuts may be followed by future wage increases. In the case of Malaysia, Mexico, and British, workers benefited from higher wages after privatisation [Galal et.al, 1994]. Pohl et.al [1997] also find that in a privatized firms in the Central and Eastern Europe, real wages growth was significant due to substantial productivity increase during
post-privatisation. Besides, Privatisation often causes a move toward more performance-based pay schemes, more flexible working conditions, and larger wage differentials.

In summary, for state-owned enterprises, which typically overstaffed and pay excessive wages, privatisation tends to reduce employment and wages, at least initially. Over time, if a privatized enterprise can expand its activities and increase its efficiency, employment and wages are likely to increase.

2.4.3. The Fiscal Impact of Privatisation

Finally, at a macro level, privatisation can have a direct or indirect impact on the budget of the government. Under state ownership, the government may finance the operations of the public enterprises through subsidies, lending and capital transfers. On the other hand, the public enterprises may contribute to government revenues through taxes, dividends, and debt service payments [Gupta et al., 1999]. After privatisation, these flows between the budget and the public enterprise will virtually cease; instead, the government will receive the sales proceeds and taxes on the privatized enterprise’s profits.

State enterprises, privatisation, and fiscal policy also interact in several ways. On the one hand, losses by state enterprises are part of the fiscal problem and fiscal crises push privatisation towards the top of the policy agenda. In the late 1970s, state enterprises generated average deficits of four percent of GDP in LDCs [Floyd, 1984]. Moreover, fiscal crises itself usually further impedes attempts to control state enterprises and their losses by weakening the state’s administrative and monitoring capacities. Lastly, investment by state enterprises is a prime target for budget cuts and without investment the quality of products, infrastructure, and services quickly deteriorates. These factors disgrace the image of the companies and increase public support for reform and privatisation. A fiscal crisis is a major determinant of, if not necessary condition for, the decision to privatize [see Fishlow, 1990; Veron, 1998; and Waterbury 1992].
On the other hand, privatisation is perceived to be part of the fiscal solution [Pinherio and Schneider, 1995]. Privatisation provides lump sum revenue that can be used to temporarily offset the deficit and it frees governments from the burden of subsidizing loss-making state enterprises. Of course eliminating subsidies to state enterprises has a clear positive impact. And, in many cases, governments have used revenues from privatisation to reduce the stock of public debt. But the ultimate use of privatisation revenues is a function of the overall fiscal performance of a government. Although revenues reduce debt stock, indiscipline on the fiscal side means those revenues are indirectly financing the government’s current expenditures or increasing its space to borrow more.

For instance, Brazil tried to sustain the nominal value of its overvalued currency by using its reserves and its privatisation revenues. Thus, the potential fiscal benefits were lost as government used reserves to protect the currency. Macedo [2000] indicates the likelihood that privatisation revenues in the mid-1990s merely prolonged the period during which Brazil tried to sustain the nominal value of its overvalued currency and put off the day of reckoning, which finally came in 1998. Mussa [2000] refers to the same fault in the case of Argentina. Revenues from privatisations in the mid-1990s were significant over a period of three or four years. Despite those infusions, the government failed to generate the fiscal surpluses it needed. Both the national and sub national governments kept on borrowing, and ultimately the privatisation revenues were swallowed up in the collapse of the currency and the debt default in 2002.

The analysis of the fiscal impulse or the revenue maximization approach to privatisation is not only theoretical, but also empirical. On their empirical study, Galal and others [1994] find that in 9 of 12 cases, the fiscal impact of privatisation was positive. In the case of Malaysia’s Kelang Container Terminal, the government earned increased corporate taxes from the enterprise, and benefited from the appreciation of its retained 49 percent share. Similarly, in Argentina, a study of five cases [Shaikh, 1996] finds that the fiscal impact was positive due to enterprises’ higher income taxes, higher indirect taxes
resulting from higher output, and the elimination of subsidies to the enterprise after privatisation.

A review by the IMF [2000] of 18 privatizing countries, reported substantial gross receipts from privatisation, accounting 2 percent of annual GDP. This is a substantial amount, but the long-run effects on government revenue generally come not from the sales proceeds (which result from a one-time sale of an asset) but from the elimination of pre-privatisation subsidies to state enterprises and from subsequent increased tax revenues from more profitable and productive private enterprises. Governments such as Mexico, Cote’d de Ivoire and Mozambique received, in the first few years following sales, more from privatized firms in taxes than from direct proceeds of sales. A “flow of funds” analysis in Bolivia also shows, in the first four years following sales, a positive financial return to government of US $ 429 million through taxes.[]

In contrast, some empirical studies in some countries (for example Chile, Brazil) support for the claims that revenues from privatisation are too little and too late to help much in resolving fiscal crises. For instance, Galal et.al [1994] reported that the Chilean treasury is estimated to have lost dividends and corporate taxes equivalent to 22 percent of the sale price of the Electricity Company Chilgener. For Teléfonos de México, the net fiscal impact of privatisation was zero.

In conclusion, therefore, privatisation enhances the performance of the former SOEs. The majority of the studies by different researchers proved that the various performance indicators, including firm efficiency, profitability, employment, wages and salaries, and budget of the government have improved in the years after privatisation. Although there are some few negative results, it is worth noting that various government policies and other external factors can affect the process of privatisation. Hence, based on the vast literature reviewed in this chapter, we will design a conceptual framework for the study in the following chapter.
CHAPTER THREE

FRAMEWORK FOR ANALYSIS AND METHODOLOGY

3.1. Introduction

In this chapter, we develop a conceptual framework and design the research methodology of the study. In section 3.2, we present the conceptual framework for analysis and discuss the justification for adopting it. In section 3.3, we present the research methodology followed in designing the research and collecting and analysing the data. Finally, in section 3.4, we conclude the chapter with summary.

3.2. Framework for the Analysis of the Study

In this section, the study establishes a conceptual framework upon which the performance of the privatised activities or enterprises can be assessed. The assessment and evaluation of the impacts of privatisation can be done through different approaches. Ideally, performance should be assessed in terms of the objectives for privatisation. However, the policy objective and motives for privatisation varies between countries and have altered with time. Thus, according to Cook and Kirkpatrick, [1995] one can assess and evaluate the impact of privatisation on performance by employing the following different approaches.

The first approach is to assess the impact of privatisation on performance on the basis of macro level indicators. Here, the effect of privatisation is assessed in terms of the financial proceeds from the sale of state assets, and also the broadening of the tax base [see Black and Drollery, 1998]. The contribution of these financial proceeds that are generated from privatisation in increasing the government revenue and in reducing a budget deficit is considered as one way of assessing and evaluating the impact of privatisation at a national or macro level [see Gupta et al., 1999; Galal et al., 1994; Shaikh, 1996; IMF, 2000; Mussa, 2000; Pinherio and Schneider, 1995; Fishlow, 1990; Veron, 1998; and Waterbury 1992]. The tax contribution of the privatised entities, which
is taken as a fiscal performance indicator, is defined as tax-to-sales [Laporta and Silanes, 1997]. Likewise, the impact of privatisation on investment and/or foreign direct investment inflows -as examined by Fontain and Geronimi [1992] for Sub-Saharan Africa can also be alternative indicators of macro level impact.

Secondly, the impact of privatisation is measured at the enterprise level in terms of efficiency or financial profitability [see Megginson et al., 1994]. In this case, a range of indicators can be calculated. But, the more commonly used yardsticks or indicators in assessing and evaluating the impact of privatisation on the operating efficiency at the firm level are sales per employee, value-added per employee, and total factor productivity. For instance, many authors have assessed privatization empirically in terms of its effect on economic efficiency. By doing so, they define efficiency in various ways. For instance, Megginson, Nash, and Van Randenborgh [1994], Boubakri and Cossett [1994], and D’souza and Megginson [1998] defined efficiency as real (inflation-adjusted) sales per employee. Bishop and Thompson [1992], Bishop and Green [1995], Phol [1997] took total factor productivity (TFP) as a good measure of efficiency. Martin and Parker [1995] also define efficiency as annual growth in Value-added per employee.

Thirdly, the impact of privatisation on performance outcomes can be assessed and evaluated in terms of social impact. The social impact of privatisation has been mainly examined in terms of labour effects. Here, privatisation is judged on the basis of its impact on the employment, wages level, and associated employment-related benefits [see Gupta et al., 1999; Megginson, Nash, and Van Randenborgh, 1996; Gupta, Schiller, and Ma, 1999; Boubakri and Cossett, 1998; Johnson, 2001; Laporta and Silanes, 1997; Ramamurti, 1997; and Boubakri and Cossett, 1998]. A closely related set of indicators assesses the impact of privatisation on labor that is retrenched, wages, and related safety net provisions as a result of privatisation.

Finally, it is also possible to assess performance impact of privatisation in terms of the economic welfare, using cost-benefit approach. This has the attraction of allowing
different effects to be valued in terms of common unit of measurement and aggregated to give a single, overall measure of the results of privatisation. Yet, this is beyond the scope of this research.

Irrespective of the above indicators of performance that is selected, there is a difficulty in developing an appropriate methodology for impact assessment. The problem is establishing the counterfactual: that is, what would have happened in the absence of privatisation? If the counterfactual can be identified, however, it becomes possible to separate out the extent to which observed changes in the performance indicators are due to privatisation itself, and the extent to which they are due to exogenous changes in the industry of economy as a whole.

In order to solve this methodological difficulty, however, two approaches have been widely used. The first is to compare performance before and after privatisation [Cook and Kirkpatrick, 1995; Megginson, Nash, and Van Rondenborgh, 1994]. The second is to compare performance of the privatised enterprises to those of similar enterprise that have not been privatised and to take the observed differences as evidence of the effect of privatisation.

This study subscribes to the first three approaches together in examining and assessing how privatisation affects the above stated performance variables by comparing the pre- and post divestment data. Since the first study to be published using this methodology is Megginson, Nash, and Van Rondenborgh [1994], we will refer to this as MNR Methodology. This common method was also used by Boubakri and Cosset [1998], D'Souza and Megginson [1998], La Porta and De Silanes [1997]. The fourth approach, which is the cost-benefit analysis is beyond the scope of this study mainly due to the shortage of data.

This study, therefore, employs the MNR Methodology in exploring and analysing the impact of privatisation on the overall performance of the newly privatised Eritrean manufacturing firms. The study takes operating efficiency, profitability, employment and
wage levels, and some fiscal variables as key performance indicators in the manufacturing enterprises. By doing so, it describes the level of these key parameters before and after privatization based on the income statement and balance sheet data.

3.2.1. Advantages of MNR Methodology

Studies employing the MNR Methodology have two key advantages. First, they are the only studies that can examine and directly compare large samples of economically significant firms, from different industries, privatised in different countries over different time periods [Megginson and Netter, 2001]. Since each firm is compared to itself (a few years earlier) using simple sales and income data that produce results in simple percentages, this methodology allows one to efficiently aggregate multi-industrial, multinational results. Second, it also yields samples that encompass the largest and most politically influential privatisations [Megginson W.L, and Netter J. M, 2001]

3.2.2. Limitations of the MNR Methodology

The MNR Methodology has also some few economic and econometric drawbacks. First, unless careful selection is made it leads to selection bias, that is biased towards the very largest companies sold. Second, the studies which use this common method (MNR Methodology) can not account for the impact on privatised firms of any regulatory or market opening initiatives that often are launched simultaneously with or immediately after major privatisation programs. Finally, it is needed to examine only simple, universally available financial variables (such as assets, sales, and net income) or physical units such as the number of employees [ibid, 2001].

3.3. Research Methodology

Research methodology is “the application of scientific procedure towards acquiring answers to a wide variety of research questions” [Adams and Schvaneveldt, 1991, pp.16].
It provides tools for doing research and obtaining useful information. Research methodology incorporates the entire process of a study, that is, conceptualizing and observing the problem under study, investigation of the research questions, data collection and analysis, and generalization of the results.

