



**Institute of Social Studies**

Graduate School of Development Studies

**THE PERFORMANCE OF STATE-OWNED JUTE  
ENTERPRISES AND NEWLY PRIVATIZED ENTERPRISES  
IN BANGLADESH: DOES PRIVATIZATION REALLY  
MATTER?**

A Research Paper presented by:

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*To my Parents who are the source of inspiration in every  
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## *Lists of Acronyms*

ADB – Asian Development Bank

AJM – Adamjee Jute Mills

AL – Bangladesh Awami League

BJMA – Bangladesh Jute Mills Association

BJMC – Bangladesh Jute Mills Corporation

BNP – Bangladesh Nationalist Party

BOI – Board of Investment

CPI – Consumer Price Index

IMF – International Monetary Fund

SOEs – State Owned Enterprises

Tk. – Taka (Bangladeshi Currency)

WB – World Bank.

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## CHAPTER – 1: INTRODUCTION

**1. Introduction:** The aim of this paper is to investigate the impact of privatization on the performance of five privatized jute mills in Bangladesh. To observe the impact of privatization on these enterprises, accounting performance measures like profitability and operating efficiency have been used and to test the significance of these changes, t-statistics and chi-square test have been used. The paper finds that changes in ownership have brought some improvement in the later stages of privatization compared to the earlier stages although these improvement is not statistically significant.

Bangladesh is not the only one country in the world who has inherited a large and paramount public enterprise sector. Like many other countries, Bangladesh has embraced to a process of privatization of her economic space for the last two and half decades. Privatization process in Bangladesh has moved from the transfer of ownership and management of state-owned enterprises as well as in the financial sector which like public infrastructure, education and health care sector remained as the preserve sector for the state. Historically, development process of Bangladesh has been led by greater public action and the contribution of the state-owned enterprises to value added at the apogee of the extension of the public sector, in 1974, stood at 16.3% (Sobhan and Ahmad, 1980). By adopting another measure of contribution of state-owned enterprises, Sobhan has calculated that the share of public expenditure to GDP stood at 9.2% in 1972 which had risen to 18.3% by 1995/96 (Sobhan, 2005: 3-4). This leading role of the SOEs was perceived from the historic dominance of economic space in Bangladesh by a non-Bengali entrepreneurial class, dating from the days of British rule, extending into the period of Pakistan rule between 1947 and 1971 (Papanek, 1969 in Sobhan, 2005:3-5). These were followed by the nationalization policy of the government in 1972 under which the then government nationalized almost all the mills and factories from the private owners. These public enterprises played an important role in the economy in the seventies and eighties particularly as the presence of the private sector in the economy was not dominant compared to the public sector. But despite the negative performances of the state owned enterprises, little restructuring and downsizing of them were carried out by successive governments. Despite having a low resource base and high incidence of poverty, Bangladesh has taken a business-as-usual approach to public enterprise sector reform.

Although in terms of the number of firms and in terms of their average size, the privatization process in Bangladesh is far below than the international standards, the privatization process

of state owned jute enterprises have some particular characteristics. That's why its analysts have some sort of interests over the sector. Privatization of state owned jute enterprises has been taken place in two ways. In its first form, Privatization of state owned jute enterprises was not carried out by direct sale to the prospective private investors; rather in the year 1982-83, these units were handed over to their former Bengali owners at free of charge from whom the then government took control for their operation. The other form of privatization for the state owned jute enterprises has been carried out through direct sale to the prospective private entrepreneurs. These mills were owned by the Pakistani owners who fled the country during the war of Independence of Bangladesh.

**1.1 Background of Privatization Process in Bangladesh:** When Bangladesh achieved its independence in 1971, the economy of the newly independent country was dominated by the private sector. At that time 66% of total fixed assets of the industrial sector were owned by the private sector (Sobhan and Ahmad, 1980). With the end of the liberation war, the country experienced an industrial ownership vacuum as the fleeing West Pakistanis owners abandoned their industrial and commercial units. This type of abandonment made the Bangladeshi state the de facto owner of 544 industrial enterprises. Three months later, the then government of Bangladesh announced the formal nationalization of these abandoned units, as well as the nationalization of all the jute and cotton textile mills owned by the Bangladeshi entrepreneurs. At the same time, the government nationalized almost all the banking sector (except the three foreign owned banks), insurance, the import trade, the raw jute export trade and most of inland water transport. This resulted over 90% of industrial fixed assets under public ownership.

However, this huge number of state enterprises proved too much of a burden for the government (Ahmad, 1976b; Ghafur, 1976; World Bank, 1993). The performance of these state owned enterprises in Bangladesh has been far from satisfactory (Sobhan and Ahmad, 1980, Akthar Mahmood, 1989). Their inefficiency had a direct impact on the allocation and quality of public investment (World Bank, 1993). State owned enterprises incurred huge losses and were a major burden on the national exchequer. The jute industries incurred huge losses during 1972-1973 to 1984-1985 and it was in the red in 10 out of 13 years (Mahmood, 1989). Mahmood (1989) uses employment data before nationalization to estimate that at the beginning of the 1980s, 15% of the labour force in the industry was "excess".

With the advent of a new military government in the power following the assassination of Sheikh Mujib in 1975, dramatic changes were made in the constitution, politics and state policies of Bangladesh. Being influenced by the World Bank and the IMF, the new military government persuaded the policy of market liberalization and privatization (Ahmad, 1976a; Ghafur, 1976). At first, these moves were neither well-organized nor policy-oriented. To set the economic reforms in a sound institutional framework, a disinvestment board was established which resulted in a further 255 SOEs, including 'abandoned' and vested properties, being divested or privatized between 1975 and 1981 (Dowlah, 1998; World Bank, 1995, 1997).

In the 1970s, the privatization took place in a limited scale. However, the massive denationalization took place following the New Industrial Policy of 1982 when the Military ruler General Ershad came into power. Actually, Mr. Ershad's industrial policies were based on Western ideologies, especially Thatcherism and Reganism, and used these to legitimize undemocratic actions (Uddin and Hopper, 2001, 2003). By adopting Western policy recommendations on restructuring industry, Ershad government solicited Western support in favor of its regime. The government was almost helpless against the terms and conditions for privatization set by the donor agencies as donor agencies tended to make loan facilities conditional upon privatization (whether SOEs were loss-making or not). As a result of this, by the end of June 1983, the government returned 33 jute mills which accounted for 38% of capacity in the sector and 27 textile mills that accounted for 44% of spinning and 53% of weaving capacity to their former Bengali owners. In 1986, New Industrial Policy was declared which restricted the state's scope for intervention. Under this policy, many public sector enterprises were put into a holding company as joint stock companies. These subsidiary companies tried to sell shares as part of what the government called 'the 51-49 Plan', in which the government retained 51 per cent of total shares in order to maintain overall control (Humphrey, 1990). By 1986, more than 650 state owned enterprises were privatized which brought down the share of the public sector in industrial fixed assets to around 40% by the end of 1985 as compared to 85% in 1982 (Bhaskar and Khan, 1995).

A new and democratic government came into state power in 1991 and formulated the Industrial Policy in 1991 which advocated further private sector development. Under the guidelines of the World Bank, the government adopted a wholesale privatization program by promoting an 'Enabling Environment' which included liberalizing foreign trade, relaxing

exchange controls, and restructuring import tariffs. In 1991, the Asian Development Bank (ADB) financed the Bangladesh government in undertaking the program 'Improvement of Labour Productivity in the Public Sector Enterprises' — or, in common parlance, the 'Golden Handshake Programme' as part of the preparations for privatization. Under this programme, a large number of workers were retrenched from some selected state owned enterprises with the hope of enabling the enterprises to be sold privately with less worker resistance. In 1993, the government set up the Privatization Board to expedite the pace of privatization. However, the performance of the Board is not satisfactory.

The privatization policy was persuaded by the subsequent government who came into power. The new government who came into power in 1996 remained committed to the previous privatization policies (The Daily Star, 14 June 1996), in the belief that SOEs in Bangladesh were inefficient and under-utilized. Different reports prepared by the World Bank (1993, 1995, 1996a, 1996b, 1996c) were influential in shaping political opinion towards privatization. The government promised donor agencies intensification of privatization (The Bangladesh Observer, January 1997) but from 1996 to 2001, only nine small SOEs were fully privatized which was much less than the expectations. The new government of 2001 did not change past government's policies towards privatization but these policies have created strong political debate.

Absence of a clear-cut privatization policy as well as lack of transparency in both the process and also its outcome have really raised the question over the commitment of the last three successive elected governments over privatization. Under the tenure of Autocratic Ershad government during 1980s, 125 public enterprises were privatized where as under the tenure of the last three governments; privatization process has almost been stalled. Since the inception of the Privatization Board in 1993, only 46 state-owned enterprises have been handed over to the private ownership. Numbers of SOEs privatized under the past three governments are as follows:

BNP (1993-1996): 12 Units

Awami League (AL) (1996-2001): 20 Units

BNP (2001-present): 14 Units

The present government has listed and approved another 94 SOEs for privatization but so far only 3 units have been handed over to the private ownership. Given the slow progress with privatization, government of Bangladesh is now trying to shut down the loss-making SOEs.

For these closed units, government has introduced the policy of 'golden handshake' to compensate the employees of these enterprises. This program is being implemented with the financial assistance from the World Bank (WB) and Asian Development Bank (ADB). Under this process, the Awami League government has shut down two units which were handed over to Bangladesh Army and Bangladesh Navy later. The present BNP government has taken a landmark decision in the history of economic management and indeed, of industrial development in Bangladesh in 2003 when it announced the shut down of Adamjee Jute Mill (AJM), the largest jute mills of the world. The government arranged self retirement policy for the 25,000 employees of the mill under 'golden handshake' policy. The closure of AJM has affected a large community of people in the local area as their livelihoods were directly or indirectly connected with the AJM. Following the success of AJM, the government decided to shut down another 10 SOEs in the last two years. However, the decision to close down 5 large jute mills in Khulna has created severe protest among the employees as well as the local people. Bowing down to the pressure, the government has reversed its decision to shut down those units.

The process of privatization of all these units as well as their size distribution can be shown in the following table 1.1 and 1.2 respectively.

**TABLE- 1.1: Phasing of the Privatization Process**

1	2	3	4	5	6
Period of Disinvestment	Number of Enterprises	Value of Sales (Tk. <sup>1</sup> )	Amount Recovered(Tk.)	Unit Value (Tk.), 3/2	4 as % of 3 %
Pre-liberation	13	23,87,125	23,87,125	183625.00	100
1 <sup>st</sup> Jan. 1972- 30 <sup>th</sup> June 1975	114	4,10,63,276	4,05,22,381	360204.18	99
1 <sup>st</sup> July 1975- 30 <sup>th</sup> June 1981	247*	52,93,77,694	48,89,17,651	2143229.53	92
1 <sup>st</sup> July 1981- 30 <sup>th</sup> June 1991	125**	126,33,19,190	99,64,12,927	10106553.52	79
1 <sup>st</sup> July 1991-	6	60,14,61,528	58,08,87,814	100243588.00	96.5
<b>Total</b>	<b>505</b>	<b>243,76,08,813</b>	<b>210,91,27,898</b>	<b>4826948.15</b>	<b>86.5</b>

\* 16 industries were given back to the original Bangladeshi owners free of cost.

\* 5 industries were taken back by the government for non-payment of the dues by the buyers.

\*\* 6 industries were taken back by the government for non-payment of the dues by the buyers

**SOURCE:** Board of Investment (BOI), Government of Bangladesh.

<sup>1</sup> Tk. is the abbreviation of Bangladeshi currency- Taka. 1US\$ = 70.00 Taka as on 21.10.2006.

**Table – 1.2: Size Distribution of Privatized Units**

1	2	3	4	5	6	7
Sale by Value(Tk.)	Number of Enterprises	Value of Sale (Tk.)	Unit Value (Tk.)	Amount Recovered (Tk.)	Balance (Tk.)	5 as % of 3 (%)
Below Tk. 20 lakh	384	16,23,58,655	4,22,809	15,44,30,076	79,28,579	95
Tk. 25 lakh- Tk. 1 crore	77	39,45,57,004	51,24,117	35,98,85,169	3,46,71,835	91
Tk. 1 crore- 5 crore	32	71,51,86,779	2,23,49,586	58,24,34,598	13,27,57,181	81
Tk. 5 crore- 10 crore	9	54,90,40,028	6,10,04,448	46,49,65,379	8,40,74,648	85
Tk. 10 crore+	3	61,21,77,350	20,40,59,117	54,31,23,651	6,90,53,699	89
<b>Total</b>	505	243,76,08,813		210,91,27,898	32,84,80,915	86.5

**Source:** Board of Investment (BOI), Government of Bangladesh.

**1.2 Indication of the Problem:** Bangladesh, as many other developing countries has undertaken a privatization program by transferring the State-Owned Enterprises (SOEs) to the private sector. Privatization in Bangladesh has gone through various phases since its independence. Jute industries which were nationalized along with other heavy industries soon after the independence of Bangladesh in 1971 continued to put negative contribution to the national exchequer from the very beginning of nationalization. In fact, as soon as the most potential and profitable jute industry during 1952-1971 was taken under state ownership in 1972 in the name of Socialism, the problem started to arise. Jute industry had faced the misfortune of loss because of mismanagement under bureaucratic system of management, in absence of Socialist cadre (The Bangladesh Observer, February 2003). Sensing their negative contribution towards the economy, Government of Bangladesh started to de-nationalize these units from the late 1970s which means that Bangladesh adopted the privatization policy even earlier than Margaret Thatcher who had made privatization a household word and long before the transitional economies initiated a massive experiment with divestiture. Privatization had its greatest impact on Bangladesh's premier industry and export earner, jute textile. Thus this study attempts to establish whether the formerly state-owned jute mills have improved their performance as a result of the change in their ownership structure. The underlying theme in this research work is to observe the relationship between ownership structure and performance in terms of profitability, output and employment.

**1.3 What is Jute:** Jute is a natural fiber which is 100% bio-degradable and recyclable and thus environment friendly. “It is a long, soft, shiny plant fiber that can be spun into coarse, strong thread” (wikipedia). Jute is mainly cultivated in developing countries of South and South-East Asia and in some parts of Latin America. Bangladesh, India, China and Thailand produce about 90 percent of world jute production. It is the main cash crop of Bangladesh and Bangladesh is the world’s largest grower of quality jute.

Jute is mainly a rain fed annual crop whose cultivation is labor intensive. Although it is a labor intensive crop, it requires relatively small quantities of other inputs like fertilizer and pesticides and the cultivation can be carried out in small holdings. For this reasons, jute production is predominantly concentrated in Bangladesh, India, China, Nepal and Thailand.

