An Internship Report

On

The Performance Analysis of "Dhaka Electric Supply Company Limited (DESCO)"

Submitted To:
Department of Business Administration
Faculty of Business Studies
Sonargaon University(SU)
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Submitted By:
Saleh Kazbin
ID: EMBA2102023005
Program: EMBA
Major: Finance
Department of Business Administration
Faculty of Business studies
Sonargaon University (SU)
Dhaka-1215

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Supervised By:

Md. Shahbub Alam
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Submitted for the Partial Fulfilment of the Requirements for the Degree the Executive Masters of Business Administration

Date of Submission: September 05,2022

Letter of Transmittal

5 September, 2022

Md. Shahbub Alam

Lecturer

Department of Business Administration

Sonargaon University(SU)

Dhaka-1215

Subject: Submission of Internship Report.

Dear Sir,

It is my great pleasure to submit the report on performance analysis of DESCO as a part of my internship program. I have closely observed different departments operations of the DESCO in my internship period.

I enjoyed preparing this report, which enriched my practical knowledge of the theoretical concept. I tried to reflect the practical operational aspects of the company, which is complementary to the theoretical lessons. I am very much glad that you have given me the opportunity to prepare this report for you and hope that this report will meet the standards of your judgment.

Sincerely yours,

Saleh Kazbin

ID: EMBA2102023005

Program: EMBA

Major: Finance

Department of Business Administration

Faculty of Business studies

Sonargaon University (SU)

Dhaka-1215

Declaration

I, Saleh Kazbin, hereby declare that the report of internship titled “The Performance analysis of DESCO” is prepared by me after completion of three months’ work in DESCO.

I also would like to confirm that, the report is prepared exclusively for academic purpose not for any other purposes.

……

Saleh Kazbin

ID: EMBA2102023005

Program: EMBA

Major: Finance

Department of Business Administration

Faculty of Business studies

Sonargaon University (SU)

Dhaka-1215

Supervisor's Certificate

This is to certify that the internship report on "Performance analysis of Dhaka Electric Supply Company Limited(DESCO)" for the degree of Executive Masters of Business Administration (EMBA) major in Finance from Sonargoan University carried out by Saleh Kazbin, ID No.-EMBA2102023005, under my supervision. I have fully monitored his effort in the process of completing this report.

I, hereby, acknowledge his work & wish him all the success.

……

Md. Shahbub Alam

Lecturer

Department of Business Administration

Sonargaon University(SU)

Dhaka-1215

Acknowledgement

At first, I want to express my thanks to the Almighty Allah for giving me the chance to complete the internship report.

Then I would like to express my sincere gratitude and cordial thanks to our most respected teacher Md. Shahbub Alam, Lecturer, Department of Business Administration, Sonargaon University(SU), Dhaka-1215 for his constant supervision and valuable instruction and helpful advice during the internship and report writing. His direction and necessary comments, criticism and kind patience greatly helped me to carry on the task of preparing the report. It would never be possible to give it final shape without his encouragement.

Moreover, I am very much grateful to the officials of DESCO. Making of this report would be difficult without the cooperation of some officials of DESCO. So, my heartiest appreciation goes to those officials.

Finally, I would like to thanks Sonargoan University, Dhaka and its Business Administration Department for giving me an opportunity to complete my EMBA degree and give me a scope to gather practical experience and enrich my knowledge.

Executive Summary

Finance department of a company played a vital rule on its success specially in making investing and financing decision. The ratio analysis act as source of needed information towards making those decisions.

Our purpose of this study is to analyse financial statement of a company that is listed in Dhaka or Chittagong stock exchange in order to find out the limitations and providing reliable recommendation.

We conducted our study on Dhaka Electric Supply Company Limited (DESCO) that is listed in Dhaka stock exchange. All the data study includes collected from secondary sources those are mentioned in the reference section. We also study other competitive firms operating in fuel and power industry. On this report, we provide graphical presentation of financial data to make it easily understandable. We also present the overall scenario of Bangladesh fuel and power industry as well as the business environment in our country and its impact on this industry.

During our study, we tried to give our best effort to find out the limitations and risk associated with management dilemma of Dhaka Electric Supply Company Limited. And our effort succeeds to find out that, the company is losing its net income in current year compare with its previous year that's declining net profit margin and assert turnover. We also fund that the rate of debt against its assets is remarkable that may lead the company towards bankruptcy.

In order to resolve management dilemma, we recommend being more conscious about effective and efficient management to minimize its exchange fluctuation loss.

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Introduction

This report will address the overall financial situation of “DESCO ELECTRICITY SUPPLY CO.LTD (DESCO).” to facilitate various parties related with this company. It will also highlight the performance with comparison of its competitors in “power industry”.

We divided our study in six parts. In which each part include separate concern. Part one present the overview of the company, here we tried to show the background and history of incorporation of the company. Part two include overview of the annual report with the summary and highlights of financial statements and changes in particulars. Part three showed the business environment in Bangladesh and its impact on fuel and power sector. Part four exhibit the overview of power industry with the financial data and its current situation.

The most crucial part in this report is part five and part six. In these parts, we analyse the financial statements and try to show the performance of the company compare with its competitors. Finally, in part six we exhibit our findings and recommendation regarding with the problem statement.

We hope that our findings will be helpful for the board of directors of DESCO Ltd. to make proper investment and financing decision.

Statement Of The Problem

Dhaka Electricity Supply Company (DESCO) is planning to expand their operation by establishing new service plant with the consideration of large consumer demand. They also plan to collect fund for their projected plant by offering share in capital market. However, they do not know what will be the response from investors after publish the annual report of 2021.

Though electricity is a key ingredient for all types of production and has a large market potentiality with big demand, DESCO ltd. is **losing their profit** despite of having a large volume of revenue.

Now due to losing of their profit with having large demand of electricity the board of directors are in big dilemma about **whether to invest in new plant by offering share in capital market or not.**

Objective of The Study

Our principal objective is to provide reliable recommendation in order to overcome the management dilemma about establishment of new plant and financing for the projected plant after studying all financial and managerial data of DESCO ltd.

Part – 01

OVERVIEW OF THE COMPANY

Background and History of incorporation

Dhaka electric supply company ltd.(DESCO) was created as a distribution company in November 1996 under the companies act 1994 as a public limited company with an authorized capital of Tk.500 billion . However, the operational activities of DESCO ltd. at the field level commenced on September 24,1998 with the taking over of electric distribution system of Murmur area from erstwhile Dhaka electric supply authority(DESA) with a consumer strength of 71,161 and a load demand of 90 MW. In the subsequent years of successful operation and performance, the operational area of DESCO was expanded through inclusion of Gulshan circle in April,2003 and Tongi municipality area in march ,2007. The total consumer strength stands at 4, 49,063 as of 30th June 2021 with a maximum load demand of 640 MW as on that

date.

Products and services

Dhaka Electric Supply Company (DESCO) ltd. is an importer and distributer of power (electricity) .the Company mainly purchase power from Bangladesh power development board (BPDB) then sell this power to residential and industrial users. DESCO distributes the major part of electricity of the capital city of Bangladesh. It is responsible to distribute 622 MW of power in approximately 220 sqKm Area of Dhaka.

Review of the literature

Liquidity ratio:

A ratio analysis that provides a quick easy to use measure of liquidity by relating the amount of cash and other current assets to the firm's current obligations. Two commonly used liquidity ratios are, current ratio and quick ratio.

Current ratio: calculated by dividing current assets of a company by the current liabilities. Current assets normally include cash, accounts receivable and inventories. Current liabilities include accounts payable, short-term notes payable, long-term debt that mature in the current period. **.** ***(Essentials of managerial Finance, Basely and Brigham)***

Current assets = current assets / current liabilities

Quick ratio (Acid test ratio): calculating by subtracting the inventory from current assets, then dividing by the current liabilities.

