

Summer Internship Project Report

On

**FINANCIAL ANALYSIS OF BSES YAMUNA POWER LIMITED WITH COMPETITOR COMPANY(TDPPL)**

At **BSES Yamuna Power Limited (BYPL)**

By

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**BBA (FIA) Class of 2020**

**(17333)**

**In Partial Fulfillment of the Requirements for the Award of the Degree in**

**BBA (Financial Investment Analysis)**

**(2019)**

**SHAHEED SUKHDEV COLLEGE OF BUSINESS STUDIES**

**(University of Delhi)**

**DECLARATION**

I hereby declare that this internship report, submitted to Shaheed Sukhdev College of Business Studies, University of Delhi is a record of an official work done by me under the guidance of Mr. Krishna Chakrovarty, Senior Manager. The project is submitted in the partial fulfillment of the requirements for the award of the degree of Bachelor of Business Administration (Finance and Investment Analysis). The results embodied have not been submitted to any other University or Institute for the award of any degree or diploma.

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(Signature of Guide)

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**POWER INDUSTRY**

**INDUSTRY PROFILE**

ELECTRICITY is one of the vital requirements in the over all development of the economy and is therefore, appropriately called the “Wheel of Development”. In fact, the power sector has played a dominant role in the socio-economic development of the county. As a convenient versatile and relatively cheap form of energy it plays a crucial role in agriculture, transport, industry and domestic sector. Hence power has all along remained in the priority list of Indian planners and plan outlays have reflected this aspect. The outlays for power sector have been around 19% of the total outlays for the public sector in various plan periods.

There has been a spectacular increase in the installed generating capacity of electricity in the country. Starting with a capacity of about 1360MW at the time of independence,

Despite tremendous increase in the availability of power since independence there is acute power shortage gap between demand and supply. The per capita consumption of power in the country is very low as compared to the position in the developed countries. Power is a key input for economic growth has as direct relationship with the national productivity as also the overall economy of the country.

There has been diversification of the sources of generation in terms of hydel, thermal and nuclear sources. The share of hydel in the total generating capacity had drastically come down and that of thermal had shown noticeable increase. Another significant change is the increasing share of Central sectors in recent years.

The share of the thermal element in the installed generating capacity, which is also predominantly coal-based, shows a steady increase. Thus, the relatively cheaper and a more desirable change in terms of a higher share of hydel source, which is renewable, have not materialized.

FOR THE LAST SIX DECADES INDIAN POWER SECTOR HAS ACHIEVED SOME REMARKABLE MILESTONES :

* Generation capacity has increased from 1,712 MW in 1950 to 1,28,581 MW
* The growth in the transmission lines has been from 3,708 ckm in to more than 2,50,000 ckm today
* Per capita electricity consumption has increased from 15 kwh to 606 kwh and expected to grow to 932 kwh by 2012.
* 100% electrified cities.
* More then 84% villages electrified.
* 5th largest energy consumption in the world.
* Investment of Rs.25547 Cr via Five Year Plan (till IX plan).
* Formation of Regional Grid and National Grid

**Sector comments:**

Notwithstanding the massive increase in generation capacities over the past decades, the history of the Indian power sector has been punctuated by shortages, massive pilferages and a demand-supply gap, which has been growing. The shortages have been so chronic that, at times fears have been expressed about a negative impact on industrialization due to these shortages. Thus, while the figures for additional capacity being created may look impressive in isolation, the fact is that the demand growth has always been higher than the supply. Further, the capacity additions are significantly below the plan targets, particularly during the eighth plan, where the capacity addition of about 16,000 MW showed a shortfall to the extent of about 40 per cent from the revised plan target of around 29,000 MW.

**Industry players and profile:**

The power sector reveals that it can be largely segregated into four different categories on the basis of type of players in the industry. These include:

* **Private Sector Licensees:** In the private sector, some companies had been given licenses to carry on generation and distribution activities. While some of these, like **BSES** Limited, **NDPL** are generation and distribution companies others, like Surat Electricity, are just distribution companies.
* **Independent Power Producers:** The Independent Power Producers (IPPs) are the companies that have been given a nod to set up generation capacities.
* **Central Government Corporations:** which consist of corporations like the National Thermal Power Corporation (NTPC), Nuclear Power Corporation, National Hydro Electric Power Corporation (NHPC), and some other smaller players.
* **State Government Corporations:** which consist of the various state electricity boards and other corporations that have been promoted by the respective government’s Poor management, transmission and distribution (T&D) losses and poor recoveries of dues are some of the factors, which are responsible for the plight of these corporations. Currently, the financial health of many SEBs is precarious and their revenue-raising capabilities are more or less dependent on assured guarantees from the respective governments.

Finally, a look at the regulatory structure of the sector indicates that various Acts govern the power sector. These provide for the tariff determination procedure for companies. It also defines the various terms such as reasonable returns and capital base. However, approvals of tariffs rest with the respective governments. .

* 1. **ABOUT THE COMPANY**
* **Name of the company:** BSES Yamuna Power limited
* **Address:** Shakti Kiran Building, Karkardooma,New Delhi-110092, India
* **Phone number:** +91 11 3009 9999
* **Fax no:** +91 11 3999 9403
* **Website address:** [www.bsesdelhi.com](http://www.bsesdelhi.com)

BSES Limited is India’s premier utility firm engaged in the generation, transmission and distribution of electricity. Formerly, known as Bombay Suburban Electric Supply Limited, it wasincorporated on 1st October 1929, for the distribution of electricity in the suburbs ofMumbai, with a pioneering mission to make available uninterrupted, reliable and qualitypower to the customers and provide value added services for the development of the powerand infrastructure sectors.

