

Assessment of Employee Stock Option Plans' Impact on the Financial Performance of Indian Construction & Infrastructure Companies

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ABSTRACT

Organizations throughout the world continue to face enormous demands due to competitive pressures to increase productivity. Employee stock ownership plans (ESOPs), which boost the performance and productivity of the company and its workers by retaining them to a significant degree, have also been embraced in emerging countries like India in response to the competitive challenges with industrialized nations like the USA. Employee stock ownership plans are widely used by several successful and capable businesses worldwide. The growth of the firm's performance and employee productivity may be partly blamed for the success of ESOP enterprises in nations like the USA, Japan, and the UK, among others. In recent years, these consequences have drawn increased attention from all across the globe. This paper is an empirical investigation on the effects of ESOP on the financial performance of 10 publicly traded Indian construction and infrastructure enterprises over a six-year period. Based on secondary data gathered from business annual reports of the relevant years, the research evaluates three years before to and after the introduction of ESOPs for the chosen firms. Company-wise in the chosen selection, pre- and post-ESOP adoption analysis and regression analysis are performed.

Keywords- businesspeople, investors', tax savings, NPS, SSY.

I. INTRODUCTION

Louis Kelso, a San Francisco attorney and investment banker, is credited with founding the ESOP. Through the KELU's concept, Kelso received an invitation to San Francisco in 1956, after which the first ownership was given to the workers. Employee Stock Ownership Plan (ESOP) is a choice made available to an employee in regard to employer firm shares. The word "ESOP" refers to a broad range of tools and incentive programs that are popular with the newly upwardly mobile salaried class and are intended to encourage, recognize, compensate, and retain high performers. Since it fosters a feeling of ownership among the company's workers, it is the finest non-cash incentive program that businesses have to give in order to keep staff for a longer period of time. The majority of international businesses from the US, UK, France, and Japan utilize this strategy.

Despite having the second-largest population behind China, India's human resource managers nevertheless face a serious retention issue. India has one of the youngest populations among the developed nations, yet it still has a high unemployment rate. Employee stock option plans ("ESOPs"), which were previously unheard of in India, have become more common recently. Many Indian organizations, particularly those in the software and pharmaceutical sectors, have come to understand the value of employee stock options in attracting and retaining top personnel in the face of the brain drain and poaching issues. In reality, new horizons have opened up in this field, and parent firms, particularly those situated in the United States, have discovered that employee stock options are a practical instrument for developing human resources. Employees who live in India and participate in the worldwide stock option plans of their parent firm (or any other foreign company in the same group) are becoming more and more common lately.

II. SCOPE OF STUDY

The research concludes that by creating, discussing, and carrying out their plans in a more suitable way, Indian construction businesses may maximize their benefits by using the full potential of ESOP. For many different stakeholders, including retail and institutional investors, market regulators, publicly listed firms adopting ESOPs, research institutes, and governments that want to have these institutions, this empirical research study is highly beneficial and profitable. By comprehending and further implementing how to deal with regulations and policies, market regulators will, on the one hand, gain knowledge about Employee Stock Ownership Plans, while, on the other hand, the creation of sound regulations

and policies will increase investor confidence to invest in the stock market. Recognizing how to refine their investment selections would also assist merchants and institutional investors. Additional research may be conducted in a number of Indian organizations' industries, including human resource management, banking, information technology, and many more.

Objectives Of Study

The major goal of this research is to shed light on how employee stock ownership programs affect an organization's financial success. To assess and contrast the financial results of the chosen Indian construction and infrastructure companies throughout the adoption phase of the ESOP (Employee Stock Option Plan) and thereafter.

III. RESEARCH METHODOLOGY

3.1 Research Design: The research is primarily descriptive and causal in nature.

3.2 Sampling Design: The study's selective sample of 10 businesses from India's construction and infrastructure industry that are listed on the BSE served as its foundation. Three years before and three years after the chosen firms adopted ESOPs are taken into consideration in the study. For comparative purposes, the year of adoption is used as the base period.