Jute has great importance to the poor farmers. It is an ideal crop for rotation with rice which gives extra earnings for peasant growers and at the same time protects rice cultivation. It has great contribution over employment creation as its planting, harvesting and primary processing has given much-needed employment for rural women and landless labourers. Its industrial processing also creates more jobs. Rural households, after the extraction of the fibre, use the jute sticks as an environmentally friendly cooking fuel.

Jute is used in producing Sacks, ropes and cords, carpets, mats, clothes, geo-textiles etc. In recent times, jute is also used in making paper pulp. Besides these, shopping bags, building and insulation materials and jute particle boards are also made of jute. Very recently, some automobile manufacturers are using jute fibre to replace glass fibre in upholstery as jute is one of the most cost effective high tensile vegetable fiber. So, jute has occupied a firm place in the automotive industry as it is now used for manufacturing more eco-friendly interiors for cars and automobiles.

**1.4 An Over-view of the Jute Industry in Bangladesh:** Over the past few decades, Bangladesh is the largest producer of quality jute which is the main raw materials for jute industries. Based on this advantage of the availability of sufficient and cheap raw material, the jute industry in Bangladesh started its journey in the 1950s when the first mill was set up in 1951. Till then, this part of the country was considered as the hinterland where only raw jute production took place and the processing activities of the jute fibre was done in the jute mills in India. Soon after the independence from the British rule, the then government of Pakistan felt that instead of exporting only the raw jute fibre, it would be better to add value to the fibre through processing and export jute goods and earn foreign exchange for the

country. Considering the importance of having jute mills in their own country, the then Pakistani government promoted setting up of jute mills as far back as in the 1950s.

Due to the availability of cheap and sufficient raw materials as well as growing demand for jute products in foreign markets due to absence of artificial fibre, jute industry in Bangladesh started to flourish at a good pace. In 1952, the largest jute mills of the world Adamjee Jute Mill was established at Adamjee Nagar (Adamjee City) under private venture. Soon after that as many as 19 more mills were set up at different parts of the country. By the end of 1960s and early 1970s, about 30 million people were directly or indirectly involved in this sector. The development and prosperity of this sector was tremendous until 1971. At that time total number of jute mills was 62. Setting up of new industries experienced a halt during 1972-73 when the government persuaded a nationalization policy under which all the mills and factories as well as financial institutions owned by private and public were taken under state control. This was followed by the world wide fall of demand for jute goods in the late 1980s as synthetic materials had made an in-road in the fields where jute goods were in use. Many experts began to term the jute industry in Bangladesh as the “Sun-set” industry as the export market for jute and jute goods shrank and there was no future to expand. They even termed that jute industry in Bangladesh is ‘ailing’ and they raised question whether there is any scope to recover and make the sector profitable as the synthetic and bulk container packaging posed a great threat towards jute as the traditional material for this purpose. Prices of jute goods experienced downward trends and the industry was almost in the fear of ruin.

However, jute sector started to recover its lost grounds in the late 1990s as once termed “sunset industry” started to offer fashionable, eco-friendly products that were attracting new consumers. The mountain high oil price also played an important role in shifting the demand from synthetic products towards jute products. Jute sector of Bangladesh has responded smartly to take the advantage of this growing demand. To meet this additional demand and to capture the lost market, a number of new industries have been established. Denationalization of some jute industries in 1982-83 which were nationalized in 1972-73 as well as subsequent industrial policy of the government played an important role in this regard. At present, there are as many as 160<sup>2</sup> jute mills in Bangladesh out of which 30 mills are under government control and the rest 130 is under private ownership.

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<sup>2</sup> Source: Bangladesh Jute Mills Corporation and Ministry of Jute and Textile, Government of Bangladesh.



The country fetched US\$ 307 million and \$96 million by exporting jute goods and raw jute in the 2004-05 fiscal year. During the July-September period of the 2005-06, jute goods export grew by 14.15% and raw jute by 59% (The Daily Star, December 2005).

**Some Interesting Findings:** In conducting this work, the researcher has found some interesting findings that are ongoing in the jute sector of Bangladesh. These findings are as follows:

*a. Anti-dumping within the sector:* Cost of production and sales price for the produced goods are important things for any industry to operate. In the jute sector of Bangladesh, the cost of production for producing one metric ton of jute goods is Tk. 57,000 for the public firm which is Tk 47,000 for the private mills. Now, while selling the produced goods, the public mills are selling it at Tk. 47,000 per metric ton and the private mills are selling it at Tk. 56,000 per metric ton (The Daily Inqilab, 10.08.2006)<sup>3</sup>. This means that the public mills are selling their products at a price which is even lower than their production cost. This type of dual prices for the same jute products within the country is actually destroying the market of jute goods for Bangladesh as the foreign and local buyers are showing interests over the low priced jute products. The buyers are even creating pressure upon the private mills authority in reducing their prices. Thus the private firms are facing uneven competition within the sector and it is very hard for them to remain in the business. To avoid this, many mills are trying to change their line of productions i.e they are trying to produce those goods where the public mills have less efficiency.

*b. Price incentives for Export:* In Bangladesh, the government is giving a 10% export subsidy<sup>4</sup> on per metric ton of jute goods for exporting jute goods in the abroad irrespective of the ownership i.e both the private and public sector is enjoying this incentive scheme from the government. In fact, this is working as an encouragement for the exporter in exporting finished products instead of raw jute.

*c. Unwillingness to disclose the profit/loss figure:* While collecting the data it has been observed that some of the private mills are not willing to disclose their profit/loss figure. They fear that if they disclose that they are earning profit then government may stop the

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<sup>3</sup> This has also been reflected while conducting interviews with different owners and managers of the mills as well as in the report titled "Jute Sector Adjustment Credit (JSAC)" prepared by the World Bank and Ministry of Jute in 1993.

<sup>4</sup> Source: Ministry of Jute and Textile, Government of Bangladesh.

export subsidy for them and they may face heavy taxation. This issue has been revealed by Dr. Binayak Sen of BIDS in the study while conducting the study on the 'Post-privatization Performances of the Privatized Mills'. Sen's finding is that visits to these companies rarely yield any quantitative information and they only provide some first hand information to indicate whether the unit was operational or not and could elicit some qualitative observations from workers and those of the management who agreed to talk to the investigators about the profitability of their enterprises (Sobhan, 2005 : 24).

*d. Not listed in the stock exchange company:* In Bangladesh, there are two stock exchanges but none of the jute mills are listed in the stock exchange. They are not interested in offloading their shares in the market.

*e. Strong Trade Unionism in the SOEs:* In Bangladesh, trade unionism exists in almost all the state owned sectors. Jute sector is not exception to that and this trade unionism is very strong which is indulged with negative activities. They interfere in almost every aspects of the mill which starts from jute purchasing to recruitment of excess manpower. And all the trade union bodies are backed by the major political parties. However, in the private sector, there is no existence of trade unionism which is conducive for smooth functioning of the mills.

**1.5 Research Objectives:** Jute is the main cash crop of Bangladesh which directly and indirectly involves about 3.0 to 3.5 million farmers<sup>5</sup>. After some critical decades, jute is again gaining growing demand in international market. Jute industry in Bangladesh has gone through several changes like private ownership followed by nationalization and again privatization of some of the industries. These changes have also affected the performances of these industries which require rigorous efforts to address. The main objective of this research work is to critically focus the pre-privatization and post-privatization relationship between privatization and performance of the newly privatized firms in terms of their profitability, productivity, employment and output. Beside this, some policy measures as well as the social impacts of privatization will be investigated as well.

The research will try to answer the following leading question:

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<sup>5</sup> Source: Ministry of Jute and Textile, Government of Bangladesh.

“Does privatization lead to better performance in terms of profitability, output and employment?”

**1.6 Research Question:** The main research question for this work is “Does privatization lead to better performance in terms of profitability, productivity, output and employment?”

**1.7 Statement of the Hypothesis:** In conducting this study, the following Hypothesis has been tested in order to assess the relationship between privatization and performances of the firms:

- a. Null Hypothesis (H<sub>0</sub>): There is no relationship between privatization and the efficiency of the firm.
- b. Alternative Hypothesis (H<sub>1</sub>): There is relationship between the privatization and efficiency of the firm.

**1.8 Scope and Limitations:** The findings of the present study would particularly applicable to five (5) privatized jute enterprises of Bangladesh located at different parts of the country. However, the findings will also have implications for other enterprises having similar conditions. The findings of this study will throw some light in the field of privatization in Bangladesh which would be of great use to the concerned planners and policy makers. This study may also help in generating further studies.

Considering the allocated time, fund and other necessary resource availability, the study has been conducted with the following limitations:

- a. The study was limited to some selected jute mills in Bangladesh
- b. For information of the study, the researchers depended on the data as furnished by the sampled individuals during the interviews.
- c. It was very difficult to get exact information from the stakeholders as they don't keep their written records in a scientific way with respect to their activities, productions, profit/loss, asset values and incomes.
- d. For obtaining the pre-privatized data, the researcher had to move frequently in various government offices as they were not kept with the mill being privatized.
- e. The private mill authority had reservations in revealing their profit/loss figure in the wake of losing export subsidy provided by the Government for exporting jute goods to abroad.

However, for carrying out the research successfully, the following **assumptions** have been drawn:

- i. The respondents selected for this study were competent enough to satisfy the investigator.
- ii. The information furnished by the respondents has been treated as reliable. They have expressed the truth about their opinions
- iii. The views furnished by the respondents were representative of the population of the study.
- iv. The researcher was well adjusted to the environment of the study area. Hence, the respondents furnished their correct opinions without any hesitations.
- vi. The researcher had legal access to collect data from concerned secondary sources.

**1.9 Structure of the Paper:** The paper has been started with a brief background of privatization that has taken place in Bangladesh so far. After this brief description, efforts have been made to reflect something about the problem or about the research area. This has been followed by a very brief description about the jute and an overview of jute industry in Bangladesh. Then the research objectives with research question have been described. After that, the hypothesis of this research paper has been stated and at the same time attempts have been made to identify the scope and limitations of this paper.

Chapter 2 has started with an introduction and short definition of privatization followed by its theoretical framework. Objectives that are normally persuaded with privatization has also been discussed which is followed by a review of existing literature on privatization – both on Bangladesh as well as on international arena.

Chapter 3 is the methodological and analytical part which has started with the methodologies that have been applied in carrying out this research work. Here, attempts have been made to give an idea of how the samples for this study have been selected, how the information has been collected and the limitations that were faced in collecting this information. These things have been preceded with the measurement part where it has been described how the performance of both types of firms have been measured, what is the impact of privatization on firms, test of hypothesis etc.

Chapter 4 is about the findings of the study followed by social impacts of privatization, policy implications and at last some concluding remarks.

## CHAPTER – 2: CONCEPTUAL FRAMEWORK

**2.1 Introduction:** This chapter deals with the conceptual framework for this study. So, at the beginning the concept of privatization has been explained very briefly followed by an attempt to critically assess the existing theoretical arguments where different indicators of performance for the firms as well as the reasons for improved performances of the firms contributed by privatization have been discussed. Most common objectives persuaded with privatization and the major objectives persuaded for this study have been discussed in the next section which is followed by the review of existing literature on privatization.

**2.2 Concept of Privatization:** The term privatization which is also known as ‘denationalization’ or ‘disinvestment’ was coined in 1948 and perhaps has been popularized by *The Economist* during the 1980s (Wikipedia).

In its most common term, privatization referred to as the sale or transfer of ownership and/or service functions from the state control to the private hands. However, this may be termed as a broad definition of privatization. Because one can argue that this may allow for a wide range of transfers that can be listed under the term privatization. For the purposes of this paper, we will adopt a narrow definition of the term privatization referring to as the direct sale or transfer of State Owned Enterprises (SOEs) from the public to private control. Under it, the prospective private buyers obtain a controlling interest and take control of the management of the firm. The sale of SOEs can take different forms depending on the method of sale and the fraction of claims sold to the private owners. It can be partial or complete depending on the magnitude of transfer of property or responsibility held by the government. Another popular form which is somewhat analogous to a *share issue privatization*, will not be considered as it has not been adopted in selling SOEs in Bangladesh.

**2.3 Theoretical Framework:** From a theoretical point of view, there is a very common notion that privatization of firms would lead to better performances. Now, performance can be positive or negative. For an enterprise, positive performance means greater achievement in profit, greater productivity, increase in the volume in sales etc while negative performance indicates a declining trend of the same. There are a number of indicators to measure the performance. By conventional measure profit and loss remains the most favoured measures of performance for corporate enterprises. Generally, economists use the concept of

profitability, productivity, level of technological advancement, growth of sales, growth of exports, leverage, labour intensity, capacity utilization etc in measuring the performance of an enterprise. A number of economists have used profitability, productivity, leverage and labour intensity to measure the post-privatization effect of privatization and consider these as good indicators of performance. However, due to limited access on data and time constraint, only profitability and operating efficiency have been used to measure the post-privatization effect of privatization in this paper. The variables that have been used to measure the profitability and operating efficiency have been defined in the methodological part with the help of table- 3.1.

It is widely believed that with the transformation of firm ownership from the public to private, the profitability of the firm would increase which also indicates better performance of the privatized unit. There are a number of factors which cause this improvement in the profitability. Firstly, privatization leads managers to focus on the goal of profit maximization as under private ownership the management is directly responsible to share holders (Yarrow, 1986). Secondly, privatization, to some extent, transfers both the control rights and cash flow rights from the politicians to the managers which lead to increase in profitability through efficiency gains in the form of redress of excess labour spending that the politicians needed for electoral reasons (Boycko et al., 1996). Besides these, after privatization firms naturally employ their human, financial and technological resources more efficiently because of a greater stress on the goal of profit maximization as well as a reduction of government subsidies (Boycko et al., 1996; Kikeri et al., 1992 in Loc et al., 2006). In addition to these, it is also expected that output will also increase following privatization due to better incentives, more flexible financing opportunities and greater scope for entrepreneurial initiative (Megginson et al., 1994). If the bankruptcy costs are significant, once government guarantees are removed the newly privatized firms should reduce its debts (Boubakri and Cosset, 2002 in Loc et al., 2006). Moreover, one can expect that once the ownership of the overstuffed public enterprise shifts from public to private, the level of employment declines and the newly privatized firms receive government subsidies no more. Finally, once the productivity of the newly privatized firms' increases as a result of privatization, employee income should improve (Loc et al., 2006).

In order to establish this notion that is why privatizing an enterprise could lead it to improve its performance, a number of arguments can be put forward. In general one can attribute the

following points which are associated with private ownership and which may lead superior performances of the privatized firms: i) a more specific definition of objectives which means adopting objectives that are more closely associated with firm performance instead of the multiple objectives that are very common in public enterprises, ii) the relaxation of certain constraints (like those that limit access to financing) and iii) certain management characteristics. The characteristics of the private management follows that privatization becomes a key factor in determining the effects of privatization on performance (Ruiz-Meir et al., 2002).