On 1st March 2002, BSES Ltd. was renamed as Reliance Energy. Post takeover by the Reliance Group, BSES has announced mega investment plans in the power sector. Upon implementation of these, the Mumbai market will probably account for a minority of its sales and profits. BSES have setup its own power plant at Dahanu power station and a dedicated distribution line, which shows that it has in-house capabilities ranging from engineering, operation & maintenance of power plants and transmission and distribution systems.

BSES through international competitive bidding acquired an early stake of 51% in three of the four distribution companies of Orissa. At present, BSES along with its subsidiaries provide electricity to more than 33.96 lakhs consumers in an area covering about 1, 60,000 sq. km.

As part of its active support in privatization process, BSES has recently acquired an equity stake of 51% in two of the three distribution companies of Delhi after unbundling and privatization of the erstwhile Delhi Vidyut Board. The two distribution companies-

1) BSES Rajdhani Power Limited

2) BSES Yamuna Power Limited

BSES yamuna power limited, an associated of Reliance power projects, supervises the power distribution in the central and eastern parts of delhi. The function of BSES yamuna power limited an spread over the central and eastern areas of the capital of india.

The power distribution of the following areas are served by the BSES yamuna power limited:-

* Paharganj
* Patel nagar
* Dariyaganj
* Yamuna vihar
* Karawal nagar
* Laxmi nagar
* G T Road
* Nand nagri
* Krishna nagar
* Shankar road
* Mayur vihar
* Chandni chowk
* Karkardooma

BSES yamuna private limited is a public incorporated on july 2001. It is classfied as non-government companies, Delhi. Its authorised share capital is Rs. 5,560,000,000. It is involved in other business activities.

BYPL annual general meeting is held on 27 september in every year as per records from ministry of corporate affairs (MCA), its balance sheet was last filed on 31 march 2018.

The longest serving director currently on board list is Lalit Jalan who was appointed on 04 October, 2005. Lalit Jalan has been on board for more than 13 years.

The most recently appointed directors are Punit Narendra Garg and Suresh Mandihally Rangachar, who were appointed on 10 April, 2019

BSES yamuna power limited’s **corporate identification number (CIN) U74899DL2001PLC111525** and its **registration number** is **111525**. Its **email** address is **Suresh.agarwal@relianceada.com** and its **registered adderess** is **shakti kiran building karkardooma, Delhi 110092**

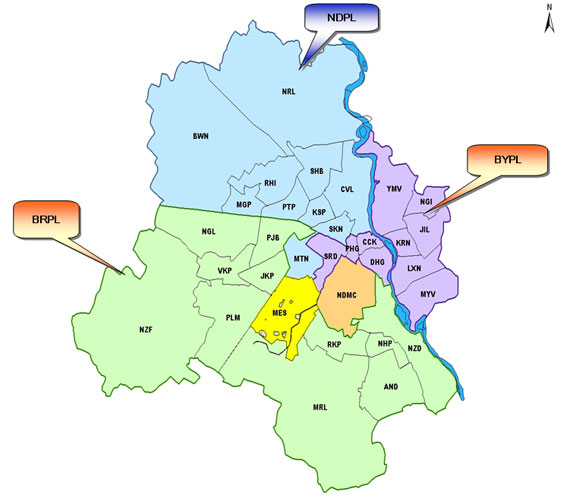


Fig 1.1 Range of power distribution

|  |  |  |  |
| --- | --- | --- | --- |
| SN | Particular | Unit | BYPL (East & Central) |
| 1 | **Area** | **sq. km** | **200** |
| 2 | **Customer Density (As of Mar ’14)** | **Cons / sq km** | **6989** |
| 3 | **Total Registered Customers  (As of Mar ’14)** | **Million** | **1398** |
| 4 | **Peak Demand (YTM FY 14)** | **MW** | **1487** |

Table 1.

**ORIGIN**

The history of electricity in Delhi dates back to 1905 when M/s John Fleming Company was awarded the license as per Indian Electricity Act, 1903, for generation and distribution of power in Delhi. It was replaced by Delhi Tramway and Lighting Company, which was subsequently renamed as Delhi Electricity Supply & Traction Company. In 1939 The Delhi Central Electric Power Authority (DCEPA) was formed to run the services. In 1951, the DCEPA was taken over by Delhi Electricity Board, constituted under Indian Electricity Supply Act 1948. In 1958, Delhi Electricity Supply undertaking came into existence and was once again converted to Delhi Vidyut Board in 1997.

The power sector in Delhi has undergone a major transformation since 2002. From a single State Electricity Board called Delhi Vidyut Board, and its erstwhile avatar Delhi Electricity Supply Undertaking (part of Municipal Corporation of Delhi), the entire sector was divided into five companies namely, three distribution companies, one transmission / holding company and one generation companies. This was the outcome of the Delhi Electricity Reform Act, 2000. It is the far sightedness of the then government, led by Smt. Sheila Dikshit, which made such far reaching changes possible even in the absence of a central legislation providing for reform of the electricity sector, which was enacted much later in the form of Electricity Act, 2003.

**Elements of the reform:-**

Distribution is a sector, which can be largely self-financing over the long term once the investments have been made in bringing the system to technological modern standards. The transmission and generation system require large capital investments.

The concept of loss reduction namely Aggregate Technical and Commercial Losses (AT&C) were taken as the measure of bidding and the assets were valued on “Going Concern” basis as per Companies Act provisions.

The five years of reforms (2002 – 2007) have brought both brick bats and kudos to the government

The entire 66/33/11 KV distribution system was privatized by setting up three distribution companies:

* North Delhi Power Limited (NDPL)
* BSES Yamuna Power Limited (BYPL)
* BSES Rajdhani Power Limited (BRPL)

In these companies, 49% stakes is that of government by the way of holding assets and land on lease, and in turn government has three directors on each of the boards of the three companies whereas the Managing Director is appointed by the larger shareholder namely TATA Power in case of NDPL, Reliance Energy in case of BYPL and BRPL

Basically, BSES Yamuna Power Limited, Delhi is a part of service Sector Company. It is a power industry which distributes electricity to Delhi consumers. It is semi governmental company i.e. joint venture with ADA Group (Anil Dhiru Bhai Ambani Group of Companies). It is a nationalized company which operates their business in the city of Delhi in some particular region.

