



# A Study of Environmental Accounting Disclosure and its Impact on Value Accounting Finance Factor by P-Value of Multi Regression Model for Selected Research Unit

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## Abstract:

*In India, now a day's industrial development is on top gear. A common traditional belief is that businesses need only report upon those things that can be measure and that are require under laws, accounting standards or listing rules. But that's not all duties of business units. Industries use natural resources of various types in their production Process. It may be water minerals, air, fuel or other resources. Simultaneously industrial activities are responsible for environmental pollution and degradation.*

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**Keywords:** *Value Accounting for Finance Factor; Environment Accounting Disclosure Index*

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## 1. Introduction

In India the book "Arthashastra" which wrote by Chanakya at time of Mauryan Empire that book sows the practice to maintaining books of accounts. From that the word Accountability comes in to existence. Accountability means responsibility, liability and answerability. The word environment derives from the French word "Environ". Actually the word Environ means "surrounding", now surrounding is including all factors which are directly or indirectly , biotic or abiotic connect to us for an example the factors like human beings, plants, animals, air, soil, water, light etc. In India, now a day's industrial development is on top gear. A common traditional belief is that businesses need only report upon those things that can be measure and that are require under laws, accounting standards or listing rules. But that's not all duties of business units. Industries use natural resources of various types in their production Process. It may be water minerals, air, fuel or other resources. Simultaneously industrial activities are responsible for environmental pollution and degradation.

## 2. Objective of the Study

To study the impact four parameter of Environment Account as Independent variable Environmental Accounting Disclosure Index on five parameters of dependent variable value accounting of finance factor by P – Value of Multi regression model of selected 15 units of India from 7 sectors.

## 3. Research Design

### 3.1 Sample Design

There are various organizations working in each sector in India Researcher has considered NSE base 15 units from NIFTY 50 companies for the present study by simple random sampling techniques for the present study.

### 3.2 Data Collection

The present study is mainly based on secondary data and the required data is collected from Annual Published Report of selected units, various Magazines, Periodicals related to each sectors, related websites and subject matter is also used. Data with reference to Environment Accounting Disclosure Index has traced out from the published annual report of research unit.

### 3.3 Period of Study

The study period is to be converted 9 years; from 2011-12 to 2019-20.

### 3.4 Tools & Techniques

Tools & Techniques For the present study is Ratio-Analysis for value accounting as an Accounting tools and p-value multi regression model is used as tools of Statistics.

## 4. Value Accounting for Finance Factor

(a)**Enterprise Value to Net Operating Revenue:** Enterprise value to earnings before interest and tax (EV/EBIT) or EV/NOR is a measurement to whether a share in a company is cheap or expensive, relative to competing firms or the wider market. The EV/EBIT or EV/NOR is a modified multiplier of the P/E ratio that addresses the weaknesses of the P/E ratio. So instead of using just the firm's share price, it uses enterprise value; which includes debt. The EV is then compared to earnings, before, rather than after tax and interest.

(b)**EV to EBITDA:** The EV/EBITDA ratio is better as it values the worth of the entire company. The ratio helps determine the true earning potential of the business. The ratio proves a great tool for valuing companies that are making losses at the net earning level, but are profitable at the EBITDA level.

(c)**Market Value to Net Operating Revenue:** Market Value to Net Operating Revenue ratio helps investors analyze how much they should pay for a stock based on its current earnings. This is why the Market Value to Net Operating Revenue ratio is often called a price multiple or earnings multiple. Investors use this ratio to decide what multiple of earnings a share is worth. In other words, how many times earnings they are willing to pay.

(d)**Price to Book Value Ratio:** The price to book value ratio, or PBV ratio, compares the market and book value of the company. Investors find the P/B ratio useful because the book value of equity provides a relatively stable and intuitive metric that can be easily compared to the market price.

(e)**Earning Yield:** The earnings yield refers to the earnings per share for the most recent 12-month period divided by the current market price per share. The earnings yield (which is the inverse of the P/E ratio) shows the percentage of a company's earnings per share. This metric is used by many investment managers to determine optimal asset allocations and is used by investors to determine which assets seem underpriced or overpriced.

## 5. P-Value Analysis

The p-value for each independent variable tests the null hypothesis that the variable has no correlation with the dependent variable. If there is no correlation, there is no association between the changes in the independent variable and the shifts in the dependent variable. In other words, there is insufficient evidence to conclude that there is effect at the population level. Hypothesis for the present study is on the base of 5% significant level that means 0.05 values. If P – Value of respective parameters under study falls above 0.05 then Null Hypothesis is accepted otherwise Alternate Hypothesis is accepted.