Theoretically, it is also believed that privatization might cause firms to operate more efficiently. The reason behind is that under private ownership the firm is run in a disciplined way with principal objective being the profit earning. The changes in the ownership create ground for the new management to take decisions for the interest of the firm and these decisions are being taken without any political interferences. Transformation of ownership also shifts the privatized firm's objectives and manager's incentives which are imposed on them by the politicians, the ones who enjoy the most of the benefits of politicized decision making. Moreover, after privatization, firms would have many entrepreneurial opportunities because they would not be subject to government control (D'Souza, Megginson, and Nash, 2001). Hartley and Parker (1991) develop a conceptual framework based on property rights and public choice approaches to explain why privatized firms are more efficient than SOEs because profit motivation is absent for public firms, and they, instead, concentrate on other goals, mainly social objectives.

Property right approach is also preferred by the World Bank and IMF on their advice on privatization. They have also focused on political economy approach which describes why privatization leads to better performances. According to the property right approach, SOEs face serious ownership problems as the ownership is so dispersed that no one has incentive to ensure efficiency. On the other hand, private owners have incentive to operate their firms more efficiently, and competition and the effective operation of the financial market forces inefficient private enterprises to close down or be taken over (Alchain, 1996; Levine, 1997; Rowthorn and Chang, 1993; Yarrow, 1986 in Cuong, 2004). The political economy approach argues that superior performance of the private ownership can't be determined by the purely conventional economic analysis but rather in the sphere of political economy. Bureaucrats and politicians who have self interests and who control the SOEs may not pursue the interests

of the mass public. For example, they can use state resources to serve the interests of the vested groups, providing high wages and secure employment to workers and subsidies to state enterprises, which negatively affect the performance of the state enterprises. In addition to these, political economy approach notes that various factors such as socialist ideology, sharing of responsibility, rent-seeking behavior and failure of the political system created various problems for state owned enterprises, including over staffing, overpaid employees and soft budget constraints. These problems lead to state enterprises performing less efficiently than the private sector ones (Boycko et al., 1995; Kornai, 1986, 1990, 1992; Kornai and Matis, 1990; Sappington and Stiglitz, 1987; Stiglitz, 1987; Walder, 1989; Yifu and Tan, 1999 in Cuong, 2004).

**2.4 Objectives Pursued with Privatization:** Over the last few decades, much debate is going on over the issue of 'State's Participation in Business' on a worldwide scale. Many economists have suggested that it is not the business of the state to run the state-owned companies. They are much vocal about the issue of privatization and the enormity of this economic phenomenon is overwhelming all most all over the world. Kikeri, Nellis and Shirley (1992) in their study have stated that "more than 80 countries have launched ambitious efforts to privatize their state-owned enterprises. Since 1980, more than 2000 SOEs have been privatized in developing countries, 6,800 worldwide." Goodman and Loveman (1991) have showed that the total value of worldwide privatizations exceeded \$185 billion by 1990, and the process still continues unabated.

A lot of arguments can be listed about why privatization should be pursued. These objectives can be of different nature such as economic, political etc. These objectives can also be viewed from the perspective of firms and consumers. In Bangladesh, the privatization program was persuaded with more than one of the different objectives like achieving greater efficiency, greater contribution of the private sector towards the economy of Bangladesh, supply of quality goods at a lower cost and others that has been listed in the following table. These issues are similar to the issues identified by Fernando Ruiz-Meir and others in their study published in 2002. In this classic paper they have identified the objectives of privatization from political, economic and social as well as from firm-oriented and customer's point of view (Ruiz-Meir et al., 2002). These objectives can be viewed in the following table 2.1.



**Table 2.1: Most Common Objectives for Privatization**

Economic	<ul style="list-style-type: none"><li>➤ Achieving greater productivity, profitability and efficiency</li><li>➤ Ensuring the active role of the private sector in the economy</li><li>➤ Develop the public sector's financial health</li><li>➤ Increase the tax revenue from private enterprise</li><li>➤ Attract foreign direct investment</li></ul>
Political and Social	<ul style="list-style-type: none"><li>➤ Liberate the enterprise from unwanted political interference</li><li>➤ Release resources for allocation in other important sectors</li><li>➤ Create a ground for the employees to take part as shareholders</li><li>➤ Improve the welfare of the society</li><li>➤ Increase the total employment level in the economy</li><li>➤ Create a property-owning middle class</li><li>➤ Reduce corruption and the abuse of public office</li></ul>
Firm Oriented	<ul style="list-style-type: none"><li>➤ Improve performance (associated with efficiency argument)</li></ul>
Consumer Oriented	<ul style="list-style-type: none"><li>➤ Ensuring better services and supplying goods with lower prices and better quality</li></ul>

**Source:** Ruiz-Meir et al., 2002

Besides these, objectives like revenue collection; development of capital markets and widening of share ownership; introduction of competition and exposure to market discipline can also be persuaded with privatization (Price-Waterhouse, 1989, page 10).

However, in this study, due to limited time and availability of limited data, I shall work with the objectives of productivity, profitability, operating efficiency, level of employment and welfare criterion.

**2.5 Literature Review:** In the literature of economics and political science, there are a number of theoretical explanations that elucidate various aspects of the privatization process in terms of selling off state owned businesses (SOEs). From the political side's point of view, a number of scholars have focused on how institutions stall or prohibit the ability of political actors to privatize (Boix 1997; Graham and Naím 1998; Heller, Keefer and McCubbins, 1998; Manzetti, 1993) and have analyzed the effects that political legitimacy and patronage (Jomo K.S. 1993) have on the eagerness of actors to privatize (Ramamurti, 1996). Others have argued on the economic side, signifying that factors such as tax levels (Birch 1994),

debt levels of state owned businesses (Biglaiser and Brown, 2003), and the ability of the state to commit to changes (Heller and McCubbins, 1996) affect the eagerness of investors to invest in the process. Besides these, several scholars have focused on what effect the incorporation of business actors in the political system has on the ability of economic actors to influence the privatization process (Keefer and Shirley, 2001).

In this paper the literature review would be discussed from two points of view namely existing literature of privatization on Bangladesh and the literature on international experience. First, we will discuss the literature on Bangladesh and then on international experiences.

Since its inception, public enterprises in Bangladesh played a significant role in the overall economic development of the country. Despite this leading role, the literature on public enterprises is much limited in Bangladesh. Although over the last 20 years, successive governments at different times have privatized over 500 public enterprises, no regime in Bangladesh had made any effort to observe the outcome of these privatization or more specifically what has happened to these privatized firms. Among these limited studies, the study carried out by Sobhan and Ahmad (1980, 1982) on public enterprises in Bangladesh is very notable. In their study, they have discussed about the problems of public enterprises in the 1970s from the planner's point of view. Following their works, some other scholars like Islam (1975) and Ahmad (1987) discussed the problem of nationalization of SOEs and their performances. Mammood (1989) has conducted a rigorous analysis of financial and the operating performances of some selected state owned enterprises for the period of 1972-1985. Muhith (1993) also carried out a study on the evolution of policy changes and the process of privatization followed by successive governments after the independence of Bangladesh. Humphrey (1992, 1990) conducted a very interesting and in-depth study on privatization of public enterprises of Bangladesh. In his study, he has presented a detailed inside account of the origins, implementation and scope of privatization of public enterprises. However, his study suffers from the lack of evaluation of the post-privatization performances of these enterprises.

Sobhan and Mahmood (1991, 1986) have carried out a comprehensive study on the performances of the privatized jute and textile mills which were privatized in 1982-83. After conducting an in-depth analysis, they have compared the performances of public enterprises

and the privatized enterprises and they have not found any convincing evidence of superior performances of the privatized units. Sobhan and Ahsan (1984) found that denationalized jute mills performed no better than public sector mills. In some cases, the production output of the denationalized mills was lower than that of their public sector counterparts, whose profits per ton were often higher. Ahmad (1994: 187–8) concluded that privatized mills did not even show an improved financial performance. Humphrey (1990: 161), in a report commissioned by USAID, concluded that privatization in Bangladesh has had mixed fortunes. The World Bank (1995, reporting on work by Lorch, 1990) and Sobhan (1991) conducted cross-sectional comparisons of Bangladeshi privatized enterprises and SOEs, but reached inconclusive results. Ahmad (1993) and a World Bank report (1993), found no significant evidence of greater efficiency in privatized jute and cotton textile mills.

Lorch (1991) also studied the post privatization performance of the textile industry and he also showed that there is no indication of improved productivity, profitability and performance (Akram in Sobhan, 2005). Dowlah (1997) conducted a study on some selected firms that were privatized between 1991-1996. In his study, he has showed that privatization has led to a superior performance and productivity for the firms. None of the above mentioned studies on privatization in Bangladesh has investigated the employment level of the privatized firms.

The literature on the international experience in the privatization of state-owned enterprises is diverse and extensive. In the following part, we will try to go through that literature.

It is widely believed that privatized firms are more efficient than the publicly owned as they run under the motives of profit maximization where as this objective is absent for public enterprises. These enterprises also concentrate on other goals like social welfare maximization. But the change in ownership from public to private is not the only factor which causes improvements in the performances of the privatized firms. Rather the competitive environment and capital market discipline increase the efficiency of these firms (Castro and Uhlenbruck, 1997 in Omran, M.: undated). Vickers and Yarrow (1991) in this perspective argue that competition can significantly improve monitoring possibilities which increase incentives for productive efficiency. As a result, in competitive environment, publicly owned enterprises are less efficient than the private firms. Barberis et al.,(1996); Claessens, Djankov, and Pohl (1997); La Porta and López-de-Silanes (1997) and Martin and

Parker (1995) in their studies found that in general the privatized firms improve their performance as the change in management (new owners and administrators) contributed to raise the value of the firms. And there are improvement in the profitability of the businesses also which can largely be explained by improvements in productivity rather than by higher sale prices or reductions in the labor force.

On the other hand, in the case of non-competitive industries or industries with natural monopoly elements, the performance of privatized firms is indistinct and results from empirical studies are dubious (Boubakri and Cosset, 1998). Vining and Boardman (1992) argue that the differences between public and private ownership would not be very significant at low levels of competition because both types of firms would adopt similar rent seeking behavior. Here it may be the case that there would be no significant incentive or motivation for either firm to adopt distinctly different strategies. Consequently, one form of ownership might not achieve any major performance compared with the other under such environment. But as competition increases, management of privately owned firms offers incentives and motivation for managers to proactively adopt profit maximizing behavior, which might be absent in their SOE counterparts (Stano, 1975; and Alchian, 1977). In addition, D'Souza and Megginson (1999) indicate that privatized firms are likely to achieve solid and rapid economic benefits as long as there are no economy-wide distortions that hinder competition. In contrast to the above literature which concludes that ownership is a vital factor under competitive environments, Parker and Hartley (1991) point out that the source of efficiency gains might lay less in ownership status and privatized firms perform better when competition replaces monopoly.

Ehrlich et al. (1994) has developed very good evidence on productivity differences between state-owned and privately owned firms. They used a sample of 23 comparable international airlines of different (and in some cases changing) ownership categories over the period 1973-83. After a rigorous study on these data, they were able to obtain good and comparable cost, output, and ownership data. They developed a model of endogenous, firm-specific productivity growth as a function of firm-specific capital, and used the model as a basis for their fixed-effects regressions estimating a cost function in a simultaneous framework with input-demand equations. The results of their study found a significant relationship between ownership and firm-specific rates of productivity growth which also suggest that private

ownership leads to higher rates of productivity growth and declining costs in the long run, and that these differences are not affected by the degree of market competition or regulation. Boardman and Vining (1989) in their classic works on privatization used data from the 500 largest manufacturing and mining corporations in the world outside the United States, as compiled by *Fortune* magazine in 1983. In analyzing the effects of privatization they classified these firms as SOEs, Mixed Enterprises or Private Companies, and used four profitability and two efficiency measures. Their results suggest that after controlling for a wide variety of factors, large industrial mixed and public enterprises perform substantially worse than private ones. Their conclusions suggest that partial privatizations may be not the best strategy as these perform quite similarly to SOEs.

Frydman, Gray, Hessel, and Rapaczynski (1999) compared the performance of privatized and state firms in the transition economies of Central Europe namely Czech Republic, Hungary, and Poland. They carried out their study by taking data for 200 privatized and public enterprises. After going through a rigorous study on the collected information, they concluded that in the context of Central Europe, privatization has no beneficial effect on any performance measure for the privatized firms. Their study also indicates that for those cases in which privatization are effective, its effectiveness varies considerably depending on the performance measure under examination. In particular, their findings show that while the effect of privatization on revenue is very significant for certain types of owners, there is no significant effect of ownership change on cost reduction (Frydman, Gray, Hessel, and Rapaczynski (1999) in Andres *et. al.* 2006).

**2.6 Conclusion:** This chapter has indicated that existing literature on privatization suggests that privatization of state owned enterprises has mixed performances i.e some study shows that privatization leads to better performances while some study reveals the opposite. So, considering the nature of objectives with the privatization program, it is really important to investigate whether privatization has achieved the perceived objectives persuaded with it or not.

## CHAPTER – 3: METHODOLOGY AND PERFORMANCE ANALYSIS

**3.1 Introduction:** This chapter deals with the main methodological and analytical part for this study. It also presents an analytical framework to examine the question of ownership and efficiency on the basis of the collected information. How the information for the study was collected, how they have been analyzed, limitations of the data collection etc have been discussed here. The overall results of this study are based on the analysis of this information.

**3.2 Methodology:** In carrying out the research a number of research methods have been used which includes interviews of different persons including managers, accounting staffs, civil servants, trade union leaders and workers concerned with the respective organizations, analyses of relevant documents, examination of newspaper reports etc.

In analyzing the collected data to show the pre and post privatization performances of the privatized firms, various accounting performance measures like profitability, operating efficiency etc have been used. Profitability has been measured by net income, return on sales and return on assets where as operating efficiency has been measured by production efficiency, income efficiency and sales efficiency.

Since like many other Developing Countries, inflation is a big factor in Bangladesh and it has a rising trends over the years, to observe the real increase or changes in performances, in certain cases, appropriately designed price deflator like Consumer Price Index (CPI)<sup>6</sup> has been used to calculate the real values. The CPI has not been used in output data as it is not in monetary value.

Besides these, to observe the significance of privatization through hypothesis testing, t-statistics and Chi-square test has been used.

Comparisons between the performance of state-owned firms and privatized firms have also been carried out simultaneously.

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<sup>6</sup> Data Source for CPI: Bangladesh Economic Review, Ministry of Finance; Government of Bangladesh. Base year for CPI is 2000.