BSES DELHI is a service sector industry and the specific function of the company is distribution of power (electricity). The company has both the major department like HR (Human Resources Department) and Finance Department. The company has also store, maintenance & operations and IT department because store department is required for maintaining the inventory and management & operations required for smooth running of operations.

* **VISION OF BYPL:**
* To be amongst the most admired and most trusted integrated utility companies in the world.
* To deliver reliable and quality products and services to all customers at competitive costs, with international standards of customer care thereby creating superior value for all stakeholders.
* To set new benchmarks in standards of corporate performance and governance, through the pursuit of operational and financial excellence, responsible citizenship and profitable growth.
* **MISSION OF BYPL**
* To attain global best practices and become a world-class utility
* To provide uninterrupted, affordable, quality, reliable, safe and clean power to our customers.
* To achieve excellence in service, quality, reliability, safety and customer care.
* To earn trust and confidence of all customers and stakeholders by exceeding their expectations, and make the company a respected household name.
* To earn trust and confidence of all customers and stakeholders by exceeding their expectations, and make the company a respected household name.
* To consistently achieve high growth with the highest levels of productivity.
* To be a technology driven, efficient and financially sound organization.
* To be a responsible corporate citizen nurturing human values and concern for society, the environment and above all, people.
* To contribute towards community development and nation building.
* To promote a work culture that fosters individual growth, team spirit and creativity to overcome challenges and attain goals.
* To encourage ideas, talent and value systems.
* To uphold the guiding principles of trust, integrity and transparency in all aspects of interactions and dealings.
* **CORE VALUE’S OF BYPL**
* **Honesty-:** Truthful in all our actions & forthright with one another & all our stakeholders.
* **Integrity-:** We say what we mean and deliver what we promise and promise to stand for what is right.
* **Respect-:** Appreciate and value the skills, strengths and perspectives of our diverse workforce.
* **Fairness-:** Justice, impartiality and consistency in all our operations.
* **Purposefulness-:** Observe all our activities in terms of higher purpose and ideals
* **Trust-:** Foster a culture of teamwork with open, candidate and speedy communication.
* **Responsibility-:** Demonstrate highest levels of responsibility and accountability for individual actions for pursuit of organizational excellence.
* **PRODUCT RANGE OF BSES**

Basically the company BSES, DELHI the key player of Delhi facilitate for providing of power (electricity) .The Company has only one product range i.e. power. The company purchases the power from their supplier and distribute to their customers.

The company has co-product range of the key product i.e. power which helps in the process of distributing to their customers. The co-product ranges are:

* Transformer
* Wires
* Poles.
* **SIZE OF THE ORGANISATION**

The size of the organization can be measured in two terms i.e.-

* Manpower
* Annual Turnover

**Manpower**

Total number of employees in BSES Delhi is approximately 5400. The Employees in BSES Delhi are categorized into three -

* Government Employee - 2500
* CTC Employee – 2500
* Contract Based Employee - 400
* **AREA COVERED**

BYPL distributes power to an area spread over 200 sq kms with a population density of 6989 per sq km. Its 13.98 lakh customers are spread over 14 districts across Central and East areas including:

* Chandni Chowk
* Daryaganj
* Paharganj
* Shankar Road
* Patel Nagar
* G.T. Road
* Karkardooma
* Krishna Nagar
* Laxmi Nagar
* Mayur Vihar I & II
* Mayur Vihar III
* Yamuna Vihar
* Nand Nagri
* Karawal Nagar

**MAJOR DEPARTMENTS OF BYPL ARE**

1. **Finance**

In finance department there are 14 sub head. These are as follows:

* Banking

Apply for loans, bulk payment, normal banking transactions such as salary payments, SD Refund etc……

* Central Account
* Procurement:

Day to day normal expenses such as car rental, courier service , gifts….

* Revenue Collection:

Collection of bills generated, by the way of cash and cheque.

* Contract Payment:

Work order related payments, such as civil works, construction of sub- station, installation of street lights, transformer etc

* Statutory Compliances.

Compliances of tax related matters like VAT, TCS, TDS, WCT

* Revenue Billing:

Supply of electricity to consumers & billing of electricity consumed by them.

* Security Deposits Refund (SD)

Advanced consumption deposit is taken from consumer at the time of providing connection.

* JOB Costing.

It is required to maintain a budget and estimate is given and on completion actual cost

* Power Purchase.

Purchase of power from the different sources.

* Cost Audit.

Maintenance of cost records & get audited by consultant. (Cost Accountant).

* Fixed Asset Verification.

Actual site verification of assets such as transformer,

* Salary

Disbursement of salaries to the employees through ECS.(Electronic Clearing System)

* LTA (Leave Travel Allowances)

It is a part of salary head. It is reimbursed to the employees.

* Medical reimbursement.

Medical expense reincured by the employees is reimbursed.

1. **Human resource**

* In their HR department they have many sub division like......IRR ,ESC
* For new hire they manly invite fresher and experience from open market
* Time to time they provide training to their employee so their employee improve and update their knowledge and skill so efficient and effective work on work floor.
* Regular Feedback collected by HR to improve their organisation and provide best facilities to their employee.

1. **Business management groups**

In business management groups they are sub divided into two major departments are

* Commercial Department - new connection release, additional load & reduction of load, name change, final bill issued, NOC ,
* Collection Department.- Bank deposit, clearing of cheques, additional cost on dishonoured cheques.
* **MARKET SHARE OF THE COMPANY**

Basically BSES, Delhi is a power distribution company. In the sector of power distribution, BSES, Delhi has covered 75% market Share in terms of revenue and out of that BSES Yamuna has 45% revenue and remaining is covered by BSES Rajdhani Power limited i.e. 30%.

