

IMPACT OF PROFITABILITY ON SHARE PRICES

(A CASE STUDY OF NTPC)

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ABSTRACT : The main aim of the study is to analyze the impact of profitability on share prices by adopting NTPC in India as case example. Moreover, the study also aimed to explore the decision making criteria of investors on the basis of profitability from share prices. Literatures find that, firm size, growth, lagged profitability, capital structure, debt, liquidity, and lagged debt are responsible for impacting the profitability of a company. On the other hand, profitability of a company has a significant impact on share prices. Since, increasing or high share price shows better strength and development in terms of profitability of the company, it is impendent to further explore the impact of profitability on share prices using a case example.

Data was collected for profitability analysis on the basis of income and expenditures for 2015 to 2018.

Keywords : Profitability, NTPC, Share Prices

INTRODUCTION : Profitability of a firm is an essential precondition to gain success and survive in the long term. It is the measure of the scope of the company's profit relative to the size of the business. Profitability is always the primary goal of any business because without profitability a company will not be able to survive in the long term and it will be unable to face competition in case of negative profits. Profitability is measured with income and expenses, where income is money generated from the activities of the business.

Concept of Share Prices : Share price is the price of one share in various saleable stocks of a firm. Share price indicates reputation of the companies listed in stock exchanges (Stierwald, 2009). Increasing or high share price shows better strength and development of the company. In other words, the total capital of a company is divided into various small parts and each small part is known as share. Valuation of share, in case of shares which are listed on a stock exchange, can be obtained from the daily list of prices published by stock exchanges.

It is assessed that share prices and other assets are important part of the dynamics of economic activities. According to Yahyazadehfar & Babaie, (2012), stock market is considered as the primary indicator of a country's economic strength and development. Stock prices indicate the expectations of earnings, dividends, and interest rates. An investor's stock price decisions reflect their expectations about future movements and not current activity because he/she tries to evaluate future variables (Reilly & Brown, 2011) .

OVERVIEW OF NTPC :

NTPC Limited is the largest power generating company in India in terms of installed capacity and generated output. It supplies bulk of power to the Indian households. In 1975, it was set up as a private limited company with the name of National Thermal Power Corporation Private Limited. But in 1976, the word 'private' was deleted by the government of India. It acquired first patch at Singrauli in 1976. Then it expanded its operations to Badarpur projects.

In 1985, NTPC was converted from private to public company. This company was the first company among Public Sector Undertakings (PSUs) which issued bonds in the debt market. Then it further expanded its area by acquiring Feroze Gandhi Unchahar Thermal Power Station (2x210MW) from Uttar Pradesh Rajya Vidyut Utpadan Nigam. Then after the legislation was passed by the government of India, control of transmission system was given to Power Grid Corporation of India Ltd. It achieved Navratna status in the year 1995. After that, NTPC acquired 460 MW Talcher Thermal Power Station from Orissa State Electricity Board. Initial public offer (IPO) was launched by NTPC which consisted of 5.25% as fresh issue and 5.25% as offer. It started generation of power from hydro nuclear and renewable energy sources along with undertaking coal mining and oil exploration activities in around 2005. NTPC became a listed public company in 2004 with 89.5% equity share capital held by the government.

NTPC signed Memorandum of Understanding (MoU) with Asian Development Bank (ADB), GE Energy Financial Services USA, Kyushu Electric Power Co Inc Japan and Brookfield Renewable Power Inc Canada in 2008. These deals aimed to form joint ventures (JVs) by the company under public-private partnership to undertake renewable power generation. In 2010, NTPC gained a status of Maharatna.

REVIEW OF LITERATURE :

1. Profitability refers to the ability of a business activity in any enterprise, company or organization to make profits (Athanasoglou, Brissimis & Delis, 2008). Businesses have a primary target of making profits over a certain period of time to guarantee their survival and growth. Profit making is the evidence of how efficient the leadership and management of an enterprise is, given the available resources for use.