Quick ratio = current assets – inventory / current liabilities

Asset management ratio:

Asset management ratio measures how effectively the firm is managing its assets. Firms invest in asset to generate revenues in both the current period and in future periods.

Production is affected by the capacity of asset if asset are too low profitable sales might be lost because the firm is unable to produce enough products. **.** ***(Essentials of managerial Finance, Basely and Brigham)***

Inventory turnover ratio: calculated by dividing the cost of goods sold by the inventory. This ratio shows how efficiently a company can manage its inventory. The formula is as follows:

Cost of goods sold /inventory

Day's sales outstanding (DSO): DSO also known as average collection period (ACP), is used to evaluate the firm's ability to collect its credit sales in a timely manner. DSO calculated as follows:

Accounts receivable / average daily sales

Debt management ratio:

Debt ratio: The debt ratio measures the percentage of the firm's assets financed by creditors .it is computed as follows:

Total liabilities / Total assets

Time interest earned ratio: Time interest earned (TIE) ratio calculated by dividing the earnings before interest and taxes by the interest charges.

Earnings before interest and taxes / interest charges

Profitability ratio:

Profitability ratio shows the combined effects of liquidity management, asset management, and debt management on operating result.

Net profit margin: Gives the profit per dollar of sales and calculated by dividing the net profit by the sales. Net profit margin ratio is calculated as follows:

Net profit / sales

Return on total assets: The return on total asset is calculated as follows –

Net income / Total assets

(Essentials of managerial Finance, Basely and Brigham)

Market value Ratio:

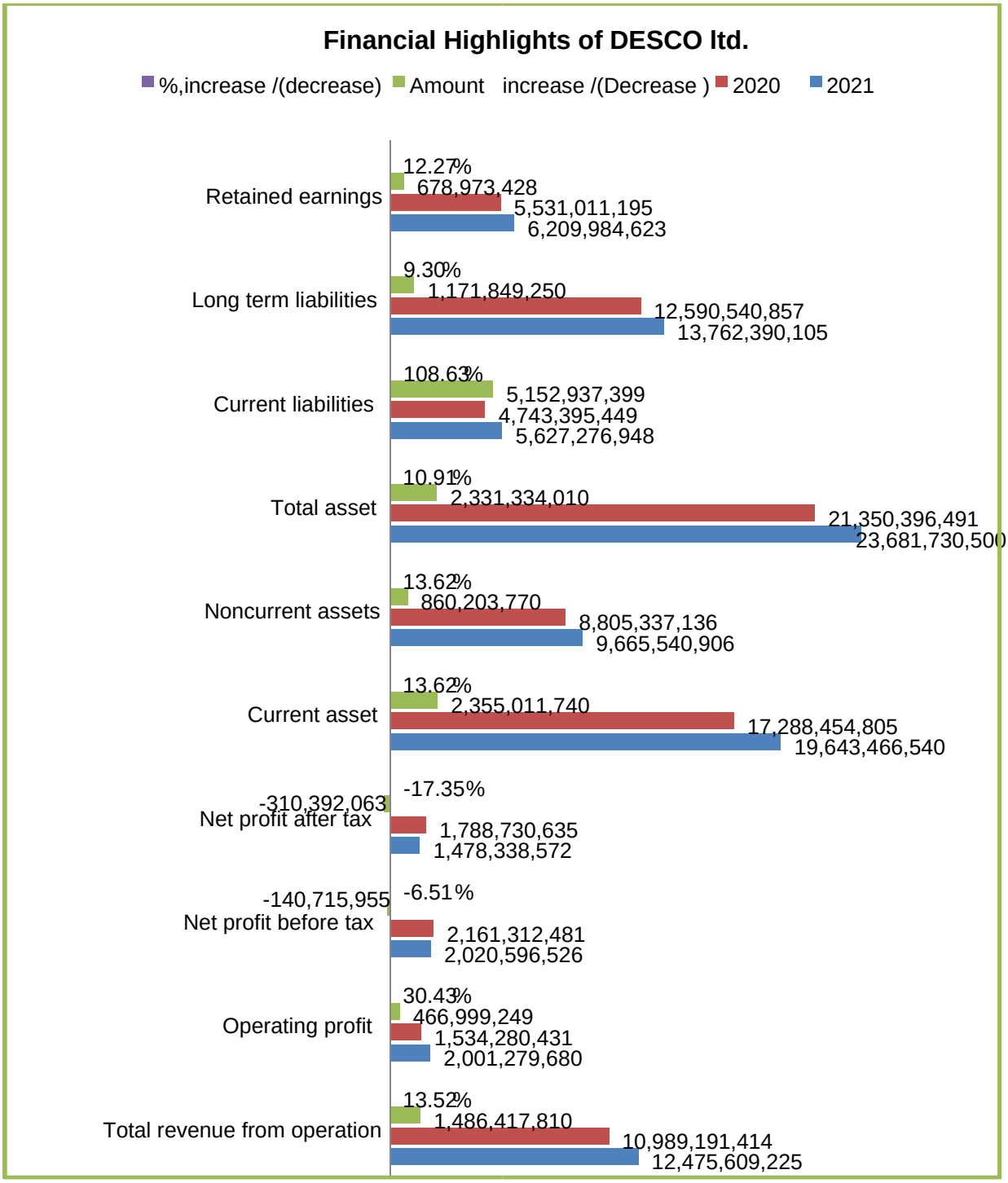
This ratio relates the firm's stock price to its earnings and book value per share. They give management an indication of what investors think of the company's future prospects based on its past performance. If the firm's liquidity, asset management, debt management and profitability ratios are all good, then its market value ratio would be high and its stock price probably will be high.

Price earnings ratio: The price earnings ratio shows how much investor is willing to pay per dollar of reported profits. To compute the companies' price earnings ratio, we need to know the firms earning per share (EPS).

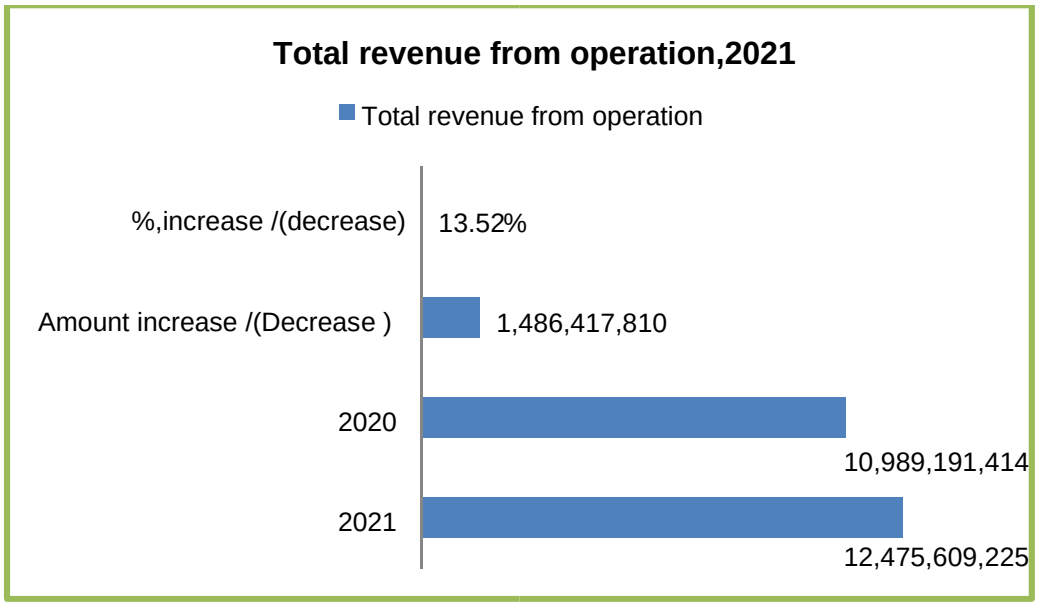
Earnings per share = Net income available to common stockholders /Number of common shares outstanding.