Actually for the player of power distribution in position Delhi, each player has a specific area for power distribution and so there is no specific market position for any player. Each player has full monopoly for the power distribution in its respective region.

* **CATEGORIES OF CUSTOMERS**

BSES Delhi caters to supply of electricity to more than two million consumers, who are further divided into 4 circles and 33 divisions (14 BYPL & 19 BRPL). BSES has a wide variety of consumers and are distinguished into house, residential complexes, high buildings, commercial complexes, industrial houses, government establishment, municipal hospitals and many more.

The consumers are broadly divided into two categories:-

**1. On the Basis of Load**

1. **SLCC**-Consumers having load less than 11KW
2. **MLCC -**Consumers having load in between 11KW and 45KW
3. **KCC -**Consumers having load more than 45KW
4. **GCC -**Government premises and consumers.

**2. On the Basis of Tariff**

The highest number of consumers falls under the domestic category followed by non- domestic. The consumption pattern shows that domestic consumer uses more than 50% of the electricity followed by non-domestic and industrial.



|  |  |
| --- | --- |
| Category | BYPL |
| Domestic | 1,031,436 |
| Non-Domestic | 341,387 |
| Industrial | 8,232 |
| Agriculture | 49 |
| Mushroom Cultivation | 6 |
| Railway Traction | 0 |
| DMRC | 1 |
| Others | 16,736 |
| Total | 1,397,847 |

Table 1.3 Customer profile

Fig 1.4 Customer profile

An interesting observation is that though domestic consumers are 80.04% of the total population, still they consume less than 50% of electricity. This is because the consumption per consumer is high for industrial sector.

It must be admitted that the distribution system in Delhi was abysmally poor due to the inability of erstwhile Delhi Vidyut Board to make the necessary investments at the distribution level. This required large capital investments to be made by the companies to provide an uninterrupted and stable power to the people of Delhi. This explains an increase in the capital expenditure in the initial years. The distribution companies have lived up to the expectations in making large investments in improving the distribution system. The technical improvements made by BSES Yamuna Power Limited show a high level of improvement in the 66, 33 and 11 KV systems. The use of High Voltage distribution systems has ensured that the small groups of consumers are not able to hook on to the lines and steal power, thereby reducing AT & C losses while at the same time they get stable power.

|  |  |
| --- | --- |
| Financial Year | Annual Turnover (Rs / cr) |
| 2015-16 |  |
| 2014-15 | 4734.57 |
| 2013-14 | 4313.83 |
| 2012-13 | 4251.53 |
| 2011-12 | 3106.91 |

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Fig-1.2 Annual Turnover

**CHAPTER 2: REVIEW OF LITERATURE**

**FINANCIAL ANALYSIS**

Financial analysis is the process of identifying the financial strengths and weaknesses of the firm and establishing relationship between the items of the balance sheet and profit & loss account.

Financial ratio analysis is the calculation and comparison of ratios, which are derived from the information in a company’s financial statements. The level and historical trends of these ratios can be used to make inferences about a company’s financial condition , its operations and attractiveness as an investment. The information in the statements is used by Trade creditors, to identify the firm’s ability to meet their claims i.e. liquidity position of the company.

Investors, to know about the present and future profitability of the company and its financial structure. Management, in every aspect of the financial analysis. It is the responsibility of the management to maintain sound financial condition in the company.

**RATIO ANALYSIS**

The term “Ratio” refers to the numerical and quantitative relationship between two items or variables. This relationship can be exposed as:

* Percentages
* Fractions
* Proportion of numbers

Ratio analysis is defined as the systematic use of the ratio to interpret the financial statements. So that the strengths and weaknesses of a firm, as well as its historical performance and current financial condition can be determined. Ratio reflects a quantitative relationship helps to form a quantitative judgment.

**STEPS IN RATIO ANALYSIS**

* The first task of the financial analysis is to select the information relevant to the decision under consideration from the statements and calculates appropriate ratios.
* To compare the calculated ratios with the ratios of the same firm relating to the past or with the industry ratios. It facilitates in assessing success or failure of the firm.
* Third step is to interpretation, drawing of inferences and report writing conclusions are drawn after comparison in the shape of report or recommended courses of action.

**BASIS OR STANDARDS OF COMPARISON**

Ratios are relative figures reflecting the relation between variables. They enable analyst to draw conclusions regarding financial operations. They use of ratios as a tool of financial analysis involves the comparison with related facts. This is the basis of ratio analysis. The basis of ratio analysis is of four types.

* Past ratios, calculated from past financial statements of the firm.
* Competitor’s ratio , of the sum most progressive and successful competitor firm at the same point of time.
* Industry ratio, the industry ratios to which the firm belongs to.
* Projected ratios, ratios of the future developed from the projected or pro forma financial statements.

**NATURE OF RATIO ANALYSIS**

Ratio analysis is a technique of analysis and interpretation of financial statements. It is the process of establishing and interpreting various ratios for helping in making certain decisions. It is only a means of understanding of financial strengths and weaknesses of a firm. There are a number of ratios which can be calculated from the information given in the financial statements, but the analyst has to select the appropriate data and calculate only a few appropriate ratios. The following are the four steps involved in the ratio analysis.

* Selection of relevant data from the financial statements depending upon the objective of the analysis.
* Calculation of appropriate ratios from the above data.
* Comparison of the calculated ratios with the ratios of the same firm in the past, or the ratios developed from projected financial statements or the ratios of some other firms or the comparison with ratios of the industry to which the firm belongs.

