

**Impact of Return on Capital Employed On Company Performance – An Introspection in India**

**Dr. Pradip Kumar Das**

Associate Professor & Teacher-In-Charge, Commerce Unit, Jagannath Kishore College, Purulia (West Bengal), India

**\*Corresponding author**

*Dr. Pradip Kumar Das*

**Article History**

*Received: 09.09.2017*

*Accepted: 15.09.2017*

*Published: 30.09.2017*

**DOI:**

10.21276/sjbms.2017.2.9.5



**Abstract:** Estimating a company’s sustainable profitability is a big challenge to investors. A profitable company yielding a steady revenue stream with modest capital expenditure has the ability to compound shareholder wealth at an attractive rate over time. Even though many studies have been conducted, most companies strive to provide competitive returns. The golden path of being profitable has not yet been revealed. Selected 15 Sensex Companies standing as leading players are expected to provide considerable support to empower the efforts of the Indian Government. On this backdrop, the present study aims at focussing and assessing the efficacy of the performance of the selected Sensex Companies with the help of the most appropriate accounting-based measure of profitability i.e. Return On Capital Employed (ROCE) from 2012 to 2017. The empirical study reveals that companies have not been able to increase revenue and ROCE simultaneously and they are not also compatible in comparison with the global capital market.

**Keywords:** Sustainable Profitability, Return On Capital Employed, Sensex Companies, Steady Revenue Stream, Shareholder Wealth

**INTRODUCTION**

Performance of an enterprise states the introspective overview of how well an enterprise utilizes its assets seconding for revenue generation. Profitability ratio indicates the efficiency of a company’s capital investments. The nature of a company’s competitive advantage stems from its basic business functions and

profitability ratio measures how well a company invests in its core operations. A high profitability ratio typically is an indication of well-managed and profitable business. Profitable companies capacitating to produce a steady revenue stream with modest capital expenditure are able to compound shareholders’ wealth to a greater degree. Companies with higher operational profitability produce higher compounded growth rates with lower risk over the entire period, as well as higher average returns over different time periods. Efficient management of finance is vital for the successful operation of a business enterprise. A large section of the people of society having little financial literacy is willing to be aware of the financial performance of those companies where their financial interest lies. Companies possessing both favourable characteristics of low capital intensity and high profitability should be the best compounders of shareholders’ wealth. A low reliance on physical capital to beget revenue and high operational profitability are distinguishing peculiarities of quality companies. Quality companies usually experience superior stock market performance. Every entrepreneur with risk factors constantly attempts to introduce the enterprise in order to establishing the superior entrepreneurial ability to acquire an edge over the competitors in the dynamic society. Financial performance being dynamic in nature is not always readily available from the enterprise. This paper deals

with 15 companies which are representatives of various industrial sectors of the Indian economy. There are various management accounting indicators used by companies to measure their performance. The most distinguishing result comes from the analysis of Return On Capital Employed (ROCE). Higher ROCE companies produce superior performance results regardless of the research design used. ROCE compares a company’s earnings from its primary operations with the capital invested in the company and can serve as a reliable measure of corporate performance [1]. As ROCE is an indication of management’s ability to effectively allocate capital [2],[3], it should be useful as filter indicating profitable companies. Thus, out of the most extensively used accounting ratios, ROCE has been taken as the most common appropriate accounting-based measure for assessing the efficacy of the performance of the selected Sensex Companies in terms of profitability.

**RETURN ON CAPITAL EMPLOYED (ROCE) – CONCEPT**

The term ‘Return’ means the profits available. Thus, the ROCE ratio points out the relation between the volume of capital invested and the amount of profits earned on such capital. Speaking otherwise, this ratio explicits the profitability of a firm by establishing relationship between profits and capital invested. It is

probably one of the most frequently used ratios for assessing the performance of organisations. ROCE, a member of the Return On Investment ratio, can be determined taking profits and capital employed of a given firm. ROCE highlights the earning potentiality of a firm's assets indicating the nature of profit earning capacity of a firm in response to its long-term sources of capital employed in the acquisition of its assets. It provides substantial clues to the nature of utilisation of long-term funds made available to the firm by owners and creditors. It also helps in evaluating how efficiently the funds are being managed by the management. The higher the ratio, the more efficiently the funds have been used by the management. In other words, a high ROCE achieved for a consecutive years indicates that the firm has a stable financial position with sound future prospect. ROCE provides an indication of the economic productivity of capital. Thus, it provides a standard measure of operating efficiency, which is very often applied regardless of the type of business or subdivision within a single organisation in as much as it is not affected by the long-term capital structure and other factors external to the influence and immediate management.