Price earnings ratio (PE) = Market price per share / Earning per share. **.** ***(Essentials of managerial Finance, Basely and Brigham)***

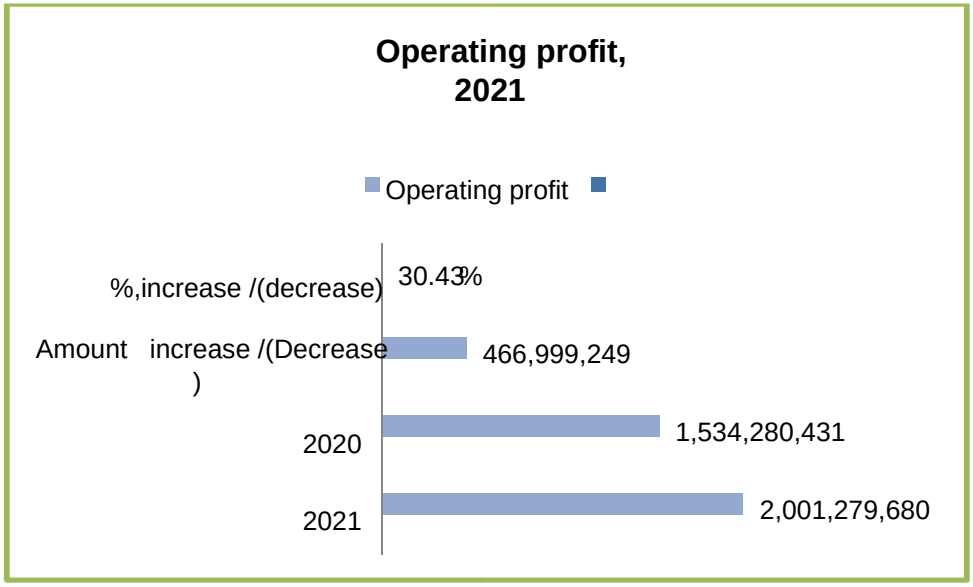
Part – 02
OVERVIEW OF THE ANNUAL REPPORT
Financial Highlights



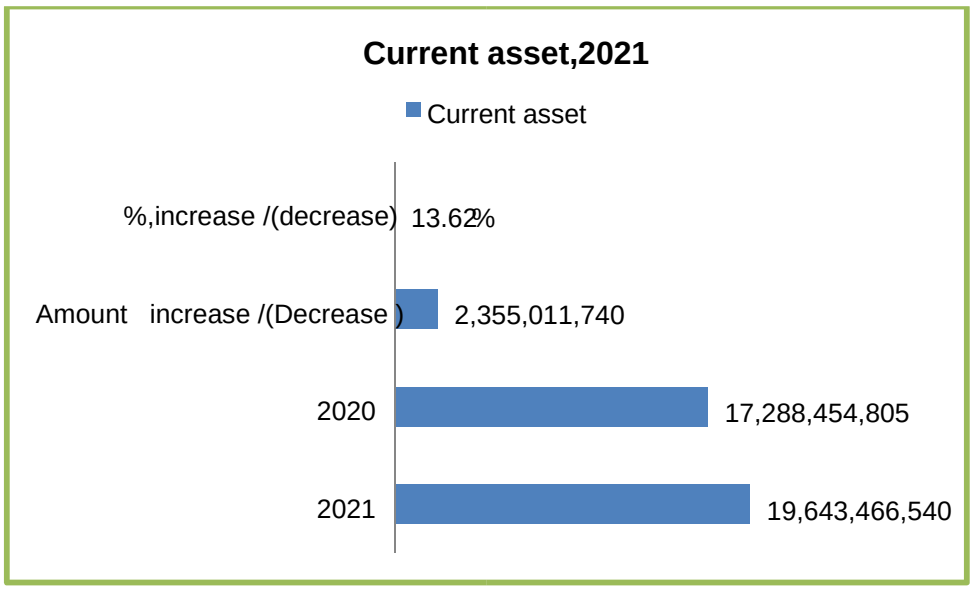
Source: All data have been collected from the annual report of DESCO ltd.2021.



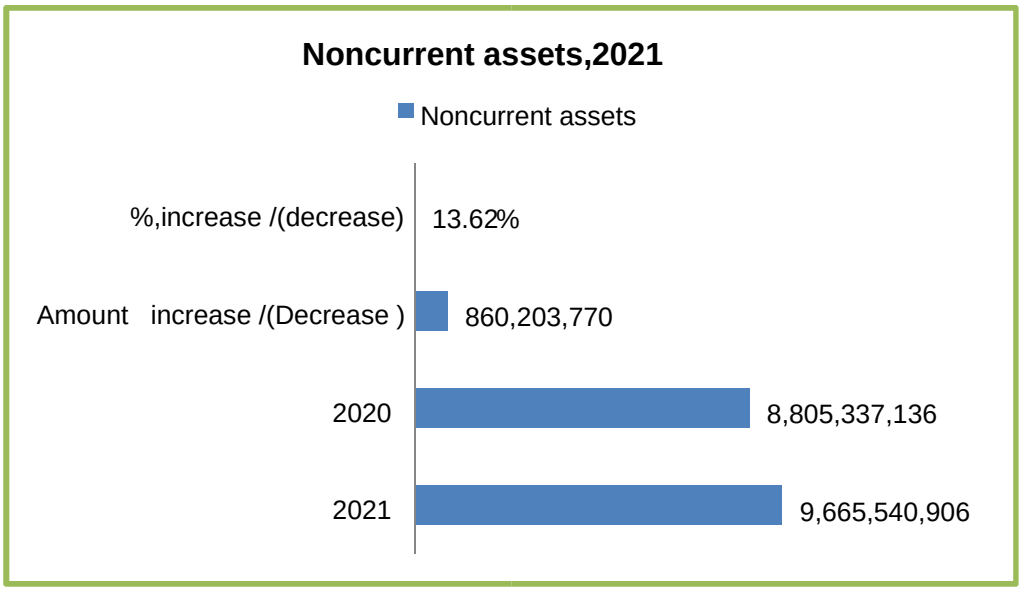
Total revenue from operation has increased by 13.52 percent in 2021 compared with 2020. The statement of comprehensive income shows that both energy sale and other operating revenue have increased in 2021 that leads to the increase of total revenue from operation.



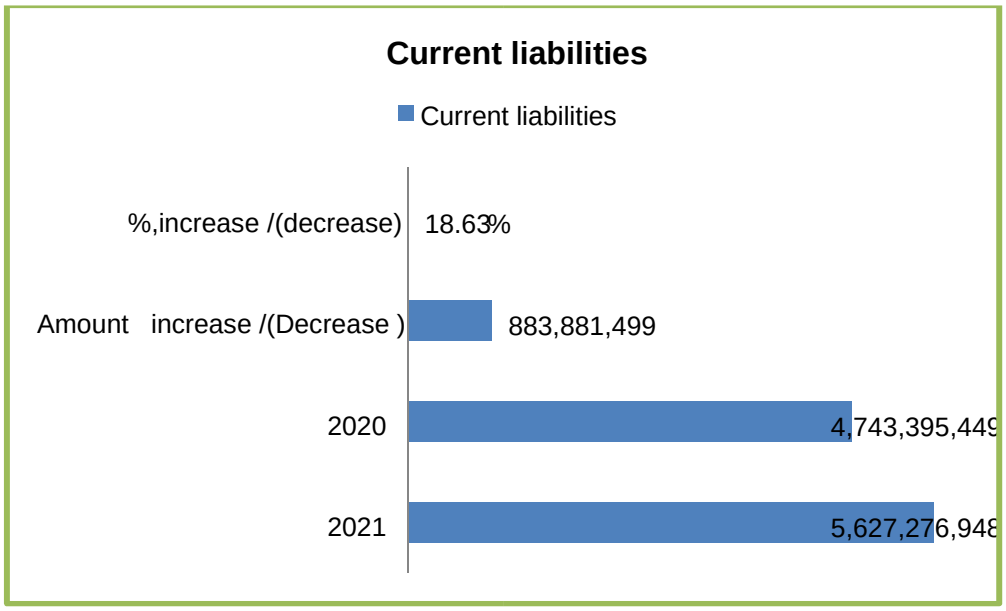
Operating profit in 2021 has increased by 30.43 percent, which is the amount of 466,999,249. According to the comprehensive income statement of DESCO ltd, operating profit increased due to the increase of Gross margin in 2021.



