# Does Corporate Governance Affect the Efficiency of a Firm: A Study of Companies Listed in Nifty CPSE Index

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#### Abstract

In the present era of business two principles are very important. First is transparency and second is trust. Investors are also more interested in investing in the companies which demonstrate good social responsibility and have high standards of transparency norms. The entire stakeholder wants the see that the respective company should operate with integrity and this can be done with the help of a good corporate governance structure. It reflects the positive traits of a company and the intentions behind the particular business they have. Corporate governance also affects the performance of the company. The present study shows the corporate governance practices in central public sector enterprise listed in Nifty CPSE index and its relationship with the efficiency of the companies. There are 10 companies in this index out of 8 companies for a period of five years was taken up for the study. The data of 2 companies were found incomplete so they were not included in the study. To study corporate governance, corporate governance discloser index i.e. CGDI was used and for efficiency Assets turnover ratio and Inventory turnover ratio were used. Three control variable .i.e. size of company (natural log of total assets), age of the company (year from incorporation) and leverage (debt equity ratio) were also taken. After the collection of data Karl Person coefficient of correlation and linear regression was applied. In the analysis it was found that there is positive correlation of corporate governance with efficiency there is a significant positive impact of corporate governance on Inventory turnover ratio.

**Key Word**: Corporate governance, efficiency, Assets Turnover Ratio, Inventory Turnover Ratio, Age of the company, Size

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### **Corporate Governance: An Introduction**

In recent times corporate governance has attained a great importance all over the world. There were two very important factors which were responsible for the rapid growth of corporate governance i.e. integration and globalization of financial markets and a surge of corporate scandals such as Enron, World Com and others. Initially in the mid of 1970s many US firms were found involved in illicit payments to foreign officials which led U.S. Security Exchange Commission (S.E.C) into the corporate governance realm. At that time few outside directors of many companies were involved in false activities like paying bribe and due to these corporate records were are affected. Many senior executives are also involved in this. Due to this widespread corporate bribery federal agency has taken action and resolved numerous cases with settlements and where the companies are involved in false practices were undertook to make board-level changes, such as the appointment of additional outside or independent directors and the creation of an audit committee. Not only this, in 1976 the S.E.C. amended the listing requirement for the companies listed in New York Stock Exchange. According to the new guidelines of the S.E.C each listed company has to maintain an audit committee composed of independent directors.

The chairman of the New York Stock Exchange said in 1977 the greatest challenge facing U.S. business and private enterprise generally might be "The prospect of pervasive government supervision and control over corporate governance and management (Chicago Tribune, 10-8-1977)." After that world had seen many corporate scandals which are became very popular. So all these illicit practices compelled different governments made regulations on corporate governance among which "Sarbanes-Oxley Act of the US legislated on 30 July 2002" was the most important and considerable Act.

## About Nifty CPSE

Nifty CPSE consist of central public sector enterprises. Its main aim is to provide the facility for disinvestment of some selected public sector enterprise to the Government of India. At present there are 10 companies listed in this index.

Company Name	Industry	Share price	Market Capitalization (Rscr) as on 31 mar 2019
Oil and Natural gas Corporation Ltd. (ONGC)	Oil Drilling and Exploration	164.90	211,034.18
Coal India Ltd.	Mining & Minerals	276.95	156,410.04

### Table 1: NIFTY CPSE Index

Indian Oil			
Indian Oil Corporation Ltd. (IOC)	Refineries	135.45	146,766.74
GAIL India Ltd.	Oil Drilling and Exploration	356.85	70,947.95
Container Corporation of India Ltd.	Transport & Logistic	604.80	34,732.82
Oil India Ltd.	Oil Drilling and Exploration	208.55	19,302.41
Power Finance Corporation Ltd.	Finance	81.85	35,429.89
Bharat Electronics Ltd.	Electricals	87.15	27,411.67
Rural Electrification Corporation Ltd.	Finance	104.05	32,546.65
Engineers India Ltd.	Infrastructure	117.55	7,668.25

Source: Moneycontrol.com

## Scope of the study

The present study examines the relationship between corporate governance and company's efficiency listed in Nifty CPSE index. There are 10 companies listed in this index out of which 8 companies were taken for a period of 5 years i.e. from 2014-15 to 2018-19 in the study. Complete data of 2 companies i.e. Rural Electrification Corporation Ltd. and Power Finance Corporation Ltd. were not found so they were omitted from the study.