2. Profitability can also be described as the ability to gain returns from resources available in a given investment (Kang, Lee & Huh, 2010). It is essential to point out that profitability is not a synonym for efficiency rather it can be described as the index of efficiency. Efficiency can be measured by gauging the profitability of a given investment.

OBJECTIVES & RESEARCH METHODOLOGY :

Objectives : 1 To analyse the effect of profitability on the share prices of NTPC.

2. . To know the relation of profitability with share prices.

Research Methodology :

Research methodology of any study is arrived at when the researcher considers the problem statement.. This research focused on a case study of NTPC & how its profitability influence its share prices in the Indian Stock Market.

This study incorporated the use of a descriptive methodology of research. The research design used the descriptive research design as a technique to explain in detail the characteristics of the subject of profitability and the share prices in the stock market. The quantitative approach is a means of evaluating data gathered so

as to decode it through the use of descriptive statistics in a manner enabling the analyzed to understand the problem mathematically. For every variable being analyze quantitatively, the standard deviation and mean are general means of data analysis in any study. In this study, research on data was conducted using the Microsoft excel tool.

DATA ANALYSIS & INTERPRETATION :

ANALYSIS OF SOURCES OF INCOME OF NTPC LTD.

The gross income of a company consists of “all gains, profits and income derived from all the sources” (Surrey & Warren, 1953 pp 772). Alongside, it pays to the government the taxes levied on its products. The net income is therefore gross income net of taxes. The table below presents the various sources of NTPC revenues with the corresponding values in the financial years 2015-16 and 2016-17.

Revenue	Sources of Income	2016-17 (in Rs. Crores)	2015-16 (in Rs. Crores)
Sales of energy	Coal, hydro, small hydro, solar, wind and gas based energy	77071.11	69961.62
Consultancy and other services	Consultancy services	163.71	117.04
Lease rentals on operating assets	Recovery of capacity charges due to depreciation, interest on loan capital and pre tax return on equity	240.42	223.25
Internally consumed energy	Power charges for construction work at power stations	68.93	81.82
Interest earned by beneficiaries	Subsidiaries and Joint ventures	397.09	221.29
Provisions for tariff adjustments written back	Accounting adjustments of tariff charged to consumers	162.49	154.51
Interest earned by assets	Subsidiaries and Joint ventures	154.31	84.25
Government grant	Subsidies	15.38	0.03
Other income	Subsidiaries and Joint ventures	1068.86	1165.35
Total Revenue		79342.30	72009.16

Table 1: Sources of Revenue for NTPC in fiscal years 2015-16 and 2016-17

(Source: (NTPC, 2017))

INTERPRETATION 1: Table 1 shows that total income earned by NTPC increased by 10% in 2016-17. Sources of income constitute income mainly from sales of energy, consultancy services, lease rentals on operating assets, dividend income from long term investments obtained by the joint ventures and subsidiaries, and interest earned on term deposits with banks. Comparison of figures of the two columns suggested that the increase in income of 2016-17 was a result of rise in sales of energy (Rs. 77071.11 crores from Rs. 69961.62 crores), rise in revenue from consultancy and other services (Rs. 163.71 crores from Rs. 117.04 crores), growth in interest earned by beneficiaries (Rs. 397.09 crores from Rs. Rs.221.29 crores), rise in interest earned by assets (Rs. 154.31 crores from Rs. 84.25 crores) and increase in Government grants (Rs. 15.38 crores from Rs. 0.03 crores).

For the purpose of aggregate income comparison between NTPC data was also collected from another source (The Economic Times, 2018) which represented the aggregate figures pertaining to annual income of NTPC in the following form.