3.3 Variables under Study: The following Variables werestudied in the research:

Net Fixed Assets (NFC)
Net Current Assets (NCA)
Investment
Asset Turnover Ratio (ATO) = Net Sales/Total Assets
Net Sales
Total Assets

Sampling Units: Following ten companies belonging toConstruction & Infrastructural sector have been selected for the study:

Selected Construction & Infrastructure Companies			
1	IVRCL Limited (Iragavarapu Venkata Reddy Construction)	6	IL & FS Engineering & Construction Company Ltd.
2	Mahindra Life Space Developers Limited	7	Jaiprakash Associates
3	Brigade Enterprise Limited	8	Hindustan Construction Company
4	Berger Paints India Ltd.	9	DLF Ltd. (Delhi land and Finance Ltd.)
5	Kirloskar Constructions & Engineers Ltd.	10	Oberoi Realty

3.4 Source of Data: For the objective of this research, secondary data was extracted from the annual reports of a number of Indian construction and infrastructure firms.

3.5 Period of Study: For the purpose of this research, financial information relating to a period of six years (three years previous to the implementation of ESOP, and three years after its implementation) was employed. In the research, it was assumed that the ESOP allotment year would be counted as the year 0, and that the pre-allotment years would be counted as (-1,-2,-3) and the post-allotment years would be counted as (1, 2, 3) correspondingly. Analyses were performed in accordance with these assumptions.

3.6 Statistical Tools and Techniques: Comparative and Regression Analysis is done company by company using the Pre- and Post- period of adoption of ESOP in the selected selector to know the significance of relationship and interrelationship between various variables and to find out the effectiveness of ESOP on corporate performance of ten selected Indian Construction & Infrastructure companies. This was done in order to know the significance of relationship and interrelationship between various variables and to find out the effectiveness of ESOP on corporate performance of ten selected Indian Construction & Infrastructure companies.

IV. DATAANALYSIS &INTERPRETATION

4.1 Company-Wise Analysis

The pre- and post- ESOP periods of ten chosen Construction & Infrastructure businesses were compared in order to determine if the implementation of ESOPs had a favorable or negative impact on the firms' performances thereafter. This was done in order to undertake company-wise comparative analysis and interpretation of the data. The monetary units used to express the values of the data obtained are called Crores.

Table 1: Pre- and Post- Adoption of ESOP: Performance of IVRCL Limited (Iragavarapu Venkata Reddy Construction

VARIABLE	PRE- ESOP ADOPTION			POST- ESOP ADOPTION		
	2010	2011	2012	2014	2015	2016
NFA ---(I)	601.72	694.45	691.42	578.08	476.83	392.78
NCA---(II)	4,700.49	4,250.39	4,313.99	4,709.83	5,240.19	5,257.05
INVEST—(III)	1,584.30	1,653.55	1,740.75	1,324.81	1,299.89	1,831.94
SALE	5,707.97	6,347.52	3,829.50	3,160.93	2,385.24	2,054.20
T.A(I+II+III)	6886.51	6598.39	6746.16	6612.72	7016.91	7481.77
ATO(A/B)	0.8289	0.9620	0.5677	0.4780	0.3399	0.2746

4.2 Interpretation of Data

The performance of IVRCL Ltd. Company is broken down into Pre- and Post- adoption of ESOP in the table that can be seen above. The year 2013 was chosen as the base year (0) since it was the year when the company first implemented an ESOP. Following the implementation of ESOP, there has been a detrimental effect on the Net Fixed Asset (NFA). The increase in the company's Net Current Asset (NCA) from 2012's level of 4313.99 to 2016's level of 5257.05 has a beneficial effect on the company's overall performance. The company's net sales were 3829.5 in the year 2012, but only 2054.2 in the year 2016, indicating a negative influence on the company's performance. After the ESOP was implemented, there was a little rise in the value of the total assets. The Asset Turnover Ratio (ATO) was 0.5677 in the year 2012, but it dropped to 0.2746 in the year 2016, which is more evidence that the company's performance has been negatively impacted. Overall, it is possible to draw the conclusion that the outcomes obtained by IVRCL Ltd Company are inconsistent, and the implementation of ESOP did not result in any beneficial changes at this company.