**INTERPRETATION OF THE RATIOS**

The interpretation of ratios is an important factor. The inherent limitations of ratio analysis should be kept in mind while interpreting them .The impact of factors such as price level changes, change in accounting policies, window dressing etc., should also be kept in mind when attempting to interpret ratios. The interpretation of ratios can be made in the following ways.

* Single absolute ratio
* Group of ratios
* Historical comparison
* Projected ratios
* Inter-firm comparison

**GUIDELINES OR PRECAUTIONS FOR USE OF RATIOS**

The calculation of ratios may not be a difficult task but their use is not easy. Following guidelines or factors may be kept in mind while interpreting various ratios are:

* Accuracy of financial statements
* Objective or purpose of analysis
* Selection of ratios
* Use of standards
* Calibre of the analysis

**IMPORTANCE OF RATIO ANALYSIS**

* Aid to measure general efficiency
* Aid to measure financial solvency
* Aid in forecasting and planning
* Facilitate decision making
* Aid in corrective action
* Aid in intra-firm comparison
* Act as a good communication
* Evaluation of efficiency
* Effective tool

**LIMITATIONS OF RATIO ANALYSIS**

* Differences in definitions
* Limitations of accounting records
* Lack of proper standards
* No allowances for price level changes
* Changes in accounting procedures
* Quantitative factors are ignored
* Limited use of single ratio
* Background is over looked
* Limited use
* Personal bias

**CLASSIFICATION OF RATIOS**

Several ratios, calculated from the accounting data can be grouped into various classes according to financial activity or function to be evaluated. Management is interested in evaluating every aspect of the firm’s performance. They have to protect the interests of all parties and see that the firm grows profitably. In view of thee requirement of the various users of ratios, ratios are classified into following four important categories:

* **Liquidity ratios** - short-term financial strength
* **Leverage ratios** - long-term financial strength
* **Profitability ratios** - long term earning power
* **Activity ratios** - term of investment utilization

**Liquidity ratios** measure the firm’s ability to meet current obligations;

**Leverage ratios** show the proportions of debt and equity in financing the firm’s assets;

**Activity ratios** reflect the firm’s efficiency in utilizing its assets; and

**Profitability ratios** measure overall performance and effectiveness of the firm.

**LIQUIDITY RATIOS:**

It is extremely essential for a firm to be able to meet the obligations as they become due**. Liquidity ratios** measure the ability of the firm to meet its current obligations (liabilities). The liquidity ratios reflect the short-term financial strength and solvency of a firm. In fact, analysis of liquidity needs the preparation of cash budgets and cash and funds flow statements; but liquidity ratios, by establishing a relationship between cash and other current assets to current obligations, provide a quick measure of liquidity. A firm should ensure that it does not suffer from lack of liquidity, and also that it does not have excess liquidity. The failure of a company to meet its obligations due to lack of sufficient liquidity, will result in a poor credit worthiness, loss of credit worthiness, loss of creditors’ confidence, or even in legal tangles resulting in the closure of the company. A very high degree of liquidity is also bad; idle assets earn nothing. The firm’s funds will be unnecessarily tied up in current assets. Therefore, it is necessary to strike a proper balance between high liquidity and lack of liquidity.

The most common ratios which indicate the extent of liquidity are lack of it, are:

1. **Current ratio.**
2. **Quick ratio.**
3. **Cash ratio.**
4. **Networking capital ratio.**

**1. Current Ratio**:

Current ratio is calculated by dividing current assets by current liabilities.

Current assets include cash and other assets that can be converted into cash within in a year, such as marketable securities, debtors and inventories. Prepaid expenses are also included in the current assets as they represent the payments that will not be made by the firm in the future. All obligations maturing within a year are included in the current liabilities. Current liabilities include creditors, bills payable, accrued expenses, short-term bank loan, income tax, liability and long-term debt maturing in the current year.

The current ratio is a measure of firm’s short-term solvency**.** It indicates the availability of current assets in rupees for every one rupee of current liability. A ratio of greater than one means that the firm has more current assets than current claims against them Current liabilities.

**CURRENT RATIO=CURRENT ASSET/CURRENT LIABILITY**

**2. Quick Ratio:**

Quick ratio also called Acid-test ratio, establishes a relationship between quick, or liquid, assets and current liabilities. An asset is a liquid if it can be converted into cash immediately or reasonably soon without a loss of value. Cash is the most liquid asset. Other assets that are considered to be relatively liquid and included in quick assets are debtors and bills receivables and marketable securities (temporary quoted investments). Inventories are considered to be less liquid. Inventories normally require some time for realizing into cash; their value also has a tendency to fluctuate. The quick ratio is found out by dividing quick assets by current liabilities.

|  |
| --- |
| **QUICK RATIO=QUICK ASSET/CURRENT LIABILITY** |

**3. Cash Ratio:**

Since cash is the most liquid asset, it may be examined cash ratio and its equivalent to current liabilities. Trade investment or marketable securities are equivalent of cash; therefore, they may be included in the computation of cash ratio:

**CASH RATIO=CASH+ MARKETABLE SECURITIES/CURRENT LIABILITY**

**4. Interval Measure**

Yet another, ratio, which assesses a firm’s ability to meet its regular cash expenses, is the interval measure. Interval measure relates liquid assets to average daily operating cash outflows. The daily operating expenses will be equal to cost of goods sold plus selling, administrative and general expenses less depreciation (and other non cash expenditures divided by number of days in a year (say 360).