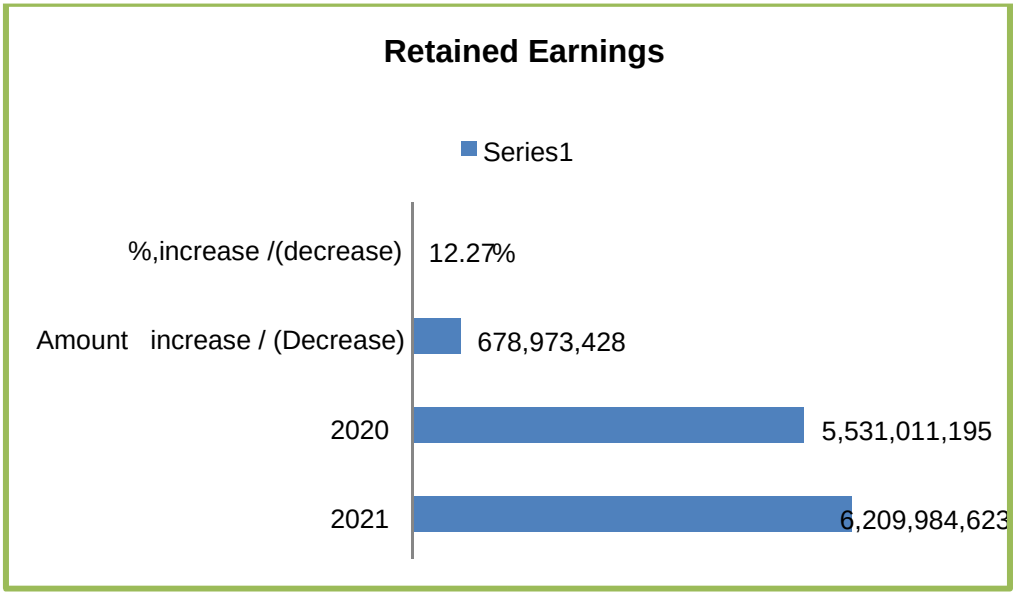
Total current asset of DESCO ltd. has increased by 13.62 percent in 2021. The income statement of DESCO ltd. indicate remarkable change of accounts receivable and cash at bank that mainly leads to increase total current assets.



Noncurrent assets increased by 13.62 percent in 2021, these changes occurred due to the increase of working capital in 2021 than 2020.



Current liability increased by 18.36 percent in 2021. Accounts payable, accrued interest on loan increase leads to go up the current liability.



The above graph shows the raise of retained earnings by 12.27 percent in 2021. That is the amount of 678,973,428.

FINANCIAL STATEMENTS

Statement of Financial position

I. *As at 30 June 2021 (Source: Annual report 2021 of DESCO ltd.)*

Particulars	Note	30 June 2021	30June 2020
Noncurrent asset			
property , plant ,equipment	2	TK.8,352,974,008	TK.8,440,892,392
capital work in progress	3	1,312,565,899	335,313,744
investment in share	4	1,000	29,131,000
		9,665,540,907	**8,805,337,136**
current asset			
store and spares (inventory)	5	4,026,231,885	4,671,791,624
Accounts receivable	6	2,703,257,156	2,375,140,475
advances and deposits	7	130,770,356	134,659,063
Advance income tax	8	399,469,804	438,322,022
Cash and bank balances	9	12,383,737,339	9,668,541,662
		19,643,466,540	**17,288,454,805**
current liabilities			
Accounts payable	10	2,103,174,342	1,865,308,079
creditors for goods /works	11	832,341,678	1,028,992,195
creditors for other finance	12	1,146,976,859	747,920,808
creditors for expenses	13	119,945,956	79,095,756
current maturity of long-term loans	14	363,406,475	257,297,761
accrued interest on loans	15	516,632,143	359,487
provision for income tax	16	544,799,496	405,311,657
		5,627,276,948	**4,743,395,449**
		14,016,189,593	12,545,059,356
Net current asst		**23,681,730,500**	**21,350,396,491**
sources of funds			
capital and reserves			
share capital	17	2,082,215,772	1,601,704,440
share money deposit	18	75,000,000	75,000,000
GOB equity	19	1,552,140,000	1,552,140,000
proposed dividend	38		
Retained earnings	20	6,209,984,,623	5,531,011,,195
Equity		**3,709,355,772**	**3228844440**
Long-term liabilities			
Loan from ADB /GOB	21	7,516,987,500	6,482,508,563
Differed tax liability	35.2	1,254,797,127	1,213,835,706
Due to DESA	22	4,039,671,539	4,039,671,539
Consumer security deposit	23	950,933,940	854,525,049
		13,762,390,106	**12,590,540,857**
		23,681,730,500	**21,350,396,491**

STATEMENT OF COMPREHANSIVE INCOME

For the year ended 30 June 2021 *(Source: Annual report 2021 of DESCO ltd)*

Particulars	Notes	2020-2021	2019-2020
Operating revenue			
Energy sales (Net of vat)	24	TK.12,290,781,425	TK.10,810,974,22
Other operating revenue	25	184,827,800	178,217,18
Total revenue from operation		**12,475,609,225**	**10,989,191,41**
cost of energy sales			
energy purchase (including wheeling charge)	26	8,801,828,794	7,845,646,91
operating expenses	27	217,830,914	243,981,21
Depreciation (operating)	34	659,587,005	566,749,95
		9,679,246,713	**8,656,378,08**
Gross margin		**2,796,362,512**	**2,332,813,32**
cost and expenditure			
Administrative expenses	28	161,576,317	126,159,97
employee expenses	29	575,014,500	619,018,52
bad debt provision	6.2	13,154,539	12,007,26
Depreciation (non operating)	34	45,337,476	41,347,12
		795,082,832	798,532,89
Operating profit		**2,001,279,680**	**1,534,280,43**
Non operating income /(expenses interest income)	30	**781,098,894**	**872,083,49**
interest expenses	31	-277,851,267	-221,200,04
Exchange fluctuation (loss)	32	**-516,364,173**	**-32,193,48**
Appreciation /(diminution) in value of investment	4.1	0	5,738,80
gain on sales of investment	4.1	31,136,600	
Miscellaneous income	33	1,296,793	2,603,28
Non operating income(Net)		**19,316,847**	**627,032,05**
Net profit before tax		**2,020,596,526**	**2,161,312,48**
Income tax			
current tax provision	35.1	-501,296,533	-149,037,371
deferred tax provision	35.2	-40,961,421	-223,544,475
Net profit after tax		**1,478,338,572**	**1,788,730,635**
Basic earnings per share	**36**	**71**	**86**

STATEMENT OF CHANGES IN EQUITY

For the year ended 30 Jun2021

Particulars	Notes	Share capital	share money Deposit	GOB Equity	Reserve & Surplus
Balance at July 20		1,601,704,440	75,000,000	1,552,140,000	5,531,011,195
GOB equity		0	0	0	0
Net profit for the year		0	0	0	1,478,338,572
priors years adjustment	37	0	0	0	-78,598,146
proposed dividend	38	0	0	0	-480,511,332
stock dividend paid		480,511,323	0	0	-480,511,332
cash dividend paid		0	0	0	-240,255,666
Balance at 30 June 20 1		**2,082,215,763**	**75,000,000**	**0**	**5,729,473,291**

