



# An Analysis Of The Effects Of Stock In Blue-Chip Companies On Economic Growth (A Case Study Of BHEL, NTPC & ONGC)

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**Citation:** Dr. Pravin Choudhary, Charu Katiyar, Nikhilesh & Risha et al. (2024), An Analysis Of The Effects Of Stock In Blue-Chip Companies On Economic Growth (A Case Study Of BHEL, NTPC & ONGC), *Educational Administration: Theory And Practice*, 30(4), 2095-2102, Doi:10.53555/kuey.v30i4.2267

## ARTICLE INFO

## ABSTRACT

The aim of this research is to examine the relationship between economic growth and the shares of selected top PSUs. The majority of individuals concur that blue-chip companies are high-value investments that offer stability and long-term gains to investors. Reputable businesses with a solid track record of profitability and consistent earnings are the owners of these stocks. Some features of blue-chip stocks that benefit investors over time include a track record of reliable dividend payments, which can help counteract any short-term drops in the stock's value. Buying blue-chip stocks is a common strategy for investors who want to safeguard their investment amid erratic economic times. By examining their fundamentals, this study seeks to conduct a complete analysis of the growth potential and performance of blue-chip companies in India.

**Keywords:** Economic Growth, Capital Employed, Blue Chip Companies, Interest

## Introduction:

"Blue chip" stock refers to shares issued by a sizable, reputable, stable, and well-established business. These companies frequently have a lengthy track record of operation, steady earnings growth, and dividend payments to shareholders.

A blue-chip company often has a market valuation in the billions. It is usually well-known and placed in the top three or as the market leader in its industry.

For all of these reasons—including the potential for profit—blue chip stocks are among the most sought-after stock purchases by investors. Blue-chip companies include BHEL, NTPC, ONGC, Coal India Ltd., IBM Corporations, Microsoft, Coca-Cola Company, American Express, McDonald's, and Boeing Co.

"Blue chip" companies are big, reputable companies that usually own well-known brands and have excellent reputations. Blue chip businesses are prudent additions to any portfolio because of their steady financial returns. The steadily increasing payouts of blue chips have made them a favorite among investors. This might be true in general, but it's not a given. Investors frequently believe that blue chips are immune to all types of market shocks. For this reason, it is essential to diversify a portfolio beyond blue chip firms.

### Bharat Heavy Electricals Ltd. (BHEL)

BHEL, the central public sector undertaking in India, is the largest manufacturer of power generation equipment owned by the government. The Ministry of Heavy Industries oversees its administration, although the Government of India owns the company. Based in New Delhi, BHEL was founded in 1956 with the aid of Soviet technology.

### National Thermal Power Corporation Ltd. (NTPC)

Formerly known as National Thermal Power Corporation, NTPC Limited is a central Public Sector Undertaking (PSU) in India that generates energy and performs other functions. It is owned with the aid of using the Ministry of Power and the Government of India. The PSU's foremost workplace is positioned in New Delhi. The

production and distribution of power to Indian State power Boards is the primary responsibility of NTPC. In addition, the organization handles turnkey mission contracts and consulting paintings referring to engineering, mission management, production management, and energy plant operation and management.

### **Oil & Natural Gas Corporation Ltd. (ONGC)**

The Ministry of Petroleum and Natural Gas, Government of India, is the owner of the Oil and Natural Gas Corporation Limited (ONGC), a central public sector enterprise. The company's main office is located in Dehra doon. On August 14, 1956, the Indian authorities hooked up ONGC. Approximately 70% of India's domestic crude oil production and 84% of the nation's natural gas production are produced by this largest government-owned oil and gas exploration and production company in the nation. ONGC has vertical integration throughout the whole gas and oil sector. The Indian authorities granted ONGC the Maharatna designation in November 2010.

## **Literature Review**

**Bhalla V.K. (2017)** assessed the distinct sections influencing the Blue-chip associations focal investigation. According to him, cash-related risk considerations are the primary determinants of esteem costs, which in turn impact advantages and benefits. Furthermore, he communicated that proving risk in value is more significant than in securities and that it also influences cost. He found that many specialists estimate esteem using the pay-to-earnings (P/E) ratio, which is comparable to dividing the public cost by benefit per share.

