DOES CORPORATE GOVERNANCE INCREASES FIRM PERFORMANCE OF IT INDUSTRY? AN EMPIRICAL ANALYSIS

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Abstract

Purpose: As India is the biggest hubs for the Information technology (IT) companies and they have impacted the industry in a big way due to several reasons in which their effective governance is also an important means that shape positively the performance of the companies. So, the study mainly focused to ascertain the effect of corporate governance aspects on the performance of selected IT companies in India along with their year wise performance.

Methodology: This study is based on the secondary data covering the period of 5 years i.e. from 2010 to 2014 which have extracted from the annual report from the websites of the companies. In order to achieve the objective of the study, Top 10 IT companies by their market capitalization have been selected to show the relationship among various internal governance aspects and performance of IT companies. Size of Board of Directors, number of Female board, proportion of Independent Directors, number of Board meeting, Chief Executive Officer Duality and Board committee are the aspects of Corporate Governance have been taken as independent variables. ROA, ROE and Return on capital employed have been used as an indicator of performance of the companies. Multiple Regression, Charts and Descriptive statistics are used to analyze the result.

Findings: From analysis, it is found that the sizes of board of directors, Independent directors and board committees have affect significantly the IT companies. We have been found no any significant impact of female board and board meeting on financial performance. It is quite surprising when gender effect among the board members did not turn out to be significant with regard to financial performance. So, Composition of boards has differentiated the financial performance results.

Conclusion: To sum up, board independence and Board committee are most important factors for IT sector shows the positive relation to corporate performance. Board committee consists with mainly Audit committee, compensation committee, nominations committee, investor grievance committee and risk management committee. All committees consist entirely of independent director, expertise, strong commitment and actively participation contributes effectively overall performance of the IT companies. Clause 49 has been increased top management transparency and personal accountability. Yet, depending on the desired financial results, companies need to carefully consider their board's makeup and their involvement.

KEYWORDS: Corporate Governance, Financial Performance, IT industry, Board, India

1. Introduction

Corporate governance is all about doing right actions for the betterment of the companies' performance by the right people on board as well as company. Increasing competition, pressure on billing rates of traditional services and increasing commoditization of lower-end services are among the key reasons forcing the Indian software industry to make a fast move up in the software value chain. The companies are now providing higher value-added services like consulting, product development, R&D as well as new digital technologies like social media, mobility, analytics, and cloud computing (SMAC). The new Indian government is emphasizing on better technology enabled delivery mechanisms for a multitude of government projects. Further, with the new digital India initiative being launched, the domestic market for software services looks forward to a bright future. India's IT industry can

be divided into five main components, viz. Software Products, IT services, Engineering and R&D services, ITES/BPO (IT-enabled services/Business Process Outsourcing) and Hardware. Export revenues, primarily on project based IT Services continue to drive growth with IT Services. This accounts for 54.2% of total revenues followed by BPO and Engineering services at 19.5%, Software Products at 15.3% and hardware at 11%. The Indian IT/ITES industry earned revenue of over US\$ 109 billion during the FY2014. Out of this, exports accounted for 69.7% of the industry's revenue. At the end of FY14, India's share in the global outsourcing market stood at 55%. The USA accounts for about 53% of the export revenue followed by the UK and Continental Europe, with 15% and 10% respectively. Other regions such as Asia Pacific are catching up, with a contribution of 6.5%. Indian IT companies had a good year in terms of financial performance, driven by factors like such as the improvement in the quality of service offerings, stable pricing environment and the depreciation of the Indian rupee. One of the main reason of increasing capitalisation and profitability due to their manpower and management that understand the competitiveness' of dynamic environment and work for the companies effectively and efficiently. They are mainly directed by the board of directors who mainly gives the strategic direction to the companies.