STATEMENT OF CASH FLOWS

For the year ended 30 June 2021

Particulars	2020-2021	2019-2020
A. CASH FLOW FROM OPERATING ACTIVITIES		
Received from Energy Sales	12,278,991,231	10,736,499,500
Collection of Govt. Duty, VAT & Tax	595,447,691	589,913,372
Received from Other Operating & Non Operating Activities	312,896,368	319,559,818
Received against Financial Income	673,080,257	803,683,195
Payment for Energy Purchase	(8,571,116,103)	(7,842,804,434)
Payment for Employee Expenses	(575,013,288)	(619,900,904)
Payment for Administrative & Other Expenses	(142,784,931)	(124,787,322)
Payment for Interest on Long Term Loan	(120,706,318)	(195,862,119)
Income Tax Paid	(322,956,476)	(431,843,705)
Payment for Govt. Duty, Vat & Tax	(692,723,553)	(774,193,750)
Net cash inflow from operating activities	**3,435,114,878**	**2,460,263,651**
B. CASH FLOW FROM INVESTING ACTIVITIES		
Acquisition of Property & Plant	(436,846,655)	(193,473,710)
Acquisition of Stores & Equipment	(911,155,593)	(2,096,556,826)
Net cash used in investing activities:	**(1,348,002,248)**	**(2,290,030,536)**
C. CASH FLOW FROM FINANCING ACTIVITIES		
Long Term Loan received	935,249,683	1,445,003,853
Dividend Paid	(97,205,597)	(325,848,459)
Long Term Loan Paid	(311,008,206)	(235,190,514)
Consumer Security Deposits Received	101,047,208	120,511,119
Net cash inflow from financing activities	**628,083,087**	**1,004,475,999**
D. Cash & Cash equivalents increase /(decrease) during the year	2,715,195,718	1,177,239,472
E. Cash & Cash equivalents at the beginning of the year	9,668,541,622	8,491,302,150
F. Cash & Cash equivalents at the ending of the year	**12,383,737,339**	**9,668,541,622**

Source: all data collected from "annual report 2021" of DESCO ltd.

SUMMARY OF THE FINANCIAL DATA OF DESCO LTD.

NO.	PARTICULARS	2021	2020	Amount increase /(Decrease)	%,increase /(decrease)
01.	Total revenue from operation	12,475,609,225	10,989,191,414	1,486,417,810	**13.52%**
02.	Operating profit	2,001,279,680	1,534,280,431	466,999,249	**30.43%**
03.	Net profit before tax	2,020,596,526	2,161,312,481	-140,715,955	**-6.51%**
04.	Net profit after tax	1,478,338,572	1,788,730,635	-310,392,063	**-17.35**
05.	Current asset	19,643,466,540	17,288,454,805	2,355,011,740	**13.62%**
06.	Noncurrent assets	9,665,540,906	8,805,337,136	860,203,770	**13.62%**
07.	Total asset	23,681,730,500	21,350,396,491	2,331,334,010	**10.91%**
08.	Current liabilities	5,627,276,948	4,743,395,449	883,881,499	**108.63%**
09.	Long term liabilities	13,762,390,105	12,590,540,857	1,171,849,250	**9.30%**
10.	Retained earnings	6,209,984,623	5,531,011,195	678,973,428	**12.27%**

Source: all data collected from "annual report 2021" of DESCO ltd.

Figure: Trend analysis of major financial operation.

Management Responsibilities for the financial statements

Section 181 of the company's act 1994 requires directors to ensure that the company keeps proper books of accounts of all transactions and prepare financial statements that give a true and fair view of the state of the company's affairs and of the profit for the year. The directors are also require to ensure that financial statements have been prepared and presented in accordance with the requirements of the International accounting standards / International financial reporting standards as adopted by the Institute of chartered accountants of Bangladesh and provide the information required by the company's act 1994,securities and exchange ordinance 1996, security and exchange commission rules 1987 and the regulations of the Dhaka /Chittagong stock exchanges. They are also responsible for taking reasonable measures to safeguard the assets of the company and in that context to established appropriate system of internal control with a view to the prevention and detection of any fraud and other irregularities.

The auditors and independent director

In compliance with security and exchange commission (SEC) regulation the company has formed a four-member audit committee of the board headed by an independent director, Mr. Fazlul Hague ,Member

(finance),Bangladesh power development board (BPDB). The others member of the committee is ,Mr.

Foizahmed, Join secretary (admin) power division, Ministry of power, Energy and mineral resources, Begum Salma Bente Kadir , Joint secretary , legislative and parliamentary affairs division , Ministry of law , justice & parliamentary affairs and Mr. Kudret E Khuda ,FCA,FCMA, Director (Procurement ,finance and accounts),DESCO.

Part – 3

BUSINESS ENVIRONMENT IN BANGLADEH AND ITS IMPACT ON POWER INDUSTRY

Organization does not exist in vacuum; it has to operate in a dynamic environment. The terms environment does not merely refer ecology it also refers some external forces. When we talk about business environment of a country, we think of some phenomena those are directly and indirectly related with the function of business organization. Business environment generally is the combination of some factors that forces its operation such as political, social, economic and legal as well as technological situation .The success of business in a country totally depends on its environmental flexibility. Here we tried to show the real scenario of Bangladesh business environment and its effect on this industry.

Lan Brooks and Jamie Weatherston present a model of Business Environment on their "The Business environment challenges and changes"

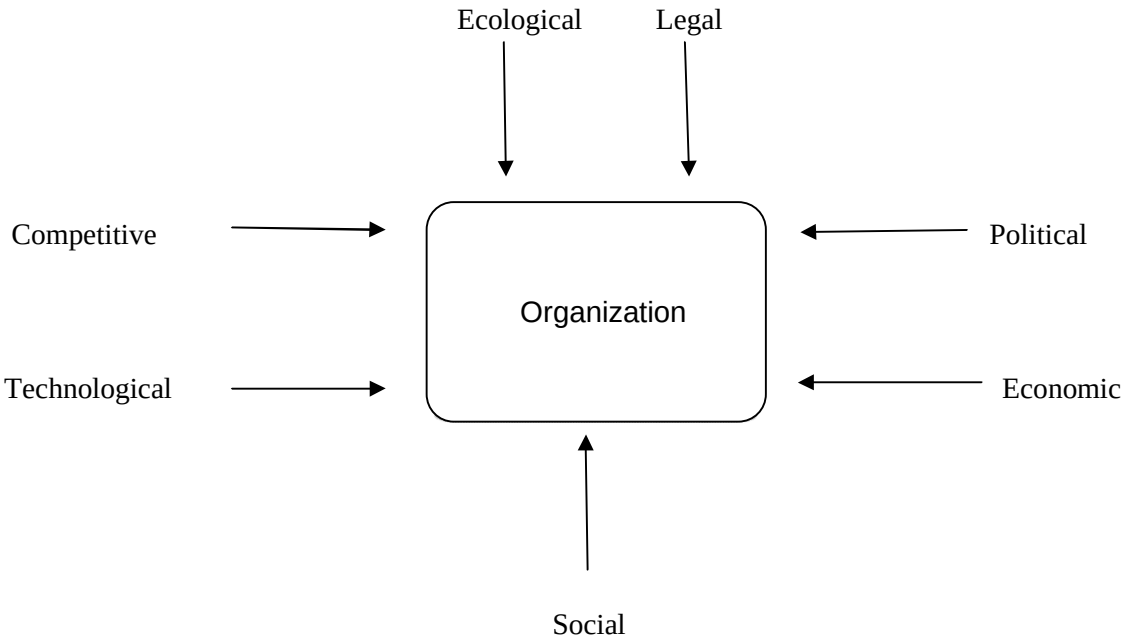


Fig: LEPESTC.

Legal: The legal body mainly operates the function of rules and regulation. It dictates how a company will operate in an industry. The legal body of power industry in Bangladesh is "Bangladesh power Development Board "(BPDB), under the ministry of Bangladesh power and energy responsible for formulating policy and maintaining the function of this industry in order to ensure the better service for consumer.