Different variables that have been used in this study can be shown with the help of the following table (Table-3.1).

**Table – 3.1: Definition of Variables**

Performance Measure/Variables	Definition
1. Profitability ❖ Net Income ❖ Return on Sales ❖ Return on Assets	Net Income: Total Income after tax and interest Return on Sales: $\text{Net Income} \div \text{Sales}$ Return on Assets: $\text{Net Income} \div \text{Assets}$
2. Operating Efficiency ❖ Production Efficiency ❖ Income Efficiency ❖ Sales Efficiency	Production Efficiency: $\text{Total Output} \div \text{No of Employee}$ Income Efficiency: $\text{Net Income} \div \text{No of Employee}$ Sales Efficiency: $\text{Total Sales} \div \text{No of Employee}$
3. Output	Total amount of finished goods produced per year (Measured in Metric Ton)
4. Employment	Number of Employees in each year and includes workers, staff and officers.
5. Sales	Total revenue in a year (Measured in Million Taka)
6. Asset	Total Value of Asset after depreciation and tax (Measured in Million Taka)

**3.3 Selection of the sample:** The study has been carried out on ten selected jute mills located at different parts of Bangladesh and which are in running condition. Out of these ten enterprises, five mills are currently being operated under public ownership and five are under private ownership. In selecting these mills, much attention was paid to maintain homogeneity among themselves in terms of their locational advantages, size of firms in terms of employment and production capacity etc. So, there is no significant fixed-firm effect for the selected industries. The selected private and public mills have been shown in table 3.2.

**Table -3.2: List of Privatized and State Owned Jute Mills Considered for the Study**

No	Name of the Jute Mills	Date of Privatization
1	Bangladesh Jute Mills*	-
2	Karim Jute Mills*	-
3	Latif Bawani Jute Mills*	-

4	Gul Ahmed Jute Mills*	-
5	Hafiz Jute Mills*	-
6	Alhaj Jute Mills	30.13.1982
7	Janata Jute Mills	09.01.1983
8	Nowapara Jute Mills	09.12.1982
9	Pubali Jute Mills	02.02.1983
10	Uttara Jute Mills	09.01.1983

\* State Owned Jute Mills

**3.4 Effort to Collect Information:** Data for the present study were collected by the researcher himself from the selected respondents by using the previously prepared interview schedule. In order to collect relevant data, an interview schedule was prepared. It was prepared keeping the objectives of the research in view. The schedule contained mostly closed questions. Simple and direct questions and statements were included in the schedule to obtain the information on selected variables of the study. Appropriate scales were developed with a view to operationalize the selected variables. Necessary corrections, additions, alternations and rearrangements were made in the schedule based on the pretest experience. The interviews were made individually in the office of the respective mills as well as in the head offices of the respective mills. All possible efforts were made to explain the purpose of the study to the respondents and their answers were carefully recorded by the researcher. Wherever any respondent faced difficulty in understanding any question, utmost care was taken to clarify the same.

The researcher faced some serious problems during data collection. Data collection was started on 06 August 2006 and completed on 02 September 2006.

The efforts in collecting the required data were very exhaustive and it required much time. It also involved the collaboration of different public and private departments. Ten information sources were identified and used for the collection of both primary and secondary data. Field level offices of the selected jute mills were the main sources of primary data. In some cases especially for the data of earlier periods, primary data was also collected from the head offices of the concerned mills. The pre-privatized period data was mainly collected from Bangladesh Jute Mills Corporation (BJMC) as these are preserved neither by the privatized



mills nor their association- Bangladesh Jute Mills Association (BJMA). Some important information was also collected from the Ministry of Jute and Textile, International Jute Study Group (IJSJ) and Directorate of Jute. For over all privatization data, the researcher went to the Board of Investment (BOI) and Privatization Commission – the two government organizations under the direct control of Prime Minister’s Office (PMO), involved with activities of investment promotion and privatizing state owned enterprises in the country.

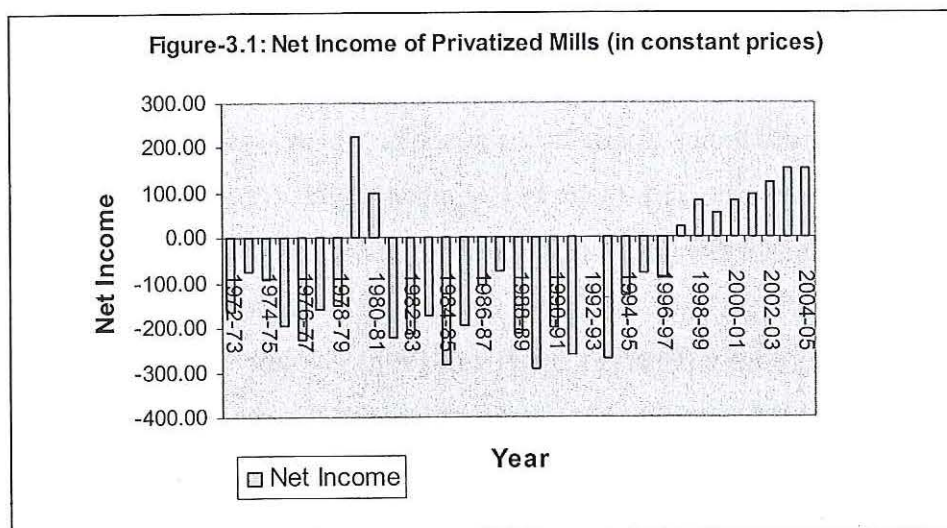
In preparing the dataset, different sources have been consulted. So, when possible a number of data collected from the field level were cross checked with record kept with the head office of respective mills in order to verify the quality and consistency of the information collected so that it become more authentic. When there aroused any differences over the collected data, data and sources were selected which matched trends and similarities with the aim of maintaining credibility in the data set.

**3.5 Limitations on Availability and Quality of Information:** It was very hard to have information on privatized firms as in many cases especially in the case of profit/loss figure, they were reserved in disclosing. It was very difficult to collect the pre-privatization data as they have not collected and kept much of them in the organized way. The same has proven to be true with regards to the information on the performance of the firms during the earlier age of privatization. Besides these, different mills keep their information according to their own ways as there is no systematic uniformity among themselves. Even some mills don’t provide their information to the Bangladesh Jute Mills Association (BJMA) (an association for the private jute mills in Bangladesh) which is responsible for consolidating various information on private sector jute mills in time for reconciliation. This may be identified as a limitation for the current study and for this reason greater caution has been exercised in interpreting the analytical results.

**3.6 Data Editing, Coding and Tabulation:** Data obtained from the respondents were then coded, compiled, tabulated and analyzed in accordance with the objectives of the study.

**3.7 Measurement of Performance:** In this section, various methods for measuring the performances of the selected jute enterprises of Bangladesh considered under the study have been discussed. These include measurement of profitability, operating efficiency etc which are as follows.

**Measurement of Profitability:** Profit is the most conventional measure of judging the performance for corporate enterprises. In this study, profitability for the privatized firms has been measured by three proxies namely the net income earned by these firms, their return on sales (ROS) and return on assets (ROA). Another important measure of profitability – return on equity (ROE) has not been used here as none of the mills considered under the study is listed in the stock exchange. Return on sales has been calculated by dividing the real net income with the real sales and return on assets has been calculated by dividing the real net income with the real assets values. Their results have been described in the following figures (3.1-3.3).



**Net Income:** From figure-3.1, it can be seen that the selected privatized mills which were under state control till 1982-83, continued to earn negative profit during the early stages of nationalization. This trend continued for a long time even after their privatization. Under state ownership, these mills made profit during 1979-80 and 1980-81. Immediately after that they earned negative profit for a long time under private ownership. This negative trend continued till 1996-97. From 1997-98, the incomes of the privatized mills are increasing and it is continuing till present time.

One important thing is that the negative trend is not the uniform trend for the five privatized firms and it does not reflect the actual picture of individual firm. Out of these five firms, two firms (Janata and Pubali) were making positive profits for almost every year after their privatization. Another two firms also made some profits during this period although the

number of years they incurred loss is higher than the number of years they earned profit. But the striking fact is that the remaining firm (Uttara) was remained closed for eleven years (1987-1997) due to transfer of ownership and labour unrest and thus incurred heavy losses for the closing periods. These combined loss figures of the three firms have pulled the average profit figure towards negative and this has been reflected in figure – 3.1.

From the figure, it is clearly visible that the firms made negative profit even under private ownerships till 1997-98. There were some reasons behind these negative performances. Among them enforcement of 'Minimum Wages' for both the private and public sector workers declared by the government, payment of two additional incentive schemes<sup>7</sup> for the workers and the previous loss burden which were shifted upon them by the government were important. Under the minimum wage scheme, both the public and private sector industries had to pay the minimum wages to the workers which were much higher according to the private owners. In fact, from the very beginning of the declaration of 'Minimum Wages' for the workers, a major complaint of the private sector mills was that the government set very high wage rate which is easier for the government mills to cover since government underwrites their losses (Bhaskar and Khan, 1995). During the ownership transfer period, the government handed over the mounting liabilities to the private owners which were accrued during the state control. Privatized mills had to repay these liabilities for a long period of time and in fact some mills (Noapara and Alhaj) are still repaying this debt burden. Another important factor that caused the losses for the private mills were the compensation that they had to pay to the labours. During privatization, there were excess labour in every mill and after taking the mills in their control, the private owners could not terminate workers as government enforced a ban on terminating workers for one year (Bhaskar and Khan, 1995). After that period, private owners terminated a lot of workers and for that termination they had to pay a lot as compensation as the disposed workers filed suits in the courts challenging their termination. This also increased their costs and multiplied the amount of loss. The magnitude of profit differentiation can be explained a bit in the context of marketing promotion strategy as it varies from one mill to another.

So, from the point of view of net income based on figure-3.1, we can say that the performances of the privatized firm's are improving although in most of the years after

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<sup>7</sup> Two festival bonuses per year for every worker were paid by the owners as per government declaration.

privatization, they are making negative profits. However, the scenario has started to change in the late 1990s as they are earning good profit in every year from 1997-98 to 2004-05.

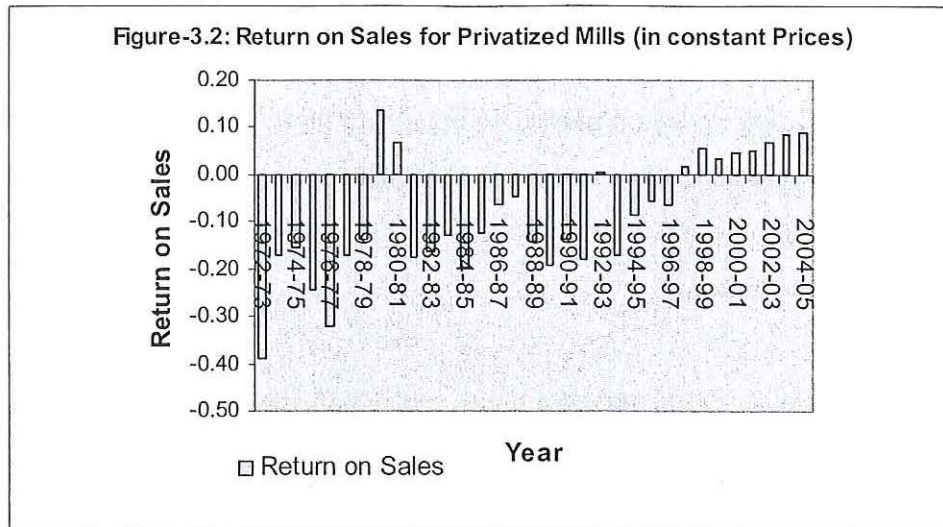
Now, one can simple question may arise regarding the fact that despite making huge losses over the years, why and how these firms remain in the business for a long time. In order to find out the secret of it, one has to go through the political economy of Bangladesh. Here we can mention some instances.

Firstly, in Bangladesh, it is very normal in jute sector that if the firms are in operation i.e if they carry on their production activities, they receive some incentives in the form of subsidy (for example, export subsidy as mentioned earlier) from the government which they will have to forgo if they stop their production by closing down the mills. So, they prefer running the mill than closing down it as with running condition, they get other benefits in addition to export subsidy.

Secondly, since these mills are not making substantial improvements, in the name of sick industries, they very often enjoy the tax exemption facilities from the government. In fact, it is a common characteristic for a large number of enterprises in Bangladesh. A study carried out by Akram concluded that out of 201 firms, 95 firms had no tax registration record and thus evading the tax net completely and many of the firm's direct tax payment had declined (Akram in Sobhan, 2005: 27). Wide spread tax non-registration following privatization is a very common phenomenon in Bangladesh.

Thirdly, in the name of sick industries, they are taking a lot of money from the banking sector in the form of loan but very often they do not pay back these loans. Each year, the government of Bangladesh allocates some special funds in the national budget to support the industrial sector of the country and these mills enjoy this opportunity by keeping their mills in running condition.

Besides these, almost all the mills have huge amount of default loans with the banking sector of the country and due to pressure from these banks, they can not close their enterprises. And another important aspect is that since the prospect for jute goods are getting better day by day and their loss figure is gradually declining, they opt to remain in the business, rather than closing the mills with the hope of better marketing in the future.



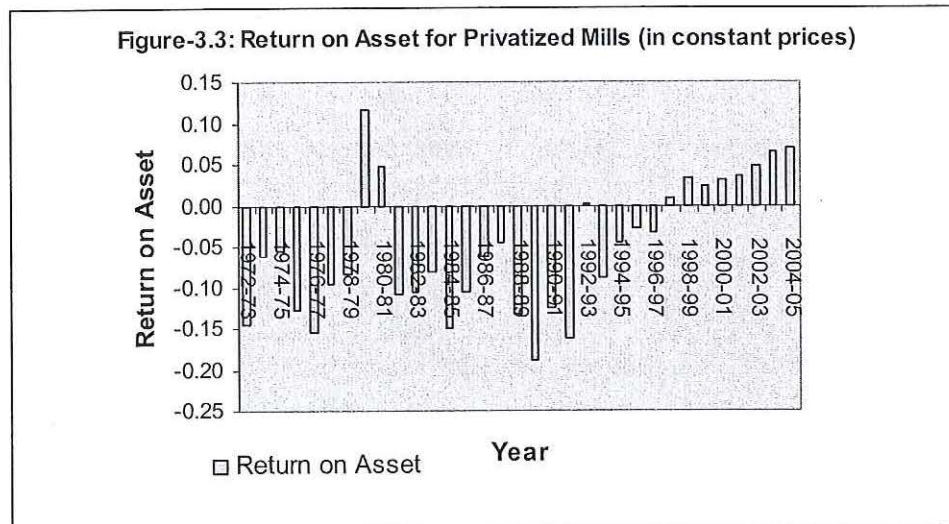
**Return on Sales:** From figure- 3.2, it can be seen that even after the privatization, return on sales for the privatized mills on an average were negative except the year 1979 to 81 when these mills' return on sales were positive and when they were under state control. In fact it is the reflection of the above discussed net income factor since we have calculated the return on sales by simply dividing the net income by the sales value. The negative return on sales was resulted by over employment particularly for the early privatization period which reduced their total income, huge liabilities and the world wide reduction in demand for jute goods.