Strong governance has long been considered crucial for enhancing the long-term value of stakeholders in the business environment and also influential in the development and functioning of economy and exerts a strong influence on resource allocation which impacts on the performance of firms. Corporate Governance has attracted considerable attention, debate and research worldwide in recent decades. The absence of good corporate governance is a major cause of failure of many well performing companies. The economic well being of a nation is the reflection of the performance of its companies. The OECD (2004) Principles of Corporate Governance acknowledge that an effective corporate governance system can lower the cost of capital and encourage firms to use resources more efficiently, thereby promoting growth. Good corporate governance is a desired feature of a liberalized market to ensure the flow of both foreign and domestic capital for accelerated economic development. This is because it increases investor confidence and goodwill, ensures transparency, fairness, responsibility and accountability. Performance can be seen as the success in meeting pre-defined objectives, targets and goals within specified time. These outcomes can be explained as the measures by which the firm is evaluated, and broadly include the quality of governance. Several studies conducted in the developed countries have confirmed the positive relationship between good corporate governance and organisational performance, (see Jensen and Meckling, 1976, Fama and Jensen, 1983, Vishny and Shleifer, 1997).

2. Review of Literature

Arising from many high profile corporate failures, coupled with generally low corporate profits across the globe, the credibility of the existing corporate governance structures has been put to question. Satyam computer services ltd. which offers IT services was founded in 1987 by B. Ramalinga Raju. It was 4th fastest growing company in India and the first Indian internet company listed on three International Stock Exchange NASDAO, NYSE and Euro next. Their deliberately misapplication of accounting policies and presentation of inadequate disclosure by the creative accounting, window dressing and cooking the books create a one of the biggest scams in IT sectors in India that raised the questions on the inactive board members and their monitoring of the ethical policies and the way they are being maintained in the companies. At this time IT sector was suffered a downfall and their global image was tarnished. Over the past decades numerous of studies have attempted to predict relationship of Corporate governance mechanism in and the around the world.

Monks (1996) argues that the numerous cases of corporate failures are an indictment of the effectiveness of the existing corporate governance structures. The corporate governance debate has largely centered on the powers of the Board of Directors vis-a-vis the discretion of top management in decision making processes.

Agrawal and Knoeber (1996) made studied the interrelationships between seven different corporate governance mechanisms in a simultaneous equations context and find a negative relationship between independence and firm performance (as measured by Tobin's Q). Brown and Caylor (2004) do not find Tobin's

Q to increase in board independence, but they do find that firms with independent boards have higher returns on equity, higher profit margins, larger dividend yields, and larger stock repurchases, suggesting that board independence is associated with other important measures of firm performance aside from Tobin's Q.

Dehaene et. al (2001) analysed 122 companies to verify whether a relationship exist between board composition (number of directors, outside director, CEO duality) and company performance (ROA and ROE). Their findings indicate a significant positive relationship between percentage of outside director and ROE i.e. the more external director a company has, the better is its performance. They also found a significant positive relationship between CEO duality and ROA i.e if the CEO is also the Chairman of BOD, the company would show higher ROA.

Subramanyam, M. and Dasaraju, H. (2014) made an attempt to analyze the level of corporate governance practices through disclosure among the biggest IT companies in India and found that among the sample IT companies, Infosys, Wipro, TCS and HCL scored high score i.e. more than 100 and Tech Mahindra and Mphasis scored low score i.e. less than 96 in corporate governance disclosure practices. They finally concluded that corporate governance increases performance of the companies.

Carlos J. et al, (2013) argued that Information Technology (IT) governance frameworks contribute to the implementation of the key principles of the good corporate governance, particularly, in the public sector. They demonstrated that there are numerous links, explicitly and implicitly expressed through a set of IT governance instruments, matching the proposals of good governance principles with the behavioral goals of an IT governance framework implementation.

From the above reviewed literature related to the corporate governance of the IT companies, we can utter that IT companies are showing really good reputation with their increased market share value and market capitalisation but really it is growing, still a question confronted while scandals come front among all. Corporate scams show a complete failure of corporate governance practices which affect the firm financial performance. The focus of virtues in corporate governance is to establish a series of practical application

of core values and principles as well as commitment to ethical business practices. Good corporate governance is required to monitors properly by the Boards members and effective fraud detection mechanism by auditors which enhance the performance and find the loopholes of the companies effectively which cause the scams in corporate world. So, there is need to study whether companies that showing largest companies are following the best corporate governance practices.