	Source of Income	2016-17 (in Rs. crores)	2015-16 (in Rs. crores)
Sales Turnover	Coal, hydro, small hydro, solar, wind and gas based energy, consultancy services and income from other sources	78971.43	71236
Excise Duties		697.99	729.2
Net Sales		78273.44	70506.80
Total Income		79342.30	71770.50

Table 2: Income Figures for NTPC in fiscal years 2015-16 and 2016-17

(Source: (The Economic Times, 2018))

INTERPRETATION 2 : Similar as table 1, table 2 depicts a rise in total income in the fiscal year 2016-17. Total income was calculated to have risen in 2016-17 by Rs. 7571.80 crores. This was mainly due to increase in sales turnover and decrease in excise duties compared to the previous financial year. Sales turnover increased by Rs. 7735.43 crores. Excise duties decreased by Rs. 31.21 crores. As a result, net sales value increased by Rs. 7766.64 crores. Consequently, total income in 2016-17 went up as was reflected in the figures in table . This is an indication that the company has done a much better performance in 2016-17. The better performance was due to the contributions made by coal stations and power stations by generating more electricity. Increase in billion units (BU) of electricity generated by coal stations and power stations including joint ventures and subsidiaries registered growth and caused income to rise (NTPC, 2017). To continue on the growth path, NTPC signed a Memorandum of Understanding (MoU) with Ministry of Power in June 2017 with a target of 250 billion units of electricity generation and a sales revenue target of 79,280 crores in the financial year 2017-18 (The Economic Times, 2017). According to the latest report, under the same MoU, NTPC targets 268 billion units of electricity generation during the financial year 2018-19 with a targeted revenue of 85,500 crores (Press Information Bureau, 2018).

ANALYSIS OF SOURCES OF EXPENDITURES OF NTPC LTD.

Expenditure	2016-17 (in Rs. crores)	2015-16 (in Rs. crores)
Raw materials cost	57.48	53.89
Power and fuel cost	48336.69	44508.43
Expenditures on employees	4324.60	3609.32
Selling and admin expenses	18.88	17.32
Miscellaneous expenses	4251.52	5075.43
Total Expenses	56989.17	53264.39

Table 3: Expenditure Figures for NTPC in 2015-16 and 2016-17

Source: (Moneycontrol, 2018)

INTERPRETATION : As depicted by the figures in table 3, cost of raw materials increased in 2016-17 by Rs. 3.59 crores. Power and fuel cost went up by Rs. 3828.26 crores. This was due to increase in the production of coal based electricity and increase in the price of coal (NTPC, 2017). Cost of retaining existing employees caused the company to spend Rs. 715.28 crores more. Selling and administrative expenses increased by Rs. 1.56 crores. However, there was a fall in the miscellaneous expenses by Rs. 823.91 crores. This reduction was attributed to zero charges paid for water conservation fund and a decrease in CSR expenses in 2016-17 as opposed to 2015-16. Considering all the components together, the total expenses in 2016-17 were higher by Rs. 3724.78 crores. As mentioned before, profit is equated to the difference between total income and total expenses. It turned out that although both total income and total expenditure were higher in 2016-17 than the previous financial year, increase in income was more than the increase in expenditure. This resulted in an increase in profit. In 2015-16, profit was equal to Rs. 18506.11 crores.

Discussion in this section clearly indicated that financial performance of NTPC improved in 2016-17. Both its after tax income and profit levels rose in 2016-17 by 10.55% and 20.78% respectively.

Impact on share prices : *The first two parts corresponded to the entire financial years 2015-16 and 2016-17 respectively. The third part covered the period of April, 2017 to November, 2017 of the 2017-18 financial years.*