In the 1980s and early 1990s, the demand for jute goods experienced a heavy downfall as the low cost synthetic goods were easily available everywhere. Analysts at that time even began to term the jute industries as the 'Sunset Industry' as the export market shrunk and there were no possibility in near future to expand. However, this situation changed in the late 1990s as the price of oil which is the main component for synthetic products started to rise which led to the rise of price for the synthetic products. Besides these, people became more aware about environment which was threatened due to extensive use of synthetic products. These combined factors led to a greater demand for jute products and thus greater sales and greater return on sales. This has been reflected in figure -3.2 from the period 1998-99 to present time.

Excess employment was another reason for negative sales on return. The private owners had to operate their industries with excess manpower as under state ownership huge number of excess workers were recruited which was much higher than the actual manpower capacity of the respective jute mill. In the following year of privatization, government enforced a one year ban on termination of workers. So, the privatized mills had to operate their units with

those excess workers which increased their cost of production and thus decline in profit or net income.

Gradually, the private owners tried to overcome these problems by reducing the excess manpower from the industry at the expense of huge compensation and their output was also increasing to match the greater demand for jute products. These combined effects caused the net income of these units an upward trend which was negative for a long time after their privatization. So, in the 1990s their returns on sales are on a positive trend which means an improvement in return on sales as has been reflected in figure 3.2. But still the performance is not up to the mark as it is below taka 0.10 million and they experienced negative sales efficiency for a longtime after their privatization.



**Return on Assets:** From figure-3.3, it can be seen that like the net income and return on sales, the average return on assets for the private mills has increased gradually and achieved positive figures from the year 1998-99 to current year. Under state control as well as in the early stages of privatization, they had negative return on assets except two years when they had positive return on asset.

The principal reasons behind the negative return for the privatized mills is the huge liabilities that have been shifted over to the private owners by the government during privatization, obsolete machineries, sale of land property of the mills for repaying the debt etc. Some of the mills are still repaying these liabilities and they have faced much problem in overcoming this situation. They had to spend a major portion of their incomes in repaying the debt that were accumulated during state control. So, they have earned negative profits which have caused

the return on assets figure negative as it has been calculated by dividing the net income with asset values.

**Mill Wise Performance Analysis:** In the above analysis, that is, the measurement of profitability, the overall performance for the five privatized mills has been discussed by various accounting measures. However, for clear understanding, the study has critically analyzed the individual mill wise performance for each firm by dividing the entire privatization period into three categories. We can see the performance of the privatized mills with the help of Table-3.3.

**Table – 3.3: Mill Wise Performance for the Privatized Firms**

Name of the Mill	Average Sales per year (Million Tk.)			Average Profit per year (Million Tk.)		
	Pre-priv. (1973-1983)	Post-priv. (1984-1994)	Post-priv. (1995-2005)	Pre-priv. (1973-1983)	Post-priv. (1984-1994)	Post-priv. (1995-2005)
<b>Alhaj</b>	325.33	531.45	993.69	-10.99	-14.33	60.99
<b>Uttara</b>	424.58	255.90	1030.60	-148.82	-256.90	-161.04
<b>Janata</b>	471.20	791.29	1128.85	23.30	19.40	73.43
<b>Pubali</b>	383.41	504.01	1170.50	-32.27	4.92	62.76
<b>Noapara</b>	344.95	570.38	968.33	-40.57	-88.19	0.67

It can be seen from Table-3.3 that average sales per year for Alhaj jute mills have increased over the period and it has almost doubled from previous time period to next period. The profit figure (-14.33) deteriorated in 1984-94 period even than the pre-privatized period. The reasons behind this are huge debt burden, excess manpower, decline in the demand for jute products during this period, absence of proper managerial skills etc. However, in the next period, it has achieved good profit (60.99) as the managerial skills have developed; excess manpower has been rationalized and good sales of jute products in the export market. These have reduced the cost of production while greater demand for jute products in the later stages has increased the sales volume which has ultimately improved the performance of the mills.

Performances of Uttara Jute Mills have also improved though it is still earning negative profit. The reason behind this is the closure of the mill for a long time (1987-1997) after privatization due to ownership transfer and labour unrest. The burden of liabilities as well as other costs was so high that the average profit for the best period of privatization is still negative although it is earning profit for the last few years.

Janata Jute Mills is the best performing jute mills among the privatized jute mills. From the beginning of its journey, the mill is earning profit. Its average sales per year are gradually increasing over the years. In the first period, the mills annual average sales volume was 471.20 million taka which has reached to 1128.85 million taka in the period 1995-2005. The mill has overcome the effects of negative factors of public ownership and achieving greater sales and profitability in the later stages of privatization. The mill authority is also planning to start its second unit within the next few years.

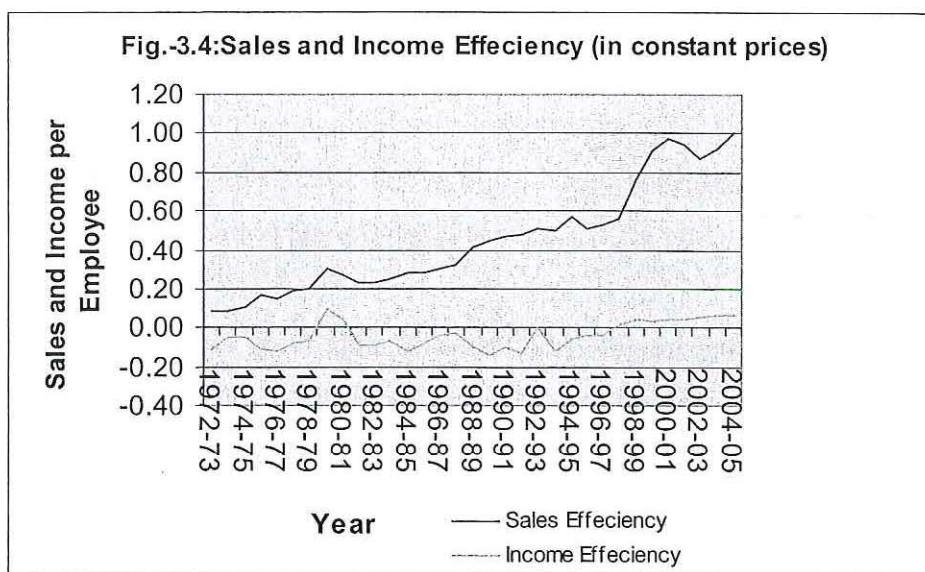
Pubali Jute mills is also a better performer within the private sector in terms of average sales and profit per year. The mill earned a negative profit of -32.27 million Taka during state ownership. However, after privatization, the mill is continuing to earn profit. Its average profit rose to 62.76 million taka for the period 1995-2005 due to growing demand for the produced products, better management and appropriate policies.

Performances of Noapara Jute Mills are also improving after privatization and its average sales per year have reached to 968.33 million Taka in the period 1995-2005 from 344.95 million Taka in 1973-1983. Profitability has also increased and the mills have earned positive profit in the last decade. The mill authority has started its second unit also. The mill authority has adopted an aggressive marketing policy and is now selling its products only in the foreign markets.

So, we can see from the above analysis that although privatization has improved the privatized firm's sales and profit figure but it is at a very low rate. The reasons behind their below standard performance is the heavy debt burden, falling demand for jute products in the 1980s, dual policy of the government in selling jute goods, increasing operating costs etc. However, gradually they have successfully overcome the negative effects that were handed over to them at the time of privatization by adopting appropriate policies, ensuring better managerial capacities, product diversification and other measures which are leading them towards better performances at the later stages of privatization. And it can be anticipated that if the growing world demand for jute goods persists for some years and if they get equal treatment from the government in selling their products, they are expected to flourish further in near future.



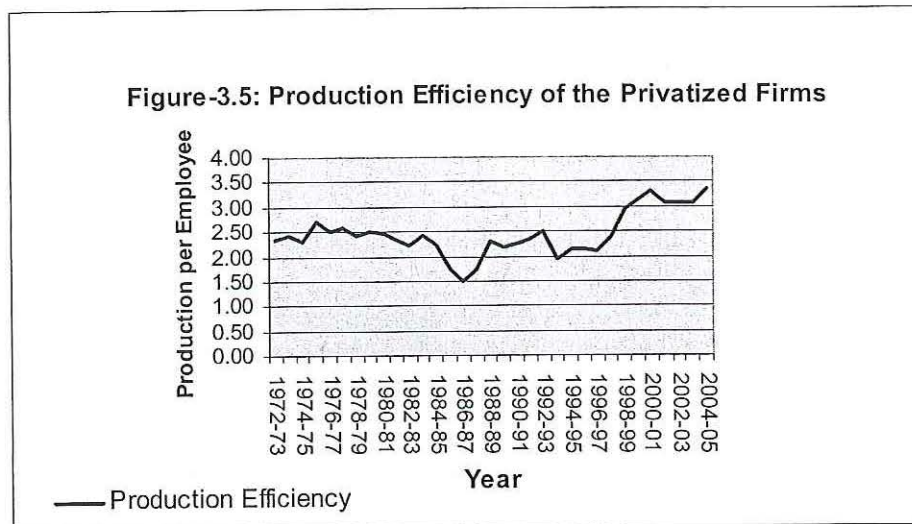
**Operating Efficiency:** Operating efficiency is a good indicator in describing the performances of the firm as many economists use it in describing the performance. In this paper, operating efficiency has been measured by three variables like production efficiency, income efficiency and sales efficiency. These figures have been calculated by dividing the output volume, real net income figure and real sales value of the firms in each year with the number of employees in that respective year. These results have been discussed elaborately in the following discussion with the help of figure 3.4-3.5.



**Sales and Income Efficiency:** Estimates of sales value don't allow for improvement induced by the expedient of raising the price of the product or through inflation induced changes in the price level. Considering this, it becomes necessary to apply an appropriately designed price deflator to estimate the real value of sales and income. Thus, in measuring the sales and income efficiency, proper price deflator has been used and the values are in constant price with the base year 2000<sup>8</sup>. It can be seen from the above figure-3.4 that sales efficiency (indicated by the blue line) is increasing and income efficiency (indicated by the pink line) have been fluctuating over time as the privatized mills could not retrench their excess manpower immediately after privatization. Up to 1997-98, the average income efficiency of the privatized mills was negative (except 1979 to 1981). We have already mentioned that the negative income efficiency was caused by the huge negative income of one mill- Uttara as it was closed for 11 years. So, income per employee was also negative. Both income and sales

<sup>8</sup> Data source for the CPI: Bangladesh Economic Review, Ministry of Finance; Government of Bangladesh.

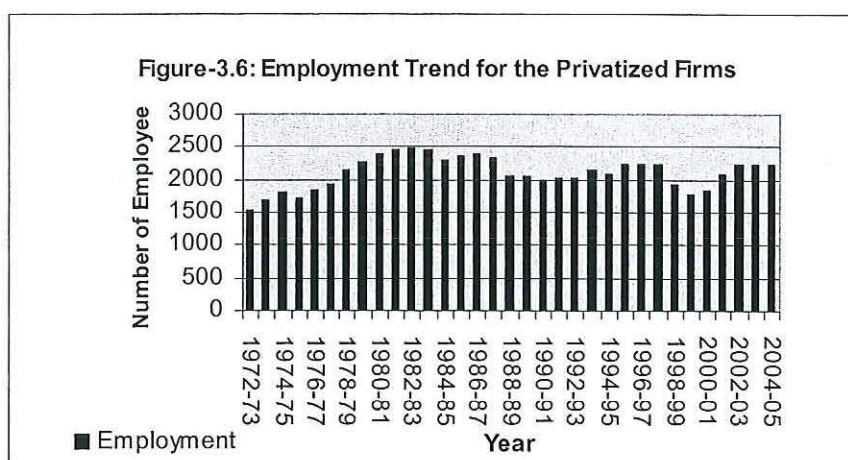
efficiency have reached their maximum under private ownership. Sales and income efficiency has experienced a superior growth in the later stages of privatization particularly in the late 1990s. The reasons behind these are increase in production, optimization of excess manpower, good demand for jute products due to substantial increase in oil price, better management in operating the factories by the authority etc.



**Production Efficiency:** From figure-3.5, it is very clear that like income efficiency, production efficiency has a fluctuating trend through out the whole period. It had a very low record which started in the period of early 1980s and continued till 1990s. The reason behind this low production efficiency is the sudden decline of demand for jute goods world wide during the entire 1980s and early 1990s. This is the period when synthetic products had huge demand as people liked it due to its cheap price, availability and durability. People preferred artificial fibre - synthetic products over the natural fiber – jute. So, due to lower demand, the production of jute goods was lower. This scenario started to change in the mid 1990s when the oil prices continued to rise and people became more aware about environment. Synthetic products are not environment-friendly rather it is very much harmful for the environment. So, the demand of the people shifted from synthetic products towards the jute products. This also led to a higher production for the industry which ultimately raised their production efficiency.

**Employment Level:** From the government’s point of view, one of the major objectives of privatization programme in Bangladesh was to increase the total employment level in the economy as Bangladesh is having a huge population and the unemployment problem is acute

in the country. However, this objective is a bit contradictory with the conventional objectives of privatized firms. Because for achieving higher profitability through various cost reduction measures, the private management first targets the excess employee of the mills and try to terminate them. So, it is very natural that when the ownership of the firm is transferred from public to private, the number of employee in the enterprise will decline and it will help in improving the performance of the firm. How far the objective of greater employment from social point of view has been achieved in Bangladesh for the privatized jute mills can be illustrated by the following figure – 3.6.