Political: After the liberation war of 1971, Bangladesh has experienced various rules. However, according to the constitution of Bangladesh 1972, Bangladesh is a democratic country. Main two political parties are "Bangladesh Awami League"and"Bangladesh National party". There are some other registered political parties contributes in national election and policymaking process. Political instability is one of the major barriers in progress of business in Bangladesh. Corruption in administration and system loss is another challenge on the progress of electricity sector in Bangladesh.

Economic: Bangladesh is an open market oriented economic country mainly based on agriculture, industry and service sector. The economic growth of Bangladesh is mostly depending on electricity. After the liberation war in 1971 Bangladesh was an agricultural country but over time its moving on industrial and service sector.

Social: Majority of the people is Muslim here, and until now believes in collectivism rather than individualism family structure. Thus, consumption decision depends on the head of the family.

Technological: Technological development is not so remarkable in Bangladesh. We mainly import technology from developed country to promote our production. Japan, germen, Singapore, China is the major technology exporter in this region.

Competitive: The competitive environment of power sector in Bangladesh is flexible. The presence of private firms in this sector is not so identifiable. Bangladesh government is now taking steps to encourage private investors in this sector

Part -04
OVERVIEW OF THE INDUSTRY

Industry Background

At the time of partition of Indo-Pak sub-continent, in the year 1947 when the British colonial rulers left, power generation and distribution of this part of the country were in the hands of some private companies. The power supply to then 17 provincial districts was within the township in a limited way. The generation voltage was 400 volts. Power used to be supplied to most of the districts during night time only. Only exception was Dhaka City where power used to be supplied by two 1500 kW generators and the generation voltage was 6600 volts and this was the highest supply voltage. There was no long-distance transmission line. Besides power used to be generating by some industries (tea, sugar and textiles) and railway workshops. Dhakeswari Cotton Mills, Pahartali Railway workshop, Saidpur Railway workshop and Sugar Mills were amongst them. In aggregate, the generation capacity of the country was 21 MW. The generation capacity of the power utility companies together was only 7 (seven) MW and there was no transmission system.

In 1948, Electricity Directorate was created in order to plan and improve power supply situation. In 1959, Water and Power Development Authority (WAPDA) was created and the power sector really started working satisfactorily. In 1960, Electricity Directorate was merged with WAPDA. The basic philosophy was to give more autonomy to an organization for development of this basic infrastructure. At that time relatively higher capacity plants were built at Siddhirganj, Chittagong and Khulna, (highest plant size was only 10 MW Steam Turbine at Siddirganj). At the same time Kaptai dam was under construction under Irrigation department. Unit size of Kaptai was 40 MW, which for that time was considered to be a large power plant. Side by side construction of Dhaka-Chittagong 132 KV transmission line was in progress. Construction of

Kaptai dam and commissioning of Dhaka-Chittagong 132 KV transmission line in the year 1962 may be taken as milestone of power development of this country. In 1972, after the emergence of Bangladesh through a bloody War of Liberation as an independent state, Bangladesh Power Development Board (BPDB) was created as a public sector organization to boost the power sector.

During mid 1970s government emphasized on the rural electrification for achieving a desirable social upliftment in the country. A different approach and a new model were considered for undertaking a comprehensive scheme. Thus, the Government created Rural Electrification Board (REB) in October 1977. Later in 1991 Dhaka Electric Supply Authority (DESA) now DPDC was created to operate and develop distribution system in and around Dhaka (including the metropolitan city) and bring about improvement of customer service, collection of revenue and lessen the administrative burden of BPDB. Public investments and state ownership have been the traditional means to exercise control over the electricity sector. Government regulated the natural monopoly of power supply primarily to protect the consumer's interest. The situation is fast changing. Structural changes are taking place and new corporate characters are emerging. The gradual expansion of the infrastructure has also been justified by the need for realizing social goods relating to rural electrification and low-cost electricity supply to the public.

As on June-2020, in FY 2019-2020, BPDB has total installed capacity of 5823 MW at 88 units (BPDB 3719 MW at 50 Unit and IPP, SIPP & Rental at 38 units) of Power Plants located at different parts of the country. The main fuel used for power generation is indigenous gas. Total 17,079 Gwh gross energy was generated in the public sector power plant under BPDB. In addition, total 11,327 Gwh of energy was purchased by BPDB from Independent Power Producers (IPP, SIPP & Rental) in the private sector. The maximum demand served during peak hours is 4698.5 MW in August 20, 2020. The transmission network is 8465 ckt km long comprising 230, 132 and 66 KV lines. The total numbers of grid sub-stations are 108 and the total capacity is 16,749 MVA as on June-2020.

In FY 2020-11, BPDB had about 12,516 employees of which 2,362 were of supervisory level (holding positions of sub-assistant engineer or higher or equivalent) as on 05/05/2021.

Current scenario of Power Sector

Access of electricity:

Only 47 percent of the total population has access to electricity BPDB is responsible for distribution of electricity in most of urban areas in Bangladesh except Dhaka Metropolitan City and its adjoining areas under DESA and DESCO, areas under West Zone Power Distribution Company Limited (WZPDCL) and some of the rural areas under Rural Electrification Board (REB).

Presently BPDB's distribution network is comprising of 33 KV, 11 kV and 11/0.4 KV lines. Total distribution line in the country is about 2, 09,932 km of which 46,599 km belongs to BPDB and total number of consumers of different category is about 2159897at the end of FY 2021.

Followings of the Distribution Zones of BPDB:

- Chittagong
- Camilla
- Sylhet
- Mymensingh
- Rajshahi
- Rampur

Demand supply gap for electricity:

There is a big gap exist in our electricity demand and supply in Bangladesh. Demand of electricity improves significantly due to improvement of living standard of people, increase of agricultural production, development of industries. Presently the shortage of electricity has estimated between (1500- 1800) megawatts. The following table will show the details of electricity generation.

Table: Present power generation capacity in Bangladesh (FV 2021).

Public sector	MW
BPDB	3344
APSCL	662
EGCB	210
Subtotal -	**4213**
Private sector	
IPPS	1272
SIPPs(BPDB)	99
SIPPS(REB)	226
15 years rental	168
3/5 years rental	1635
Subtotal	**3400**
Total	**7613**

Source: power development board.

Sources of electricity supply:

Electricity supply in Bangladesh comes from both private and public sources. The Bangladesh power development board (BPDB), Ashuganj power station company limited (APSCL) and

electricity generation company Bangladesh (EGCB) are producing electricity in the public sector. On the other hand, through IPP (Independent power producer) and through rental power, electricity produced in the private sector, which is purchased by the government at a fixed rate.

Tariff:

The power development board has sent a proposal to the energy regulator to increase electricity price by tk.0.41 per unit or 11 percent for bulk users. The fuel cost has grown up following the rise in petroleum price in December last year. That is why PDB is planning to adjust the cost. In November last year,

BERC hiked electricity tariff for bulk consumers increased by 14.37 percent to tk.3.74 per kilowatt-hour on February 1. In November last year, BERC hiked Electricity tariff for bulk users by 33.57 percent on an average to reduce mounting losses incurred by the PDB. As a result, bulk tariff went up by 16.79 percent or tk0.47 per unit on an average to reduce mounting losses incurred by the PDB.

State run distribution entities Dhaka power Distribution Company ltd. Dhaka Electric supply company ltd. Rural electrification Board; west zone power distribution Company are the PDB s bulk buyers.

The retail tariff of electricity went up by tk.0.31 per unit from February 1, taking the per unit price to tk.5.02. It came two months after the price per unit soared by 13.24 percent to tk.4.071 from tk. 4.16 on December 1 last year for retail users. The tariff hikes are part of the government move to slash the subsidies for electricity generation.