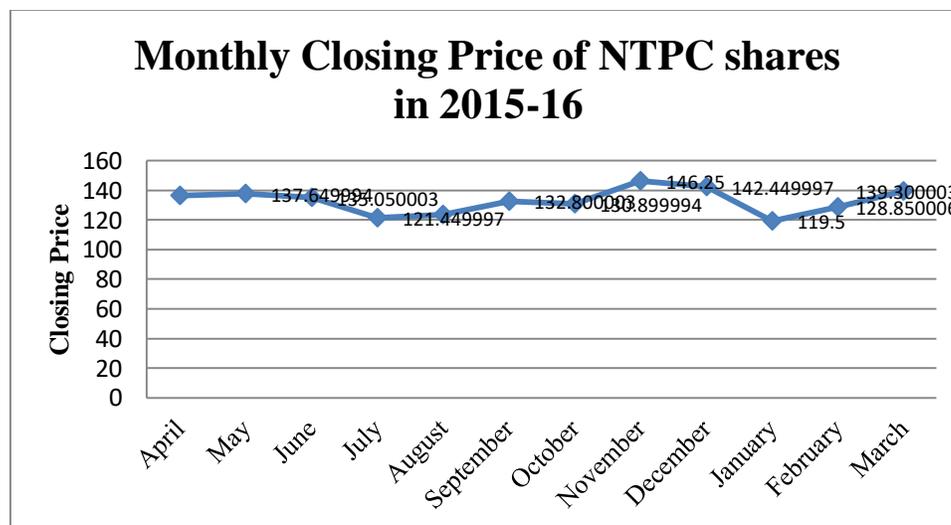


Figure 1: Monthly Closing prices of NTPC Shares in 2015-16

Source: (Yahoo finance, 2018)

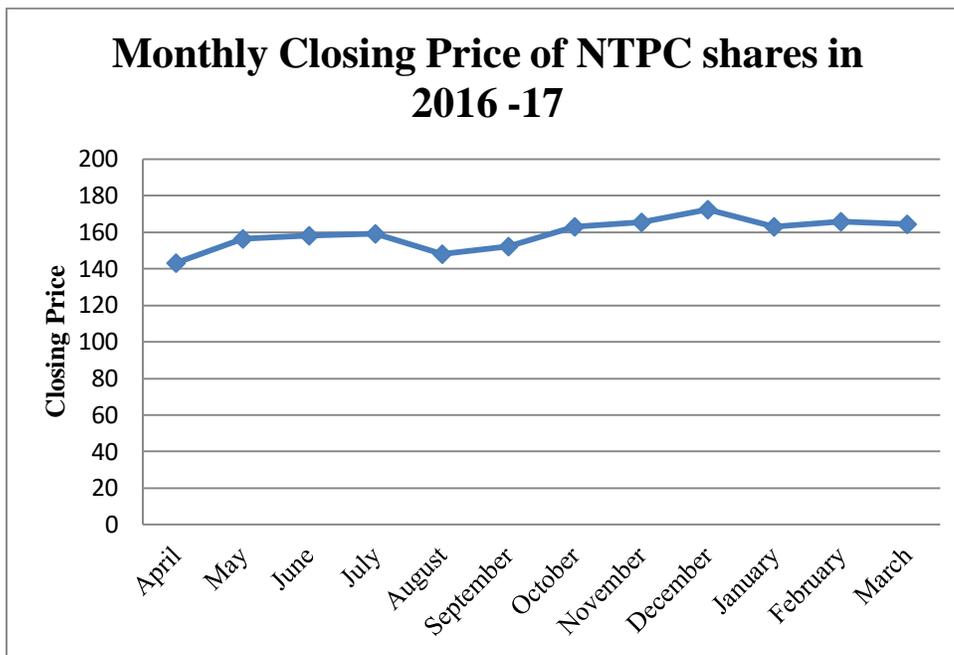


Figure 2: Monthly Closing prices of NTPC shares in 2016-17

Source: (Yahoo finance, 2018)