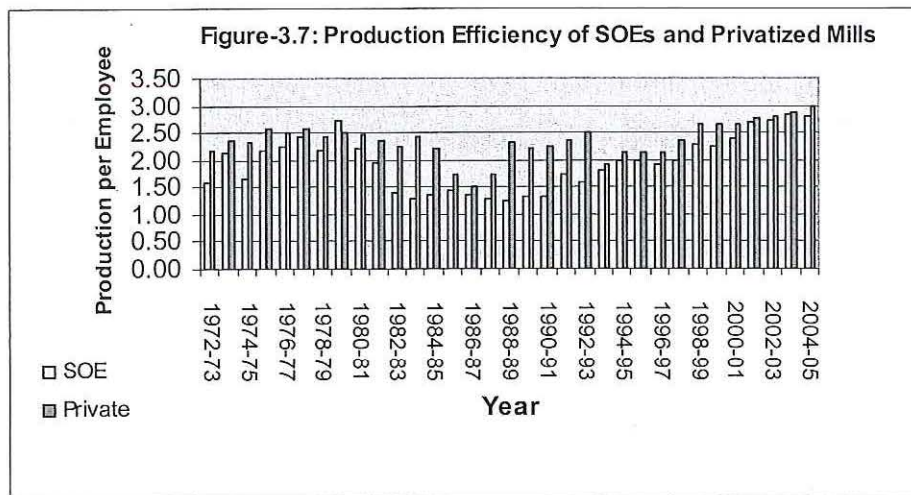


From figure – 3.6, it can be seen that the level of employment for the privatized firms have not increased significantly overtime. Before privatization, the employment level for these firms increased gradually and reached its peak in the year 1982-83 when the average number of employees for these mills was about 2500. It remained almost same in the next year as the government enforced a one-year ban on layoffs of the mills and employee termination. So, after that ban was lifted, the level of employment started to decline in these mills. It was not surprising as the private management is always concerned with the goal of profit maximization which they achieve through various cost reduction measures like rationalization of excess manpower. This trend continued till the end of 1980s and in the mid 1990s, the situation improved a bit as the jute sector experienced good business. Then the employment level again declined and from 2001-02, it is on increasing trend.

So, it can be said that from government’s perspective, the objective of greater employment with privatization of firms has not been achieved. But from private owner’s point of view, this phenomenon is not surprising and in fact, by rationalizing the excess manpower, they

have advanced one step towards the achievement of their main objective – greater profitability. So, it can be considered as an improvement caused by privatization.

**Comparison Between the Private and Public Mills:** In order to observe the performances of the considered state-owned enterprises and the newly privatized enterprises simultaneously, comparative analysis has been carried out. Here we mainly see the operating efficiency of the state owned enterprises and privatized firms with the help of descriptive statistics. We will see the production efficiency, income efficiency and sales efficiency for both types of firms in figure 3.7-3.9.



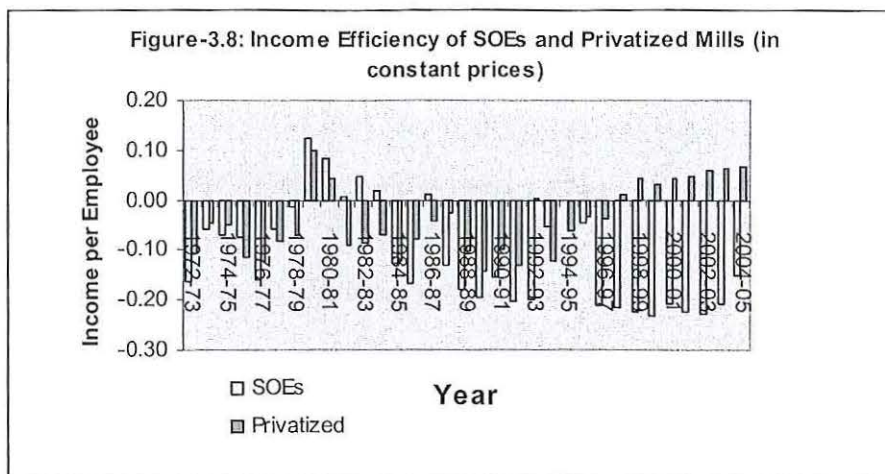
**Production Efficiency:** In figure-3.7, we see that the production efficiency for both types of firms is fluctuating overtime. The privatized enterprises enjoyed superior production efficiency (indicated by dark lines) from the very beginning and their efficiency declined in 1984-85 to 1987-88. From then, it has been increasing in almost every year.

However, figure-3.7 does not indicate the uniform trend of production efficiency for the privatized firms. One simple question may arise regarding the trend that whether only the better performing firms were privatized and why the productivity of the privatized firms declined after privatization although their performance was better when they were under state control. Two facts may be cited here in explaining this situation. Firstly, these privatized mills were set up by the Bangladeshi owners who were running these mills with greater efficiency. They employed optimum level of manpower and adopted better production techniques with latest machineries of then time. When these mills were nationalized,

government did not inject huge labor force like the state owned although their performance was affected. Having lower labour force than the public mills and having better machineries, the performance of these mills were a bit better than the public mills. Now, the privatization policy of the Government of Bangladesh at that time was to privatize those units first which were owned by the Bangladeshi owners. So, these mills were privatized first and in the later stages mills which were owned by the former Pakistani owners are being privatized. Secondly, these mills could not rationalize their labour force for some years after privatization while their production did not increase substantially due to a world wide decline of demand for jute goods. And another fact is that the average production of the privatized mills declined which was resulted by the closure of one big mill (Uttara) for 11 years. After privatization, production of two mills (Janata and Pubali) increased almost steadily while production for the remaining two mills also increased except some years. So, the sector's average production declined which has been reflected in the above figure.

State owned enterprises also experienced lower production efficiency (indicated by the light lines) for the same period. Their production efficiency was also affected by the declined demand for jute goods and failure to rationalize the labour force. However, in the beginning of 1990s, the government adopted (or compelled) a golden hand-shake programme under which a lot workers accepted self retirement. So, the number of excess manpower decreased a bit which has increased the production efficiency of the state owned firms.

So, we can say that from the point of view of production efficiency, both types of firms experienced growth overtime (except some years in the mid 1980s) and although privatized firms achieved superior production efficiency over time compared to the state owned firms, their performance is almost same like pre-privatized period.

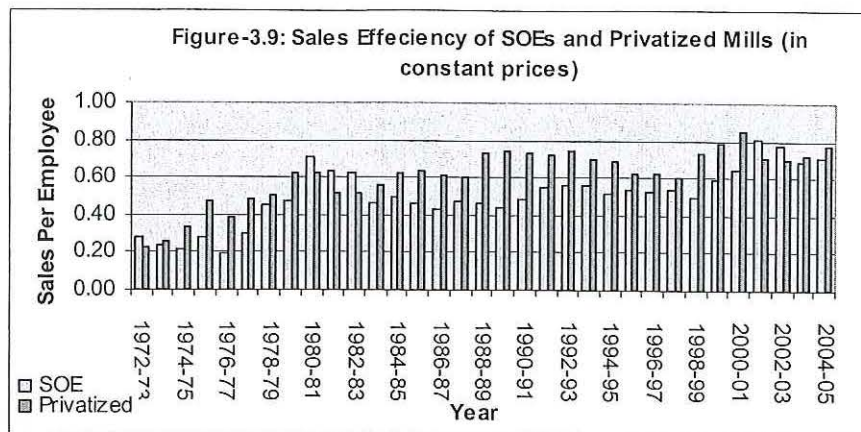


**Income Efficiency:** From figure -3.8, it can be seen that up to 1978-79, on average, the income efficiency is negative for both types of firms. Both sectors achieved positive income efficiency for the first time in 1979-80 when the privatized firms were under state control. After that both the privatized and SOEs failed to earn positive income efficiency except the year 1982-83 and 1983-84 when the SOEs made some positive income. The privatized firms enjoyed positive income efficiency in every year from 1998-1999 where as the public sector mills continued to incur heavy losses and as a consequence, their income efficiency is still negative.

The negative income efficiency that the privatized mills experienced for a long time was due to the negative effects of state control which they were having even after the privatization. Among these negative effects, excess manpower, huge debt burden, wrong policy of the government in selling jute goods etc are notable. Besides these, the decline in demand for jute goods also reduced their revenues where as costs did not reduce at the same rate.

The state owned enterprises are still incurring heavy losses due to massive corruption, shortages of money for purchasing jute, decline in revenue due to the sale of produced goods at a price lower than their production costs, destructive trade unionism, absence of proper planning, obsolete machineries etc.

So, it can be said that the privatized firms are achieving greater income efficiency but at a slower rate and most of the time after their privatization, their income efficiency was negative.



**Sales Efficiency:** Due to inflation induced changes in the price level, it is necessary to use real sales in calculating sales efficiency by applying appropriate price deflator. For this reason Consumer Price Index (CPI) has been used to convert the nominal sales value into real sales value for both the private and state owned firms. Over the year, the nominal sales efficiency for both types of firms have increased. However, in figure -3.9, it is indicated that over the period, the real sales efficiency for both the state owned and privatized firms is a bit fluctuating. One good thing for the state owned firms is that in some years, their sales efficiency is higher than the privatized firms. One reason for this is that state owned enterprises sell their products at a lower price than the private firms. Privatized firms have also enjoyed positive growth rate in terms of sales efficiency. This is due to their innovative marketing policies, greater demand for jute goods and other strategies conducive for the growth of the industry.

**Chi-Square and t-Statistics Test:** From descriptive statistics, it appears that the privatized firms have performed better in the later stages of privatization. So, it would be better to test the significance of their improvement between the earlier and later stages of privatization through appropriate statistical tests. In order to observe the effects of privatization on the performance of firms especially on output, sales and income, Chi-square test and t-statistics test<sup>9</sup> have been done by using the sales efficiency, production efficiency and income efficiency data. Chi-square test has been done to test the possible relationship between privatization and sales, output and income efficiency of firms. Then t-test has been applied to test the significance of their relationship.

<sup>9</sup> The formula that has been used for calculating Chi-square and t-statistics is given in the Annex - A

In calculating the chi-square values, sales efficiency, production/output efficiency and income efficiency data for the last five years (2001 to 2005) of privatization for the privatized and public mills has been used. These results were then compared with the first five years' data (1985 to 1989)<sup>10</sup>. The reason for selecting these time periods is that from descriptive statistics, it seems that the privatized mills have performed better during the later stages of privatization compared to earlier periods. The sales data for the period 2001 to 2005 has been categorized in three grades/classes as lower, medium and higher sales efficiency where the lower limit is 0.60 and the higher limit is 0.81 and above. Similarly, Output data has also been categorized into three grades/classes where the lower limit is 1.80 and the higher limit is 3.01 and above. Income efficiency data has been categorized into three classes where the lower limit is less than 0.0 and the higher limit is 0.04 and above. (Different class limits have been used for the data of 1985 to 1989 period). Then on the basis of observed and expected frequencies from the respective data set and with the help of the degrees of freedom, the value of chi-square has been calculated at 5% significance level. The information that has been used to calculate the chi-square for the period 2001-05 has been summarized in the following table (table 3.4, 3.5 and 3.6).

**Table- 3.4: Production Efficiency Data Table for the Calculation of Chi-square**

<b>Grade</b>	<b>Privatized</b>	<b>SOEs</b>	<b>Total</b>
Lower Production Efficiency (1.80-2.40)	1	1	2
Medium Production Efficiency (2.41-3.00)	2	3	5
Higher Production Efficiency (3.01 +)	2	1	3
<b>Total</b>	<b>5</b>	<b>5</b>	<b>10</b>

**Table-3.5: Sales Efficiency Data Table for the Calculation of Chi-square**

<b>Grade</b>	<b>Privatized</b>	<b>SOEs</b>	<b>Total</b>
Lower Sales Efficiency (0.60-0.70)	1	2	3
Medium Sales Efficiency (0.71-0.80)	2	2	4
Higher Sales Efficiency (0.81 +)	2	1	3
<b>Total</b>	<b>5</b>	<b>5</b>	<b>10</b>

<sup>10</sup>. Statistical tests reports for this period (1985 to 1989) have been presented in Table-A1 at Annex –B.



**Table-3.6: Income Efficiency Data Table for the Calculation of Chi-square**

Grade	Privatized	SOEs	Total
Negative Income Efficiency <0.0	0	4	4
Medium Income Efficiency (0.00-0.03)	3	1	4
Higher Income Efficiency 0.04 +	2	0	2
<b>Total</b>	<b>5</b>	<b>5</b>	<b>10</b>

On the basis of the above table 3.4, 3.5 and 3.6, the results of chi-square test for the period 2001-05 have been presented in the following table 3.7 and 3.8.

**Table – 3.7: Chi-Square Test Results for Sales and Production Efficiency**

Sales Efficiency Data			Production Efficiency Data		
	SOEs	Privatized		SOEs	Privatized
No. of Classes/Grades	3	3	No. of Classes/Grades	3	3
No. of Observed Frequencies	5	5	No. of Observed Frequencies	5	5
Degrees of Freedom	2	2	Degrees of Freedom	2	2
Level of Significance	5%		Level of Significance	5%	
Calculated Chi-square	0.71		Chi-square	0.76	
Critical Value (at 5%)	5.99		Critical value (at 5%)	5.99	

**Table – 3.8: Chi-Square Test Results for Income Efficiency**

Income Efficiency Data		
	SOEs	Privatized
No. of Classes/Grades	3	3
No. of Observed Frequencies	5	5
Degrees of Freedom	2	2
Level of Significance	5%	5%
Calculated Chi-square	0.17	
Critical Value (at 5%)	5.99	

Similarly, for calculating the t-statistics, the same output, income and sales efficiency data of public and private mills have been used for the period 2001-05. Then on the basis of mean value, standard deviation and number of observation, t-statistics has been calculated at 5% significance level. The results of t-statistics have been summarized in table 3.9 and 3.10.

**Table – 3.9: t-Statistics Test Results for Sales and Production Efficiency**

Sales Efficiency Data			Production Efficiency Data		
	SOEs	Privatized		SOEs	Privatized
Mean	0.73	0.75	Mean	2.67	2.82
Standard Deviation	0.10	0.11	Standard Deviation	0.47	0.56
No. of Observation(N)	5	5	No. of Observation(N)	5	5
N-1	4	4	N-1	4	4
Level of Significance	5%		Level of Significance	5%	
Calculated t-value	0.5		Calculated t-value	0.71	
Critical t-value	1.86		Critical t-value	1.86	

**Table – 3.10: t-Statistics Test Result for Income Efficiency**

Income Efficiency Data		
	SOEs	Privatized
Mean	-0.20	0.05
Standard Deviation	0.15	0.14
No. of Observation(N)	5	5
N-1	4	4
Level of Significance	5%	
Calculated t-value	5.0	
Critical t-value	1.86	

**3.8 Hypothesis Testing:** From our descriptive analysis (Figure 3.1 – 3.9), it seems that privatization has improved the performances of the privatized firms to some extent at least it is very remarkable at the later stages of privatization. Now, it would be wise if we test the hypothesis to observe whether this change is significant or not. To do this, the study has used the results of chi-square and t-statistics which have been calculated in table 3.7 to 3.10.