**Ghosh T.P (2017)** studied the Fundamental Analysis of the Blue-chip associations. The person stated that they believed "Blue-chip associations" will have a big impact on banks, financial institutions, associations that deal with cash outside of banks, and associations that deal with collections. Due to the accumulation of links, the risk is mostly linked to financial and business risk. A number of risks are detrimental to banks, financial associations, and non-banking cash connected businesses. These risks include advance charge peril, amphitheater chance, outside exchange shot, liquidity danger, country and sovereign risk, and chapter 11 potential.

**Philippe Jhorion and Sarkis Joseph Khoury (2016)** looked at a "Basic analysis of the NSE's Blue-chip associations in India." He said that in the absence of broad segmentation, it is difficult to evaluate the risk associated with near securities and that the family unit hypothesis is a subset of the decision regarding the overall assignment of assets. The categories that affect stock expenses and the correlation between rising stock expenses and exchange rates must be taken into account by the budgetary authorities.

**K.Sivakumar. (2014)** found new standards that will help examiners choose which association is best for investment. As per his perspective, Economic Value Added (EVA) holds greater potency in carrying out crucial initiatives compared to other conventional instruments such as EPS and esteem benefit extent. EVA employs all of the resources at its disposal to analyze the capital that the association raised. The financial professional has more advantages when the EVA rises. The market cost of an association's offerings will most likely rise in relation to its EVA.

**Shurveer S. Bhanawat (2011)** An analysis of the "Indian Blue-chip associations" is presented in this paper, "A fundamental examination of Blue-chip associations of NSE in India." This study uses quantitative, fundamental methods to analyze the impact of the cash-related crises on the Indian auto sector. The impact is not significant, according to the t-Test and Analysis of Variance assessments, showing that although retreat impacts economies generally, the Indian auto industry has demonstrated adaptability and was mostly unaffected by the subsidence.

## **Research Methodology**

**Research Design:** Descriptive Research in Nature.

**Sample Size:** 5 years data (1-4- 2018- 31-3 -2023).

**Data Collection:** Research are based on secondary data which is collected from website of selected PSUs annual published reports.

**Tools for Hypotheses testing:** Correlation & T-test

**Objective of the study:**

- To research how the stock of blue-chip businesses affects economic expansion.

- To be aware of the variables influencing the stocks of blue-chip firms and India's economic development (such as GDP growth rate, capital employed, profitability, and interest on long-term borrowings).

### Hypotheses of the Study:

HO1: There is no significant relationship between ICR and Economic Growth of the selected PSUs.

HO2: There is no significant relationship between ROCE and Economic Growth of the Selected PSUs.

### Limitation of the study:

1. Cost and time are constraints.
2. Only 5 years data are analyzed
3. Only Three Blue-chip companies' stocks (PSUs) are taken for this study

## Data analysis & Interpretations

### Bharat Heavy Electricals Ltd. (BHEL)

**1. Interest coverage Ratio:** The interest coverage ratio, a measure of debt to profitability, is used to assess how well a business pays off its present debt without experiencing difficulties. The interest coverage ratio of a business is calculated by dividing its earnings before interest and taxes (EBIT) by its interest expense for a given time period.

= Earnings Before Interest & Tax / Interest on Long term Borrowings

**Table 1**

Year	EBIT	Interest on Long term borrowings	Ratio
2018-19	2048	288	7.111
2019-20	-662	507	-1.306
2020-21	-3612	373	-9.684
2021-22	437	355	1.231
2022-23	450	522	0.862

The interest coverage ratio of BHEL Ltd. is displayed in Table 1. The company's ratio for the given year is extremely low, which indicates that it is very difficult for it to pay off interest payments out of profits. As a result, BHEL's status is not favorable for paying off its debt with profits.

**Return on Capital Employed:** Return on capital employed (ROCE) is a financial term that may be used to evaluate a company's profitability and capital efficiency. This ratio can be used to evaluate how well a business is making a return on its investment.

= Earnings Before Interest & Tax / Capital Employed

**Table 2**

Year	EBIT	Capital Employed	Ratio
2018-19	2048	41401	0.049
2019-20	-662	37657	-0.018
2020-21	-3612	35380	-0.102
2021-22	437	35337	0.012
2022-23	450	36453	0.012

Table 2 displays the BHEL's Return on Capital Employed. The BHEL ratio in the given year is extremely low when compared to financial performance. A ratio of 20% or more is excellent. Therefore, there is a poor return on capital invested in the BHEL situation.