#### **LITERATURE REVIEW OF RETURN ON CAPITAL EMPLOYED (ROCE)**

This chapter presents a brief review of the literatures relating to the studies on financial performance and certain analytical tool. Financial performance analysis is vital for the triumph of an enterprise. It is also an appraisal of the feasibility, solidarity and inventiveness of a business. There are different measures to evaluate how well a company is using its resources for making profit. No one measure of financial performance can be taken on its own.

ROCE is extensively used as a performance measure in the profit-seeking sector [4] and successfully measures how well management is able to employ a firm's assets to generate returns. ROCE is usually a measure of the ability and efficiency of management [5]. Portfolio consisting of higher ROCE companies should outperform a portfolio comprising less ROCE firms over the long-term. ROCE compares a firm's earnings from its primary operations with the capital invested in the company and can serve as a reliable measure of corporate performance [6]. ROCE measures how well a company invests funds in its basic business operation [7]. ROCE uses operating income in the numerator and capital employed in the denominator [8]. ROCE represents financial resources necessary for the company to continue functioning and engage in its primary task of revenue generation [9]. ROCE is an indication of management's ability to effectively allocate capital [10]. A firm's competitive advantage stems from its basic business function and ROCE determines how well a company invests in its core

operation. A high ROCE is an indicator of both well-managed and profitable enterprise. ROCE is a closely-watched business score and especially in capital-intensive industries [11]. Major financial decisions shaping the future of a company and having a direct impact on the ROCE improve the firm's performance and thereby improves the ROCE returns. ROCE ratio specifically is the ultimate measure of corporate performance and it highlights the financial outcome or profit against total financial resources employed by the firm [12]. Rutherford highlights the use of ROCE performance indicators by excessive agencies under a trading regime [13]. ROCE metric reflects the efficiency of the employment of capital resources within the firm [14]. ROCE is an important tool to identify companies that offer good value and have the potential to grow. ROCE can aid the investor in identifying firms with strong earning potential. A company with high returns on capital will attract competition, and if the barriers to entry are not sufficient enough, new entrants will enter the industry. ROCE is used extensively in comparing relative profitability, both between divisions within a firm, and between different companies [15]. The literature also shows that ROCE is a popular measure of management performance [16]. A high ROCE ratio would then be indicative of a company that is operationally profitable as well as efficiently managed. ROCE compares a firm's earnings from its primary operations with the capital invested in the company and can serve as a reliable measure of corporate performance [17]. As ROCE gives an indication of management's ability to effectively allocate capital [18,19], it should be worthy as a filter for indicating profitable companies.

#### **OBJECTIVE OF THE STUDY**

Behind every research study, there must have been some definite objectives which help to build guidance to the entire study. To be specific, the study attempts to accomplish the following objectives:-

- To assess the performance of 15 Sensex Companies by using ROCE measures.
- To study the smoothness in the forecasted values of ROCE by comparing with actual ROCE.

#### **DATA & RESEARCH METHODOLOGY**

The present study is based on secondary data. The data were collected mainly from the published annual reports of the selected companies, magazines and journals on finance. The performance of the companies is evaluated with the help of most commonly applied profitability ratio i.e. Ratio On Capital Employed i.e. ROCE for a period of six years i.e. from 2012 to 2017. To analyze the data the standard tool i.e. Return On Capital Employed (ROCE) has been applied.

**LIMITATIONS OF THE STUDY**

As the study is mainly based on secondary data, the study suffers from certain limitations as follows:-

- The financial performance of the companies under study is judged just for the last six years, ending 2017. Hence, any uneven trend before or beyond the set period is the limitation of the study. Uneven trend cannot simply be predicted.
- The analysis is based on only monetary data collected mostly from annual reports and accounts; analysis of non-monetary factors is limited being an external analyst.
- As per the requirement of the study, some data have been grouped and sub-grouped.