3. Objectives of the study

The main objective of this study is to examine the linkage of the corporate governance mechanism on firm performance through the along with following statements:

- 1. To study the performance of the selected IT companies.
- 2. To study the link of the various aspects of corporate governance and the performance of the IT companies.

4. Research Methodology

This study is mainly conducted to investigate the link between the various governance aspects and the performance of the IT companies. For showing this relationship, 10 top companies have been selected by their market capitalization (See annexure 1). This study is based on the secondary data covering the period of 5 year i.e from 2010 to 2014 which have extracted from the annual report individually from the website of the companies. In the present study, profitability performances have been taken into consideration. The different key profitability ratios i.e Return on assets, Return on Equity and Return on capital employed have been calculated in order to judge the financial performance for the period under study. For establishing the relationship between various aspect of governance and performance, Return on Capital employed (ROCE), Return on Assets (ROA) and Return on Equity are taken as the dependent variable and the independent variables are taken as governance aspect for the study are size of Board of Directors, Number of Female Board, proportion of Independent Directors, Number of Board meeting, CEO duality and Board Committee. Multiple

Regression has been used to show the effect of aspects of the corporate governance on the performance of IT companies at 5% level of significant. If P-value is less than 5% level of the significance in case of any independent variable, we can infer that the relationship between that particular variable with dependent variable is significant. Besides this charts are used to show the performances and Descriptive statistics are used to show the trend and the Shapiro-Wilk test and Durbin Watson are used to check the assumption of the regression.

Following are the indicators used for the corporate governance aspects and performance of the companies:

4.1 Return on asset

ROA is a better metric of financial performance. It explicitly takes into account the assets used to support business activities. It determines whether the company is able to generate an adequate return on these assets rather than simply showing robust return on sales. Using ROA as a key performance metric quickly focuses management attention on the assets required to run the business.

ROA= Net profit after Tax/ total assets? 100

4.2 Return on equity

The common shareholder is entitled to the residual profits. A return on shareholders' equity is calculated to see the profitability of owners' investment. The shareholders' equity or net worth will include paid-up share capital, share premium and reserves and surplus less accumulated losses. Net worth can also be found by subtracting total liabilities from total assets.

 $ROE = Profit \ after \ Taxes \ (PAT)/ \ Net \ Worth \ or shareholder Equity$

Where, ROE indicates how well the firm has used the resources of owners. The earning of a satisfactory return is the most desirable objective of a business. The ratio of net profit to owners' equity reflects the extent to which this objective is accomplished. This reveals the relative performance and strength of the company in attracting future investments.

4.3 Return on capital employed

Net capital employed is the total of fixed assets plus current assets less current liabilities. In other words it is the quantum of permanent capital expressed as non-current liabilities plus shareholders equity. Therefore,

ROCE = Adjusted Net Profit / Capital Employed? 100

Where, Capital Employed = Net Fixed Assets + Net Working Capital

It reflects as to how well a company is employing its capital. The fixed assets forming a part of net capital employed are taken into account only after deducting the amount of depreciation. This ratio is regarded as one of the best method of evaluating managements' efficiency and overall profitability.

4.4 Board Effectiveness

Under the umbrella of board effectiveness, lie several factors but empirical studies have made use of board structure and composition with size, independence and performance as the key parameters. A board of limited size is expected to be more performing than bigger ones due to better communication and decision making thus improving performance. Board size plays a pivotal role in mitigating agency costs and in affecting the firm performance.

4.5 Duality

Duality exists when the same person occupies the title of CEO and Chairman of Board of Directors. The CEO is accountable for administering the company's operations, providing leadership, performance, preparing strategies, plans, objectives, and communicating to the investors. The chairman on the contrary runs and reviews the board, scrutinizes activities and uplifts the image and goodwill of the company.