### 3.3.1. Research Design

The research questions of this study address the issues of the impact of privatisation on the overall performance of the manufacturing enterprises. The analysis conducted in this study, therefore, seeks to determine whether the privatisation of the SOEs in Eritrea is truly desirable and lives up to the expectation of the government of Eritrea on the performance of newly privatised firms. In particular the study tries to determine whether privatization of the Eritrean manufacturing enterprises: (1) improves the firm’s efficiency, (2) increases, decreases or maintains the work force, and (3) contributes to the budgetary advantage. We also examine whether, following privatization, the firms increase (4) their profitability.

### 3.3.1.1 Sampling

The Eritrean government owns several manufacturing, service rendering and utility companies. This study is focused on the manufacturing sector for they are earmarked for privatization, employ the majority of the work force in Eritrea, and they have a large impact on the economy. The enterprises, moreover, provide a good case to understand the process and the problems encountered in privatisation in a developing country [Stifanos, 2000].

According to Eisernhardt [1989a, pp.545] “While there is no ideal number of cases, a number between 4 and 10 cases usually works well. With fewer than 4 cases it is often difficult to generate theory with much complexity and its empirical grounding is likely to be unconvincing. With more than ten cases, it quickly becomes difficult to cope with the complexity and volume of data.” Therefore, we selected six enterprises from six manufacturing sectors in the economy. Our sample of firms is drawn from the Ministry of
Trade and Industry’s (MTI) listing of privatized enterprises (see annex.). Moreover, we were taking the following characteristics under consideration in generating sample enterprises:

3.3.1.1.1. Significance of the Industry

The industry should contain large enterprises and has a significant effect on the Eritrean economy in terms of employment, production and capital investment. This study included firms, which employ relatively large numbers of employees before privatizing (50 or more) and companies which had a large amount of capital (two million Nakfa or more). The other enterprises are not selected due to this criterion. For instance, the office furniture and household industries employ relatively few workers and have a relatively a small book value of assets. The metal work industries also employ few workers.

3.3.1.1.2. Date of Sale

This is an important selection criterion. In order to investigate the process of privatisation and to compare the pre- and post privatisation performance variables, an enterprise should be privatised at least one year before the study. Many enterprises were not selected because they were privatised at the end of 2001. Hence, a condition for any company to be included in the sample was that at least one or two number of observations be available for pre- and post privatisation periods.

3.3.1.1.3. Availability of Data

Some firms have a well-documented data while others have not. So, in the selection process, the availability of data in the enterprise was highly significant. The researcher has found some firms without financial recording systems for their day-to-day operations and, thus obliged to drop them from the selection process. Hence, those with better documentation were chosen for this study.
Using the above listed criteria, six enterprises were selected from six industries. The most common industries are food processing, beverage, footwear and leather, textiles, tobacco and match, and chemical industry. In order to have an in-depth and comprehensive study of these industries, we included one firm from each industry. The food processing firm selected is Alpha foods. The beverage enterprise included is Red Sea Bottlers Sh. Co. The footwear and leather enterprise selected is “Keih-Bahri”. The textile factory selected is Baraco textile. The Tobacco and Match enterprise included is the British-American tobacco. Finally, the Red Sea Soap Factory was selected from the chemical and detergent industry.

The above sample selection criteria, allow the study to test whether performance changes after government divestiture. The study employed a matched pairs methodology for comparing the pre- and post privatization performance measures of the sample enterprises. Moreover, to avoid any potential bias in selection, great care was taken so that the information would not reflect the most successful privatization only. Thus, the above criteria rendered the most representative and worth of including industries.

3.3.1.2. Data Collection Approaches

Any research can involve either quantitative or qualitative data or both [Yin, 1994]. Eisenhardt [1989a] argues that a combination of data types could be highly synergetic. He further elaborated that quantitative evidence can indicate relationships, which may be salient to the researcher. It can keep researchers from being carried away by vivid, but false, impressions in qualitative data. It can also bolster the findings when it corroborates those findings from qualitative evidence. On the other hand, the qualitative data are useful for understanding the rationale or theory underlying relationships revealed in the quantitative data or may directly suggest the theory, which can then be strengthened by quantitative support. Hence, this study employs both the quantitative and qualitative.
Multiple data collection methods provide method for triangulation and strong substantiation of constructs and hypothesis [Eisenhardt, 1989a; Scapens, 1990; Yin, 1994]. In this study, therefore, primary data have been collected through an interview with various managers and board director of the NASPPE and the use of a questionnaire. In addition, the secondary data such as financial data from the sample enterprises, government policy documents and library books, Journals and articles have also been collected for answering the research question(s) posed.

3.3.1.2.1. The Quantitative Data

The quantitative data collected includes financial data such as income statements, balance sheets and other supporting financial documents, and data from the questionnaire collected.

An audited financial data measure the successes and failures of the firm and explain how and why its financial health changed overtime. The financial data also forms the basis for planning future operations and for suggesting ways to improve performance of the organization [Stifanos, 2000]. According to Crum and Goldberg, [1998, pp.47], “Almost every action taken by the company management is noted in the accounting system. Each interaction with suppliers, customers, workers and government is recorded in the books of account.”

Thus, in order to assess the impact of privatization on the overall performance of the enterprises studied (i.e. especially its impact on the firm efficiency, labor market, profitability, and on the budget of the government), financial variables relating to company operations (sales, costs and operating profits), company investments (total assets, fixed assets and working capital) and company tax payments (Sales tax, profit tax, …etc) data for the period of 1996-2001 were collected. By doing so, the ministry of trade and industry (MTI) was requested for the annual financial reports of the sample enterprises for the three years period prior to privatization.
Besides, the sample firms were also requested for their annual financial statements of the post-privatisation period. These pre-and post privatisation data have helped the researcher to compare the performance of the enterprises before and after divestiture; and in reaching on certain conclusions about the impact of privatisation on the firm efficiency, the work force, profitability, and government’s budget.

3.3.1.2.2. The Questionnaire Data

For the purpose of assessing the major constraints the enterprises under study encountered at the-time-of-handover, to explore the major restructuring measures (activities) adopted towards solving the constraints, and to identify the major current challenges (bottlenecks) of the sample enterprises, a well prepared written questionnaire was distributed among the top-level managers of each sample firm. The questions asked were structured into five parts; namely efficiency-related, labor-related, market-related, production-related, and tax-related questions. Answers to these type of questions provide very important information to carefully assess the overall impact of privatization on the performance of the enterprises under study. These all information supplemented by other data sources are employed in the analysis part of the study.

Once we obtain the selected enterprises, we distributed the questionnaires in person. The researcher has left the questionnaire with the respondents for about two weeks and collected it during the appointment date for an interview. At the time of distribution, the researcher explained the instructions for filling the questionnaire which were written on the front cover, and clarified if there were concepts that the respondents did not understand when they were scanning the questions. At the time of collection of the questionnaire, the researcher tried to explain if the respondents still had some questions or if they need clarification.
3.3.1.2.3. The Qualitative Data

A qualitative data were also collected to answer some of the research questions regarding how managers are trying to enhance the overall efficiency and performance of the enterprises. Top-level managers of the enterprises under study were interviewed. They were asked questions relating to company operations, investments, finance problems and other external factors such as government tax and other policies.

Open-ended questions were asked to the managers, but in order to focus the interviews to the most issues that would help us answer the research questions, we identified relevant concepts from the literature to be used as a signpost for us. However, this did not limit the responses of the interviewees. They were expressing and providing additional insights. The researcher took notes during the interviews. The interviewees responded in the local language Tigrigna to facilitate communications and then, the researcher transcribed the interviews in to English.

In addition, the director of the National Agency for Supervision and Privatisation of Enterprises (NASPEE) was also interviewed to assess the progress and constraints encountered in privatizing the enterprises in Eritrea. The director was asked open-ended questions related to: the main objectives of the privatization policy in Eritrea, the restructuring measures taken by the government before a bid for a sale (if any), the impact of privatization on the labor market and government’s budget, safety nets adopted to compensate the laid off workers (if any), and basic assistance offered to the newly privatized enterprises from the MTI and the agency (if any). The researcher has taped this interview for the person was accustomed to that devise. He responded in the local language and then the researcher transcribed the interview in to English.

3.3.1.3. Data Analysis

Multiple data collection methods strengthen the grounding of theory by triangulation of evidence [Eisenhardt, 1989a; Scapens 1990, Yin, 1994]. The financial data, managers’
responses to the questionnaires and interview data are analyzed to answer the research questions posed in this study.

3.3.1.3.1. Quantitative Data Analysis

This study has used the financial analysis techniques in analyzing the financial data collected from the companies selected for this study. Financial analysis highlights both the strength and the possible areas of concern of a company and helps in identifying the fundamental problems and weakness of the business and helps in assessing the firm’s competitive strength. Financial analysis can also help in identifying the root causes of the problems that the enterprises are facing in enhancing efficiency and creating value [Stifanos, 2000].

Furthermore, the study has also used absolute financial data such as sales, asset investments as well as relative figures such as financial ratios in assessing the efficiency impact. Ratios are derived from the recorded data of the company to test the prediction and/or hypothesis of the study. We compute empirical proxies for every company for about six-year period: three years before privatisation (i.e. from t-1 to t-3 time period) through 1-3 years after privatization (i.e. from t+1 to t+3).

Thus, we develop a performance “time-line” that reflects operating results from the last three years state-ownership through the first three years as a privatized entity. For the sake of comparison, the study then calculated the mean or average of each performance variable for each firm over the pre-and post privatization windows (pre privatization: years -3 to -1 and post privatization: years +1 to +3). In the case of the questionnaire data analysis, the managers’ responses are described and analysed using averages and ranges.

3.3.1.3.2. Qualitative Data Analysis

The study has interviewed for both the managers of the sample firms and the director of the NASPEE. The transcribed interviews were read and the essential issues reported were annotated. In addition, we assembled the meaningful themes identified from the
transcripts and also gathered the interesting quotes from the transcripts. The open-ended interviews provide the researcher with additional qualitative data that were not able to get from the financial documents or the questionnaires. It also helped to corroborate the findings of the financial and the questionnaire data.

3.4. Summary

In this chapter, we designed the conceptual framework and the research methodology for the study. As regards to the framework, the impact of privatisation on the performance of the sample firms will be analysed and evaluated in terms of its impact on the firm efficiency [defined as sales per employee and value-added per employee], profitability, employment and wages level, and its contribution to the budget of the government. By doing so, the pre-and post-privatisation data on these performance indicators of the sample firms will be compared.

Moreover, the methodology of the study consists of both quantitative and qualitative analysis. The qualitative analysis and interpretations of the existing data supplement the quantitative measurements and relationships. The financial data are analyzed using financial analysis techniques (i.e. Ratios), while the managers’ responses are described and analysed using averages and ranges. Finally, the interview responses of managers are used to illustrate the financial analysis and managers’ responses to the questionnaire results.

In the next chapter, we will employ the above stated framework and methodology in analysing the impact of privatisation empirically. We will discuss the situation of the sample firms at-the-time-of-handover, the major post-privatisation restructuring measures adopted by the firms, the impact of privatisation on the firm efficiency, profitability, employment and wages level, and on the budget of the government. Finally, we will explore the major current constraints faced by the sample firms.
CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1. Introduction

The predominant national development objective of Eritrea has been the creation of a modern, technologically advanced and internationally competitive economy within the next two decades. Consistent to this, the macro-policy of the Government aims to establish an efficient, outward looking, private sector-led market economy, with the government playing a proactive role to stimulate private economic activities [GOE, 1994]. To this end, the government has been committed in privatising 39 small, medium, and large state-owned manufacturing enterprises since 1997. In doing so, the Government envisaged the creation of a more efficient, competitive, and profitable private sector. The purpose of this chapter, therefore, is to scrutinize the impact of the privatisation on the operating efficiency, profitability, employment and wages, and fiscal performance of the newly privatised enterprises.