- Non-availability of sufficient literature and information from the companies is also another limitation of the study.
- The performance of the company covering a long period can provide a better picture of management practices in this regard. The study covering a period of six years can touch only a part of the problem.

**ANALYSIS AND MAJOR FINDINGS / RESULTS AND DISCUSSION**

TABLE- 1 exhibits the return on capital employed (ROCE) of the selected companies under study. ROCE in Bajaj Auto Ltd. has declined from 46.53% in 2012 to 21.74% in 2017. Thus, it remains approximately less than half of the rate in 2017 in comparison to 2012.

**Table-1: Return On Capital Employed (%) of 15 Sensex Companies for the period from 2012 to 2017**

Name of the Company	2012	2013	2014	2015	2016	2017	$\bar{X}$
Bajaj Auto Ltd.	46.53	36.47	32.37	25.38	28.71	21.74	31.87
Tata Motors Ltd.	3.84	0.97	1.08	-16.02	0.67	-6.72	2.70
Hero Moto Corp.	42.86	38.71	37.16	35.93	37.77	31.85	37.38
Maruti Suzuki India	10.37	11.95	12.39	15.00	16.38	19.43	14.25
Ashok Leyland	8.00	5.55	0.35	4.04	8.82	16.05	7.14
TVS Motor Company	13.87	6.22	12.85	14.73	16.32	18.27	13.71
Asian Paints Ltd.	40.08	31.91	29.99	29.39	30.14	24.57	31.01
Dr. Reddy's Laboratories Ltd.	17.76	15.98	18.59	14.25	10.61	11.35	14.76
Cipla Ltd.	15.70	16.33	13.21	10.17	10.80	7.47	12.28
Infosys Ltd.	24.27	25.15	24.01	25.29	27.58	20.29	24.43
ITC Ltd.	34.93	31.31	31.68	29.54	28.18	21.52	29.44
Bharti Airtel Ltd.	6.68	-6.36	5.62	12.76	5.62	-6.36	2.99
Tata Steel Ltd.	8.14	5.92	6.95	6.50	4.79	3.89	6.03
JSW Steel Ltd.	5.05	12.59	12.96	12.72	7.00	15.30	10.94
Steel Authority Of India Ltd.	6.38	3.51	4.11	3.22	-6.87	-1.33	1.50
Average	18.96	15.75	16.22	14.86	15.10	13.15	16.03

Source: - Annual Reports and Accounts – Results Computed.

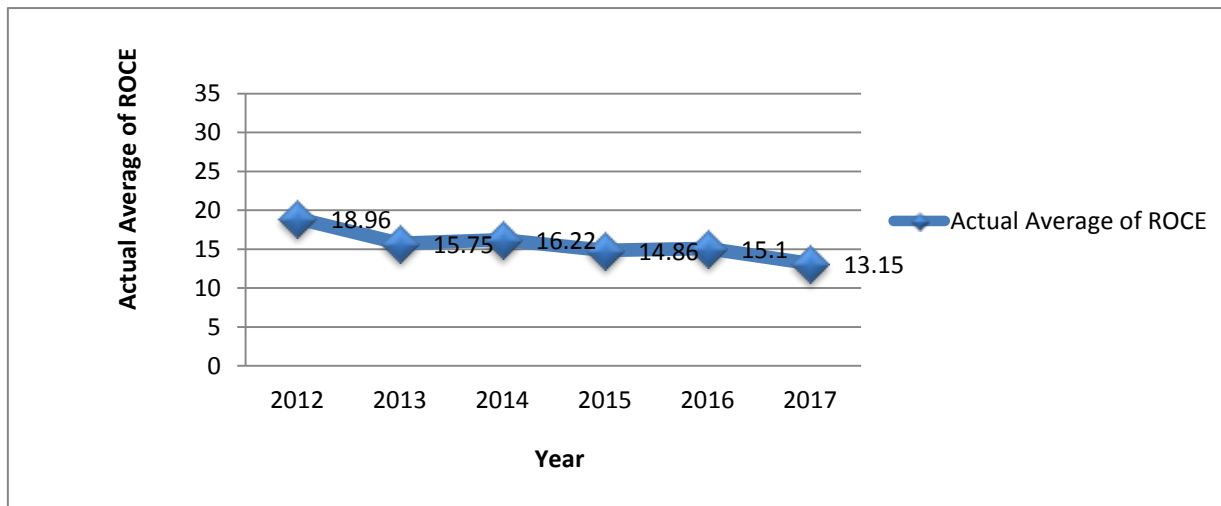
Turning to Tata Motors Ltd., the rate steeply declines from 3.84% in 2012 to -6.72% in 2017. In 2015 and 2017, ROCE has found to be negative. While in Hero Moto Corp., ROCE has decreased from 42.86% in 2012 to 31.85% in 2017. Shifting to Maruti Suzuki India, ROCE has deeply increased from 10.37% in 2012 to 19.43% in 2017. In Ashok Leyland, ROCE has increased from 8% in 2012 to 16.05% in 2017. ROCE in TVS Motor Company has increased from 13.87% in 2012 to 18.27% in 2017 while in Asian Paints Ltd., ROCE has decreased from 40.08% in 2012 to 24.57% in 2017. ROCE has declined in Dr. Reddy's Laboratories Ltd., Cipla Ltd., Infosys Ltd., ITC Ltd., Bharti Airtel Ltd., Tata Steel Ltd. and Steel Authority of India Ltd. from 2012 to 2017. While in JSW Steel Ltd., ROCE has increased more than two times from 2012 to 2017. Table evidences that out of 15 selected companies, ROCE has decreased in 11 companies