**Interval measure = Current assets – inventory/ Average daily operating expenses**

**5. Net Working Capital Ratio**

The difference between current assets and current liabilities excluding short – term bank borrowings in called net working capital (NWC) or net current assets (NCA). NWC is sometimes used as a measure of firm’s liquidity. It is considered that between two firm’s the one having larger NWC as the greater ability to meet its current obligations. This is not necessarily so; the measure of liquidity is a relationship, rather than the difference between current assets and current liabilities. NWC, however, measures the firm’s potential reservoir of funds. It can be related to net assets (or capital employed):

Net working capital (NWC)

NWC ratio =

(Net assets (or) Capital Employed)

**6. LEVERAGE RATIO:**

The short-term creditors, like bankers and suppliers of raw materials, are more concerned with the firm’s current debt-paying ability. On other hand, ling-term creditors like debenture holders, financial institutions etc are more concerned with the firm’s long-term financial strength. In fact a firm should have a strong short as well as long-term financial strength. In fact a firm should have a strong short-as well as long-term financial position. To judge the long-term financial position of the firm, **financial leverage**, or **capital structure** **ratios** are calculated. These ratios indicate mix of funds provided by owners and lenders. As a general rule there should be an appropriate mix of debt and owners equity in financing the firm’s assets.

Leverage ratios may be calculated from the balance sheet items to determine the proportion of debt in total financing. Many variations

of these ratios exist; but all these ratios indicate the same thing the extent to which the firms has relied on debt in financing assets. Leverage ratios are also computed form the profit and loss items by determining the extent to which operating profits are sufficient to cover the fixed charges.

**7. DEBT RATIO:**

Several debt ratios may be used to analyse the long term solvency of the firm The firm may be interested in knowing the proportion of the interest bearing debt (also called as funded debt) in the capital structure. It may, therefore, compute **debt ratio** by dividing total debt by capital employed or net assets. Capital employed will include total debt and net worth

**Total debt (TD)**

**Debt ratio =**

**Total debt (TD) + Net worth (NW)**

**Total debt (TD)**

**Debt Ratio=**

**Capital employed (CE)**

**Debt-Equity Ratio:**

The relationship describing the lenders contribution for each rupee of the owners’ contribution is called debt-equity (DE) ratio is directly computed by dividing total debt by net worth:

Total debt (TD)

Debt - equity ratio = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Net worth (NW)

**8. Capital Employed to Net worth Ratio**

It is another way of expressing the basic relationship between debt and equity. One may want to know: How much funds are being contributed together by lenders and owners for each rupee of owners’ contribution ? Calculating the ratio of capital employed or net assets to net worth can find this out:

Capital employed (CE)

Capital employed to net worth Ratio =

Net worth (NW)

**COVERAGE RATIO:**

**Interest Coverage Ratio:**

Debt ratios described above are static in nature, and fail to indicate the firm’s ability to meet interest (and other fixed charges) obligations. The **interest coverage ratio** or the **times interest-earned** is used to test the firm’s debt-servicing capacity. the interest coverage ratio is computed by dividing earnings before interest and taxes(EBIT)by interest charges:

EBIT

Interest coverage ratio =

Interest

**ACTIVITY RATIOS:**

Funds of creditors and owners are interested in various assets to generate sales and profits. The better the management of assets, the larger the amount of sales. Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted or turned over into sales. Activity ratios, thus, involves a relationship between sales and assets. A proper balance between sales and assets generally reflects that assets are managed well. Several activity ratios are calculated to judge the effectiveness of asset utilization.

**10. Inventory Turnover Ratio:**

Inventory turnover indicates the efficiency of the firm in producing and selling its product. It is calculated by dividing the cost of goods sold by the average inventory:

Cost of goods sold

Inventory turnover Ratio =

Average inventory

(OR)

Net sales

Inventory

The average inventory is the average of opening and closing balances of inventory. The cost of goods sold may not be available so we can compute inventory turnover as sales divided by inventory In a manufacturing company inventory of finished goods is used to calculate inventory turnover. This inventory turnover ratio indicates whether investment in inventory is efficiently utilized or not. It, therefore, explains whether investment in inventory in within proper limits or not. It is calculated by dividing the cost of goods sales by the average inventory.

The inventory turnover shows how rapidly the inventory in turning into receivable through sales.

A high inventory turnover is indicative of good inventory management.

A low inventory turnover implies excessive inventory levels than warranted by production and sales activities or a slow moving or obsolete inventory.

**Inventory Conversion Period:**

It may also be of interest to see the average time taken for clearing the stock. This can be possible by calculating the inventory conversion period. This period is calculated by dividing the no. of days by inventory turnover ratio:

No. of days in the year

Inventory turnover ratio=

Inventory turnover ratio

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No. of days in the year

Inventory turnover ratio=

Inventory turnover ratio

**11. Debtors (Accounts Receivable) Turnover Ratio:**

A firm sells goods for cash and credit. Credit is used as a marketing tool by number of companies. When the firm extends credits to its customers, debtors (accounts receivable) are created in the firm’s accounts. Debtors are convertible into cash over a short period and, therefore, are included in current assets. The liquidity position of the firm depends on the quality of debtors to a great extent. Financial analyst applies these ratios to judge the quality or liquidity of debtors (a) Debtors Turnover Ratio (b) Debtors Collection Period Debtors’ turnover is found out by dividing credit sales by average debtors:

Credit sales

Debtors turnover **=**

Debtors

Debtors’ turnover indicates the number of times debtors’ turnover each year generally, the higher the value of debtors’ turnover, the more efficient is the management of credit.

To outside analyst, information about credit sales and opening and closing balances of debtors may not be available. Therefore, debtors’ turnover can be calculated by dividing Total sales by the year-end balances of debtors:

Sales

Debtors turnover =

Debtors

**Average Collection Period:**

Average Collection Period is used in determining the collectibles of debtors and the efficiency of collection efforts. In ascertaining the firms comparative strength and advantage relative to its credit policy and performance

The average number of days for which the debtors remain outstanding is called the Average Collection Period. The Average Collection Period measures the quality of the debtors since it is indicated the speed of their collection.