Table 2: Pre- and Post- Adoption of ESOP: Performance of Mahindra Life Space Developers Ltd.

VARIABLE	PRE- ESOP ADOPTION			POST- ESOP ADOPTION		
	2010	2011	2012	2014	2015	2016
NFA ---(I)	32.37	31.93	29.07	28.57	29.8	29.41
NCA---(II)	753.21	985.56	1,135.99	1,268.20	1,373.36	1,909.67
INVEST—(III)	409.55	297.88	320.13	656.9	573.4	573.4
SALE	506.85	521.13	422.26	760.04	600.16	753.2
T.A(I+II+III)	1195.13	1315.36	1485.19	1953.67	1976.56	2512.48
ATO(A/B)	0.4241	0.3962	0.2843	0.3890	0.3036	0.2998

4.3 Interpretation of Data

The performance of Mahindra Life Space Developers Ltd. is broken down below, both before and after the implementation of an ESOP, as seen in the table above. The year 2013 was chosen as the base year (0) since it was the year when the company first implemented an ESOP. There has not been much of a shift in the value of the Net Fixed Asset (NFA) between the Pre period and the Post era. The increase in the company's Net Current Asset (NCA) from 2012's level of 1135.99 to 2016's level of 1909.67 has a beneficial effect on the company's performance. The good effect that this has had on the productivity of the company is shown by the fact that net sales in 2012 were 422.26 and climbed to 753.2 in 2016. The value of the company's total assets has also increased significantly after the adoption of the ESOP. The Asset Turnover Ratio (ATO) was 0.2843 in the year 2012 and 0.2998 in the year 2016, which indicates that the firm has not undergone any substantial changes. Overall, it is possible to draw the conclusion that even if there is not much change in fixed assets and ATO, but the total sales and fixed assets unquestionably produce beneficial growth in the company's performance and productivity, and also that the adoption of ESOP does not exhibit any negative impact, which is a relief.

Table 3: Pre- and Post- Adoption of ESOP: Performance of Brigade Enterprise Limited

VARIABLE	PRE- ESOP ADOPTION			POST- ESOP ADOPTION		
	2008	2009	2010	2012	2013	2014
NFA ---(I)	788.59	1050.51	1777.8	1348.89	1355.83	1464.18
NCA---(II)	894.36	905.37	666.03	957.3	1185.79	1155.92
INVEST—(III)	34.78	14.67	19.7	92.29	133	191.5
SALE	388.25	362.47	469.37	788.12	915.77	1008.01
T.A(I+II+III)	1717.73	1970.55	1863.53	2398.48	2674.62	2811.60
ATO(A/B)	0.2260	0.1839	0.2519	0.3286	0.3424	0.3585

4.4 Interpretation of Data

The effects of Brigade Enterprise Limited taking ESOP adoption before and after into consideration are shown in the table above. After the ESOP was implemented, the NFA of the firm began to exhibit a downward trend in results. On the other hand, NCA demonstrates a beneficial influence on enterprises' performances, as shown by the fact that it increased to 1155.92 in 2014 from 666.03 in 2010. Following the implementation of ESOP in the firm, there has been a discernible rise in revenue. ATO was 0.2519 in 2010, and it was 0.3585 in 2014; this demonstrates not just an upward tendency for the company's overall financial performance but also an improving trend for ATO. Following the implementation of ESOP, this business has, on the whole, reaped the benefits to the fullest extent possible.

Table 4: Pre- and Post- Adoption of ESOP: Performance of Berger Paints India Ltd.