This chapter is organised as follows: section 4.2 presents the profile of the sample firms. Section 4.3, reviews the situation of the sample firms at-the-time-of-handover. Section 4.4, narrates the major post-privatisation restructuring measures adopted by the firms. Section 4.5, provides discussions and analysis on the impact of privatisation on the operating efficiency, labour market, and fiscal performance of the sample firms. Finally, in section 4.6, the main problems and/or constraints currently faced by the privatised companies are investigated.

4.2. Brief historical profile of the companies under study
The Red Sea Bottlers Share Company

The Red Sea Bottlers Share Company was established in 1964 as a National Soft Drinks Corporation. It started operation using obsolete machinery and produced Coca-Cola, Sprite, Fanta Orange and Fanta Tonic. It was nationalised in 1975. After independence the government rehabilitated and resumed its production, but the obsolesce of machinery and distribution tracks were causing problems. In January 1997, the government of Eritrea and the Coca-Cola Company entered into a joint venture, creating a new company under the name of Red Sea Bottlers Share Company. The joint-venture agreement helped the company to raise equity finance of US $13 million from the investors, making it one of the most modern Coca-Cola factories in Africa. The new bottling line has a production capacity of 8,000 cases per day in comparison to the 1,500 cases produced by the old bottling line. The factory also added a new product-line, Krest and there is a plan to introduce other new flavours.

Alpha Food Processing Company

The Alpha food processing company was established as a flourmill by an Italian entrepreneur in 1901. The entrepreneur added manufacturing and bakery in 1944. It was nationalized by the Ethiopian military regime in 1982. Since Eritrea’s independence in 1991, the company had been operating as a state-owned enterprise. In 1996, the government assigned the factory to the ministry of defense, but at the end of 1998 the government offered it for sale. After three years in March 2001, the company was sold to a local investor for Nakfa 8 million. Currently, the company is producing pasta, bread and some by-products.

Baraco Textile Company
Baraco Textile Company is located in the city of Asmara, the national capital. The company was established in 1965. It started operation as a public share company in accordance with the then prevailing commercial code of Ethiopia. The military government of Ethiopia nationalised the company in 1975. After the ouster of the Ethiopian rule and since Eritrea’s independence in 1991, the company came under the control of the government of the state of Eritrea. Finally, it was sold to a local investor for Nakfa 12 million in 1998. The company mainly produces textile fabrics made of cotton, rayon filament and polyester viscose, dyed and printed twills, flanne letters, dyed and printed sateen, jeans, and polyester-cotton.

**Red Sea Soap Company**

The Red Sea Soap Company, formerly known as SAPE (Soaps Alikes Plant Electrochemici), is located in the city of Asmara, the capital city of Eritrea. It was established in 1973 by Uniliver of Great Britain and an Italian entrepreneur who had a small laundry soap factory in another part of the city. The new company produced and marketed Uniliver products, namely, Lux, Astral, Lifebouy, and Omo. Since Eritrean independence in May 1991, the Red Sea Soap Company had been administrated as one of the state-owned enterprises. Finally, the company was sold to a local investor for $2.05 million in August 1997. At present the company produces mainly toilet soaps, laundry soaps, powder, and liquid detergents.

**British-American Tobacco Company**

The British-American Tobacco Company, previously called Gash Cigarette and Tobacco factory), is located in the centre of Asmara. A Greek company named Mina Ananistolla initially established it in 1920. At that time the factory used manual tools to prepare cigarettes that were hand rolled on plain sheet paper. In 1929, it was nationalised by the Italian Colonial Administration and had got an exclusive power/right in respect of the purchase, preparation, manufacture, sale, import and export of tobacco and tobacco product. These exclusive rights have not been changed or modified through out the successive colonial administrations that Eritrea had passed through. Since independence
in 1991, the company came under the control of the State of Eritrea. In March 1998, the company was sold to a foreign (British citizen) investor for 54.8 million Nakfa. The company produces mainly light and king size Rothmans and Ideal cigarettes.

**Keih Bahri Leather Company**

The company was first established in 1964 by two Italian investors. The main line of business of the factory is tanning hides and skins. The factory obtains its supply of hides and skins from domestic markets. Since 1966 the tannery has been exporting wet blue hides mainly to Italy and the United Kingdom and supplies local footwear factories with shoe-uppers and soles. The factory was nationalised in 1975 by the Ethiopian regime. Since independence in 1991, the factory had been as one of the state-owned enterprises. The Eritrean Government sold the factory to a local investor for Nakfa 12 million at the end of 2000.

4.3. The Situation of the Companies under study at-the-time-of-handover

Analysing the situation of the companies at-the-time-of-handover provides an essential prospective for understanding the constraints that the companies had been facing in the transition period. It is also a benchmark for evaluating the major changes (restructuring activities) made in the years following privatisation. Subsequently, the study conducted interviews and distributed a questionnaire.

The origin of the problems and constraints that faced the Eritrean manufacturing sector owe to the hostile economic and business environment of the last colonial administration. Besides, the inappropriate policies adopted by various governmental institutions after independence have also exacerbated the problems and constraints considerably. Although the study does not analyze very deeply on the impact of the constraints on the performance of the manufacturing sector in the pre-privatisation period, it is clear that their impact on productivity, efficiency, competitiveness and effective functioning of the manufacturing companies is highly weighty. The most serious constraints the sample firms faced at-the-time-of-handover are discussed hereunder.
As revealed from the survey undertaken, all the sample firms were in a bad situation at-the-time-of-handover. The companies were operating in similar environment and the most serious common constraints they have faced during the transition period are: lack of committed principal and agent, old and obsolete machinery, lack of spare parts and raw materials, lack of market and marketing skills, lack of technicians and engineers, and low paid and redundant workforce.

4.3.1. Principal-Agent Problem.

In the pre-privatisation period, the companies under study had been characterized by managerial slack and lack of incentive by the government in the alignment of the utility of the managers with the institutional objective of the companies. Because of the principal-agent problem, the government had directly intervened in the day-to-day administration of the companies. It was strictly controlling the companies’ agents on all matters such as pricing, sales, investment and other management decisions. The agents had to request the permission of the authorities of the MTI. Such strong and forceful control mechanisms, therefore, restricted the power, freedom, and productivity of the management. Besides, the government failed to implement workable compensation schemes that motivates managers to align their interest with the interest of the government.

In Eritrea, the Ministry of Finance (MOF), the MTI and the NASSPE oversaw the state-owned enterprises. The MOF handles financial matters and collects dividends. The MTI designs industrial policy and the NASPPE is entrusted with managing, restructuring and privatising state-owned enterprises slated for privatisation. However, lack of coordination among these various governmental entities also worsened the problem and led to an ownership confusion and conflict of interest among these institutions. These governmental institutions were giving different (sometime conflicting) directives to the agents and the agents were not able to know from whom to receive orders and to whom to report. Thus, governance under these governmental institutions was weak and
ineffective. All these were making the managers (agents) powerless and negligent as well.

4.3.2. Old and Obsolete Machinery.

Absence of modern machinery and equipment was common on the firms at-the-time-of-handover. They were equipped with very old and outdated machinery, with negative impact on the output, both in terms of quantity and quality. The fixed assets of the companies were old, highly depreciated and lead to frequent breakdown, increase cost of production, decreased the capacity utilisation, and thus hindered the firms from improving the quality of their product and efficiency. The management team was less empowered on new machinery investment and upgrading technology due to the restrictions of the NASPPE and lack of finance in some firms.2 The government as an owner tried to exit quickly than restructuring them. It feared that investing in new machinery and technology increases the sales price of the companies to be privatised and as a result this high sales price may not attract many buyers. Therefore, the government opted to continue operating the companies “as they are.”

Moreover, the companies were paying 80 percent of their net profits as a dividend to the government since 1995. Consequently, the 20 percent retained profits were not enough for the agents to finance investments. This strict dividend policy was constraining agents from engaging in profitable long-term investment projects and from buying material when prices are cheap. To this end, the firms did not make any major investments in machinery and equipment, and thus were forced to use second hand machines acquired for over twenty-thirty years. Since the government sold the companies “as they are”, the old and obsolescence of machinery and equipment was one of the major constraints the new investors have faced during the transition period.

4.3.3. Lack of Market and Marketing skills

2 The board of NASPPE was restricting the managers from long-term investments in machinery and equipment and thus, the managers had no option except for continuing to use the old machinery.
A substantial portion of Eritrea’s manufacturing products was exported to Ethiopia. In 1998, due to the eruption of the border conflict between the two countries, the market problems of the manufacturing sector have worsened and trade between the two countries has totally ceased. The advent of this event had led the companies to remain with the smallest domestic market share only. When the trade problem between Eritrea and Ethiopia started, the managers had to look for another alternatives in the neighboring African countries, Middle East, and Europe. For this purpose, market research had to be conducted to identify the products that consumers in these regions wanted and what new products could be designed to meet their needs. This required money for research and travel of people from the marketing department.

The government, however, did not want to inject money and engage in new product development. The companies were encountering a lack of market for their products. Thus, the lack of marketing personnel versed with the knowledge of marketing and lack of exposure of the marketing staff to the outside markets hindered the companies from identifying prospective new markets and producing new products in the pre-privatisation period. Hence, lack of adequate and dependable markets and non-existence of marketing experts were common on the sample firms at-the-time-of-handover.

4.3.4. Lack of spare parts and raw materials

The availability of spare parts and good quality raw materials enables manufacturers to produce higher quality finished products that can be competing in the domestic and foreign markets. However, according to the survey made by the MTI [1998], there were lack of spare parts, raw materials of appropriate quality and sufficient quantity in almost all the Eritrean manufacturing establishments.3

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3 According to the survey of MTI [1998], both the large and small-scale manufacturing establishments suffered from lack of spare parts and raw materials. For instance, 124 large and 125 small-scale manufacturing establishments reported that they have serious spare parts and raw materials problems.
The old machinery required spare-parts, yet obtaining them was a difficult encounter. This was due to the fact that the manufacturers of the old machinery do not exist any more or because they do not produce such obsolete machinery any more. Thus, there was a lack of spare parts from the original suppliers. If the spare parts were then needed, the suppliers have to set up new workshops. This made the spare parts expensive and the interviewed managers stated that it was sometimes cheaper to buy new machinery. Occasionally due to lack of spare parts, some of the companies were obliged to operate under capacity. In addition, there was also lack of locally sufficient raw materials and information on good quality raw materials.

4.3.5. Low paid, unmotivated, and Redundant Workforce

Low salary payment and redundancy was common in the Eritrean state-owned manufacturing enterprises. In Pre-Privatisation period, the government as a principal was delinquent and did not try to improve the efficiency of the state-owned enterprises by reducing the existed overstaffed and redundancy. Most of the workers were unskilled, low paid, and were supporting their families. Just to say ‘no’ to them and expel them from their work was hazardous. Even the management (agent) did not have autonomy and the gut to layoff the employees due to the social consequences that the government and management would expect it to follow.