4.6 Female Board

It represents gender diversity in boardroom. The new company law, 2013 mandated to specific companies to have at least one woman on the board.

In recent years, it has been increasingly pressured by shareholder activists, large institutional investors and politicians to appoint women as directors or officers. The assumption is that "greater diversity of the boards of directors should lead to less insular decision making processes and greater openness to change". It's found that good corporate governance was positively associated with board diversity.

4.7 Board Meeting

As per Section 285 of the Companies Act, in every company, a meeting of its Board of directors shall be held at least once in every three months and at least four such meetings shall be held in every year. Notice of every meeting of the Board of directors of a company shall be given in writing to every director for the time being in India, and at his usual address in India to every other director. The quorum for a meeting of the Board of directors of a company shall be one third of its total strength (any fraction contained in that one-third being rounded off as one), or two directors, whichever is higher.

4.8 Board Committee

A key element in the corporate governance process of any organization is its audit committee. While a board may have several committees - Grievance committee and Audit committee - are critical and must be made up of at least three independent directors and no inside directors. Other common committees in boards are nominating and governance. A board committee under the chairmanship of a non-executive director shall be formed to specifically look into the redressal of shareholders and investors complaints like transfer of shares, non-receipt of balance sheet, non-receipt of declared dividends etc. This Committee shall be designated as 'Shareholders/Investors Grievance Committee'. The number of meetings of the Shareholders/Investors Grievance Committee should be in accordance with the exigencies of business requirements.

5. Analysis of the data

I. Performance of the IT companies

Table 1 and chart 1 depicts overall profitability position of selected IT companies for the period from 2010 to 2014 in terms of Return on Assets, Return on Equity, and Return on Capital Employed. The Performance of the selected IT companies for the period of 5 years from the year 2010 to 2014 has been depicted in the following table:

Table 1

- The profitability position of all the selected companies shows a little fluctuation but with have positive overall performance.
- Return on assets ranges from 13.7 to 26.94 shows that executive teams to focus their own operations more tightly on the activities and assets they are best qualified to manage and to spin out other activities and assets to more specialized companies.
- Return on equity ranges from 16.6 to 37.14 which are also reveals that the firm has used the resources of owners effectively.
- Return on capital employed ranges from 22.18 to 46.82 which can be considered as reasonable for the selected company which reflects as to how well all selected company is employing its capital.
- All the companies effectively performing in which on the basis of ROA, Tata consultancy services stood on the top among all followed by Infosys ltd, Tech Mahindra, MindTree, Tech Mahindra, HCL Technology, Wipro ltd, oracle financial services, Mphasis and KPIT while TCS again stands on the top followed by HCL Technology, Infosys ltd, Tech Mahindra, Mindtree and so on. But Persistent has lowest standard deviation which reveals that they earn returns on assets and equity consistently.

II. Effect of Corporate governance aspects on the performance of the IT companies.

An assessment of the normality of data is a prerequisite for many statistical tests because normal data is an underlying assumption in parametric testing. For testing normality, the test statistics are shown in the third table. Here two tests for normality are run. For dataset small than 2000 elements, we use the Shapiro-Wilk test; otherwise, the Kolmogorov-Smirnov test is used. In our case, since we have only 50 elements, the Shapiro-Wilk test is used. The p-value is more that 5% level of significance. We can reject the alternative hypothesis and conclude that the data comes from a normal distribution. The pooled regression model has been used to show the impact of governance on the performance for the study period in this analysis which equation of model are presented as follows:

 $ROA = 0 + \beta 1BOD_SIZE + \beta 2FE_BOD + \beta 3BOD_IND + \beta 4BOD_MEETING + \beta 5BOD_COMMITTEE + \beta 6FIRMSIZE + \beta 7AGE + £$

ROE = &0 + $\&1BOD_SIZE$ + $\&2FE_BOD$ + $\&3BOD_IND$ + $\&4BOD_MEETING$ + $\&5BOD_COMMITTEE+ \&6FIRMSIZE+ \&7AGE+ £$

$$\begin{split} &ROCE = \&0 + \&1BOD_SIZE + \&2FE_BOD + \\ \&3BOD_IND + \&4BOD_MEETING + \\ \&5BOD_COMMITTEE + \&6FIRMSIZE + \&7AGE + \pounds, \end{split}$$

Where, β 0, β 1, β 2, β 3...... β 8 are the parameters of ROA, ROE and ROCE line to be estimated and £ are error in the model.