### NTPC

#### 1. Interest coverage Ratio =

Earnings Before Interest & Tax / Interest on Long term Borrowings

**Table 3**

Year	EBIT	Interest on Long term borrowings	Ratio
2018-19	12673	4717	2.686665
2019-20	14466	6782	2.132999
2020-21	15279	7459	2.048398
2021-22	19166	7351	2.607264
2022-23	24067	9980	2.411523

Table 3 displays the NTPC's interest coverage ratio. The NTPC's ratio is excellent for the current year, indicating that it will be able to pay down its debt with profits.



**Return on Capital Employed=**

Earnings Before Interest &amp; Tax/Capital Employed

**Table 4**

Year	EBIT	Capital Employed	Ratio
2018-19	12673	233258	0.05433
2019-20	14466	270291	0.05352
2020-21	15279	282785	0.05403
2021-22	19166	289665	0.066166
2022-23	24067	308940	0.077902

Table 4 displays the NTPC's Return on Capital Employed. The NTPC's ratio of profit to invested capital in the given year is quite low. A ratio of 20% or more is excellent. Therefore, the NTPC's status does not favor a return on capital invested.

**ONGC****1. Interest coverage Ratio =**

Earnings Before Interest &amp; Tax/Interest on Long term Borrowings

**Table 5**

Year	EBIT	Interest on Long term borrowings	Ratio
2018-19	39954	2492	16.03291
2019-20	20369	2824	7.212819
2020-21	16403	2215	7.405418
2021-22	41040	2360	17.38983
2022-23	50396	2700	18.66519

Table 5 displays the ONGC's interest coverage ratio. The ONGC's ratio in the current year is quite high, which is advantageous for the company and indicates that it will be able to pay off its debt with profits.

**Return on Capital Employed=**

Earnings Before Interest &amp; Tax/Capital Employed

**Table 6**

Year	EBIT	Capital Employed	Ratio
2018-19	39954	255518	0.156365
2019-20	20369	256114	0.079531
2020-21	16403	281624	0.058244
2021-22	41040	300662	0.136499
2022-23	50396	325887	0.154643

Table 6 displays the ONGC's Return on Capital Employed. In comparison to financial performance, the ONGC's ratio for the given year is not too poor. A ratio of 20% or more is excellent. Therefore, the ONGC situation is favorable for both improving the ratio to reach the optimal limit and for return on invested capital.

**Hypotheses testing:**

BHEL

H01: There is no significant relationship between ICR and Economic Growth of the selected PSUs.

H11: There is a significant relationship between ICR and Economic Growth of the selected PSUs.

Year	ICR	Economic Growth rate
2018-19	7.111	6.45
2019-20	-1.306	3.87
2020-21	-9.684	-5.83
2021-22	1.231	9.05
2022-23	0.862	7

### First Hypotheses Results

#### BHEL

Tools	Result	Table Value	The Null Hypotheses is accepted(H01) and alternate hypotheses is rejected(H11), So there is no significant relation between Interest coverage ratio and Economic growth rate.
Karl Pearson Coefficient of correlation	0.8559	High degree of positive Correlation	
T-test	2.867	3.182	

#### NTPC

Year	ICR	Economic Growth rate
2018-19	2.686665	6.45
2019-20	2.132999	3.87
2020-21	2.048398	-5.83
2021-22	2.607264	9.05
2022-23	2.411523	7

#### First Hypotheses results

##### NTPC

Tools	Result	Table Value	The Null Hypotheses is accepted(H01) and alternate hypotheses is rejected(H11), So there is no significant relation between Interest coverage ratio and Economic growth rate.
Karl Pearson Coefficient of correlation	0.8012	High degree of positive Correlation	
T-test	2.32	3.182	

#### ONGC

Year	ICR	Economic Growth rate
2018-19	16.03291	6.45
2019-20	7.212819	3.87
2020-21	7.405418	-5.83
2021-22	17.38983	9.05
2022-23	18.66519	7

#### First Hypotheses results

##### ONGC

Tools	Result	Table Value	The Null Hypotheses is accepted(H01) and alternate hypotheses is rejected(H11), So there is no significant relation between Interest coverage ratio and Economic growth rate.
Karl Pearson Coefficient of correlation	0.7811	High degree of positive Correlation	
T-test	2.17	3.182	

#### Second Hypotheses

H02: There is no significant relationship between ROCE and Economic Growth of the selected PSUs.

H12: There is a significant relationship between ROCE and Economic Growth of the selected PSUs.