In addition, the employees were not being paid a motivating salary, and thus were not cost conscious and quality oriented. Stifanos [2000] for instance, has documented that the employees in his sample state-owned enterprises were negligent and were mainly concerned about the allotted eight working hours. They did not ask them selves whether they were producing a quality or not. Moreover, they were producing defective products, which were sold at a very low price. This was mainly due to the low salary payment, unfavourable working conditions, lack of acknowledgement of achievements and prospect of promotion. Finally, the government sold the firms with their employees “as they are” to the private investors. So the new investors have faced this problem at-the-time-of-handover.
4.3.6. Lack of skilled manpower (e.g. technicians, engineers…)

Lack of professional and skilled manpower was reported as one of the major constraints the companies have faced at-the-time-of-handover. This acute shortage of skilled, trained and qualified manpower was both quantitative and qualitative and was particularly critical at the top and middle levels. The labour market for manufacturing sector has been weakened by decades of war, neglect and destructive policies. Consequently the manufacturing sector is handicapped in terms of organisational strength and quality of manpower. Lack of creativity, dedication, skill to use raw materials properly, proper knowledge of machinery and raw materials, and low skills of the workers to adopt new technology were revealed to be as the main problems the sample firms faced during the transition period.

Properly organised maintenance and repair team contributes to the smooth and efficient working of a company and helps in improving productivity. However, the sample firms had also been loosing their technicians and engineers due to an unattractive salary. The technicians and engineers were not motivated and thus, withdrew to another lucrative jobs in the private sector. Moreover, the NASPPE restricted companies’ managers from recruiting any new employees, and thus were vacant posts in the companies. Hence, the firms had had a limited skilled manpower (technical incompetence) to keep up and maintain the old machinery.

4.4. Post-Privatisation Restructuring Activities of the sample Companies.

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4 Lack of skilled, trained, and qualified manpower naturally affects performance and productivity. Productivity depends on the optimum combination and development of human, capital and natural assets. Moreover, human resources are crucial as they form the fulcrum on which everything revolves. They are the key for the unlocking and mobilising of the other resources and must therefore be fully and effectively utilised if the productivity goals are to be realised.

5 The companies’ technicians had considerably capabilities to undertake repairs of mechanical and electrical components and this capability was helping the companies to run the old machinery. Therefore, their withdrawal affected the efficiency of the firms negatively.
In the preceding section, we described the situation of the companies under study at-the-time-of-handover. However, the survey under taken revealed that the situation of the companies has been improving tremendously due to various restructuring measures taken by the new owners since privatisation. The major restructuring activities that have been taken by the companies under study in the years following privatisation are discussed here under.

4.4.1. New Investment in Machinery and Human Capital

Investment in the acquisition of new machinery, upgrading of existing equipment and human capital is a sine-qua-non condition for economic survival today [Stifanons, 2000]. Most of the equipments of the companies were old and required complete reconditioning or replacement. Obsolete machinery led to frequent breakdowns, increased costs of production and decreased productivity. Management has to invest in machinery and human capital to obtain or maintain competitive advantage and ensure profitability.

As revealed from the survey undertaken, new investment in equipment and upgrading of technology has been the most relevant restructuring activities of the companies in the year(s) following privatisation. For better performances, the new investors had to introduce modern and appropriate technology, machinery and equipment. To this end, the new owners have made a major long-term investment of Nakfa 201,492,608 in machinery, human capital, and buildings. By doing so, the firms have adjusted to the new market environment, renovated and modernised the machinery, and upgraded the technology.

According to the finance manager of the Red Sea Beverage Company:

The recently acquired machinery is highly advanced and modern. The plant renovation was not a normal upgrading. The goal is to make a first class Company, which can compete internationally. We planned to invest US$ 13 million initially to renovate the company and its machinery; however, now it might require even more because the level of technology of the acquired machinery is highly advanced. The company will be one of
its kinds in the whole Africa and is expected to be a training centre for all other African countries. The machines are digital and work with a system of step 7 and 5 PLC (Programmed Logic Computer System). And we have been upgrading the technical competence of our technicians in order to operate the digital PLC machine.

Besides, the general manager of the Keih Bahri Leather Company has also stated that:

We found the company equipped with old machinery and equipment, which had a negative effect on the output. The government (principal) had not been committed and the company became handicapped due to old or non-availability of appropriate machinery and equipment. After Privatisation, however, our company has made an investment of 2.2 million Nakfa on modern five machines, namely: Rotary Spraying machine, Electronic area measuring machines, Roller Cotter, Ironing machine, and Fleshing machine from Italy and Czech Republic.”

Training is a dire need to upgrade the skill and knowledge of the workers to cope with the advancement of new technology in the world, and thus to make companies competitive in the market. With the exception of the Alpha Food processing company, the rest have trained their managers and employees. Key management personnel have been provided with management and technical training with the objective of bringing their knowledge up to date with modern management philosophy and with modern technology in the years following privatisation. They have also upgraded the skill of their production (especially the technicians) and marketing staffs by sending them abroad in the aim of introducing them with the new technology and marketing skills. For instance, according to the human resource manager of the British-American Tobacco Company:

To upgrade the technical competence of our technicians, our company has sent 3-4 employees to UK to take additional technical skills in order to run the new computerised machines. By doing so, we have solved the problem of technical incompetence we had suffered during the transition period.
4.4.2. Restructuring of Company Management

Post-Privatisation restructuring of enterprise management in the companies encompassed organisational restructuring, replacement, training, and changes in compensation of individual managerial personnel. The organisational restructuring taken by most of the companies changed the number, hierarchy, and duties of managerial posts. Moreover, the organisation chart was flattened through reducing the number of decision-making levels thereby avoiding cumbersome bureaucratic inefficiencies. During the pre-privatisation period all the managers have been required to follow mandatory directives about their day-to-day decisions (including investment, output, financial and other related decisions) from the top officials of the government (e.g. NASPPE, MTI, MOF). This had incapacitated the managerial flexibility of the companies in dealing with unforeseen contingencies and opportunities.

In post-privatisation period, the companies shifted from a more centralised to a more decentralised structure. To this end, the restructuring of company management has led to the appointment of committed, more qualified, and autonomous new general managers, created or upgraded the status of units for specific functions, such as marketing, product quality, and finance. New communication systems are also established for management information and production control.

4.4.3. Market Diversification and Strengthening Marketing Skills

A substantial portion of Eritrea’s manufacturing products was exported to Ethiopia. In 1998, due to the eruption of the border conflict between the two countries, the market problems of the manufacturing sector have worsened and trade between the two countries has totally ceased. This made the firms to remain with the smallest domestic market share. For instance, according to the survey made by the MTI in 1998, the highest compliant of the state-owned enterprises referred to lack of adequate market, as the 208 manufacturing establishments reported that marketing their products was the most
difficult problem in their business operations. In the post-privatisation period the sample firms with an exportable products, however, have taken measures to improve the quality of their products and ensure their competitiveness on foreign markets.

Since the post-privatisation period, most of the sample firms have been applying promotional measures designed to persuade consumers that their products are worth buying. They are advertising for their products through mass media (i.e. television and radio) and newspapers. In addition, they also display their products in various domestic, regional as well as international trade fairs and exhibitions. For instance, the finance manager of the Red Sea Bottlers Company stated:

Our Company has been advertising the Coca-Cola products on the mass media in order to attract and make known our new products to our customers since the second quarter of 1998 (since privatisation).

To this end, the companies have been strengthening their marketing strategy by training and exposing their marketing staffs to the outside markets. In line with this, they have also assessed new opportunities and re-oriented their exports to wider regional and international markets. Hence, except two firms, the rest are being able to identify prospective new markets in Djibouti, Rwanda, Congo, Italy and US (i.e. due to AGOA).

4.4.4. Introduction of New Products

In the companies, there have been two main types of post-privatisation restructuring of output: introducing new products and a quality improvement of the existed ones. First, most of the firms altered their product mix to concentrate on the product lines with the

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6 According to the survey results of the ministry of trade and industry of 1998, Problems connected with the lack of information about external markets, lack of marketing experts, lack of advisory or consultancy services, the availability of proper information regarding good quality of raw materials, lack of knowledge about new technology, and inability of competing with similar establishments were observed to be the most visible problems as far as the large state-owned manufacturing establishments are concerned.

7 Due to the new trade policy of US, many African countries including Eritrea are given open doors towards the markets of US. They can export to and import from US without any tariffs or protections.
best market potential and to reduce or abandon those with weaker prospects. According to the managers’ responses to the restructuring questionnaire and interviews, all the companies under study have changed their product mix and have introduced new products. For instance, the new products introduced by Baraco Textile, British-America Tobacco, Red Sea Soap, and Red Sea Bottlers are army camouflage, king size and light Rothmans, Lilly toilet soap and liquid detergents, and Krest water respectively. Secondly, most of the manufacturing companies used old technology and their products were poor in quality. In post-privatisation period, however, the output adjustment taken by each company has improved product quality in order to compete more successfully on the domestic market against national products and imports and on foreign markets.

4.5. Managers’ Responses to the Post-Privatisation Restructuring Activities

The following table summarises the managers’ responses to the various post-privatisation restructuring activities.

Table 1. Summary of the Managers Responses to the Restructuring Measures

<table>
<thead>
<tr>
<th>Category</th>
<th>Restructuring activities</th>
<th>Managers’ Responses on Relevance (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AFP</td>
</tr>
<tr>
<td>Investment side</td>
<td>New investment in new machine</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Changes in inventory policy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Upgrading technology</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Disposing off the fixed assets</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Control of capital expenditure</td>
<td>4</td>
</tr>
<tr>
<td>Revenue side</td>
<td>Seeking new markets</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Increasing exports</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Dropping product’s price</td>
<td>5</td>
</tr>
</tbody>
</table>
The survey conducted revealed that new investment in equipment, upgrading technology, seeking new markets, strengthening marketing skills, and increasing exports have been the most relevant restructuring activities of the company in the years following privatisation.

In addition, more effective use of resources, being selective to supplies, increasing wages, reducing employment, improving production efficiency, changing product quality and mix, and avoiding wastage have also been the most relevant restructuring activities of the company.
4.6. Post-Privatisation Performance of the Companies Under Study

As we have reviewed the vast literature in chapter two, governments all over the world have adopted large-scale privatisation programs for different reasons. By the same token, the Eritrean government has also been committed to the process of privatisation in the hope that state-owned firms will function more efficiently, produce output of higher quality and become competent once they are privatised. This section therefore answers the empirical questions posed in chapter one: Has post-privatisation performance improved as expected? How does privatisation affect the operating efficiency, employment level, salary of the employees, and the fiscal performance of the companies?

4.6.1. The Post-Privatisation Operating Efficiency of the Companies

Privatisation is seen primarily as a means of improving the efficiency of enterprises. Proponents of privatisation argue that transferring public enterprises to the private sector will expose the state-owned enterprises to the discipline of the market, and thereby lead them to increase their operating efficiency [Hemming and Monsoor, 1988].

As explained in the theoretical framework of the literature review, the study takes productivity [sales per employee] and value-added [sales-cost of sales/employee] as a proxy for measuring the operating efficiency of the selected companies8. Besides, the efficiency of the companies is also studied by analysing the financial data, managers’ responses obtained during the survey. This section, therefore, presents and analyses the evidence on the effect of privatisation on the operating efficiency of the companies under study in the years following privatisation. The detailed operating performance data is presented below.

