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ANALYSING THE EFFECT OF SURPLUS FREE CASH FLOW & AUDIT COMMITTEE ON EARNINGS MANAGEMENT FOR SELECTED INDIAN COMPANIES

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Abstract

Earning management has been a great and consistent concern among practitioners and regulators and has received considerable attention in the accounting literature. Free cash flows are important scale for evaluating the enterprise's financial health and they are motivation for adjusting earnings management. Therefore, the main aim of this paper is to examine the effect of free cash flows on evidence of earnings management. This study hypothesizes that manager of high surplus free cash flow companies have incentive to engage in earnings management. However, earnings management occurs less frequently when the audit committee is more independent. Independent audit committees provide an effective monitoring over earnings management practices. The data has been collected from published annual reports of 30 selected companies from Indian manufacturing sector for the year 2007-2016. Multiple Regression model is used by considering Discretionary accrual as dependent variable, surplus free cash flow and independent audit committee as independent variable. Modified Jones Model is used to calculate Discretionary accruals. This study shows that there is negative relation between surplus free cash flow and Earnings Management but positive relation between Independent Audit Committee which indicates that independent audit committee with their effective internal control mechanism help companies with high surplus free cash flow to reduce income increasing earnings management practices.

Keyword: *Earnings Management, Surplus Free Cash Flow, Audit Committee, Modified Jones Model*

1. INTRODUCTION

1.1 Earnings Management:

According to the Statement of Financial Accounting Concepts (SFAC) No. 1, the earnings information is a major concern for measuring performance or accountability of management. Earnings information also helps the owner or other party in measuring the power company's earnings in the future. This has created an opportunity for management to take action that can make financial reports into looks better, the manager's actions sometimes conflict with the company's goals. Earnings management is the management's efforts to change the financial statements intended to mislead shareholders who want to know the company's performance or to affect a financial report containing the earnings information. Earnings management is the impact of a manager the freedom to select and use certain accounting methods when record and organize information in the financial statements.

1.2 Relationship between Earnings Management and Surplus Free Cash Flow:

If free cash flow in a company is not used or invested to maximize or to balance the best interest of shareholders, then it raises agency problems. The manager may choose to invest in an unprofitable project due to his or her self-interest. As a result, the company may be in the position of low growth. In the absence of effective monitoring or disciplinary actions by other independent stakeholders, the manager can conceal information on the activities by providing minimal disclosure or manipulating accounting number. Investors as a group of stakeholders do not have access to inside information. Managers may not provide adequate discloses to investors on the investment cash flows or the underlying assumptions of the project. Based on this minimal information, investors may not be able to know the prospect and the advantages or disadvantages of the project for their wealth. Managers may not provide the internally projected cash flows for some investments. As a result of personal interests, managers overlook the need for preparing projected cash flow and profit forecast. The choice for making poor investments may reduce future earnings and lead to a move to remove directors or senior executives. In order to avoid the risk of facing the management turmoil, managers may employ accounting numbers to increase reported earnings. It is assumed that investors are completely unravelled of earnings numbers. Hence, managers are motivated to manage earning in order to fulfil their needs.

1.3 Relationship between Audit Committee and Earnings Management:

An audit committee plays an important role in monitoring the company financial reporting process. The audit committee meets regularly with the company's external auditors and internal financial managers to review financial statements, audit process, and internal accounting controls of the company. Independent audit committees are hypothesized to have an effect on discretionary accounting accruals. The presence of independent audit committee may protect the interest of shareholders. Their monitoring function reduces earnings management, hence decreases agency problems. Klein (2002) found that audit committee independence is negatively related to earnings management. This result suggests that independent audit committees are able to effectively control earnings management practices.

2. OBJECTIVES

1. To estimate discretionary accruals by Modified Jones Model.
2. To identify the main factors that affect earnings management.
3. To analyse the impact of free cash flow and Audit committee on earnings management.

3. LITERATURE REVIEW

- Rina BR Bukit, Takiah Mohd Iskandar (2009) has analysed on" surplus free cash flow, Earnings management & Audit committee". The objective of the study was to examine whether high surplus free cash flow is related to earnings management. The data was collected for 225 companies listed on board of Bursa Malaysia for the tear 2001. Modified jones model was used to calculate Earnings management. A regression analysis was conducted to check relationship between earnings management and free cash flow. The study revealed that Independent Audit Committee helps companies with high surplus free cash flow to reduce income increasing earnings management practices.

- Saeed Lazemi Chalak, Saeed Mohammadnezhad (2012) conducted study on" Investigation of the relationships between Earnings management and free cash flow in firms with high Free cash flow & low growth listed in Tehran securities exchange. Data were collected from 63 companies for the period 2006 to 2011. Linear Regression, Pearson Analysis &Variance Analysis were employed in the study. The study revealed that there was a direct significant relationship between Discretionary Accruals and Free cash Flows.

- Redhwan Ahmed AL-Dhamari, Ku.Norizah BT KU ISMail (2012) examined on" Governance Structure, Surplus Free cash Flow and Earning Quality: Evidence from Malaysia. This study attempts to empirically examine the role of surplus free cash flow as a moderator in the relationship with the new requirements of Malaysian code on corporate Governance. Data was taken from 330 companies for the period 2008-09. The result demonstrates that the current earnings of firms with small board and independent audit committee members are more likely to persist in the future surplus free cash flow is high.