Table 2.

Table 3 illustrates the empirical results regarding the correlation between corporate governance mechanism and firm performance. In the first column, ROA is a dependent variable, ROE in the second column and ROCE in third column to measure financial performance, the explanative ability and strength of relationship of three empirical models is 0.430, 0.525 and 0.630 respectively. Durbin-Waston are showing the result around 2 (i.e. 1.96, 1.98 and 1.89) which reveals that model have not any auto-correlation problem.

 CEO duality has been excluded from the analysis while running regression due to constant result i.e. all the companies have not any duality of the chairperson and Chief executive officer by a same person. Both positions have performed by different person

- complying as per clause 49, SEBI guidelines for the corporate governance.
- Proportion of Independent Directors and Board Committee have positive and significant relationship with ROA, ROE and ROCE at 1% and 5% level of significant which reveal that this aspect of governance affect significantly the profitability as well as performance of IT industries and Board of Director has significant at 1 % level of significance only with ROE and ROCE, reveals that size of the board of director also leads to the good performance of selected IT companies up to certain extent.
- Number of Female Board and Board Meeting has not any impact on the performance of the selected IT companies. In addition, gender diversity was not correlated with performance and this is a kind of early signal that gender diversity might not create any impact on firm financial performance
- To sum up, board independence and Board committee are most important factors for IT sector shows the positive relation to corporate performance. Board committee consists with mainly Audit committee, compensation committee, nominations committee, investor grievance committee and risk management committee. All committees consist entirely of independent director, expertise, strong commitment and actively participation contributes effectively overall performance of the IT industries.

6. Conclusion

Finally we have concluded that after Satyam scams of amounted 71.36 INR billions in January 2009, IT and software companies was suffered a downfall and their global image was also tarnished. This scam shows a complete failure of corporate governance practices in IT sectors. So, after that these IT companies has been started work for regaining the lost image by adopting best practices of corporate governance and today IT sectors again have gained full confidence of investor and stakeholder by complying the clause 49 of, Listing Rule SEBI. Statistically we found that in respect of board

structure, board size is significantly and positively related to firm performance(with ROE and ROCE), implying that, in a large size board, the diversity of insiders' opinion has a positively impact on making decisions, which is detrimental to firm performance.

Nevertheless, board independence is positively and significantly related to firm performance, suggesting that the more independent the board is, the better firm performance would be. On the other hand, Board committee has been also effected the performances which play very essential role in auditing, nomination, risk management, decision making etc. It is quite surprising when gender have effect among the board members did not turn out to be significant with regard to financial performance. Therefore, Demographic diversity in the case of board of directors (BODs), partially has not been influenced firm's financial performance. However, to a certain extent, ethnicity in boards of directors created a significant impact on firm financial performance. These findings are quite consistent with earlier study (Maran & Indraah, 2009). This study also does not relevant for the other sectors such as manufacturing, heavy machine, telecommunication etc due to having different core work. Moreover, several aspect of corporate governance of IT industries such as ownership, disclosure etc remains unexplored for the further study. Effectiveness of corporate governance system cannot merely be legislated by law. As competition increases, technology pronounces the death of distance and speeds up communication. It also promotes the transparency which leads to effective governance. To avoid the scams, a company needs to strictly follow proper system of corporate governance and rotating the auditors for enhancing every couple of years.