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8 The MNR Methodology uses the sales per employee and value-added per employee as a proxy for measuring the operating efficiency.
Table 2. Summary of the Operating Efficiency Results of the Selected Companies  
[Except employment, the Amount is in 1,000,000]

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean value Before privatisation</th>
<th>Mean value After privatisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Sales1</td>
<td>3.1</td>
<td>13.8</td>
</tr>
<tr>
<td>Cost of sales2</td>
<td>2.7</td>
<td>14.9</td>
</tr>
<tr>
<td>Operating profit3</td>
<td>0.4</td>
<td>-1.1</td>
</tr>
<tr>
<td>No. of employees4</td>
<td>78</td>
<td>476</td>
</tr>
<tr>
<td>Profit margin5</td>
<td>13 %</td>
<td>-8%</td>
</tr>
<tr>
<td>Operating efficiency6</td>
<td>0.0</td>
<td>0.03</td>
</tr>
<tr>
<td>Value added7</td>
<td>0.0</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Source: based on the annual accounts received on inquiry by the courtesy of the company and MTI

Notes. 1. Sales represents the mean (average) of the total sales of the company.
2. Cost of sales represents material, labour and other manufacturing costs incurred.
3. Operating profit is the difference of sales and cost of sales (sales-cost of sales).
4. Number of employees is an average number of employees.
5. Profit margin is the ratio that compares the operating profits to sales.
6. Operating efficiency is calculated as (real sales/number of employees)
7. Value-added is a measure of productivity and is calculated as (sale-cost of sales/employees)
8. Mean change represents the average percentage change in the operating efficiency. The plus (+) and
(-) signs represent for an increase and decrease changes respectively. AFP, BT, BAT, RSS, RSB, and KBL represent for Alpha Food Processing, Baraco Textile, British-American Tobacco, Red Sea Soap, Red Sea Bottlers, and Keih Bahri Leather Company respectively.

Analysing the above raw data of the sample firms using the common method used by Megginson et al [1994], Boubakri and Cosset [1998], and D’Souza and Megginson [1999], the mean value of efficiency indicators for the pre-privatisation period is compared with that of the post-privatisation period. The results show that the efficiency and profitability of the companies have increased substantially in the years following Privatisation.

Using the sales per employee as an indicator of operating efficiency, the results of this study agree with the prevailing view that private control is related with higher efficiency. The operating efficiency increases from an average value of 10.79 percent in Pre-Privatisation period to 13.54 percent in the Post-Privatisation period. In the years following Privatisation, all the sample firms have made exorbitant restructuring measures in machinery, management and labour. By doing so, they have been able to rehabilitate, modernise their plant and machinery, expand their production capacity, produce new and top quality products, avoid redundancies and wastage. These all have helped them to enhance their efficiency and profitability to a large magnitude. For instance, according to the general manager of Baraco Textile Company:

This company was known for its lose-making behaviour. It had a record of negative retained earnings for years before privatisation. So we had to start restructuring from the scratch once it is privatised. We have improved the performance of the company dramatically. Unlike the past, our company is now efficient and competitive in the domestic, regional, and international markets.
One of the factors affecting the operating efficiency and profitability is sales. Sales generate cash inflows for business and an increase in sales is a yardstick of customer satisfaction. Besides the major investment on machinery, management, and labour, most of the sample firms have also expanded their domestic market and identified prospective new regional or international markets for their products through a market research. These all have helped the firms to expand their production capacity and efficiency by increasing their sales or output at a relatively lower cost.

Moreover, in some firms the main constraint before privatisation was not a lack of market demand, but a shortage of supply. The firms’ managements were not able to increase the production capacity of machines due to obsolescence. After being privatised, however, they have renovated their machinery, restructured their marketing department, enhanced product distribution channels, improved their relationship with the customers, and hence increased their sales at length. For instance, according to the general manager of Keith Bahri:

Our sales is now increasing. The old machines consumed energy and produced limited output. However, since Privatisation we have replaced these old machines by new technology and being able to produce top quality products, increase our sales target and compete price wise in the local as well as foreign markets. The efficiency of our company has improved by the modern technology.

The value added per employee also as indicator of efficiency shows that an employee added value of 22.1 thousand in pre-privatisation period and 69.9 thousand in post-privatisation period. This is a most surprising result. Before privatisation, the firms’ employees were not being paid a motivating salary, and thus were not cost conscious and quality oriented. They were mainly concerned with production for the allotted eight working hours. Moreover, they were producing defective products, which were sold at a
very low price. Thus, the value added per employee was negative in the pre-privatisation period. Nonetheless, these have changed through salary increment, modernisation of machinery, high management supervision, and introduction of some incentive policies by the management since privatisation. For instance, according to the general manager of Baraco Textile:

Workers’ salary was low and caused negligence. Now, however, we pay our employees a good and motivating salary, and supervise their performance closely. For these reasons, the employees exert a great effort thereby become more efficient.

Moreover, this finding is consistent with that of Megginson et al. [1994], Boubakri and Cossett [1994], D’Souza and Megginson [1998], Bishop and Thompson [1992], Bishop and Green [1995] and Phol [1997].

4.6.2. Labour Impact of Privatisation on the Sample Firms

A universal concern in the process of privatisation is the effect privatisation has on labour. The perception that exists across the world is that privatisation results in massive layoffs and low wages as private companies get rid off highly compensated public employees and replace them with lower paid, non-union workers with fewer benefits to perform the same services. Notwithstanding, there is much evidence to show that new ownership and management leads to an expansion of activities and thereby increases the employment level and salary of the employees. This section, therefore, examines the relationship between privatisation and labour in the companies under study.

4.6.2.1. The Total Number and Functional distribution of employees

For instance, the Red Sea Bottlers Company did not have a lack of domestic market, but a shortage of supply. After being privatised, the company has therefore increased its sales by producing more Coca-Cola products to the general public at relatively lower prices.
The following table summarises and compares the total number and functional distribution of the employees of the sample firms in both the pre-and post privatisation periods. The detailed data on the labour impact of privatisation on each sample firm is presented in the appendix.

Table-3. Summary of the total number of employees of the companies under study.

<table>
<thead>
<tr>
<th>Department</th>
<th>Mean value of total employment Before Privatisation</th>
<th>Mean value of total employment After Privatisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AFP  BT  BAT  RSS  RSB  KBL</td>
<td>AFP  BT  BAT  RSS  RSB  KBL</td>
</tr>
<tr>
<td>Management</td>
<td>3     2    7    4    3    2</td>
<td>2     4    10   7    5    1</td>
</tr>
<tr>
<td>Finance &amp; Admin.</td>
<td>12    38   25   13   40   14</td>
<td>10    37   9    20   63   19</td>
</tr>
<tr>
<td>Production</td>
<td>57    42   176  38   76   63</td>
<td>61    59   25   83   101  56</td>
</tr>
<tr>
<td>Marketing</td>
<td>6     15   10   5    56   12</td>
<td>6     6    5    17   144  8</td>
</tr>
<tr>
<td>Supply chain</td>
<td>-     -    9    -    -    -</td>
<td>-     -    7    -    -    -</td>
</tr>
<tr>
<td>Quality assurance</td>
<td>-     -    3    -    -    -</td>
<td>-     -    3    -    -    -</td>
</tr>
<tr>
<td>TOTAL</td>
<td>78    47   120  60   175  91</td>
<td>79    63   59   127  313  84</td>
</tr>
</tbody>
</table>

Source: Primary data collected using a questionnaire.

Notes. AFP, BT, BAT, RSS, RSB, and KBL represent for Alpha Food Processing, Baraco Textile, British-American Tobacco, Red Sea Soap, Red Sea Bottlers, and Keih Bahri Leather Company respectively.

4.6.2.2. Classification by Skill
The following table summarises the skill, age, and gender classification of the companies’ employees in both Pre-and Post-Privatisation periods. The detailed data of each company under study is presented in the appendix.

Table-4. Summary of Classification by Skill.

<table>
<thead>
<tr>
<th>Category</th>
<th>Before Privatisation</th>
<th>After Privatisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AFP</td>
<td>BT</td>
</tr>
<tr>
<td>Skilled</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>UnSkilled</td>
<td>35</td>
<td>18</td>
</tr>
<tr>
<td>TOTAL</td>
<td>78</td>
<td>47</td>
</tr>
</tbody>
</table>

Source: Primary data collected using a questionnaire.

Notes. AFP, BT, BAT, RSS, RSB, and KBL represent for Alpha Food Processing, Baraco Textile, British-American Tobacco, Red Sea Soap, Red Sea Bottlers, and Keih Bahri Leather Company respectively.

The above tables demonstrate that privatisation does actually have a positive impact on the level of employment. The employment level and skill composition of the workforce has improved extensively since privatisation. This is mainly due to the expansion of activities, identification of prospective new domestic, regional and international markets, introduction of new product lines, changes in the product quality, and increase in sales. Unlike the fear of policy makers and workers, privatisation has increased the employment level from a mean value of 1000 in the pre-privatisation period to a mean value of 1314 in the years following privatisation. This is equivalent to the mean change of 31.4 percent. For instance, according to the general manager of the Red Sea Soap:
We will continue staffing at a level that allows us to be more competitive player in both the domestic and export markets. The valuable experience and skill of our existing employees will be put to full use in the business market.

Moreover, this result supports the conventional view of the proponents of privatisation. It is also largely consistent with the findings of Megginson, Nash, and Van Randenborgh [1996], Gupta, Schiller, and Ma [1999], and Borbakri and Cosset [1998].

In addition, the findings have also revealed that the firms increase their skilled and semi-skilled manpower by 143 percent and 20 percent respectively. However, the unskilled manpower decreased by 28.7 in the post privatisation period. Moreover, all the companies have been able to upgrade the skill of their manpower. They have been giving various training to their employees and have far more motivation to train their employees to the highest standards and using the latest techniques in the modern job market. Areas of training and development included quality management, production process management, technical and engineering, and stock control and working capital management.

When further disaggregated, with the exception of the Keih Bahri leather and the British-American Tobacco, the rest four firms have avoided employment cuts. The Keih Bahri tannery has reduced its employment slightly by 7.7 percent, where as the tobacco firm cut it by 50.8 percent. Most of the workers were unskilled, low paid, and were supporting their families. Just to say ‘no’ to them and expel them from the work was hazardous. Even the management (agent) did not have autonomy and the gut to layoff the employees due to the social consequences that the government and management would expect it to follow. Thus, the companies with limited capacity had a surplus labour and these reduced their efficiency and productivity.
However, in the years following privatisation, the new foreign owner of the British-American Tobacco Company has introduced capital-intensive technology (which was required by the nature of its tobacco products). He was, therefore, obliged to reduce the existed overstaffing at the initial stage aiming to shift the company towards more efficient, profitable and competitive. Almost 100 percent of the reduction was made on the unskilled category. Moreover, according to the human resource manager of the company:

We have found this company with full of overstaffed redundant workers. Some of the workers were getting something for nothing. Therefore, we are forced to take some reductions. Since we have now imported the new modern machines and are expanding our production capacity, we can increase our workforce in the near future. Moreover, we are currently in need of more qualified staffs from the domestic labour market.

### 4.6.2.3. Salary Structure of the Sample Enterprises

Privatisation can also have an impact on the salary level and structure, working conditions, and pay supplements. It often causes a move toward more performance-based pay schemes and more flexible working conditions [Gupta et al., 2001?]. Moreover, if a privatised enterprise can expand its activities and increase its efficiency, employment and wages are likely to increase.

The following table summarises the salary structure of the employees in both the pre-and post-privatisation periods. The detailed data on the salary structure of each sample firm is presented in the appendix.

Table-5. Summary of the Salary Structure of the Sample Firms.
The above table shows that privatisation has made a significant improvement in the wages or salary brackets of the employees. Many employees from various departments in the sample firms have moved from a lower salary bracket to a higher salary bracket due to privatisation. Consequently, the number of employees increases and decreases as we go up to the higher income bracket and lower income bracket respectively in the years following privatisation. To cite an instance, the number of employees in the lower income bracket of Nakfa 150-550 has decreased from 774 of pre-privatisation to 527 in the post-privatisation period. This is equivalent to a mean change of –32 percent. Conversely, the number of employees in the highest income bracket of greater than Nakfa 1500 (>1500) has increased from a mean value of 11 employees in the pre-privatisation
period to a mean value of 154 employees. This is equivalent to a mean change of +1333 percent.

Actually, the living standard in Eritrea is currently deteriorating mainly due to an existing inflation. However, the government has not made any salary increment since the eruption of the war with Ethiopia, 1998. Therefore, those who are newly employed and/or remained in the privatised companies have far more benefited from a salary increment than those working in the state-owned companies have. This has made the employees in the sample firms exert an effort and become more efficient than before.