360

Average Collection Period =

Debtors Turnover Ratio

**13. Net Assets Turnover Ratio:**

Net assets turnover can be computed simply by dividing sales by net sales (NA)

Sales

Net Assets Turnover =

Net assets

It may be recalled that net assets (NA) include net fixed assets (NFA) and net current assets (NCA), that is, current assets (CA) minus current liabilities (CL). Since net assets equal capital employed, net assets turnover may also be called capital employed, net assets turnover may also be called **capital employed turnover.**

**Total Assets Turnover:**

Some analysts like to compute the **total assets turnover** in addition to or instead of the net assets turnover. This ratio shows the firms ability in generating sales from all financial resources committed to total assets.

Thus:

Sales

Total Assets Turnover =

Total assets

Total Assets (TA) include net fixed assets (NFA) and current assets (CA) (TA=NFA+CA)

**15. Current Assets Turnover**

A firm may also like to relate current assets (or net working gap) to sales. It may thus complete networking capital turnover by dividing sales by net working capital.

Sales

Current assets turnover =

Current assets

**16. Fixed Assets Turnover:**

The firm to know its efficiency of utilizing fixed assets separately. This ratio measures sales in rupee of investment in fixed assets. A high ratio indicates a high degree of utilization in assets and low ratio reflects the inefficient use of assets

Sales

Fixed Assets Turnover =

Fixed Assets

**17. Working Capital Turnover Ratio**:

Working Capital of a concern is directly related to sales. The current assets like debtors, bills receivable, cash, and stock etc. change with the increase or decrease in sales. The Working Capital is taken as:

Working Capital = Current Assets – Current Liabilities

This Ratio indicates the velocity of the utilization of net working capital. This Ratio indicates the number of times the working capital is turned over in the course of a year. This Ratio measures the efficiency with which the working capital is being used by a firm. A higher ratio indicates the efficient utilization of working capital and the low ratio indicates inefficient utilization of working capital.

Sales

Working capital turnover =

Net working capital

**PROFITABILITY RATIOS**

A company should earn profits to survive and grow over a long period of time. Profits are essential, but it world be wrong to assume that every action initiated by management of a company should be aimed at maximizing profits, irrespective of concerns for customers, employees, suppliers or social consequences. It is unfortunate that the word profit is looked upon as a term of abuse since some firms always want to maximize profits ate the cost of employees, customers and society. Except such infrequent cases, it is a fact that sufficient profits must be able to obtain funds from investors for expansion and growth and to contribute towards the social overheads for welfare of the society.

Profit is the difference between revenues and expenses over a period of time (usually one year). Profit is the ultimate output of a company, and it will have no future if it fails to make sufficient profits. Therefore, the financial manager should continuously evaluate the efficiency of the company in terms of profit. The profitability ratios are calculated to measure the operating efficiency of the company. Besides management of the company, creditors and owners are also interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get a required rate of return on their investment. This is possible only when the company earns enough profits.

Generally, two major types of profitability ratios are calculated:

* Profitability in relation to sales.
* Profitability in relation to investment.

**16. Net Profit Margin**

Net profit is obtained when operating expenses; interest and taxes are subtracted form the gross profit margin ratio is measured by dividing profit after tax by sales:

Net Profit

Net profit Ratio = X 100

Sales

Net profit ratio establishes a relationship between net profit and sales and indicates and management’s in manufacturing, administrating and selling the products. This ratio is the overall measure of the firm’s ability to turn each rupee sales into net profit. If the net margin is inadequate the firm will fail to achieve satisfactory return on shareholders’ funds. This ratio also indicates the firm’s capacity to withstand adverse economic conditions.A firm with high net margin ratio would be advantageous position to survive in the face of falling prices, selling prices, cost of production .

**17. Net Margin Based on NOPAT**

The profit after tax (PAT) figure excludes interest on borrowing. Interest is tax deducts able, and therefore, a firm that pays more interest pays less tax. Tax saved on account of payment of interest is called interest tax shield. Thus the conventional measure of net profit margin-PAT to sales ratio- is affected by firm’s financial policy. It can mislead if we compare two firms with different debt ratios. For a true comparison of the operating performance of firms, we must ignore the effect of financial leverage, viz., the measure of profits should ignore interest and its tax effect. Thus net profit margin (for evaluating operating performance) may be computed in the following way:

EBIT (1-T) NOPAT

Net profit margin = =

Sales Sales

**18. Operating Expense Ratio:**

The operating expense ratio explains the changes in the profit margin (EBIT to sales) ratio. This ratio is computed by dividing operating expenses *viz.,* cost of goods sold plus selling expense and general and administrative expenses (excluding interest) by sales.

Operating expenses

Operating expenses ratio =

Sales

**19.** **Return on Investment (ROI**)

The term investment may refer to total assets or net assets. The funds employed in net assets in known as capital employed. Net assets equal net fixed assets plus current assets minus current liabilities excluding bank loans. Alternatively, capital employed is equal to net worth plus total debt.

The conventional approach of calculating return of investment (ROI) is to divide PAT by investments. Investment represents pool of funds supplied by shareholders and lenders, while PAT represent residue income of shareholders; therefore, it is conceptually unsound to use PAT in the calculation of ROI. Also, as discussed earlier, PAT is affected by capital structure. It is, therefore, more appropriate to use one of the following measures of ROI for comparing the operating efficiency of firms:

BIT (1-T) EBIT (1-T)

ROI = ROTA = =

Total assets TA

EBIT (1-T) EBIT (1-T)

ROI = RONA = =

Net assets NA

Since taxes are not controllable by management, and since firm’s opportunities for availing tax incentives differ, it may be more prudent to use before tax to measure ROI. Many companies use EBITDA (Earnings before Depreciation, Interest, Tax and Amortization) instead of EBIT to calculate ROI. Thus the ratio is:

EBIT

ROI =

Total Assets (TA)