(about 74%) and in the remaining 4 companies (about 26%), ROCE is found to be increased during the period of study. The study reveals that ROCE has declined from 18.96% in 2012 to 13.15% in 2017 in the selected companies taken as a whole. Taking all the companies together, average ROCE is found to be 16.03%. Thus, it can be inferred that the performance has not been found to be satisfactory. This might be due to faulty financial planning of the companies under study.

The ranges of ROCE ratios maintained by all the fifteen companies vary from 46.53% to 3.84% in 2012; 38.71% to -6.36% in 2013; 37.16% to 0.35% in 2014; 35.93% to -16.02% in 2015; 37.77% to -6.87% in 2016 and 24.57% to -6.72% in 2017. Coming to individual companies Table- 1 shows that Bajaj Auto Ltd., Tata Motors Ltd., Hero Moto Corp., Maruti Suzuki India, Ashok Leyland, TVS Motor Company,

Asian Paints Ltd., Dr. Reddy’s Laboratories Ltd., Cipla Ltd., Infosys Ltd., ITC Ltd., Bharati Airtel Ltd., Tata Steel Ltd. and Steel Authority of India Ltd. have ROCE on an average 31.87%, 2.70%, 37.38%, 14.25%, 7.14%, 13.71%, 31.01%, 14.76%, 12.28%, 24.43%, 29.44%, 2.99%, 6.03%, 10.94% and 1.50% respectively. Individually, on an average, the highest ROCE (37.38%) is observed in Hero Moto Corp. and the lowest (1.50%) is observed in Steel Authority of India Ltd. during the period under reference.

Considering all the companies together, it is observed that the average ROCE ratio has decreased over time which evidences that the performance of the selected companies under study in terms of the most appropriate profitability ratio i.e. return on capital employed is not reflected satisfactory. The movement of average ROCE during the period from 2012 to 2017 has been shown in the following graph: -



**GRAPH-1: Actual Average of ROCE**

From the above graph, it is found that the behaviour of average ROCE of 15 Sensex Companies during the period from 2012 to 2017 has been found bearish trend. The result has not shown sound repercussion on Indian Capital Market under global view.

**ACTUAL AND EXPECTED AVERAGE ROCE- A DIAGNOSTIC COMPARISON**

With a view to making the study more meaningful, a comparison between actual average ROCE and expected average ROCE has been made. For forecasting the expected average ROCE, Exponential Smoothing Model has been applied.

**EXPONENTIAL SMOOTHING MODEL- A CONCEPTUAL FRAMEWORK AND APPLICATION**

It is a technique or method of forecasting data without following any trend or seasonality. We

contemplate the current data to forecast rather than old data like any other forecasting tools. Conventionally, we denote the observed value as **Y** and smoothed average as **S**.