4.6.3. The Fiscal Impact of Privatisation

4.6.3.1. At National Level: Financial gains

Besides the efficiency gains at the firm level, the effect of privatisation have also focused on the financial gains accruing to the state. These are two folds: the financial proceeds from the sale of state assets, and also the broadening of the tax base [Black and Drollery, 1998, pp.16]. Thus, Privatisation can be a desirable policy from the standpoint of the government budget.

First, many governments have considered privatisation as a source of fiscal revenue and have initiated privatisation programmes with this as an important objective. It provides lump sum revenue that can be used to temporarily offset the deficit and it frees governments from the burden of subsidising loss-making state enterprises and investing in the companies [Pinheiro and Schneider, 1995, pp.752]. This is particularly true of governments that must reduce fiscal deficits as part of structural adjustment programmes. The proceeds from the sale of a state operator are often applied to reduction of the public debt. Public sector budget obligations are further reduced by removal of the former state operator’s employees from the public payroll11 [Garrison, 1999, pp.7].

11 In addition privatisation frees up administrative resources previously devoted to monitoring and controlling state enterprises.
Secondly, the government can benefit from an increase in tax payment of the enterprises once they are privatised. When they are, therefore, sold to the private sector they start paying taxes like any other private company and thus broaden the tax base [Black and Drollery, 1998, pp.16]. Moreover, firms might earn larger profits in private hands either as a result of improved efficiency or because the government is willing to deregulate prices. The government can capture the benefits of a larger income stream through higher tax revenue [UNESCAP, 2001, pp.4]. In either case, the fiscal impact of privatisation would be positive and increases the financial resource flow to the government.

This section, therefore, examines empirically the relationship between privatisation and measures of fiscal performance of the privatised firms in Eritrea in general and in the sample firms in specific.

The Eritrean government has sold the sample firms to the new investors for about Nakfa 169,662,050. This amount is equivalent to 43 percent of the total privatisation proceeds, 6.3 percent of the government deficit of the year 2000 and 2.7 percent of the gross domestic product of the Eritrean economy.12 According to the interview with the board director of NASPPE, the government at a national level has generated a total financial proceeds of Nakfa 400,000,000 from privatisation. This generated revenue or proceeds have come to the government before the existing budget deficit become under control. Thus, the privatisation proceeds and the annual tax payment of the privatised firms play a role on reducing domestic financing, or large deficit, and moreover relieving the budget strain.

4.6.3.2. The Tax Payment and Contribution of the Sample Firms.

The following table summarises the tax contribution and payment of the sample firms in both the Pre-and Post-Privatisation periods. The detailed data of each company under study is presented in the appendix.

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12 During 2000, the gross domestic product of the country was Nakfa 6.2 billion.
Table 6. Summary of Tax Payment and Contribution of the Sample Firms

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean value Before Privatisation</th>
<th>Mean value After Privatisation</th>
<th>Mean Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Payment1</td>
<td>12,004,781</td>
<td>46,563,944</td>
<td>+287.8%</td>
</tr>
<tr>
<td>Tax Contribution2</td>
<td>11.1%</td>
<td>17.5%</td>
<td>+58.2%</td>
</tr>
<tr>
<td>Subsidy</td>
<td>2,085,41413</td>
<td>NIL</td>
<td>-100%</td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire

Notes: 1. Tax payment represents the mean annual tax payment of the sample firms collectively.

2. Tax contribution is defined as the mean value of the annual tax-to-sales ration of the sample firms.

Table 6 reveals that privatisation has a positive fiscal impact in the sample firms. The tax payment and the tax contribution [defined as tax-to-sales] of the sample firms have changed extensively in the years following privatisation. In the pre-privatisation period, the companies were under a neglectful state-ownership, equipped with old machinery, having narrow market (i.e. Ethiopia), lack of skilled staffs, spare parts, and low product quality. Accordingly, their sales and profit were very low. Moreover, some of the sample firms had been chronic loss-making companies. For instance, the Baraco Textile and the Red Sea Bottlers Companies had incurred a loss of Birr (Ethiopian currency) 679,415 in 1997 and 1,963,446 in 1998 respectively.14

Furthermore, the government also subsidised the firms indirectly by allowing them to use bank overdrafts whenever they incurred losses. The Red Sea Soap Company had received an indirect subsidy of Birr 580,018 and 675,531 during 1995 and 1996 respectively. In 1998, the Alpha Food and the Red Sea Bottlers Companies had also received a subsidy of 778,224 and 627,775 respectively. Consequently, the state-owned enterprises had not been contributing to the government’s budget; rather they had strained the budget.

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13 The Baraco Textile, Red Sea Bottlers, and Alpha Food were given by the government an indirect subsidy of Nakfa 679,415, 627,775, and 778,224 respectively for they were incurring huge amount of losses.
However, in the years following privatisation the firms have made an exorbitant investment in new machinery and labour. Besides, they have increased their sales and profitability extensively and are contributing a huge amount of money to the government’s budget. To this end, the annual tax payment of the sample firms has increased from a mean value of Nakfa 12,004,781 of pre-privatisation to a mean value of 46,563,944, which equivalent to a mean change of +287.8 percent.

Moreover, the tax contribution has also increased from a mean value of 11.1 percent in pre-privatisation period to 17.5 percent in the years following privatisation, which is equivalent to a mean change of +58.2 percent. Therefore, the companies have shifted from straining the government’s budget towards contributing an enormous amount of money to the budget since privatisation. Hence, privatisation has brought about a positive fiscal performance in the sample firms. But, it all depends on the fiscal discipline of the government to make use of this huge money in solving its budget deficit effectively.

4.7. The Current Constraints of the Sample Companies

The sample firms have improved their operating efficiency, increased their employment and salary levels, and recorded an absolute fiscal performance since privatisation. These are mainly due to the major restructuring efforts made by the new investors. Yet, the firms are still facing some external constraints, which are beyond their control. According to the managers’ responses to the problem questionnaire and also an interview, the firms are facing some serious problems in furthermore enhancing their overall performance.

As revealed from the survey undertaken, the most serious problems the companies facing at present are: lack of access to foreign currencies (weak financial institutions), aggressive tax behavior of the Inland Revenue Department (IRD), a weakness of the export supporting institutions, lack of skilled manpower, shortage of raw materials, and power and water supply irregularities.

\[14 \text{ Until 1998, Eritrea was using Ethiopia’s currency, Birr.}\]
Banks, as financial institutions, play a significant role in the development of the manufacturing sector. The financial sector in Eritrea, however, is not developed and is under a strict control of the government. The provision of short and long term loans is one of the most important factors in the development of large and small manufacturing establishments. Unfortunately, the banks in Eritrea are not allowed to provide the private companies with adequate foreign currencies and the companies are not in a position to import some of their necessary inputs. Thus, all the sample firms are severely suffering from a lack of access to a foreign currency for the financial institutions in Eritrea are weak and not independent.

In addition, there is a weakness in some export supporting institutions. The MTI, customs, maritime, and packing services are not effective and are hampering the export activities of the sample firms. The firms are facing delays in the ports and airports in sending their exports and getting out their imports from the store. Moreover, they are not getting valuable information or assistance related to a regional and international market possibilities, and daily exchange rates. According to the general manager of Baraco Textile:

We textile producers have an export potential, and thus need additional regional and international market information and trade consultancy from the government (especially from MTI). However, the MTI is not supporting us in getting these information, rather they contact us only when they want some thing from us, which should not be the case.

The customs’ office employees assess the tax to be paid based on their own estimated value of the imported materials rather than the actual invoice, in which their estimate price is high. Besides, for instance, the Red Sea Bottlers has complained that the tax office is using the beverages as a base for tax assessment in restaurants and shops. The tax auditors assess high daily income if they see a large quantity of beverage products purchased. Therefore, this is motivating customers to limit their purchase of beverage products to evade taxes. According to general manager:
If a restaurant sells 10 bottles of soft drinks the tax inspector assumes as if 10 persons have dined during the day. However, some may have come for a soft drink only. Therefore, the business persons are reducing our products. The IRD depends on the cards of soft drink sales, which should not be the case.

As regards to the raw materials, some firms are facing constraints in getting the locally available raw materials in a good quality and at a reasonable price. For instance, as far as the quality and quantity of raw hide is concerned, though Eritrea is endowed with the availability of cattle, goats and sheepskins, there is a problem in collecting and transportation. Moreover these animals are kept for domestic use and are slaughtered when they get old and their skin becomes poor quality. The farmers also brand the animals’ skins for the identification of ownership and they hit them using whips and sticks. Thus, these all customs are contributing to the deterioration of the quality of the raw material.

Moreover, the main cost component of the textile industry is cotton. The price of cotton has been increasing though sufficient cotton is produced in Eritrea. The Aligheder Cotton Plantation management (the only cotton plantation in Eritrea) is asking the textile companies to buy it at a world market price. This made the cotton grown in Eritrea very extensive. Finally, the lack of skilled manpower in the domestic market and the power and water supply interruptions are also hampering the operation and performance of the sample firms.
CHAPTER FIVE

CONCLUSIONS AND IMPLICATIONS

5.1. Introduction

In the previous chapters, we reviewed the literature, designed the framework and methodology for the study, and discussed the findings of the study. In this chapter, we present the conclusions and implications of the study.

According to the Cook, Kirkpatrick and Nixson [1989], the development of a dynamic private sector is a prerequisite for structural changes towards a market economy and they argue that privatisation is one component of private sector development. This research has focussed on the impact of privatisation on the firm’s operating efficiency, profitability, employment and wages level, and tax contribution to the budget of the government.

In section 5.2, we report the summary and conclusions. In section 5.3, we discuss the implications of the study and finally in section 5.4, we describe the directions for further research.

5.2. Summary and Conclusions

In this section, we summarise the findings from the literature as well as the empirical part

The literature reviewed in chapter two generally found that governments all over the world have embraced privatisation programs for different goals. But most of them hoped that new private owners would increase the efficiency and decrease the financial demands made by the SOEs on strained government budgets. Moreover, many academic and professional researchers have recently been able to generate a wide range of empirical studies on the impact of privatization on the overall performance of the divested enterprises.
The researchers have employed various techniques and methods to assess the impact of privatisation on performance empirically. They have examined the impact of privatisation on performance in terms of the operating efficiency, profitability, employment, wages and fiscal variables of the privatised entities. By doing so, they ultimately compared the pre- and post-privatization performance data of the performance indicators.

The vast literature reviewed in chapter two documented that the majority of the studies by different researchers have proved the economic worth of privatisation. They recorded that the various performance indicators, including firm efficiency (defined as sales per employee; value-added per employee; Total factor productivity), profitability, employment, wages and salaries, and budget of the government have improved in the years after privatization. Although there are some few negative results, it is worth noting that various government policies and other external factors can affect the process of privatization.

In the case of Eritrea, the Government has embarked on privatisation program since 1995 in the hope of creating a more efficient, competitive, and profitable private sector. It issued proclamation No. 83/1995 for the establishment of a National Agency for Supervision and Privatisation of Public Enterprises (NASPPE). The agency was entrusted to optimise and transform the productivity of public enterprises and establish a competitive and conducive atmosphere for the enhancement of their privatisation.

The agency had a plan of privatising 39 manufacturing enterprises by the end of 1997. However, the experience of Eritrea shows that small enterprises were easily sold because there were local investors who could afford to buy them while selling the large ones was difficult. The large enterprises were not restructured and could not easily attract new local as well as foreign investors. This evidences that privatisation of large manufacturing enterprises where there is a weak private sector such as in Eritrea is difficult. Consequently, the privatisation program of the manufacturing enterprises in Eritrea ended by the end of 2001. Moreover, the experience of Eritrea also showed that Privatisation
has attracted only limited foreign investments. The foreigners, who purchased the enterprises, bought mainly those of enterprises that have domestic markets rather than those oriented towards exports.