**20. Return on Equity (ROE)**

Common or ordinary shareholders are entitled to the residual profits. The rate of dividend is not fixed; the earnings may be distributed to shareholders or retained in the business. Nevertheless, the net profits after taxes represent their return. A return on shareholders equity is calculated to see the profitability of owners’ investment. The shareholders equity or net worth will include paid-up share capital, share premium, and reserves and surplus less accumulated losses. Net worth also be found by subtracting total liabilities from total assets. The return on equity is net profit after taxes divided by shareholders equity, which is given by net worth:

Profit after taxes PAT

ROE = =

Net worth (Equity) NW

ROE indicates how well the firm has used the resources of owners. In fact, this ratio is one of the most important relationships in financial analysis. The earning of a satisfactory return is the most desirable objective of business. The ratio of net profit to owners’ equity reflects the extent to which this objective has been accomplished. This ratio is, thus, of great interest to the present as well as the prospective Shareholders and also of great concern to management, which has the responsibility of maximizing the owners’ welfare.

The return on owners’ equity of the company should be compared with the ratios of other similar companies and the industry average. This will reveal the relative performance and strength of the company in attracting future investments.

**21. Earnings per Share (EPS)**

The profitability of the shareholders investments can also be measured in many other ways. One such measure is to calculate the earnings per share. The earnings per share (EPS) are calculated by dividing the profit after taxes by the total number of ordinary shares outstanding.

Profit after tax

EPS =

Number of share outstanding

**22. Dividends per Share (DPS or DIV)**

The net profits after taxes belong to shareholders. But the income, which they will receive, is the amount of earnings distributed as cash dividends. Therefore, a large number of present and potential investors may be interested in DPS, rather than EPS. DPS is the earnings distributed to ordinary shareholders dividend by the number of ordinary shares outstanding.

Earnings paid to shareholders (dividends)

DPS=

Number of ordinary shares outstanding

**23. Dividend – Payout Ratio**

The Dividend – payout Ratio or simply payout ratio is DPS ( or total equity dividends) divided by the EPS ( or profit after tax):

Equity dividends

Dividend Payout Ratio =

Profit after tax

Dividends per share DPS

= =

Earnings per share EPS

**NEED OF THE STUDY**

1. The study has great significance and provides benefits to various

parties whom directly or indirectly interact with the company.

2. It is beneficial to management of the company by providing crystal

clear picture regarding important aspects like liquidity, leverage,

activity and profitability.

3. The study is also beneficial to employees and offers motivation by

showing how actively they are contributing for company’s growth.

4. The investors who are interested in investing in the company’s shares

will also get benefited by going through the study and can easily take

a decision whether to invest or not to invest in the company’s shares.

**RESEARCH METHODOLOGY**

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a decision whether to invest or not to invest in the company’s shares.

**SCOPE OF THE STUDY**:

The scope of the study is limited to collecting financial data published in the annual reports of the company every year. The analysis is done to suggest the possible solutions. The study is carried out for 3years(2013-2015)

**Objectives of the study:**

The major objectives of the resent study are to compare the financial strengths and weakness of **BSES** with **TPDDL** through **FINANCIAL RATIO ANALYSIS**.

**The main objectives of resent study aimed as:**

To evaluate the performance of the company by using ratios as a yardstick to measure the efficiency of the company. To understand the liquidity, profitability and efficiency positions of the company during the study period. To evaluate and analyze various facts of the financial performance of the company. To make comparisons between the ratios during different periods.

**OBJECTIVES**

1. To study the present financial system at **BSES.**

2. To determine the Profitability, Liquidity Ratios.

3. To analyze the capital structure of the company with the help of

Leverage ratio.

4. To offer appropriate suggestions for the better performance of the

organization

**Data sources:**

The study is based on secondary data. However the primary data is also collected to fill the gap in the information..

* Primary data will be through regular interaction with the officials of BSES.
* Secondary data collected from annual reports and also existing manuals and like company records balance sheet and necessary records.

**LIMITATIONS**:

* The study provides an insight into the financial, personnel, marketing and other aspects of **BSES**. Every study will be bound with certain limitations.
* The below mentioned are the constraints under which the study is carried out.
* One of the factors of the study was lack of availability of ample information. Most of the information has been kept confidential and as such as not assed as art of policy of company.
* Time is an important limitation. The whole study was conducted in a period of 60 days, which is not sufficient to carry out proper interpretation and analysis.

**Data analysis**

**Liquid ratio**

1. **Current ratio**

|  |  |  |  |
| --- | --- | --- | --- |
| **Current ratio** | | | |
|  |  |  |  |
| **YEAR** | **CURRENT ASSETS(cr)** | **CURRENT LIABILITY(cr)** | **RATIO** |
|  |  |  |  |
| **BSES** | | | |
|  |  |  |  |
| 2018-2019 | 1320.37 | 7990.89 | 0.17 |
| 2017-2018 | 1247.58 | 7206.25 | 0.17 |
| 2016-2017 | 1056.29 | 5065.73 | 0.21 |
| **TPDDL** | | | |
| 2018-2019 | 3716.31 | 6268.67 | 0.59 |
| 2017-2018 | 3535.49 | 7604.21 | 0.46 |
| 2016-2017 | 3795.13 | 4560.93 | 0.83 |
|  |  |  |  |

|  |
| --- |
| **INTERPRETATION**: The Current Ratio measures the firm's ability to pay their current obligations .The greater extent to which current asset exceeds current liabilities ,the easier the can meet its short term obligation. The standard ratio is 2:1 but both company’s ratio is less than the standard ratio which is not satisfactory .Both company needs to increase its current assets. |

***Bibliography***

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* Balance Sheet of BSES Yamuna Power Ltd.

**Internet References**

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* <http://www.studyfinance.com/lessons/capbudget/index.mv?page=03>

**Study Material**

* Financial Management by Khan & Jain
* Financial Management by R.P. Rustagi