VARIABLE	PRE- ESOP ADOPTION			POST- ESOP ADOPTION		
	2011	2012	2013	2015	2016	2017
NFA ---(I)	337.83	492.91	680.64	751.66	945.17	1002.6
NCA---(II)	1050.15	1203.55	1342.56	1569.79	1807.01	2099.21
INVEST—(III)	76.61	80.76	97.12	115.22	210.35	303.18
SALE	2692.71	3054.97	3415.41	4167.31	4273.63	4770.32
T.A(I+II+III)	1464.59	1777.22	2120.32	2436.67	3025.53	3404.99
ATO(A/B)	1.8385	1.7190	1.6108	1.7102	1.4125	1.4010

4.5 Interpretation of Data

The information on Berger Paints India Ltd.'s financial performance can be found in Table 4. The fact that NFA rose from 680.64 in the year 2013 to 1002.6 in the year 2017 indicates that there is optimism over the success of the firm. Following the implementation of ESOP, both the company's revenues and its Net Current Assets have shown a positive upward trend. In 2013, the company had an ATO of 1.6108, but that number dropped to 1.4010 in 2017. Every other variable in the company has improved, with the exception of the ATO. It demonstrates that even if other factors have a good influence on the business's performance, it cannot be entirely concluded with a favorable impact on the firm owing to the lower value of ATO. This is the conclusion that can be drawn from the data.

Table 5: Pre- and Post- Adoption of ESOP: Performance of Kirloskar Constructions & Engineers Ltd.

VARIABLE	PRE- ESOP ADOPTION			POST- ESOP ADOPTION		
	2011	2012	2013	2015	2016	2017
NFA ---(I)	12.71	9.84	7	5.81	6.87	34.37
NCA---(II)	73.21	6.26	74.36	51.29	80.56	76.49
INVEST—(III)	518.69	542.1	597.91	686.45	686.38	696.57
SALE	78.63	51.8	63.78	76.7	47.97	80.4
T.A(I+II+III)	604.61	558.20	679.27	743.55	773.81	807.43
ATO(A/B)	0.1301	0.0928	0.0939	0.1032	0.0620	0.0996

4.6 Interpretation of Data

The results of Kirloskar Constructions & Engineers Ltd.'s financial operations are shown in Table 5. Following the implementation of ESOP, the company has been exhibiting a general upward trend in all of its metrics. After the ESOP was implemented, there was a slowdown in the overall development of the company. Even after the implementation of ESOP in the company, the Asset Turnover Ratio has maintained its previous level of consistency. Therefore, it is possible to draw the conclusion that ESOP has not exhibited either a favorable or negative influence on the financial performance of the company as a whole, but that there is more room for improvement.

Table 6: Pre- and Post- Adoption of ESOP: Performance of IL & FS Engineering & Construction Company Ltd.