The study establishes a conceptual framework upon which the performance of the privatised activities or enterprises can be assessed. It has employed the MNR Methodology in exploring and analysing the impact of privatisation on the overall performance of the newly privatised Eritrean manufacturing firms. Besides, it took an operating efficiency, profitability, employment and wage levels, and some fiscal variables as key performance indicators. By doing so, it described the level of these key parameters before and after privatisation.

According the survey undertaken, it is revealed that the situation of the sample companies at-the-time-of-handover was in a bad situation. The companies were characterised by principal-agent problem, old and obsolete machinery, lack of dependable markets and non-existence of marketing experts, lack of spare parts and raw materials, lack of technicians and engineers, and low paid and redundant workforce.

However, in the post-privatisation period the companies have made exorbitant restructuring measures in machinery and equipment, human capital and modern and appropriate technology for better performance. They have rehabilitated, modernised their plant and machinery, expanded their production capacity, produced new and top quality products, and avoided redundancies and wastage. They have invested on human capital thereby increased the efficiency and performance of their workforce. They have also appointed committed, more qualified and autonomous new general managers, and the organisation chart was flattened through reducing the number of decision-making levels in so doing avoided cumbersome bureaucratic inefficiencies. Besides, the study documents the following empirical results:

The empirical results of this study agree with the findings of the many authors mentioned in the literature review. It has documented that privatisation in Eritrea has a positive
impact on the overall performance of the divested companies. The operating efficiency, profitability, employment, wages level and the tax payment of the firms have increased tremendously in the post-privatisation period.

So, in sum:
The main conclusion of the study is that the privatisation program in Eritrea has been found to have a Win-Win-Win effect to the Government in terms of lump sum revenue generation and broadening of the tax base, to the privatised entities in terms of efficiency and profitability, and finally to the employees in terms of employment and increased wages.

### 5.3 Policy Implications of the Study

It is now evident that privatisation has a Win-Win-Win effect to the government, the privatised entities and employees in Eritrea. So the Government of Eritrea should take similar policy initiatives to privatise (either through joint venture or 100% divestment) the service sector (like telecommunications, insurance, and banks) and other sectors of the economy. Privatising the manufacturing sector without reforming other sectors and institutions in the economy is not sufficient. One of the main bottlenecks in the Eritrean economy at present is the underdeveloped service sector and weak institutions. For instance, most of the sample firms are not getting the necessary assistance from the export supporting institutions of the government. These institutions are weak and are hampering their performance. Thus, the government of Eritrea should make institutional reforms to avoid delays and bureaucratic inefficiencies.

Furthermore, banks as credit institutions play a significant role in the development of the manufacturing sector. The provision of short-term and long-term loans and access to foreign currency are the most important factors in the development of large and small manufacturing establishments. However, in Eritrea the financial market is not competitive and services are limited. Consequently, the sample firms have no access to foreign currency and long-term loans and the interest rate is high. Thus, the services
provided by the financial institutions should be developed in terms of variety and competitiveness. The companies should be given an access to hard currency and interest rates should be eased to encourage the manufacturing and other sectors in the economy. This can facilitate the creation of an efficient and outward looking private sector.

According to Megginson and Netter [1999], one of the most commonly asked practical questions about privatisation is whether governments should restructure state-owned enterprises prior to sale or leave any such restructuring to private buyers. Nellis and Kikeri [1989] argue that governments should restructure state-owned enterprises prior to divestment, both because they are better able than private owners to cushion financial blow to displaced workers (through unemployment and pension payments) and in order to provide a private buyer with a clean slate.

The Board of NASPPE, however, has been restricting any long-term investment projects in the enterprises slated for privatisation and has been selling them “as they are” without restructuring. Consequently, it faced difficulty and took additional four years to sell the large-scale enterprises for they could not attract foreign as well as local investors. Hence, the government in its further privatisation programs should first restructure the large-scale service or other enterprises in order to attract strategic and potential investors (preferably foreigners).

5.4. Further Research Direction

In this research, we have focused on the impact of privatisation on the performance of the newly privatised entities in order to understand the effect of shifting from a state to a market economy. The findings highlight that privatisation has a positive impact on certain performance indicators. Further research on assessing the impact of privatisation in terms of other micro and macro performance indicators is essential.
The empirical research was executed in six manufacturing enterprises from six industries in Eritrea. A large-scale quantitative study would increase the statistical generalizations, validity and reliability of the results. Thus, one can extend this research by including many other privatised entities. Furthermore, comparative research can be conducted on the performances of the state owned and privatised firms belonging to the same industry.

This research has employed the MNR Methodology in the assessment of the impact of privatisation on the newly privatised entities. Further research can also apply the Cost-Benefit approach in order to scrutinize the process and the outcome of privatisation.

Finally, this research has a limited number of observations and was unable both to build an econometric model and run econometric manipulations in the assessment of the impact of privatisation on performance. So, in the future one can incorporate some econometric models and techniques on this topic.
References:


83


### Table-1A Summary of the Operating Efficiency Results of the Alpha Food Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales¹</td>
<td>3,100,000</td>
<td>3,500,000</td>
<td>+13%</td>
</tr>
<tr>
<td>Cost of sales²</td>
<td>2,700,000</td>
<td>2,500,000</td>
<td>-7.4%</td>
</tr>
<tr>
<td>Operating profit³</td>
<td>400,000</td>
<td>1,000,000</td>
<td>+150%</td>
</tr>
<tr>
<td>No. of employees⁴</td>
<td>78</td>
<td>79</td>
<td>+1.3%</td>
</tr>
<tr>
<td>Profit margin⁵</td>
<td>13%</td>
<td>29%</td>
<td>+16%</td>
</tr>
<tr>
<td>Operating efficiency⁶</td>
<td>397%</td>
<td>443%</td>
<td>+46%</td>
</tr>
<tr>
<td>Value added⁷</td>
<td>10,000</td>
<td>12,658</td>
<td>+26.6%</td>
</tr>
</tbody>
</table>

**Source:** based on the annual accounts received on inquiry by the courtesy of the company and MTI

**Notes:**
1. Sales represents the mean (average) of the total sales of the company.
2. Cost of sales represents material, labor and other manufacturing costs incurred.
3. Operating profit is the difference of sales and cost of sales (sales-cost of sales).
4. Number of employees is an average number of employees.
5. Profit margin is the ratio that compares the operating profits to sales.
6. Operating efficiency is calculated as (real sales/number of employees).
7. Value-added is a measure of productivity and is calculated as (sale-cost of sales/employees).

### Table-2A Summary of the number, function and level of education of the employees.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dip/Degree</td>
<td>9-12</td>
<td>&lt;8</td>
<td>Dip/Degree</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance &amp; Admin.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Production</td>
<td>12</td>
<td>2</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Marketing</td>
<td>57</td>
<td>-</td>
<td>8</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>78</td>
<td>1</td>
<td>14</td>
<td>79</td>
</tr>
</tbody>
</table>

**Source:** Primary data collected using a questionnaire.

### Table-3A Summary of Classification by Skill, Age, and Gender.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total No. 25-40 41-55 &gt;55 M F</td>
<td>Total No. 25-40 41-55 &gt;55 M F</td>
</tr>
<tr>
<td>Skilled</td>
<td>8 5 2 1 6 2 13 4 4 5 11 2</td>
<td></td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>35 22 8 5 25 10 31 23 8 - 17 14</td>
<td></td>
</tr>
<tr>
<td>UnSkilled</td>
<td>35 17 13 5 23 12 15 35 - - 22 13</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>78 44 23 11 54 24 79 62 12 5 50 29</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Primary data collected using a questionnaire.
Table 4A Summary of Salary Structure of Alpha Food Processing Company

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Number</td>
<td>Age break down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25-40</td>
</tr>
<tr>
<td>Nfa 150-350</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>351-550</td>
<td>68</td>
<td>39</td>
</tr>
<tr>
<td>551-1000</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>1001-1500</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>&gt;1500</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>44</td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire.

Table 5A Summary of Tax Payment and Contribution of the Alpha Food Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Payment</td>
<td>NIL</td>
<td>219,116</td>
<td>+2191%</td>
</tr>
<tr>
<td>Tax Contribution</td>
<td>NIL</td>
<td>7.2%</td>
<td>+720%</td>
</tr>
<tr>
<td>Indirect subsidy</td>
<td>778,224.25</td>
<td>NIL</td>
<td>-100%</td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire.
BARACO TEXTILE

Table 1B Summary of the Operating Efficiency Results of Baraco Textile Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>13,800,000</td>
<td>34,100,000</td>
<td>+147%</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>14,900,000</td>
<td>21,800,000</td>
<td>+46.3%</td>
</tr>
<tr>
<td>Operating profit</td>
<td>-1,100,000</td>
<td>12,300,000</td>
<td>+1018%</td>
</tr>
<tr>
<td>No. of employees</td>
<td>476</td>
<td>637</td>
<td>+33.8%</td>
</tr>
<tr>
<td>Profit margin</td>
<td>-8%</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>Operating efficiency</td>
<td>2899%</td>
<td>535.3%</td>
<td></td>
</tr>
<tr>
<td>Value added</td>
<td>-2310.9</td>
<td>19,309.2</td>
<td>+935.5%</td>
</tr>
</tbody>
</table>

Source: based on the annual accounts received on inquiry by the courtesy of the company and MTI

Table 2B. Summary of the number, function and level of education of the employees in the Baraco Textile Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employment Level</td>
<td>Educational Level</td>
</tr>
<tr>
<td></td>
<td>Dip/Degree</td>
<td>9-12</td>
</tr>
<tr>
<td>Management</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Finance &amp; Admin.</td>
<td>28</td>
<td>8</td>
</tr>
<tr>
<td>Production</td>
<td>421</td>
<td>27</td>
</tr>
<tr>
<td>Marketing</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>476</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: Primary data collected using a questionnaire.

Table 3B. Summary of Classification by Skill, Age, and Gender in the Baraco Textile Company

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total No.</td>
<td>Age Group</td>
</tr>
<tr>
<td></td>
<td>25-40</td>
<td>41-55</td>
</tr>
<tr>
<td>Skilled</td>
<td>138</td>
<td>95</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>158</td>
<td>118</td>
</tr>
<tr>
<td>UnSkilled</td>
<td>180</td>
<td>76</td>
</tr>
<tr>
<td>TOTAL</td>
<td>476</td>
<td>289</td>
</tr>
</tbody>
</table>

Source: Primary data collected using a questionnaire.
Table 4B. Summary of Salary Structure of Employees in Baraco Textile Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Number</td>
<td>Age break down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25-40</td>
</tr>
<tr>
<td>N fa 150-350</td>
<td>341</td>
<td>230</td>
</tr>
<tr>
<td>351-550</td>
<td>81</td>
<td>36</td>
</tr>
<tr>
<td>551-1000</td>
<td>46</td>
<td>18</td>
</tr>
<tr>
<td>1001-1500</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>&gt;1500</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>476</strong></td>
<td><strong>289</strong></td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire.