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Table 1: Overall profitability position

Company	ROA		ROE		ROCE	
	A.M	S.D	A.M	S.D	A.M	S.D
Infosys	20.52	1.88	25.76	1.36	34.9	1.70
TCS	26.94	1.37	37.14	1.48	46.82	2.67
KPIT	12.36	2.35	19.38	2.35	24.14	3.24
HCLTech	15.79	4.38	27.06	7.59	30.72	9.04
Wipro	14.82	1.35	23.26	2.28	27.06	3.81
TechMah	15.96	2.67	25.44	7.32	30.04	7.32
Mindtree	18.48	5.25	24.24	7.06	29.96	8.38
Persistent	14.88	0.98	18.48	1.27	23.3	3.72
Mphasis	13.7	7.35	18.64	9.87	22.44	10.34
OFSS	14.78	2.40	16.6	2.66	22.18	0.91

Source: Computed By Authors from Annual report (2010-2014)

A.M = Average Mean S.D = Standard Deviation

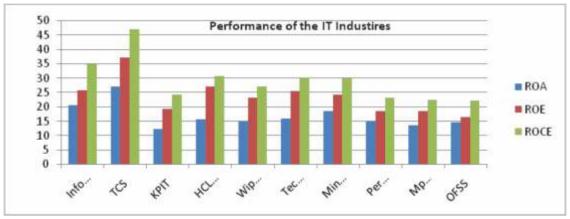


Table 2. Result of Pooled Multiple regression - ROA, ROE and ROCE as Dependent variable Model summary

Independent variables	Dependent Variables					
	ROA		ROE		ROCE	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Intercept	-16.518	.0891	-30.999	.017	-46.607	.002*
BOD_SIZE	0.9889	0.051	1.24252	0.003*	1.9967	.008*
FE_BOD	-1.329	0.207	-1.498	0.277	-2.512	0.106
BOD_IND	1.0134	0.046*	1.003	0.041*	0.252	.008*
BOD_MEETING	0.300	0.609	.071	0.927	0.130	0.880
BOD_COMMITTEE	1.364	.009*	2.027	0.003*	3.029	.000*
FIRMSIZE	1.728	0.017*	2.576	0.007*	3.563	.001*
AGE	-0.074	0.270	-0.131	0.87	204	0.043*
R-squared	0.430		0.525	·	0.630	
Durbin Waston	1.89		1.98		1.96	

ANNEXURE
1.List of companies taken for the study

Sl. No.	Name of Companies	Market Capitalisation		
1	TATA CONSULTANCY SERVICES LTD	492,071.64		
2	INFOSYS LIMITED	238,147.15		
3	HEXAWARE TECH	6,291.24		
4	HCL TECHNOLOGIES LTD	108,530.36		
5	WIPRO LTD	136,631.76		
6	TECH MAHINDRA LIMITED	64,316.94		
7	MINDTREE	10,567.73		
8	PERSISTENT	7,239.00		
9	MPHASIS	8,043.38		
10	ORACLE FIN SERVI	27,824.40		

2.Summary of Variables measurement

Sl. No.	Variables	Acronym	Description	
Dependent variables				
1	Return on Assets	ROA	The ratio of Net profit after tax is divided by total assets	
2	Return on Equity	ROE	The ratio of Net profit after tax is divided by total equity	
3	Return on Capital employed	ROCE	The ratio of profit before interest and tax by net capital employed	
Independ	lent Variables			
4	Board of Director	BOD_SIZE	Total number of director on the composition of board of directors	
5	Number of Female Board	FE_BOD	The number of women directors on the composition of total no. of directors	
6	CEO duality	CEODUAL	Dummy variable equal to "1" if the CEO is also the chair of the board and "0" otherwise.	
7	Proportion of Independent Directors	BOD_IND	The number of independent non-executive directors on the board relative to the total number of directors.	
8	Board Meeting	BOD_MEETIN G	The frequency number of meetings during a year for the board directors.	
9	Board Committee	BOD_COMMIT TEE	The commitment of the board is measured by the attendance of the board meeting	
Control	Variables			
1	Firm Size	FIRMSIZE	The natural log of total assets.	
2	Age	AGE	The year from the date of establishment	