## **Objective of the study**

To study the corporate governance disclosure of companies listed in Nifty CPSE index.

To examine the relationship between corporate governance and company's efficiency.

## Methodology

For the study companies listed in Nifty CPSE index were taken for a period of five years i.e. from 2014-15 to 2018-19. The main aim was to find the corporate governance disclosure of companies listed in Nifty CPSE index interrelationship between corporate governance and companies' efficiency

## Source

The study is based on secondary data. The data were collected from annual reports of the companies under study, sustainability reports and Does Corporate Governance Affect the Efficiency of a Firm

reports on corporate governance of the selected companies. Apart from these, books, journal, websites and research papers on corporate governance were also taken.

Analysis Tools

To study corporate governance, corporate governance discloser index i.e. CGDI was used. For this purpose mandatory corporate governance disclosures mentioned in Companies Act2013 and SEBI's Clause 49 were taken. Altogether there were 52 items taken for mandatory disclosure. After that 1 point has been given to the each disclosure items and 0 point for non-disclosure items. On this basis corporate governance disclosure index was developed by using the formula:-

CGDI = Obtained score  $\div$  Expected score x 100.

To study the efficiency of the company Assets turnover ratio and inventory turnover ratio has been taken.

For a balance result three control variables i.e. size of company (natural log of total assets), age of the company (year from incorporation) and leverage (debt equity ratio) has been taken.

After collecting the above data, the effects of Corporate Governance on the efficiency of the companies has been analyzed with the help of Karl person coefficient of correlation and linear regression model.

## Data Analysis

Assets Turnover Ratio

It is an efficiency ratio that helps in measuring the capability of the company to generate sales from its assets by comparing net sales with average total assets. Given below is the table which shows the efficiency of the companies listed in CPSE Nifty index with the help of Assets Turnover Ratio.

Year	18-19	17-18	16-17	15-16	14-15	Mean	Standard deviation
Oil and Natural gas Corporation Ltd. (ONGC)	36.28	29.17	31.42	34.94	39.82	34.326	4.165583
Coal India Ltd.	4.9	1.97	1.53	0.77	1.74	2.182	1.584825
Indian Oil Corporation Ltd. (IOC)	167.14	151.04	138.85	157.44	199.01	162.696	22.75179
GAIL India Ltd.	92.38	87.01	97.96	107.27	115.45	100.014	11.42935

Table-2: Assets Turnover Ratio of CPSE Nifty Index

Container Corporation of India Ltd.	54.58	57.91	56.39	62.79	64.13	59.16	4.125821
Oil India Ltd.	28.93	24.2	20.97	24.94	26.9	25.188	2.990095
Bharat Electronics Ltd.	59.05	55.82	50.19	40.47	45.01	50.108	7.60713
Engineers India Ltd.	52.17	40.34	33.54	36.67	43.74	41.292	7.188294

Source: Compiled from moneycontrol.com

## Inventory Turnover Ratio

It is an efficiency ratio which tells that how many times a company sells and replaces its stock of goods during a period of time. It shows that how a company manages costs and how effectively they are managing their sales. The table given below shows the inventory turnover at the end of particular years.