#### BHEL

Year	ROCE	Economic Growth rate
2018-19	0.049	6.45
2019-20	-0.018	3.87
2020-21	-0.102	-5.83
2021-22	0.012	9.05
2022-23	0.012	7

**Second Hypotheses results****BHEL**

Tools	Result	Table Value	The Null Hypotheses is rejected (H01) and alternate hypotheses is accepted(H11), So there is a significant relation between Return on Capital Employed (ROCE) and Economic growth rate.
Karl Pearson Coefficient of correlation	0.9198	Very high degree of positive Correlation	
T-test	4.0601	3.182	

**NTPC**

Year	ROCE	Economic Growth rate
2018-19	0.05433	6.45
2019-20	0.05352	3.87
2020-21	0.05403	-5.83
2021-22	0.066166	9.05
2022-23	0.077902	7

**Second Hypotheses results****NTPC**

Tools	Result	Table Value	The Null Hypotheses is accepted(H01) and alternate hypotheses is rejected(H11), So there is no significant relation between Return on Capital Employed (ROCE) and Economic growth rate.
Karl Pearson Coefficient of correlation	0.5164	moderate degree of positive Correlation	
T-test	1.044	3.182	

**ONGC**

Year	ROCE	Economic Growth rate
2018-19	0.156365	6.45
2019-20	0.079531	3.87
2020-21	0.058244	-5.83
2021-22	0.136499	9.05
2022-23	0.154643	7

**Second Hypotheses results****ONGC**

Tools	Result	Table Value	The Null Hypotheses is accepted(H01) and alternate hypotheses is rejected(H11), So there is no significant relation between Return on Capital Employed (ROCE) and Economic growth rate.
Karl Pearson Coefficient of correlation	0.8395	Low degree of positive Correlation	
T-test	2.68	3.182	

**Findings:****BHEL**

- In the table 1 showing the Interest coverage ratio of the BHEL Ltd. In the given year the ratio of the company is very less it means the pay off the interest amount out of profit is so difficult for the company so the BHEL situation is not good to pay off its debt out of profit.
- In the table 2 showing the Return on Capital Employed of the BHEL. In the given year the ratio of the BHEL is very less as compare to financial performance. The ideal ratio should be 20% or more. so, the BHEL situation is not good to return on invested capital.

**NTPC**

- In the table 3 showing the Interest coverage ratio of the NTPC. In the given year the ratio of the NTPC is very good so the NTPC situation is sound to pay off its debt out of profit.

- In the table 4 showing the Return on Capital Employed of the NTPC. In the given year the ratio of the NTPC is very less profit generate on invested capital. The ideal ratio should be 20% or more. so, the NTPC situation is not good to return on invested capital.

#### **ONGC**

- In the table 5 showing the Interest coverage ratio of the ONGC. In the given year the ratio of the ONGC is very high and it is good for the organization, so the ONGC situation is positive sound to pay off its debt out of profit.
- In the table 6 showing the Return on Capital Employed of the ONGC. In the given year the ratio of the ONGC is not bad as compare to financial performance. The ideal ratio should be 20% or more. so, the ONGC situation is good to return on invested capital and also to improve the ratio to achieve the ideal limit.

#### **Conclusions:**

Following investigation of selected blue-chip stocks, we conclude that they all are very good in situation except BHEL due to their interest coverage ratio and also return on capital employed (ROCE). In hypotheses testing there is no relation between Interest coverage ratio and economic growth of the country and also there is no relation between return on capital employed and economic growth of the country, so it is very bad situation of the selected PSUs.

#### **References:**

1. <https://www.investopedia.com/terms/b/bluechipstock.asp>
2. [www.moneycontrol.com](http://www.moneycontrol.com)
3. [www.economictimes.com](http://www.economictimes.com)
4. [www.money.rediff.com](http://www.money.rediff.com)
5. [www.financeindia.org](http://www.financeindia.org).
6. [www.getmoneyrich.com](http://www.getmoneyrich.com)
7. Financial management, Theory and Practice. Shashi K Gupta, RK Sharma.
8. Financial management, Theory, concepts and problems, R.P. Rustagi.
9. <https://in.investing.com/analysis/how-to-identify-bluechip-stocks>
10. [www.bhel.com](http://www.bhel.com)
11. [www.ntpc.com](http://www.ntpc.com)
12. [www.ongc.com](http://www.ongc.com)
13. [www.google.com](http://www.google.com)