In the current fiscal year, the government is set to allocate Tk.20, 000 cores in subsidies for the power sector

Source : "The daily Star "Newspaper, Dhaka Wednesday, March 14,2012

Other Operating firms in power sector

There are thirteen firms operating in power sector enlisted in the Dhaka stock exchange (DSE).Among them only five firms are operating on electricity. Others are operating in fuel, gas and oil.

- **Summit power limited** –

  Summit Power Limited (SPL), sponsored by Summit Group, is the first Bangladeshi Independent Power Producer (IPP) in Bangladesh in private sector providing power to national grid. SPL incorporated in Bangladesh on March 30, 1997 as a Private Limited Company. On June 7, 2004, the Company has converted to Public Limited Company under the Companies Act 1994.

- **Power grid company of Bangladesh ltd. –**

  Power Grid Company of Bangladesh Ltd.(PGCB) was created under the restructuring process of Power Sector in Bangladesh with the objective of bringing about commercial environment including increase in efficiency, establishment of accountability and dynamism in accomplishing its objectives. PGCB was incorporated in November 1996 with an authorized capital of Tk.10 billion. It was entrusted with the responsibility to own the national power grid; to operate and expand the same with efficiency. Pursuant to Government decision to transfer transmission assets to PGCB from Bangladesh Power Development Board (BPDB) and Dhaka Electric Supply Authority (DESA), PGCB

completed taking over of all the transmission assets on 31.12.2002 since then, PGCB is operating those efficiently and effectively.

- **GBB power limited** –

GBB power limited is a private electricity generation company who supplies power to the national grid. GBBPL was incorporated in Bangladesh on October 17.2008.The Company has started with the joint venture agreement executed between GBB limited Caledonian powers limited as a private limited company. Later, Caledonian power limited, sponsored shareholder of the company, on November 15, 2006 has transferred 9,000 shares of face value BDT 100 each amounting to BDT 9000,000 GBB limited the holding company at face value. On February 26, 2008, the company was converted into a public limited company under the company's act 1994 with an authorized capital of BDT 1,000 million and paid-up capital of BDT 305 million

- **Barkatullah electro dynamics limited** (BEDL) **:**

Barakatullah Electro Dynamics Limited (BEDL) is a company of local and a group of Non-resident Bangladeshi (NRB) entrepreneur with the foreign partner STEE Co. Ltd. from Thailand. BEDL is the only private sector power generating company developed by a group of NRB investors. This company has incorporated in Bangladesh on 26 June 2007 as a Private Limited Company. On 25 September 2008, the Company has converted to a public limited company under the Company Act 1994. BEDL took part in the tendering process initiated by the Bangladesh Power Development Board (BPDB) and won the bid for implementing, generating, and supplying electricity from a 51 MW power plant at Fenchugong, Sylhet for a period of 15 years. BEDL signed an agreement

for supply of electricity on rental basis with BPDB on 28 April 2008. For project, financing the company appointed Infrastructure Development Company Limited (IDCOL) as a lead arranger to arrange a syndicated loan for the project. Accordingly, a syndication loan facility for BDT 1250 million arranged from six

Particulars	DESCO Ltd.	Summit power ltd.	Power grid	GBB power ltd.	BEDL ltd.
Total revenue from operation	12,475,609,225	3,601,675,022	6,255,121,287	434,418,786	767,024,698
Cost of goods sold	9679246713	1,621,765,802	4,574,983,949	199,682,312	389,786,610
Accounts receivable	2703257156	72,578,678	1.379,078,119	107,276,877	140,054,302
Operating profit	2,001,279,680	1,720,229,275	1,469,543,316	81,607,924	327,836,155
Net profit before tax	2,020,596,526	1,720,299,275	809,689,335	90,736,582	290,295,910
Net profit after tax	1,478,338,572	1,147,860,058	924,601,544	85,315,369	209,295,910
Total asset	23,681,730,500	14,746,207,890	74,503,730,358	1,570,088,200	3,204,704,467
Noncurrent assets	9,665,540,906	12,460,975,654	59,226,762,780	1,281,518,614	1,933,727,973
Current asset	19,643,466,540	1,383,972,111	15,276,967,578	326,882,202	1,270,976,494
Inventory(spare and parts)	4,026,231,885	280,071,093	1,339,656,762	20,207,289	45,870,592
Current liabilities	5,627,276,948	3,832,145,504	7,302,167,208	2,88,569,585	349,350,783
Long term liabilities	13,762,390,105	2,370,160,995	47,419,914,199	883,162,471	819,179,301
Total liability	23,681,730,500	14,746,207,890	54,722,081,407	1,570,088,200	3,204,704,467
Interest expense	277,851,267	572,439,217	1,606,262,249	130,224,058	159,173,173

Retained earnings	6,209,984,623	3,033,539,730	4,190,118,100	5,20,08,000	206,174,383
Net income available to common stockholders	1,478,338,572	1,144,580,102	924,601,544	85,315,369	209,295,910
Number of common shares outstanding.	20,822,158	286,445,991	41,901,181	26,715,058	70,666,667
Market price per share	88.9	69.6	60.0	40.0	46.9
Earnings per share (EPS) In 2021	71.00	4.00	2.21	2.83	2.32

financial institutes.

SUMMARY OF FINANCIAL DATA OF THE INDUSTRY

Source: All data except 'market price per share' have been collected from the annual report of listed companies under fuel and power industry in DSE. And the data of 'current market price per share 'have been collected from www.dsebd.org on 25th march.

Part – 05
ANALYSIS OF INDUSTRY RATIO

1. Liquidity ratio :

Current ratio = current asset / current liability

= 37,902,264,925 / 17,110,940,443 [Total industry amount]

= 2.21 Times

Quick ratio = Current asset – inventory / current liability

= 37,902,264,925 - 5,712,037,621 / 17,110,940,443

[Total industry amount]

= 1.88 Times

2. Asset management ratio :

Inventory turnover = cost of goods sold / inventory

= 6,786,218,673 / 5,712,037,621

[Total industry amount]

= 1.18 Times

Days sales outstanding = Accounts receivable / annual sales / 360

= 302, 316, 7013 / 23,533,849,018 / 360

[Total industry amount]

= 46.24 days

3. Debt management :

Debt to total asset = Total debt / Total assets

= 97,924,812,464 / 116,136,373,215 [Total industry amount]

= 0.843

= 84.31 %

Time interest earned = Earnings before interest and taxes / Interest expenses

= 4,931,617,628 / 2,745,949,964 [Total industry amount]

= 1.79 Times

4. Profitability ratio :

Net profit margin = Net profit / sales

= 3,845,411,453 / 23,533,849,018 [Total industry amount]

= 0.16

= 16.33%

Return on total asset = Net income / total asset

= 3,845,411,453 / 116,136,373,215 [Total industry amount]

= 0.033

= 3.31 %

5. Market value ratio :

Earnings per share = Net income available to common stockholders /Number of common shares outstanding

= 2,698,696,077 / 446,551,055[Total industry amount]

= 6.06

Price earnings = market price per share / Earnings per share

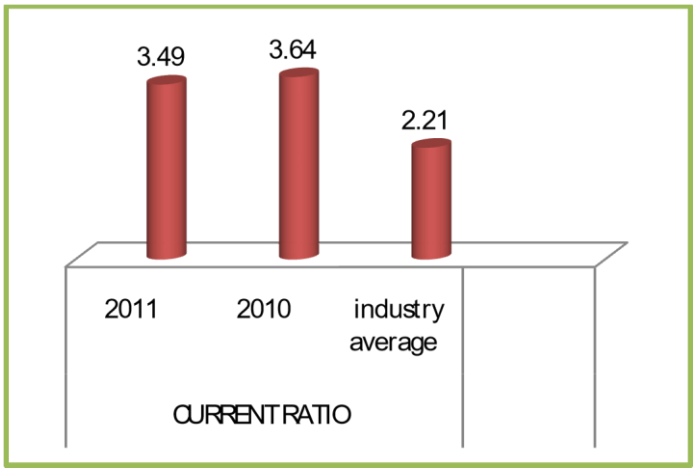
= 305.4 / 82.36

= 3.708

RATIO ANALYSIS OF DESCO LTD.