## 6. Environment Accounting

| Environment Accounting |   |
|------------------------|---|
| i                      | Whether company follows significant practice of environment accounting        |
| ii                     | Whether company prepares environmental budget?                                |
| iii                    | Whether company prepare sustainability report/ business responsibility report |
| iv                     | Whether environmental asset and liabilities considered by the company?        |

Four parameters with reference to environment accounting have considered for evaluating EADI as an independent variable for dependent variable five dimensions of value accounting for finance factor. P-Value shows the individual relationship of EADI as an independent Variable with dependent variable value accounting for finance factor.

| <b>Table 1:P-Value for Environment Accounting as an Independent Variable Environmental Accounting Disclosure Index [EADI] and dependent Variable Value Accounting of Finance Factors of BPCL for the period 2011-12 to 2019-20 for Multi Regression Model</b> |               |                         |                |                  |           |       |      |
|---|---------------|-------------------------|----------------|------------------|-----------|-------|------|
| <b>H<sub>0</sub> : There is no significant effect of Independent variable EADI on Dependent Variable Value Accounting Finance Factor if P – Value &gt; 0.05</b>   |               |                         |                |                  |           |       |      |
| <b>H<sub>1</sub> : There is significant effect of Independent variable EADI on Dependent Variable Value Accounting Finance Factor if P – Value &lt; 0.05</b>  |               |                         |                |                  |           |       |      |
| <b>[A] Environment Accounting [A]</b>   |               |                         |                |                  |           |       |      |
| <b>Value Accounting Finance Factor</b>  | <b>EV/NOR</b> | <b>EV/ EBITDA</b>       | <b>MV/ NOR</b> | <b>PBV Ratio</b> | <b>EY</b> |       |      |
| <b>Energy</b>   |               |                         |                |                  |           |       |      |
| <b>A</b>  | 1             | BPCL                    | 0.20           | 0.99             | 0.049     | 0.02  | 0.56 |
|   | 2             | RIL                     | 0.15           | 0.53             | 0.17      | 0.82  | 0.17 |
| <b>Pharmaceutical</b>   |               |                         |                |                  |           |       |      |
| <b>B</b>  | 3             | CIPLA LTD               | 0.09           | 0.00             | 0.10      | 0.057 | 0.57 |
|   | 4             | DR. Reddy Lab. Ltd.     | 0.19           | 0.38             | 0.21      | 0.18  | 0.33 |
|   | 5             | Sun Pharmaceutical Ltd. | 0.69           | 0.92             | 0.72      | 0.96  | 0.60 |
| <b>Cement</b>   |               |                         |                |                  |           |       |      |
| <b>C</b>  | 6             | Grasim Industries Ltd.  | 0.92           | 0.73             | 0.93      | 0.94  | 0.19 |
|   | 7             | Ultratech Cement Ltd.   | 0.98           | 0.53             | 0.86      | 0.91  | 0.47 |
| <b>Metal &amp; Minings</b>  |               |                         |                |                  |           |       |      |
| <b>D</b>  | 8             | HINDALCO Ltd.           | 0.19           | 0.08             | 0.91      | 0.73  | 0.00 |
|   | 9             | COAL India Ltd.         | 0.82           | 0.82             | 0.81      | 0.87  | 0.92 |
|   | 10            | JSW Limited             | 0.32           | 0.59             | 0.25      | 0.27  | 0.57 |
| <b>Automobile</b>   |               |                         |                |                  |           |       |      |
| <b>E</b>  | 11            | Mahindra & Mahindra     | 0.41           | 0.10             | 0.50      | 0.22  | 0.45 |
|   | 12            | Maruti Suzuki           | 0.81           | 0.74             | 0.83      | 0.95  | 0.79 |
|   | 13            | Bajaj Auto Ltd          | 0.49           | 0.25             | 0.44      | 0.01  | 0.22 |
| <b>Engeeneering</b>   |               |                         |                |                  |           |       |      |
| <b>F</b>  | 14            | L & T Ltd.              | 0.91           | 0.31             | 0.77      | 0.83  | 0.58 |
| <b>Consumer Goods</b>   |               |                         |                |                  |           |       |      |
| <b>G</b>  | 15            | Titan Company Ltd.      | 0.82           | 0.99             | 0.82      | 0.95  | 1.00 |

## 8. Conclusion

From the above table it is evident that there is not any significant effect of first parameter Environment Accounting of EADI independent variable on dependent variable value accounting finance factor if P – Value < 0.05 is found to be in rare cases as highlighted in above table. In most of the cases P – Value > 0.05 hence there is no significant effect of first parameter of environment accounting of EADI independent variable on dependent variable value accounting for finance factor.

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