Table 5B. Summary of Tax Payment and Contribution of Baraco Textile Company

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Payment</td>
<td>159,357.5</td>
<td>4,513,351</td>
<td>+2732%</td>
</tr>
<tr>
<td>Tax Contribution</td>
<td>1.2%</td>
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<td></td>
</tr>
<tr>
<td>Indirect Subsidy</td>
<td>679,415</td>
<td>NIL</td>
<td>-100%</td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire
## RED SEA SOAP FACTORY

### Table 1C. Summary of the Operating Efficiency Results of Red Sea Soap Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales¹</td>
<td>12,300,000</td>
<td>28,800,000</td>
<td>+134%</td>
</tr>
<tr>
<td>Cost of sales²</td>
<td>9,700,000</td>
<td>19,600,000</td>
<td>+102%</td>
</tr>
<tr>
<td>Operating profit³</td>
<td>2,600,000</td>
<td>9,200,000</td>
<td>+254%</td>
</tr>
<tr>
<td>No. of employees⁴</td>
<td>60</td>
<td>127</td>
<td>+112%</td>
</tr>
<tr>
<td>Profit margin⁵</td>
<td>21.1%</td>
<td>32%</td>
<td>+11%</td>
</tr>
<tr>
<td>Operating efficiency⁶</td>
<td>205%</td>
<td>227%</td>
<td>+22%</td>
</tr>
<tr>
<td>Value added⁷</td>
<td>43,333</td>
<td>72,440</td>
<td>+67%</td>
</tr>
</tbody>
</table>

**Source:** based on the annual accounts received on inquiry by the courtesy of the company and MTI

### Table 2C. Summary of the number, function and level of education of the employees in the Red Sea Soap Company

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employment Level</td>
<td>Educational Level Dip/Degree</td>
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<tr>
<td>Management</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Finance &amp; Admin.</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Production</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>Marketing</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
<td>11</td>
</tr>
</tbody>
</table>

**Source:** Primary data collected using a questionnaire.

### Table 3C. Summary of Classification by Skill, Age, and Gender in the Red Sea Soap Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total No.</td>
<td>Age Group</td>
</tr>
<tr>
<td></td>
<td>25-40</td>
<td>41-55</td>
</tr>
<tr>
<td>Skilled</td>
<td>27</td>
<td>13</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>UnSkilled</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
<td>24</td>
</tr>
</tbody>
</table>

**Source:** Primary data collected using a questionnaire

92
Table 4C. Summary of Salary Structure of Employees in the Red Sea Soap Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Number</td>
<td>Age break down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25-40</td>
</tr>
<tr>
<td>Nfa 150-350</td>
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<td>7</td>
</tr>
<tr>
<td>351-550</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>551-1000</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>1001-1500</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>&gt;1500</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
<td>24</td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire.

Table 5C. Summary of Tax Payment and Contribution of the Red Sea Soap Company.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Payment</td>
<td>986,093</td>
<td>4,700,000</td>
<td>+337%</td>
</tr>
<tr>
<td>Tax Contribution</td>
<td>8%</td>
<td>16.3%</td>
<td>+104%</td>
</tr>
<tr>
<td>Subsidy</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire
RED SEA BOTTLERS COMPANY

Table 1D. Summary of the Operating Efficiency Results of Red Sea Bottlers Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>26,300,000</td>
<td>97,000,000</td>
<td>+269%</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>17,800,000</td>
<td>65,000,000</td>
<td>+265%</td>
</tr>
<tr>
<td>Operating profit</td>
<td>8,500,000</td>
<td>32,000,000</td>
<td>+276%</td>
</tr>
<tr>
<td>No. of employees</td>
<td>175</td>
<td>313</td>
<td>+79%</td>
</tr>
<tr>
<td>Profit margin</td>
<td>32%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Operating efficiency</td>
<td>1,503%</td>
<td>3,099%</td>
<td>+111%</td>
</tr>
<tr>
<td>Value added</td>
<td>48,571</td>
<td>102,236</td>
<td></td>
</tr>
</tbody>
</table>

Source: based on the annual accounts received on inquiry by the courtesy of the company and MTI

Table 2D. Summary of the number, function and level of education of the employees in the Red Sea Bottlers Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employment Level</td>
<td>Educational Level</td>
</tr>
<tr>
<td></td>
<td>Dip/Degree 9-12</td>
<td>9-12</td>
</tr>
<tr>
<td>Management</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Finance &amp; Admin.</td>
<td>40</td>
<td>8</td>
</tr>
<tr>
<td>Production</td>
<td>76</td>
<td>6</td>
</tr>
<tr>
<td>Marketing</td>
<td>56</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>175</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: Primary data collected using a questionnaire.

Table 3D. Summary of Classification by Skill, Age, and Gender in the Red Sea Bottlers Company.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total No.</td>
<td>Age Group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25-40</td>
</tr>
<tr>
<td>Skilled</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>44</td>
<td>28</td>
</tr>
<tr>
<td>UnSkilled</td>
<td>111</td>
<td>36</td>
</tr>
<tr>
<td>TOTAL</td>
<td>175</td>
<td>86</td>
</tr>
</tbody>
</table>

Source: Primary data collected using a questionnaire.
Table 4D. Summary of Salary Structure of Employees in the Red Sea Bottlers

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Number</td>
<td>Age break down</td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25-40</td>
<td>41-55</td>
</tr>
<tr>
<td>Nfa 150-350</td>
<td>15</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>351-550</td>
<td>95</td>
<td>32</td>
<td>56</td>
</tr>
<tr>
<td>551-1000</td>
<td>40</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>1001-1500</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>&gt;1500</td>
<td>9</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>175</td>
<td>86</td>
<td>77</td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire.

Table 5D. Summary of Tax Payment and Contribution of the Red Sea Soap Company.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Payment</td>
<td>3,940,350</td>
<td>6,584,703?</td>
<td>+67%</td>
</tr>
<tr>
<td>Tax Contribution1</td>
<td>15%</td>
<td>16.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Indirect Subsidy</td>
<td>627,775</td>
<td>NIL</td>
<td>-100%</td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire
Notes: 1. Tax Contribution is defined as tax-to-sales
**BRITISH-AMERICAN TOBACCO**

**Table-1E. Summary of the Operating Efficiency Results of British-American Tobacco**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>41,500,000</td>
<td>90,400,000</td>
<td>+118%</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>25,800,000</td>
<td>55,400,000</td>
<td>+115%</td>
</tr>
<tr>
<td>Operating profit</td>
<td>15,700,000</td>
<td>35,000,000</td>
<td>+123%</td>
</tr>
<tr>
<td>No. of employees</td>
<td>120</td>
<td>74</td>
<td>-38%</td>
</tr>
<tr>
<td>Profit margin</td>
<td>37.8%</td>
<td>38.7%</td>
<td>+1%</td>
</tr>
<tr>
<td>Operating efficiency</td>
<td>34.58%</td>
<td>122.16%</td>
<td>+87%</td>
</tr>
<tr>
<td>Value added</td>
<td>130,833</td>
<td>472,973</td>
<td>+261%</td>
</tr>
</tbody>
</table>

*Source*: based on the annual accounts received on inquiry by the courtesy of the company and MTI

**Table-2E. Summary of the number, function and level of education of the employees in the Tobacco Company**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employment Level</td>
<td>Educational Level</td>
</tr>
<tr>
<td></td>
<td>Dip/Degree</td>
<td>9-12</td>
</tr>
<tr>
<td>Management</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Finance &amp; Admin.</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Quality assurance</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Supply Chain</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Production</td>
<td>66</td>
<td>4</td>
</tr>
<tr>
<td>Marketing</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>120</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

*Source*: Primary data collected using a questionnaire.

**Table-3E. Summary of Classification by Skill, Age, and Gender in British-America Tobacco.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total No.</td>
<td>Age Group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25-40</td>
</tr>
<tr>
<td>Skilled</td>
<td>40</td>
<td>24</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>25</td>
<td>11</td>
</tr>
<tr>
<td>UnSkilled</td>
<td>55</td>
<td>38</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>120</strong></td>
<td><strong>73</strong></td>
</tr>
</tbody>
</table>

96
Table-4E, **Summary of Salary Structure of Employees in the British-American Tobacco Company**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Number</td>
<td>Age break down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25-40</td>
</tr>
<tr>
<td>Nfa 150-350</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>351-550</td>
<td>61</td>
<td>35</td>
</tr>
<tr>
<td>551-1000</td>
<td>28</td>
<td>19</td>
</tr>
<tr>
<td>1001-1500</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>1500-2000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2001-3500</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3501-6000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>&gt;6000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>120</strong></td>
<td>73</td>
</tr>
</tbody>
</table>

**Source:** Primary data obtained using a questionnaire.

Table-5E, **Summary of Tax Payment and Contribution of the Tobacco Company.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Payment</td>
<td>5,489,852</td>
<td>28,583,006</td>
<td>+421%</td>
</tr>
<tr>
<td>Tax Contribution¹</td>
<td>13.2%</td>
<td>31.6%</td>
<td>+140%</td>
</tr>
<tr>
<td>Subsidy</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
</tr>
</tbody>
</table>

**Source:** Primary data obtained using a questionnaire

**Notes:** 1. Tax Contribution is defined as tax-to-sales
KEIH BAHRI LEATHER COMPANY

Table-1F. Summary of the Operating Efficiency Results of Keih Bahri Leather

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>10,900,000</td>
<td>11,400,000</td>
<td>+5%</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>7,900,000</td>
<td>8,100,000</td>
<td>+2.5%</td>
</tr>
<tr>
<td>Operating profit</td>
<td>3,000,000</td>
<td>3,300,000</td>
<td>+10%</td>
</tr>
<tr>
<td>No. of employees</td>
<td>91</td>
<td>84</td>
<td>-7.7%</td>
</tr>
<tr>
<td>Profit margin</td>
<td>27.5%</td>
<td>29%</td>
<td>+2%</td>
</tr>
<tr>
<td>Operating efficiency</td>
<td>1197.8%</td>
<td>1357%</td>
<td>+159%</td>
</tr>
<tr>
<td>Value added</td>
<td>32,967</td>
<td>39,288</td>
<td>+19%</td>
</tr>
</tbody>
</table>

Source: based on the annual accounts received on inquiry by the courtesy of the company and MTI

Table-2F. Summary of the number, function and level of education of the employees in Keih Bahri Leather Company.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employment Level</td>
<td>Educational Level</td>
</tr>
<tr>
<td></td>
<td>Dip/Degree 9-12</td>
<td>&lt;8</td>
</tr>
<tr>
<td>Management</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Finance &amp; Admin.</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Production</td>
<td>63</td>
<td>2</td>
</tr>
<tr>
<td>Marketing</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>91</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Primary data collected using a questionnaire.

Table-3F. Summary of Classification by Skill, Age, and Gender in Keih Bahri Leather Company.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total No. Age Group Gender M F</td>
<td>Total No. Age Group Gender M F</td>
</tr>
<tr>
<td>Skilled</td>
<td>15 25-40 41-55 &gt;55 M 2 F 13</td>
<td>23 25-40 41-55 &gt;55 M 15 8 F</td>
</tr>
<tr>
<td>UnSkilled</td>
<td>51 29 20 32 19 3 20 11 17 19</td>
<td>36 3 20 11 17 19</td>
</tr>
<tr>
<td>TOTAL</td>
<td>91 55 36 61 30 84 19 45 20 57 27</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data collected using a questionnaire
Table-4F. **Summary of Salary Structure of Employees in the Keih Bahri Leather Company**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Number</td>
<td>Age break down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25-40</td>
</tr>
<tr>
<td>Nfa 150-350</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>351-550</td>
<td>40</td>
<td>26</td>
</tr>
<tr>
<td>551-1000</td>
<td>35</td>
<td>21</td>
</tr>
<tr>
<td>1001-1500</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>&gt;1500</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>91</td>
<td>55</td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire.

Table-5F. **Summary of Tax Payment and Contribution of the Keih Bahri Company**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Payment</td>
<td>1,429,128</td>
<td>1,936,768</td>
<td>+35.5%</td>
</tr>
<tr>
<td>Tax Contribution</td>
<td>13%</td>
<td>17%</td>
<td>+4%</td>
</tr>
<tr>
<td>Subsidy</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
</tr>
</tbody>
</table>

Source: Primary data obtained using a questionnaire

Notes: 1. Tax Contribution is defined as tax-to-sales