From table 3.7 and table 3.8, we can see that the value for chi-square test for sales and output efficiency data is 0.71, 0.76 and 0.17 respectively. The calculated values of the chi-tests are less than the critical values (5.99) in every case which means that we can not reject the null hypothesis. This means that our null hypothesis is established and at 5% level of significance, there is no significant relationship between privatization and performance of the firms for the observed industrial units. If we compare the results of chi-square for this period with the results of 1985-89 (these results have been given in Annex-B), we see that the value of chi-square for sales, output and income efficiency data was 0.12, 0.37 and 0.37 respectively. So, it can be said that there is a sign of improvement in the later stages as the value of chi-square has increased for sales and output data. Now, to examine the level of significance, we see from the above table 3.9 that the calculated t-statistics in sales efficiency data is 0.50 which is 0.71 for output efficiency data. The critical or tabulated t-value for this test statistics is 1.86. According to the rule of hypothesis testing, if the calculated t-value is less than the tabulated or critical t-value, we can't reject the null hypothesis which in other words means that there is no significant relationship between the two variables at 5% significance level. Since in our case, the calculated t-value is less than the tabulated t-value in both cases, we can't reject null hypothesis which leads us to conclude that on the basis of hypothesis testing, the relationship between privatization and performance of the firms is not very significant.

However, the interesting thing is that the calculated t-value for the income efficiency data is 5.0 as has been shown in table 3.10 which is greater than the tabulated t-value. So, it indicates that there is very significant relationship between privatization and income efficiency of the firm as the firms can shed their excessive manpower without any pressure. The chi-square value does not support this findings may be due to limited number of observations.

**3.9 Conclusion:** Privatization has lead to a slow but almost gradual improvement for the privatized firms whereas the condition of the state owned firms have further deteriorated in terms of profitability. The negative performances that were carried on for a longtime by the privatized firms were caused by various factors like excess manpower, huge liabilities, fall in the world wide demand for jute etc. It can be expected that the privatized firms would perform even better as soon as they fully overcome the negative effects of public ownership.

## CHAPTER – 4: CONCLUSION

**4.1 Introduction:** The aim of this chapter is to describe the main findings of the study and suggest policy implications on the basis of these findings. Social impact of privatization due to privatization of these firms has also been investigated on a limited scale and at last the main conclusion for the study has been drawn.

**4.2 Findings:** The primary goals of privatizing these jute industries along with other industries were to promote the private sector as an engine of growth and to increase the efficiency and productivity of the sector. It was also claimed that privatization would improve the efficiency of resource use, foster competition and enhance the role of private sector. But if we turn back and draw conclusion on the basis of the above analysis, we see that privatization programme has brought some positive changes on the performances of privatized firms in the later stages although the magnitude is not very significant. Findings of the above analysis are as follows:

From the above analysis and discussion, it is clear that performances of the privatized firms are neither very satisfactory nor very negligible. Privatization has led them towards a mixed performance where there is a sign of improvement but it is not very significant according to the rules of hypothesis testing. The privatized firms have failed to improve their performances significantly in terms of profitability for a longtime after privatization though gradually their performances have improved. Only in the later stage of privatization i.e in the late 1990s, the privatized firms have gained some superior performances. Their output, sales and profitability have increased during this period. But if we see the performances of the state owned enterprises at the same time, then we can see that it is a chapter of negative performances in almost every respects. While the privatized firms are making some profit over the last few years, the state owned jute mills are continuing to make huge losses every year. Each year they are creating heavy burden on the national exchequer.

From employment consideration, privatization has brought improvement for the privatized firms although they have failed to generate significant employment opportunities even after a long period of privatization. But as a labour intensive country with acute unemployment problem, one of the major objectives of privatization policy persuaded by Bangladesh was to enhance the level of employment. In this field, the achievement of the privatized mills is far

from expectation. In most of the years, the level of employment has declined with some exception in the later stages of privatization. But from firm's point of view, this is an improvement as through this reduced manpower, the privatized mills have increased their profitability. So, the analysis shows that privatization has brought this improvement for the privatized firms.

The negative performances that the privatized firms had in the earlier period of privatization were contributed by state ownership. When the government handed over these mills to their former owner, all of these mills were burdened with huge debt burden which is still borne by them, excess manpower, decline in the demand for jute goods world wide, inappropriate marketing policies etc. Another important problem that can be attributed to the negative performance of the jute sector lies not in the ownership form but in the policy regime. Both the private and public sector jute mills have sustained losses, generally attributed to the fact that production costs have tended to be higher than the export price of jute because of the outdated equipment in the mills. The problem has further aggravated by the so called anti-dumping policy of the government<sup>11</sup>. The combination of all these factors was negative performances for the firms.

However, after this critical period, these mill authorities have adopted appropriate policies, better management discipline, aggressive marketing policies, rationalization of manpower etc. which has improved their performances in the later part of privatization.

***Social Impact of Privatization:*** As it has already been discussed in the objective part of this paper (section 2.4) that privatization in Bangladesh were persuaded with more than one objective and among these, social welfare was very crucial. Limited investigation on social impacts of privatization is one of the objectives of this study also. So, it won't be an unwarranted to highlight some of the impacts of privatization on social life in Bangladesh. While the experience of privatization is mixed in Bangladesh in regard to economic objectives, its consequences are quite disappointing in social terms. Privatization of these jute industries has cast immense negative social impacts upon the working class people. Social impacts of privatization can be viewed from four different aspects namely, a. Employment

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<sup>11</sup> Anonymous Government Official

effects, b. Family welfare effects c. Distribution of wealth effect and d. The issue of Transparency. These effects have been discussed below.

**a. Employment Effects:** Increased employment creation was a major objective of the privatization programme in Bangladesh. But in most of the cases, the privatization of public enterprises has failed to meet the anticipated goal of creating more jobs. In all most all the state owned jute mills that has been privatized and that are considered under the present study, the laying off of employees has been a major aspect of the reform as privatization has led to an increase in the demand for specialized skills but has lowered the employment levels for the unskilled.

From the beginning year of privatization, these five mills have retrenched about 4,000 workers so far<sup>12</sup>. Furthermore, there has been a tendency to replace permanent workers with temporary labour which is ultimately reducing the overall job security of the employees who remain<sup>13</sup>. This is leaving the workers in a highly vulnerable situation. In this context, employers have proceeded to ignore safety regulations and to sweep aside the formation of trade unions.

**b. Family Welfare Effects:** Privatization has adversely affected the family welfare matter for a number of workers who were laid off. Many jute mill employees who had enjoyed reasonably decent living conditions earlier have lost their jobs and are suffering with great miseries as a result of privatization. In many cases, they have been unable to feed their family members properly, let alone send their children to school and attend to their other necessities. Some former jute mill workers are even compelled to sell their personal belongings including their lands that were passed down through their families for generations and whatever they had accumulated over the years they were employed at the mills<sup>14</sup>.

**c. Distribution of Wealth:** Another important objective that was persuaded through the overall privatization programme was to create a strong property-owning middle class. But this objective like many other objectives has not been achieved till today. In some cases it was intended that the state property would be bought by the employees and small businesses but at the end this programme seemed to be very weak. Government was seemingly

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<sup>12</sup> Data Source: Concerned Jute Mill's Official Records and BJMA official Records.

<sup>13</sup> Discussion with some Trade Union Leaders and current employees

<sup>14</sup> Discussion with some disposed jute mill workers.

uncommitted to this goal as well and adopted hardly any effective steps other than lip service in order to make the social groups weaken who opposed the privatization. The process has had a negligible impact on the well-being of most of the population.

**d. Transparency:** In Bangladesh, it has been observed in many cases that privatization had been accompanied by corruption and lack of transparency. There was no open tender and the valuations that were fixed for the privatized jute mills were not done in a transparent way.

**4.3 Policy Implications:** It will not be absolutely wise to draw any significant conclusions for policy making from the limited data base and number of observations which had to draw upon in carrying out this academic study. What has however emerged from the initial findings of the study is that the notion that the changes in enterprise ownership from public to private control will inevitably improve their performance and profitability is rather simplistic. The observation is that the trends in the improvements in production and sales are mixed where as the capacity to improve the financial performance of these enterprises are more discouraging than encouraging. In addition to these, these trends are accompanied by a decline in the employment level. In a labour surplus economy like Bangladesh, it is needless to say that this aspect merits some concern.

From the social view point, it should be kept in mind that the enterprises that have been transferred from public control to private control should be regarded as part of the public domain. Thus the efficient and socially optimal use of their assets must remain as much a concern of the public as is the case with public sector assets.

Before introducing a far reaching set of policies for privatization, the policymakers should have taken a close look at the performance of the privatized enterprises. A comprehensive review and analysis of their production and productivity trends, sales performance, profit and loss records, tax payments, repayment of bank loans, employment records, investing in balancing, modernization and replacement of the enterprise and the capacity to generate reinvestible surplus should be undertaken at the outset. A corresponding review of the enterprises under state control should be made. If there are any specific problems that are faced by both the privatized and public enterprises, this should also be taken into account. This will have to be looked at and distinguished between problems internal to the enterprise or its controlling corporation such as deficiency of management and those which are

exogenous such as changes in the market or constraints on the operation and profitability of the enterprise due to official policy or lack of operating autonomy.

In the absence of such a review, a number of unforeseen consequences may emerge which have serious implications for both the policy makers as well as the nation with regard to both the questions of social justice and the expansion of productive forces.

The removal of unequal treatment of the government weighted against private enterprises in selling jute goods should be stopped as with it, the performance of the privatized enterprises would not improve significantly. The removal of institutional constraints like unequal government treatment would be an immediate step favouring the development of private enterprises in Bangladesh's jute industry. Then, if the private enterprises perform better than the state enterprises, the privatization policy should be considered in the reform agenda of the government.

This study has in fact set itself very limited goals. It is a preliminary exercise that may be designed to provide limited information and focus attention to the need for a more comprehensive study of the sector and implications for the privatization policy. Such a rigorous study would of course need to review the dialectical basis of policy making and trace the changes in the social parameters which condition the formulation of public policy in Bangladesh.

**4.4 Conclusion:** On the basis of the above analysis, it can be concluded that in the earlier stages of privatization, the rate of improvement for the privatized firms were lower compared to later stages and privatization has brought some improvements in their performances which may be below the expectation of the overall privatization program. This improvement may be due to the shedding of excessive manpower and other positive measures taken by the privatized firms. These improvements are not statistically significant but descriptive statistics shows that there are some sorts of improvements for the privatized firms after privatization. As a whole, it can be said that although privatization of SOEs in Bangladesh has not achieved a substantial gain for the country in the way of enhanced output, employment, productivity, profitability, investment or innovation in the affected enterprises there is no doubt that some of the privatized jute mills have indeed achieved some major gains in all or some of the indices that have been used above. While more and more empirical study on the outcomes of



privatization is required in Bangladesh, there are in fact very limited grounds to suggest that privatization program has generated a universal trend which is measurable in improved macro-performance in the manufacturing sector or significant improvement at the firm level. We therefore need to investigate more about why the privatized enterprises have not been able to respond to the expectations underlying the privatization process before we embark on a further phase of privatization.

## **References/Bibliography:**

- Ahmad, M. (1976a) 'Wither Public Enterprise', *Political Economy* (Journal of Bangladesh Economic Association) 2(1): 3–12.
- Ahmad, M. (1976b) 'The Historical Perspective of Public Sector Enterprises in Bangladesh', *The Journal of Management, Business and Economics* 2(3): 252–94.
- Ahmad, M. (1993) 'Public Enterprise Reforms, Employment and Productivity', in R. Islam and W. K. Blank (eds) *Social Dimensions of Economic Reforms in Bangladesh*, pp. 55–66. New Delhi: ILO-ARTEP.
- Ahmad, M. (1994) 'The Impacts of Privatization on Distributional Equity in Bangladesh', in V. V. Ramanadham (ed.) *Privatisation and Equity*, pp. 186–96. London: Routledge.
- Akram, T. (2005) 'A Theory of Ineffective Privatization.' in Sobhan, Rehman (2005) (ed.). *Privatizations in Bangladesh: An Agenda in Search of a Policy*. Dhaka: Centre for Policy Dialogue and The University Press Limited.
- Alam, M. (1997) 'Budgeting Process in Uncertain Contexts: A Study of State-owned Enterprises in Bangladesh', *Management Accounting Research* 8(1): 147–68.
- Alchian, A. (1977) *Economic Factors at Work*. Indianapolis, IN: The Liberty Fund.
- Alchian, A. (1996) 'Some Economics of Property Rights' in G. Yarrow and P. Jasiniski (eds) *Privatization Critical Perspectives on the World Economy* Vol I, London: Routledge.
- Bangladesh Jute Mills Association. *Employment and output records*. Dhaka: Bangladesh Jute Mills Association, 1983-2005
- Bangladesh Jute Mills Corporation. *Employment and output records*. Dhaka: Bangladesh Jute Mills Corporation, 1972-2005.
- Barberis, N., Boycko, M., Shleifer, A. and Tsukanova, N. (1996). 'How Does Privatization Work? Evidence From the Russian Shops'. *Journal of Political Economy* 104: 764-90.
- Bhaskar, V. and Khan, M. (1995) 'Privatization and Employment: A Study of the Jute Industry in Bangladesh,' *American Economic Review* 85(1): March, 1995, 267-273.
- Biglaiser, Glen and David S. Brown. (2003) 'The Determinants of Privatization in Latin America.' *Political Research Quarterly* 56(1): 77-89.