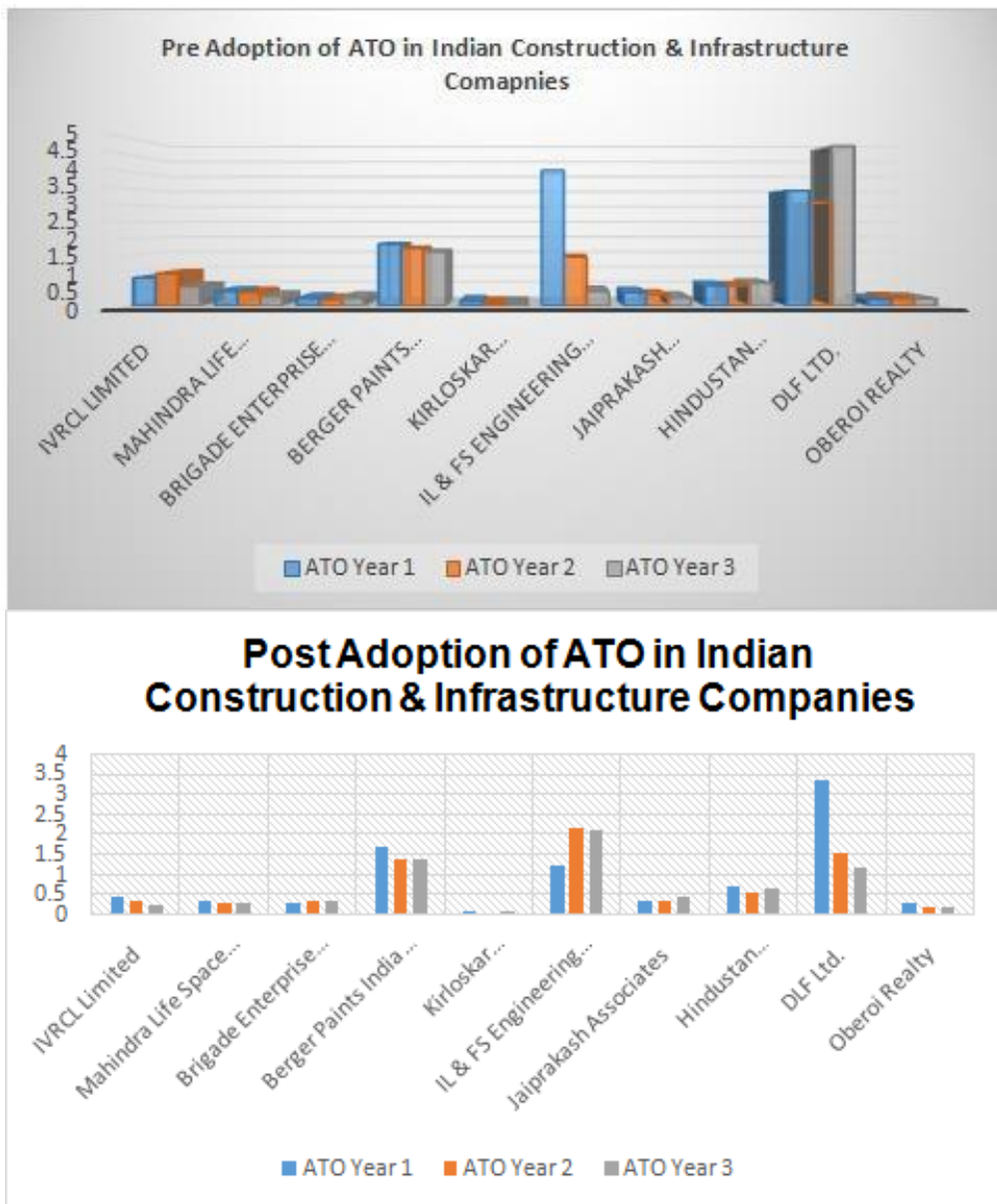
VARIABLE	PRE- ESOP ADOPTION			POST- ESOP ADOPTION		
	2006	2007	2008	2010	2011	2012
NFA ---(I)	44.2	164.61	424.72	335.36	293.11	220.93
NCA---(II)	270.84	599.64	1572.59	1382.32	728.17	1097.99
INVEST—(III)	96.15	169.01	256.23	36.65	156.67	189.73
SALE	1656.28	1360.27	983.88	2145.40	2545.75	3427.01
T.A(I+II+III)	411.19	933.26	2253.54	1754.33	1177.95	1608.65
ATO(A/B)	4.0280	1.4575	0.4366	1.2229	2.1612	2.1304

4.7 Interpretation of Data

According to the findings shown in Table 7, the implementation of ESOP at Oberoi Realty has not resulted in a significant improvement to the company's overall financial performance since the program's introduction. The value of ATO before the ESOP was implemented was higher than its value after the ESOP was implemented. Therefore, one might get the conclusion that the incorporation of an ESOP has not brought about a beneficial effect on the company's overall financial performance.