Then,  $S_1$  undefined

$$S_2 = Y_1$$

$$S_3 = \alpha Y_2 + (1 - \alpha) S_2$$

and, generalised

$$S_t = \alpha Y_{t-1} + (1 - \alpha) S_{t-1}$$

Where  $\alpha$ , the smoothing constant, takes the value from the range [0, 1]

In the exponential model, the  $\alpha$  is taken as 0.5. The forecasted values of average ROCE for the 6 years have been estimated and exhibited in the following table:-

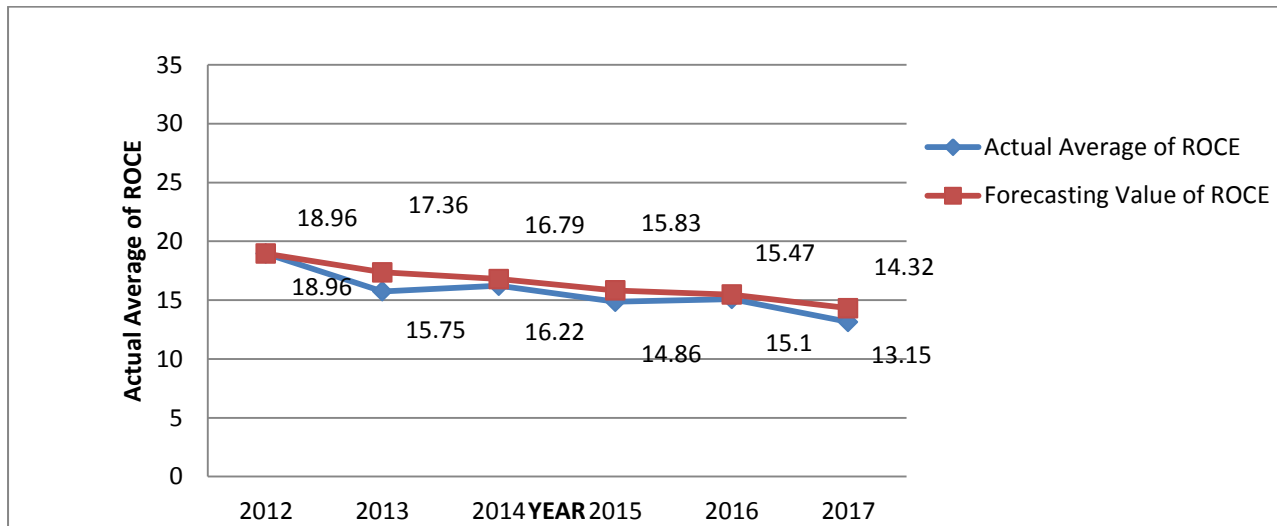
**Table-2: Forecasted Value of Average ROCE by Exponential Smoothing Model**

Year	2012	2013	2014	2015	2016	2017
Actual Average of ROCE	18.96	15.75	16.22	14.86	15.10	13.15
Forecasting Value of ROCE	18.96	17.36	16.79	15.83	15.47	14.32

Source: - Annual Reports and Accounts – Results Computed.

Table- 2 evidences that the actual average of ROCE and forecasted value of ROCE have both declined over the period of time and followed by bearish trend. In the recent past, i.e. for the year 2017, the forecasted average value of ROCE i.e. 14.32% is

found to be higher than the actual average value of ROCE i.e. 13.15%. The following graph shows the comparison lines between the Actual average of ROCE and Forecasted value of ROCE.



**GRAPH-2: Actual Average of ROCE**

The results or major findings of the study reveal that the average ROCE of 15 Sensex Companies follows the bearish trend. Sensex being the India’s capital market indicator and directly reflected by the financial performance of the largest and most actively traded stocks is not compatible in comparison with the global market.

**CONCLUSION**

Financial management of any company in India and BSE and NSE should create infrastructure facility in order to make the capital market most efficient. Finally, the regulators and policy makers like SEBI, RBI and MCA of our country, India should also make the regulatory framework convenient so that it would have a positive synergy effect on the performance of all the listing companies with the purpose of putting our Sensex or NIFTY as benchmarked index in the global capital market. Efficient management of finance is crucial for the successful operation of a business enterprise. The present study judges performance of the selected companies in the light of the most competent profitability ratio i.e. return on capital employed (ROCE). ROCE must constitute an important part of the companies’ strategic efficacious exercise. Constant efforts should be made to improve the performance which, in turn, will yield more efficiency and improve the investors’ satisfaction.