- Birch, Melissa H. (1994) 'Foreign Direct Investment in Latin America during the 1990s,' in Werner B. and Melissa H. B., (eds.), *Privatization in Latin America, New Roles for the Public and Private Sector*. Westport: Praeger in Vandusky, J. A. (2005) "Competing Theories? Re-thinking the Use of Proxy Variables in the Privatization Literature." in <http://www.binghamton.edu/polsci/graduates/vandusky.pdf> Accessed on 27.08.2006
- Boardman, A. and Vining, A. (1989) 'Ownership and Performance in Competitive Environment: A Comparison of the Performance of Private, Mixed and State-Owned Enterprises.' *Journal of Law and Economics* 17: 497-508.
- Boix, Carles. (1997) Privatizing the Public Business Sector in the Eighties: Economic Performance, Partisan Responses and Divided Governments.' *British Journal of Political Science* 27(4): 473-496 in Vandusky, J. A. (2005) 'Competing Theories? Re- thinking the Use of Proxy Variables in the Privatization Literature.' in <http://www.binghamton.edu/polsci/graduates/vandusky.pdf> Accessed on 27.08.2006
- Boycko, M., Shleifer, A. and Vishny, R. (1995) *Privatizing Russia*. London: The MIT Press
- Boubakri, N. and Cosset, J. C. (1998) 'The Financial and Operating Performance of Newly-Privatized Firms: Evidence from developing Countries'. *Journal of Finance* 53: 1081-1110 in Ruiz-Mier et al., K. (2002) 'Privatization in Bolivia: The impact on Firm Performance' in <http://www.gdnet.org/fulltext/garron.pdf> >Accessed on 21.6.2006
- Castro, J. and Uhlenbruck, K. (1997) 'Characteristics of Privatization: Evidence from Developed, Less Developed, and Former Communist Countries.' *Journal of International Business Studies*, 28, 123-43 in Omran, M. (Undated). 'The Performance of State-Owned Enterprises and Newly Privatized Firms: Does Privatization Really Matter?' in [http://www.gdnet.org/pdf2/gdn\\_library/awards\\_medals/2003/rm/market\\_state/omran\\_paper.pdf](http://www.gdnet.org/pdf2/gdn_library/awards_medals/2003/rm/market_state/omran_paper.pdf) > Accessed on 21.6.2006
- Claessens, S., Djankov, S. and Pohl (1997) 'Ownership and Corporate Governance: Evidence from the Czech Republic.' Policy Research Paper No.1737. Washington, DC, World Bank in Ruiz-Mier, F. Mauricio Garrón B, Machicado, Carlos G. and Capra, K. (2002) 'Privatization in Bolivia: The impact on Firm Performance' in <http://www.gdnet.org/fulltext/garron.pdf> > Accessed on 21.6.2006

- Cuong, N.M. (2004) *Does Ownership Matter To Enterprise Performance? A Comparative Study of Private and State Enterprises in Vietnam's Textile-Garment Industry*. Maastricht: Shaker Publishing BV.
- D'Souza, J. and Megginson, W. (1999) 'The Financial and Operating Performance of Privatized Firms During the 1990s.' *Journal of Finance* 54: 1397-1424.
- D'Souza, J., Megginson, W. and Nash, R. (2001) 'Determinants of Performance Improvements in Privatized Firms: The Role of Restructuring and Corporate Governance.' *Working Paper*, University of Oklahoma.
- Dowlah, C. F. (1998) 'Benefits of Privatization: Evidence from State-Owned Enterprises Privatized in Bangladesh during 1991–1996', *Asia Pacific Development Journal* 5(2):45–67.
- Ehrlich, I., Georges G., Zhiqiang L., and Randall L (1994) 'Productivity Growth and Firm Ownership: An Empirical Investigation,' *Journal of Political Economy* 102:1006-1038 in World Bank Policy Research Paper no. 3936 in [http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2006/06/01/000016406\\_20060601162807/Rendered/PDF/wps3936.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2006/06/01/000016406_20060601162807/Rendered/PDF/wps3936.pdf) Accessed on 03.09.2006.
- Frydman, R., Cheryl W. G., Marek H., and Andrzej R. (1999) 'When Does Privatization Work? The Impact of Private Ownership on Corporate Performance in Transition Economies,' *Quarterly Journal of Economics* 114(4): 1153-1191.
- Ghafur, A. (1976) 'On the Nationalized Industrial Sector Controversy', *Political Economy* (Journal of Bangladesh Economic Association) 2(1): 5–10.
- Graham, C. and Moisés N. (1998) The Political Economy of Institutional Reform in Latin America, in Nancy B., Carol G., and Richard H. S., (eds.), *Beyond Tradeoffs, Market Reforms and Equitable Growth in Latin America*. Washington, D.C.: IDB Publications.
- Heller, William and Mathew D. McCubbins. (1996) 'Politics, Institutions, and Outcomes: Electricity Regulation in Argentina and Chile.' *Policy Reform* 1: 357-387 in Vandusky, J. A. (2005) 'Competing Theories? Re-thinking the Use of Proxy Variables in the Privatization Literature' in <http://www.binghamton.edu/polsci/graduates/vandusky.pdf> Accessed on 27.08.2006
- Heller, William B., Philip Keefer and Mathew D. McCubbins. (1998) 'Political Structure and Economic Liberalization: Conditions and Cases from the Developing World,' in

- Paul W. D. and Mathew D. McCubbins, (eds.), *The Origins of Liberty, Political and Economic Liberalization in the Modern World*. Princeton: Princeton University Press.
- Humphrey, C. L. (1992, 1990) *Privatization in Bangladesh: Economic Transition in a Poor Country*, Asian Edition, Oxford University Press, Dhaka, Bangladesh.
- Hartley, K. and Parker, D. (1991) 'Privatization: A Conceptual Framework,' in A. Ott, and K. Hartley, (eds.), *Privatization and Economic Efficiency: A Comparative Analysis of Developed and Developing Countries*, (11-25). Brookfield, VT: Edward Edgar.
- Jomo, K.S. (1993) 'Privatization in Malaysia: For What and For Whom?' in Thomas Clarke and Christos Pitelis, eds., *The Political Economy of Privatization*. London: Routledge.
- Keefer, Philip and Mary Shirley (2001) 'Privatization in Transition Economies: Politics as Usual?,' in Stephan Haggard and Mathew D. McCubbins eds., *Presidents, Parliaments, and Policy*. Cambridge: Cambridge University Press.
- Kikeri et al., (1992) *Privatization: The Lessons of Experience*. Washington, D.C.: The World Bank.
- Kornai, J. (1986) *Contradictions and Dilemmas Studies on the Socialist Economy and Society* New York: The MIT Press.
- Kornai, J. (1990) *Vision and Reality, Market and State, Contradictions and Dilemmas Revisited*. London: Harvester Wheatsheaf.
- Kornai, J. (1992) *The Socialist System The Political Economy of Communism*. Oxford: Oxford University Press.
- Kornai, J. and Mattis, A.(1990) 'The Bureaucratic Redistribution of the Firm's Profit' in J. Kornai, (ed.) *Vision and Reality, Market and State, Contradictions and Dilemmas Revisited*. London: Harvester Wheatsheaf.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. (1998) 'Law and Finance.' *Journal of Political Economy*. 106 (6): 1113-1155.
- Levine, Ross (1997) 'Financial Development and Economic Growth: Vies and Agenda.' *Journal of Economic Literature* 35: 688-726.
- Loc, T. D., Lanjouw, G. and Lensink, R.(2006) 'The Impact of Privatization on Firm Performance in A Transition Economy: The Case of Vietnam.' *Economic of Transition* 14(2): 349-389.
- Lorch, Klaus (1991) 'Privatization through private sale: The Bangladesh Textile Industry' in Ravi Ramamurti and Raymond Vernon, (eds.), *Privatization and Control of State Owned Enterprises*, Washington DC: The World Bank, 1991.

- Mahmood, S. A (1989) 'The Performance of Selected Public Sector Industries in Bangladesh: 1972-85,' unpublished D. Phil. Thesis, University of Oxford.
- Manzetti, Luigi. (1993) 'The Political Economy of Privatization through Divestiture in Lesser Developed Economies.' *Comparative Politics* 25(4): 429-454 in Vandusky, J. A. (2005) 'Competing Theories? Re-thinking the Use of Proxy Variables in the Privatization Literature' in <http://www.binghamton.edu/polsci/graduates/vandusky.pdf> Accessed on 27.08.2006
- Martín, S. and Parker, D. (1995) 'Privatization and Economic Performance throughout the UK Business Cycle,' *Managerial and Decision Economics* 16: 225-37.
- Megginson, W. L., Nash R.C. and Van Randenborgh M. (1994) 'The Financial and Operating Performance of Newly Privatized Firms: An International Empirical Analysis.' *The Journal of Finance* 49(2).
- Muhith, A. M. A. (1993) 'Privatization in Bangladesh' in V. V. Ramanadham (ed.), *Constraints and Impacts of Privatization*. London and New York: Routledge, 1993.
- Newberry, D. and Pollitt, M. G. (1997) 'The Restructuring and Privatization of Britain's CEGN – Was it worth it?' *Journal of Industrial Economics* 45: 269-303.
- Omran, M. (Undated) 'The Performance of State-Owned Enterprises and Newly Privatized Firms: Does Privatization Really Matter?' in [http://www.gdnet.org/pdf2/gdn\\_library/awards\\_medals/2003/rm/market\\_state/omran\\_paper.pdf](http://www.gdnet.org/pdf2/gdn_library/awards_medals/2003/rm/market_state/omran_paper.pdf) Accessed on 21.6.2006
- Papanek, Hanna (1969) 'Entrepreneurs in East Pakistan'. South Asian Series Research Paper No. 16. Malaysia: Asian Studies Centre in Rehman Sobhan, (ed.), *Privatisation in Bangladesh: An Agenda in Search of a Policy*. Dhaka: Centre for Policy Dialogue and The University Press Limited, 2005.
- Price-Waterhouse, (1989) 'Privatization: Learning The Lessons From The U. K. Experience' (London, U.K.). in Errunza, V. R. and Mazumdar, S. C. (2000). 'Privatization: A Theoretical Framework'. *Journal of International Financial Markets, Institutions and Money*. 11(3), September, 2001; 339- 362.
- Ramamurti, Ravi. (1996) 'Telephone Privatization in a Large Country: Mexico,' in Ravi Ramamurti, (ed.), *Privatizing Monopolies, Lessons from the Telecommunications and Transport Sectors in Latin America*. Baltimore: John Hopkins University Press.
- Ramamurti, R. (1997) 'Testing the Limits of Privatization: Argentine Railroads' World Development Report No.25: 1973-1993.

- Rowthorn, B. and Chang, H. J. (1993) 'Public Ownership and the Theory of the State' in T.C.A.C. Pitellis (ed.) *The Political Economy of Privatization*, pp. 54-70. London: Routledge
- Cuong, N.M. (2004) *Does Ownership Matter To Enterprise Performance? A Comparative Study of Private and State Enterprises in Vietnam's Textile-Garment Industry*. Maastricht: Shaker Publishing BV.
- Ruiz-Mier, F. Mauricio Garrón B, Machicado, Carlos G. and Capra, K. (2002) 'Privatization in Bolivia: The impact on Firm Performance' in <<http://www.gdnet.org/fulltext/garron.pdf>> Accessed on 21.6.2006
- Sappington, D.E.M. and Stiglitz, J.E. (1987) 'Privatization, Information and Incentives.' *Journal of Policy Analysis and Management* 6(4), pp. 567-82.
- Shleifer, A. and Vishny, R (1996) 'A theory of privatization.' *Economics Journal*, No. 106.
- Sobhan, R. (1982) *The Crisis of External Dependence: The Political Economy of Foreign Aid to Bangladesh*. London: Zed.
- Sobhan, R. (1991) *The Decade of Stagnation: The State of the Bangladesh Economy in the Late 1980s*. Dhaka: University Press Limited.
- Sobhan, R. (2005) *Privatisation in Bangladesh: An Agenda in Search of a Policy*. Dhaka: Centre for Policy Dialogue and The University Press Limited.
- Sobhan, R. and Ahmad, M. (1980) *Public Enterprise in an Intermediate Regime: A Study in the Political Economy of Bangladesh*. Bangladesh Institute of Development Studies, Dhaka.
- Sobhan, R. and A. Ahsan (1984) 'Disinvestment and Denationalisation: Profile and Performance.' Research Report New Series no 38. Dhaka: Bangladesh Institute of Development Studies.
- Stano, M. (1975) 'Executive Ownership Interests and Corporate Performance.' *Southern Economic Journal* 42: 272-78.
- Stiglitz, J. E. (1994) *Whither Socialism?* London: The MIT
- The Bangladesh Observer. January, 1997; February, 2003.
- The Daily Inqilab. August 10, 2006.
- The Daily Star, June 14, 1996; Volume 5, number 540, Saturday 03 December, 2005
- Uddin, S. N. and T. M. Hopper (2001) 'A Bangladeshi Soap Opera: Privatisation, Accounting, and Regimes of Control in a Less Developed Country', *Accounting, Organizations and Society* 26(7/8): 643-72.

- Uddin, S. N. and T. M. Hopper (2003) 'Accounting for Privatisation in Bangladesh: Testing World Bank Claims', *Critical Perspectives on Accounting* 14: 739-74.
- Vickers, J. and Yarrow. G. (1988) *Privatization: An Economic Analysis*. Cambridge, Massachusetts: MIT Press.
- Walder, A.G. (1989) 'Factory and Manager in an Era of Reform.' *China Quarterly* 118 in Cuong, N.M. (2004) *Does Ownership Matter To Enterprise Performance? A Comparative Study of Private and State Enterprises in Vietnam's Textile-Garment Industry*. Maastricht: Shaker Publishing BV.
- Wikipedia Online Dictionary in <<http://en.wikipedia.org/wiki/jute>> and <<http://en.wikipedia.org/wiki/privatization>> . Accessed on 2.9.2006.
- World Bank (1993) 'Bangladesh Implementing Structural Reform'. Report no 11569-BD. Washington, DC: The World Bank.
- World Bank (1995) *Bangladesh: Privatization and Adjustment*. Dhaka: University Press Limited.
- World Bank (1996a) *Bangladesh Government that Works Reforming the Public Sector*. Dhaka: The University Press Limited.
- World Bank (1996b) 'Annual Economic Update: Recent Economic Developments and Medium- Term Reform Agenda'. Country Development I (July). Washington, DC: The World Bank.
- World Bank (1996c) 'Bangladesh: An Agenda for Action'. World Bank South Asia Department I. Washington, DC: The World Bank.
- World Bank (1997) 'Privatization Experience in Bangladesh 1991-1996'. Dhaka: The World Bank.
- Yarrow, G. (1986) 'Privatization in Theory and Practice.' *Economic Policy* 2: 324-64.
- Yifu, J. and Tan, G. (1999) 'Policy Burdens, Accountability and Soft Budget Constraint,' paper presented at the International Conference on The Soft Budget Constraint. New York: January 3-5. in Cuong, N.M. (2004) *Does Ownership Matter To Enterprise Performance? A Comparative Study of Private and State Enterprises in Vietnam's Textile-Garment Industry*. Maastricht: Shaker Publishing BV.



## ANNEXURE

Annex A:

Formula for Chi-Square Test is -

$$\chi^2 = \sum_i \sum_j \frac{(A_{ij} - E_{ij})^2}{E_{ij}}$$

Where  $A_{ij}$  is the Actual Frequency in row  $i$  and column  $j$  and  $E_{ij}$  is the Expected Frequency in row  $i$  and column  $j$ .

Formula for t-statistics is -

$$\frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 1} \cdot \left(\frac{n_1 + n_2}{n_1 n_2}\right)}}$$

Annex B: Table-A1: Chi-Square Test Results (1985 to 1989)

	Sales Efficiency		Production Efficiency		Income Efficiency	
	SOEs	Pvt.	SOEs	Pvt.	SOEs	Pvt.
No. of Classes/Grades	3	3	3	3	3	3
No. of Observed Frequencies	5	5	5	5	5	5
Degrees of Freedom	2	2	2	2	2	2
Level of Significance	5%		5%		5%	
Calculated Chi-Square	0.12		0.37		0.37	
Critical Value (at 5%)	5.99		5.99		5.99	