Year	18-19	17-18	16-17	15-16	14-15	Mean	Standard deviation
Oil and Natural gas Corporation Ltd. (ONGC)	14.15	12.7	12.6	13.78	13.9	13.426	0.72172
Coal India Ltd.	30.46	17.04	4.24	1.09	6.64	11.894	11.98011
Indian Oil Corporation Ltd. (IOC)	7.38	6.49	5.78	8.96	9.61	7.644	1.618095
GAIL India Ltd.	27.96	28.35	29.75	27.27	25.51	27.768	1.553261
Container Corporation of India Ltd.	296	225	248.72	334.56	331.3 7	287.13	49.04316
Oil India Ltd.	11.26	9.88	8.67	9.75	9.45	9.802	0.940728
Bharat Electronics Ltd.	2.74	2.25	1.77	1.75	2.03	2.108	0.408681
Engineers India Ltd.	354.4 3	1,622. 27	1,373. 90	1,483. 24	2,112. 47	1389.2 62	643.6745

**Table-3:** Inventory Turnover Ratio Nifty CPSE companies

Source: Compiled from Annual reports

Year	18-19	17-18	16-17	15-16	14-15	Mean	Standard deviation
Oil and Natural gas Corporation Ltd. (ONGC)	42	40	39	47	40	41.6	3.209361
Coal India Ltd.	41	39	38	36	39	38.6	1.81659
							1.01039
Indian Oil Corporation Ltd.	41	41	41	41	41	41	
(IOC)							0
GAIL India Ltd.	41	40	39	37	39	39.2	1.48324
Container	40	40	39	37	33	37.8	
Corporation of India Ltd.							2.949576
Oil India Ltd.	38	37	37	37	37	37.2	0.447214
Bharat Electronics	41	42	42	42	41	41.6	
Ltd.							0.54772
Engineers India	42	42	42	42	42	42	
Ltd.							0

**Table-4**: CGDI score of the Nifty CPSE companies

Source: Compiled from Annual reports

Corporate governance disclosure index is prepared by taking 52 mandatory disclosure items according to the SEBI's amended Clause 49. The given below table shows the disclosures done by the companies in respective years.

	ATR	ITR	CGDI	SIZE	AGE	LEVERAGE	
ATR	1						
ITR	-0.131	1					
CGDI	0.156	0.240	1				
SIZE	0.473	-0.591	0.088	1			
AGE	0.213	0.231	0.203	0.434	1		
LEVERAGE	0.685	-0.272	0.026	0.613	0.304	1	

**Table 5:** Correlation Matrix of Corporate governance and Efficiency

Source: Author's calculation

Table-6: Impact of Corporate Governance on efficiency by using regression analysis

Assets Turnover ratio					
Variables	Coeff.	t-Statistics	Prob.		
Constant	-102	-0.94	0.355		

CGDI	2.857	1.15	0.257	
SIZE	7.142	0.55	0.588	
AGE	-0.131	-0.36	0.721	
LEVERAGE	146.498	4.21	0***	
F-statistic	8.54***			
Adjusted r <sup>2</sup>	0.436			

Source: Author's calculation

\*\*\*, \*\*, \* indicates significance at 1%, 5% and 10% levels, respectively The above table shows that there is a significant impact of leverage and Assets turnover ratio. It means the change in the debt equity ratio (leverage) will affect the assets turnover ratio.

**Table-7:** Inventory Turnover ratio

Variables	Coeff.	t-Statistics	Prob.
Constant	1402.855	1.59	0.12
CGDI	42.826	2.14	0.039**
SIZE	-771.752	-7.34	0***
AGE	15.309	5.22	0***
LEVERAGE	282.41	1.01	0.321
F-statistic	19.63***		
Adjusted r <sup>2</sup>	0.656		

Source: Author's calculation

\*\*\*, \*\*, \* indicates significance at 1%, 5% and 10% levels, respectively

The above table shows that there is a significant impact of CGDI, SIZE and AGE of the company on its inventory turnover ratio of the company. It means change in CGDI, SIZE and AGE will affect the inventory turnover ratio.

#### Findings

The study shows that most of the selected Nifty CPSE companies are showing an increase in Assets turnover ratio which means most the companies are generating revenue by effectively using their assets. Higher the assets turnover ratio shows better efficiency but in some companies i.e. Container Corporation of India Ltd. and GAIL India Ltd. this ratio is decreasing which implies that their utilization of assets are not proper and can improve it.