**ACKNOWLEDGEMENT**

This paper is devoted to Almighty God who shows His kindness to me always.

**RESEARCH OPPORTUNITIES**

The critical analysis of national and international literature pertaining to the performance of Sensex Companies and organisations reveal that financial ratios are essential to microscopically analyze the performance. This study does not merely address the financial ratios and their numerical significance related to performance. The present research study enumerates the ratio which has been used as an important tool is ROCE and on the basis of this ratio, conclusion has been drawn. Performance analysis of various companies has been made by research scholars. They have selected different types of companies such as banking, agricultural, co-operatives, iron and steel and transport companies. This study is different from the earlier studies. In this study, the companies operating in India are selected. Their performances in terms of profitability are analyzed in this study. The present study analyses the performances of 15 Sensex Companies with the help of ROCE only for getting the valid conclusion. This study methodically analyses the performances of 15 companies from the most important technique or tool of ROCE. In this study, the review of previous study is done in details. While analysing the review, it is found that no sufficient attempt has been made by the previous researcher to analyse the performance of these selected key units on the basis of ROCE only. Hence, the study may be considered as a different from the earlier studies. The reviews from different studies help the researcher to pursue the study in the right innovative and useful direction. Further, the



significance of the present study over the previous studies lies in this research work.

Therefore, this study is unique in the above aspect and a pioneer in analysing the performance of the selected companies.

There is a future prospect to study the profile of impact of performance analysis in each industry, comparing and constructing different industries. Also further research can be drawn to delineate major issues facing by contemporary Indian companies going for implementation of financial decision in their management. Studies can be done to throw light on the effect and the potential benefits of the financial performance, which can help in taking faster decision regarding profitability. The potential research in the area will act as a guideline to the other industry for leveraging financial performance analysis for the successful management of the company. Set of studies can be dedicated to study the impact of financial performance and utilisation of funds on improving the overall competitiveness of the companies as another. The studies can also be carried on in the area of company design keeping in mind the latest development in the field of financial management. Financial management is redefining the way of how to manage the funds supply and financial position as well as liquidity position.

#### REFERENCES

1. Bourne, M. & Bourne, P. (2011). Handbook of corporate performance management, Chichester, West Sussex: John Wiley.
2. Leach, R. (2004). The investor's guide to understanding accounts: 10 crunch questions to ask before investing in a company. Peters field: Harriman House.
3. White, G.I., Sondhi, A.C. & Fried, D. (1998). The Analysis and use of Financial Statements (2nd ed.). New York: Wiley.
4. Rutherford, B.A. (2002). Design and implementation of return on capital employed performance indicators within a trading regime: the case of executive agencies. Financial Accountability and Management, 18 (1), 73-101.
5. White, G.I., Sondhi, A.C. & Fried, D. (1998). *Op. cit.*
6. McClure, B. (2010, March 7, 2011). Spotting profitability with ROCE. (On line) Available: <http://www.investopedia.com/articles/stocks/05/010305.asp>
7. Eilon, S. (1992). Key ratios for corporate performance, Omega, 20(3), 337-343.
8. Elliott, B. & Elliott, J. (2001). Financial accounting and reporting (5<sup>th</sup> ed.). Harlow, UK: FT Prentice Hall.

9. Eilon, S. (1988). Three prominent performance ratios. Omega, 16(1), 503-508.
10. White, G.I., Sondhi, A.C. & Fried, D. (1998). *Op. cit.*
11. Smith, J. & Hickman, A.Y. (2006). Capital decisions: educating executives. Chief Learning Officer, 6(12), 28.
12. Eilon, S. (1992). *Op. cit.*
13. Rutherford, B.A. (2002). *Op. cit.*
14. Dodge, R. (1997). Foundations of business accounting. London: International Thomson Business Press. 340.
15. Rutherford, B.A. (2002). *Op. cit.*
16. Eilon, S. (1992). *Op. cit.*
17. Bourne, M. & Bourne, P. (2011). *Op. cit.*
18. Leach, R. (2004). *Op. cit.*
19. White, G.I., Sondhi, A.C. & Fried, D. (1998). *Op. cit.*