4.8 Graphical Presentation of ATO of Construction & Infrastructure Companies

The following chart provides a graphical depiction of the ATO for each of the ten Indian construction and infrastructure companies that were chosen for this research. The first graph depicts the performance of ATO (Asset Turnover Ratio) before to adoption, while the second graph displays the performance of ATO (Asset Turnover Ratio) after adoption for enterprises involved in the construction and infrastructure industries. The time frame of the research is six years, including three years before and three years after the implementation of an ESOP.



V. INTERPRETATION OF DATA

The regression analysis of the overall, pre-and post-ESOP adoption financial performance is shown in the table that can be seen above. This study was performed to demonstrate and analyze the change in the financial performance of the firms that were chosen from the Construction and Infrastructure sector.

Sales and Profit Before Tax are considered to be dependent factors, but Asset Turnover Ratio (ATR) and Investment are considered to be independent variables. The adoption of employee stock ownership plans (ESOP) in companies has been shown to have a positive impact on the firm's performance. This is demonstrated by the fact that the value of ATO in the period before ESOP was 835.323 for sales and -8.139 for PBT (Profit before Tax), whereas in the period after ESOP it was 2240.256 and 296.161 respectively, which is more than double the times. On the other hand, the value of R2 in the Pre-ESOP period is 0.512 for sales and 0.357 for PBT, but the values for the Post-ESOP period are 0.901 and 0.412 respectively, which again demonstrates a gradual increase in the overall performance of the company over time. But if we look at how the variables performed generally over both time periods, we can see that the values of ATO and R2, which are 3509.145 and 0.393 for sales and 85.619 and 0.378 for PBT respectively, indicate that the firms' financial performance has changed only little over the last several years. In a nutshell, one may draw the conclusion that the implementation of ESOP has unquestionably shown to be helpful for the companies, but that it is still capable of undergoing further development due to the fact that the value of R2 in the overall performance of the company has not been obtained as anticipated.

VI. FINDINGS

Following the implementation of employee stock ownership plans (ESOP) in the enterprises involved in the construction and infrastructure industries, the outcomes were mixed. Even if the sales of the company as a whole and the overall assets of the company were showing improvement across all of the businesses considered for this research, the value of ATO in a few of the companies was not demonstrating a beneficial influence on the financial success of the companies. ESOPs provide a multitude of advantages to the issuing firms, including the facilitation of the retention of skilled and valued workers, the expansion of the company's internal assets, and the recruitment of superior human resource. Additionally, there are a few issues, such as an absence of accurate restrictions, the reactive character of regulators, confusions in the accounting system, and delays in really realizing the advantages. The potential benefits outweigh the constraints, notwithstanding the existing issues.

VII. CONCLUSION

One of the industries in the Indian economy with the highest growth rate is the construction and infrastructure business sector. In addition, the implementation of GST does not have a detrimental influence on either the customers or the Indian enterprises working in the construction and infrastructure industries. In the investigation of employee stock option plans in construction and infrastructure companies, the researchers came to a variety of different results. Throughout the course of the previous century, several businesses located all over the globe have implemented employee stock option plans, sometimes known as ESOPs, in order to keep brilliant workers on staff. After the SEBI ESOS & ESPP Guidelines were passed in 1999, the ESOP concept finally became widespread across corporate India, and corporations started seeing ESOPs as an appealing tool to recruit and retain workers. Even though the sociological importance of employee stock ownership to altering traditional patterns of wealth distribution had received little academic attention in India, rising markets are typically a signal that the economy is reviving, which means that higher attrition levels make ESOPs useful. This is the case even though the phenomenon had received little academic attention in India. Evaluating the effect of employee stock option plans on the financial performance of Indian construction & infrastructure companies is the subject of this research paper, which has shed light on the subject. This industry is quickly becoming into the primary driver of expansion in our nation's economy in India. In the long term, the use of ESOP will be advantageous to both the employer and the employee via the maintenance of a solid connection, associability, and trust between the employee and the employer in order to boost their performance and the firm's overall productivity. However, even if there has been a noticeable increase in the firms' overall financial performance after the implementation of ESOP, there is still room for even more development.

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