Increasing inventory turnover ratio indicates strong sales. It shows that the company is selling products quickly, which is an indicator of good business performance overall. In the study it was found that except Engineers India Ltd. all the other selected companies have shown an increasing inventory turnover ratio which is a good indicator of efficiency.

According to CGDI score, Engineers India Ltd. has got first position in corporate disclosure.

In CGDI score the median value for the 40 observations was 40 and out of the these 40 observations 16 of them are having score less than the median value which shows the that companies are lacking in mandatory corporate governance disclosure.

The correlation matrix shows that there is positive relationship of 0.156 between corporate governance and assets turnover ratio which means corporate governance is directly proportional to assets turnover ratio in the selected companies. Increase in assets turnover ratio will also increase CGDI and vice-verse

There is positive relationship of 0.240 between corporate governance and inventory turnover ratio as shown in the correlation matrix. It means that corporate governance is directly proportional to inventory turnover ratio in the selected companies. Increase in inventory turnover ratio will also increase CGDI and vice-verse

From regression analysis it was found that there is a significantly positive impact of leverage on assets turnover ratio. There is also a significantly positive impact of CGDI and Age on inventory turnover ratio and significantly negative impact of Size on inventory turnover ratio.

### Conclusion

The companies listed in Nifty CPSE index and very reputed central public sector enterprises and it attract many investors also so here corporate governance become very important. The new corporate governance regulations have been given by the SEBI and Companies Act 2013 has affected the companies working. In the present study relationship between corporate governance and efficiency of the selected companies was observed. From the study it was found that there is a positive relationship of efficiency with CGDI which is a good indicator. Companies should work on improving the corporate governance so that their market reputation can become good and their efficiency can be further improved.

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#### Annexure 1

# Suggested Mandatory Disclosures as per Revised Clause 49 and Companies Act 2013

Particulars		
I. Ideology on corporate governance		
a) Corporate governance Philosophy		
b) Mission and Vision statement		
c) Message by the Chairman		
d) Message by MD		
II. Board of Directors		
a) Composition of Board		
b) Number of Board meetings held, dates on which held.		
c) Attendance of each director at the Board meetings and the last AGM		
d) Number of other Boards or Board Committees in which he/she is a member or a Chairperson		
e) Other provisions as to Board and Committees		
III. Audit Committee		
a) Brief description on terms an d conditions of Audit Committee		
b) Composition of Audit Committee		
c) Meetings and attendance of Audit Committee		
d) Role of Audit Committee		
e) Review of Information by Audit Committee		
IV. Nomination and Remuneration Committee		
a) Brief description of terms of		

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reference		
b) Composition		
c) Attendance during the year		
d) Remuneration policy		
e) Details of remuneration paid		
V. Stakeholders' Grievance Committee		
a) Name of non-executive director heading the committee		
b) Name and designation of compliance officer		
c) Number of shareholders' complaints received		
d) Number of shareholders' complaints solved		
e) Number of shareholders' complaints pending		
VI. General Body Meetings		
a) Location and time of last three AGM		
b) Postal ballot		
c) Postal ballot procedure		
d) Disclosure of special resolutions passed last year through postal ballot details of voting pattern		
e) Person conducting postal ballot		
VII. Disclosures		
a) Related party transactions		
b) Disclosure of Accounting Treatment		
c) Remuneration of Directors		
d) Management Discussion and Analysis report		
e) Disclosure of resignation of directors		
f) Disclosure of formal letter of appointment for new directors		

g) Details of non-compliance by the company	
h) Whistle Blower policy	
i) Details of compliance with mandatory requirements and adoption of the non-mandatory requirements of this clause	
VIII. Means of communication	
a) Disclosure of Quarterly results	
b) Newspapers wherein results normally published	
c) The presentations made to institutional investors	
IX. General Shareholder information	
a) Date of Book closure	
b) Dividend Payment Date	
c) Listing on Stock Exchanges	
d) Stock Code	
e) Registrar and Transfer Agents	
f) Share Transfer System	
g) Distribution of shareholding	
h) Dematerialization of shares and liquidity	
i) Address for correspondence	
j) Plant Locations	
X. CEO/CFO Certification	
Total	