1. **Liquidity ratio analysis**:

Ratio	Formula	DESCO Ltd.		Industry Average
		2021	2020	
Current ratio	Current asset/ current liability	3.49 Times	3.64 Times	2.21 Times
Quick ratio	Current asset – inventory /current liability	2.77 Times	2.65 Times	1.88 Times



Source: Data have been collected from annual report of listed companies under fuel and power industry in DSE. 2021.

2. **Asset management Ratio:**

Ratio	Formula	DESCO ltd.		Industry average
		2021	**2020**	
Inventory turnover	Cost of goods sold/inventory	2.40 Times	1.67 Times	1.18
Days sales outstanding (DOS)	Accounts receivable /Annual sales /360	79.17 days	79.09 days	46.24 days

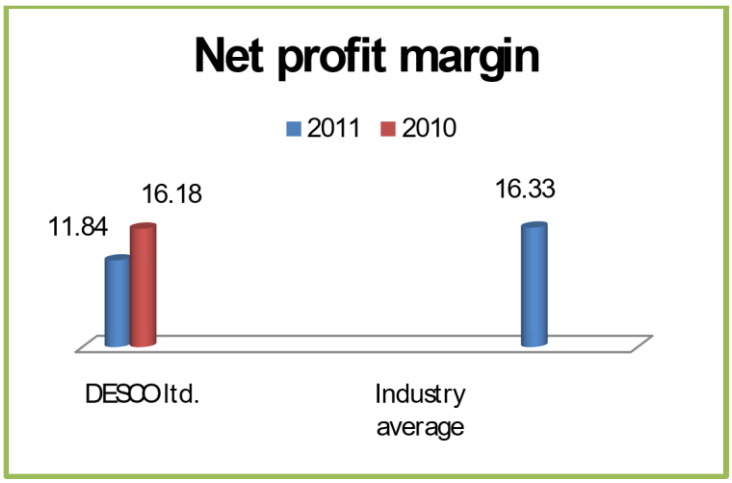
3. **Debt management Ratio:**

Ratio	Formula	DESCO ltd.		Industry average
		2021	**2020**	
Debt to total asset	Total liability / Total asset	81.87%	81.18%	84.31%
Time interest earned	EBIT / Interest charges	7.27 Times	9.77 Times	1.79 Times

4. **Profitability ratio:**

Ratio	Formula	DESCO ltd.		Industry Average
		2021	2020	

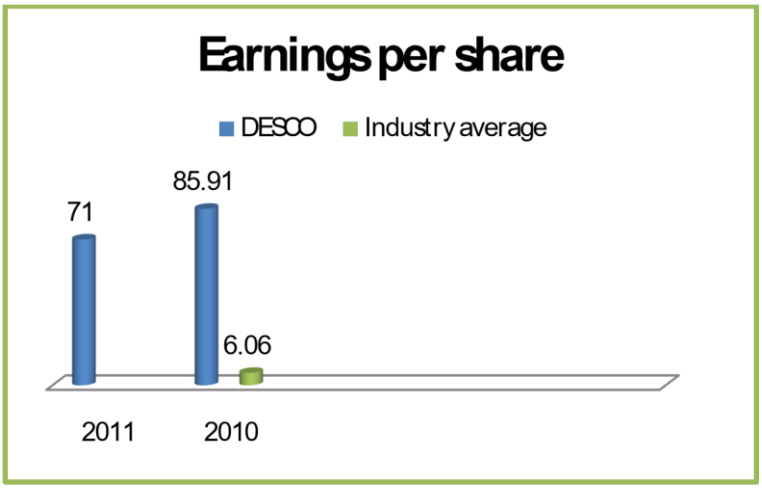
Net profit margin	Net profit / sales	11.84%	16.18%	16.33 %
Return on total asset (ROA)	Net income / Total asset	6.242%	8.377%	3.31%



Source: Data have been collected from annual report of listed companies under fuel and power industry in DSE. 2021.

5. **Market value ratio :**

Ratio	**Formula**	**DESCO ltd.**		**Industry average**
		2021	2020	
Earnings per share (EPS)	Net income available to common stockholders /Number of common shares outstanding.	71.00	85.91	6.06



Source: Data have been collected from annual report of listed companies under fuel and power industry in DSE. 2021.

6. **Price earnings Ratio:**

Ratio	Formula	DESCO ltd. 25/03/2021	Intercompany comparison (SUMMIT POWER)	Industry Average
Price Earnings Ratio	market price per share / Earnings per share	1.25 Times	17.40 Times	3.708 Times



Source: Data have been collected from annual report of listed companies under fuel and power industry in DSE. 2021.

Part – 06
(Findings & Recommendations)

FINDINGS:

From our analysis of various ratios on DESCO ltd., we found that:

1. Liquidity ratio analysis of DESCO ltd. suggests that the company has higher liquid assets than its industry. In 2021, the current ratio of DESCO ltd. is 3.49 times when industry average is 2.21 times. So, the ability of DESCO ltd. to meet the obligation of creditors is

   strong than its other operating competitive firms.

2. The inventory turnover of DESCO ltd. is higher than previous year and its industry average. Though interested parties expect efficient and profitable inventory management .However, the company has no inventory product for sale. It has spares parts. In 2021, the

   Company is carrying more inventories against its sales. In 2021, the inventory turnover ratio of DESCO ltd. is 2.40 where industry average is 1.18 that shows poor inventory management by DESCO ltd. Days sales outstanding ratio is also negative because the company takes more time to collect it due, than its industry. Here we see that DESCO ltd. takes 79.17 days to collect its receivables when industry average is 46.24 days. That means DESCO ltd. take

   32.93 more days than its industry average.

3. Debt to total assets ratio is looking good in comparison with its industry average but still rising. Although the comparison with industry average provides us satisfactory result but the reality is quite different. Because the company has 81.87 %, liability against its assets that means company financed 81.87 % of its assets by credit.

   Time interest earned ratio is on well-performed level in comparison with its industry but if we compare this result with previous year, the result is not satisfactory.

4. Net profit margin of DESCO ltd. in 2021 is poor, compare with its own previous year and its industry average. In 2021, net profit margin of DESCO ltd. is 11.84 when industry average is 16.33 percent that indicate lower rate of return on sales. Return on total asset is well in comparison with is industry average but poor performance than previous year.

5. Earnings per share of DESCO ltd. are very rich compare with its industry. This high EPS earned due to its small number of shareholder and comparably large net income available for its shareholders.

6. Our study also found that there is a big potentiality and demand for electricity in Bangladesh

   with shortage of raw materials (gas, coal, oil) for electricity production.

Ending summary

After analysing all the managerial and financial data of DESCO ltd., we reached on conclusion that, the company may lose their market share within recent years despite of having large revenue if consecutively its profit goes down by current rate, which is 17.35 percent in 2021. It may also lose the faith of investors due to its large debt against assets, which is more than 84 percent in 2021.

Recommendation:

Our analysis on DESCO ltd. suggests taking following steps in order to overcome the management dilemma about investment and financing decision.

- The company should concern about the effective management of inventory and receivable collection in order to improve inventory turnover and to control day's sales outstanding.

- The company should reduce its debt in order to improve debt management and to be more efficient. Otherwise, creditors will not be interested in further investment in this company.

- The management of DESCO ltd. should more effective and efficient in order to reduce exchange fluctuation cost as this cost leads to lower net income before interest, taxes, and return on assets in 2021.

As the debt management ratio of DESCO ltd. provide big debt against its asset so creditors and Investors currently may not be interested to invest on this company. So, the Board of directors Should Conscious about this before offering share in capital market to finance for their new Project.

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