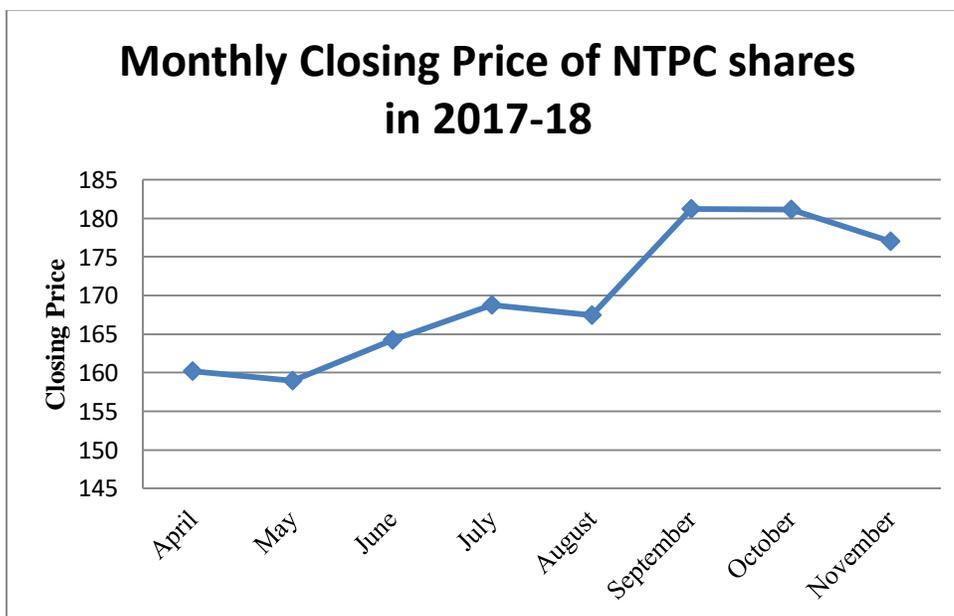


Figure 3: Monthly Closing prices of NTPC shares in 2017-18

Source: (yahoo finance, 2018)

Hypothesis testing

In this section, to quantify the impact of profit on share prices, the following null hypothesis was tested for NTPC for the period 2005 – 2017 taking quarterly data.

H₀: Profit after tax earned by NTPC does not affect its share prices.

H_A: Profit after tax earned by NTPC has an effect on its share prices.

	Coefficient	Std. error	t	p> t	95% confidence interval	
Profit of NTPC	-.0237628	.0068635	-3.46	0.001	-.0376345	-.0098911
Constant	223.9868	17.07895	13.11	0.000	189.4689	258.5046

Table-4 Regression coefficient of profit after tax on NTPC share prices

Results presented in table 4 shows that profits after tax earned by NTPC for the period 2005 – 2017 have a significant effect on its share prices. The significant impact is evident from the p-value which is less than 0.05. Therefore the null hypothesis was rejected at 5% level of significance. However, it can also be noted that the sign of the coefficient is negative which implies that profit after tax affected share prices of NTPC negatively. Although this contradicts the findings of the trend analysis, it can be interpreted by the fact that the trend analysis captured the period of 2015 to 2017 where a longer period of 2005 - 2017 was considered for the regression analysis. Since the latter period includes the period of global recession in 2008 – 2009, it might have played a role in the relation between profits and share prices where the period of recession was marked by volatility.

Findings:

Analysis in the previous two sections of this chapter found that the NTPC profits increased in 2016-17. To examine its effect on share prices, the average monthly closing prices of shares for three consecutive fiscal years were calculated and presented below.

	2015-16	2016-17	2017-18
Average Monthly closing price of shares	132.835	159.3083	165.7768

Table 0: Average monthly closing price of NTPC shares in 2015 to 2017

1.As shown in table 5, average monthly closing price increased from 2015 to 2017. The month to month trend analysis of share prices also found evidence in published reports that price of shares increased (decreased) with a rise (fall) in quarterly profits, as discussed in the previous section.

2.Thus, it can be stated that profit earned by NTPC had a positive relation with its share prices.

Recommendations: NTPC should undertake strategies such that earnings can be increased than the operational and other expenses.

Conclusion: Trend analysis of share prices for the period 2015 - 2017 revealed that for NTPC, increased profit affected its average share prices in a positive manner. Income and profit for this

company were higher in 2016-17 than the previous year. Average share prices were also found to be higher in 2016-17. Hypothesis testing of the effect of profit on share prices for NTPC for the period 2005 - 2017 revealed that profit had a significant effect on share prices for NTPC .

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