- Ardeshir bustan, Rahmatollah Mohammadipr (2016) assessed on," Investing the effect of surplus free cash flow on earning management in corporations of accepted in Tehran stock exchange." The objective of the study was to investigating the effect of surplus free cash flow on earnings management in corporations of accepted in Tehran stock exchange. Multiple Regressions, T test and F test was used as statistical tool. The data was taken from 147 companies listed on Tehran Stock exchange for the period 2008-2014.The study revealed that Surplus free cash flow has a positive effect on earnings management of corporate.

- Ratna Mappanyukk, Haryo Dwi Prakoso and Soni Agus Irwandi examined on "The Impact of Free Cash Flow and Good Corporate Governance (GCG) Earning Management of the Banking Companies Listed on the Indonesia Stock Exchange. Earnings Management, as for the purpose of this study is: 1.To determines the effect of the Free Cash Flow Earnings Management. 2. To determine the effect of the Board of Commissioners, Audit Committee, and Institutional Ownership on Earnings Management. F test and t test, multiple linear regression analysis used as statistical tool. The data was taken from 18 banks for the period 2009-2013.

4. RESEARCH METHODOLOGY

The multiple regression analysis was used to test the relationship between Dividend policy and Earnings management .Data were sourced from annual reports of 30 (Thirty) selected companies for the period 2007-2016.

4.1 Model Specification:

4.1.1 Earnings Management – Dependent Variable

The use of accruals adjustment to proxy for earnings management has been widely used in literature as it is less discernible than say a change in an accounting method which needs to be adequately disclosed and justified. Total accruals have been divided into discretionary and non-discretionary. Discretionary accruals are the abnormal part of accruals unexplained by change in revenue net of change in receivables and gross Property Plant & Equipment (PPE). These are scaled by average total assets to reduce heteroscedasticity problems. Earnings management is measured by the discretionary accruals, which is obtained by making the error term from equation. Study uses absolute abnormal accruals to proxy for earnings management. Initially, Discretionary Accruals are computed using Modified Jones model defined as below:

$$DA_{it} = TA_{it}/A_{it-1} - \alpha_{1i}(1/A_{ip-1}) + \beta_{1i}((\Delta REV_{ip} - \Delta REC_{it})/A_{ip-1}) + \beta_{2i}(PPE_{ip}/A_{ip-1})$$

Where: Δ REVt is revenues in year t less revenue in year t-1
Δ PPEt is gross property plant and equipment at the end of year t
Δ RECt is net receivables in year t less net receivable in year t-1.
At-1 is Average total assets at the end of year t-1
α1, α2, α3 are firm specific parameters ε is the residuals
Thus DACt = TAt - Non DACt
The larger the value of the discretionary accruals, the higher will be the presence of earnings manipulation and vice-versa.

4.1.2 Free cash flow, Audit committee and Earnings Management:

DAC=β1 SFCF+β2 Ind.AC+β3 SFCF*Ind.AC+β4 RELCF+β5 SIZE+β6 TACit+ e

The model incorporates discretionary accounting accruals as the dependent variable. Surplus free cash flow and independent audit committee are the independent variables. Independent audit committee as a moderating variable which moderates the relationship between surplus free cash flow and discretionary accounting accruals. The interaction between surplus free cash flow and independent audit committee is represented in the model by SFCF*InAC.

4.1.3 Measurement of Variables:

Table-1 Variable Description

Variables	Definition
Dependent Variable:	
DACi	Earnings Management of firm .It is proxy by Discretionary accrual calculated using Modified Jones model
Independent Variable:	
SFCF	Surplus Free Cash Flow
Ind.AC	Independent Audit Committee It is measured using % of independent directors of audit committee over the total number of audit committee members.
SFCF*InAC	Interaction of Surplus Free Cash Flow and Independent Audit Committee
RELCF	Relative Cash Flow which is calculated as cash flow divided by log of total assets
SIZE	Log of Market Value of Equity
TAC	Absolute Value of Total Accrual which is calculated as Net Income-Cash flow

5. DATA ANALYSIS AND INTERPRETATION

To calculate Discretionary accrual (DA) Modified Jones Model is used and the estimated model for Total Accruals was obtained as under:
TAt/At-1 = -25971.63647 (1/At-1) – (-0.511866303(Δ REV –Δ REC/ At1)) + -0.058347119 (PPE t /At-1). It gives value of non-discretionary accrual (NDA) as under, NDA= -25971.63647 (1/At-1) – -0.511866303 (Δ REV

–Δ REC/ At-1) + 0.058347119 (PPE t /At-1). DA is calculated as TA-NDA, the absolute value of which is used as independent variable in regression model.

Table: 2 Regression outputs

Descriptive Statistics			
	Mean	Std. Deviation	CV
DAC	-21.0054	298.0816	-14.1907
SFCF	479592	4698709	9.797304
Ind. AC	0.89505	0.186675	0.208564
TAC	-396851	4701765	-11.8477
SFCF*In.AC	471358	4695928	9.962551
RELCF	-60689.8	449710.2	-7.40998
SIZE	2.749	0.609701	0.22179

The above table: 2 show the Mean and Standard Deviation for each variable considering 10 years of 30 companies. Coefficient of variance (CV) is also calculated by dividing standard deviation by Mean. Here, DAC has lowest CV which shows that DAC is most consistent variable. Whereas, SFCF*Ind.AC has highest CV value which indicating least consistent variable.

Table: 3 Correlations

	DAC	SFCF	Ind. AC	TAC	SFCF*In.AC	RELCF	SIZE	
Pearson Correlation	DAC	1.000						
	SFCF	-.954 (.000)	1.000					
	Ind. AC	.030 (.300)	.015 (.401)	1.000				
	TAC	.954 (.000)	-.999 (0.000)	-.012 (.417)	1.000			
	SFCF*In.AC	-.951 (.000)	1.000 (0.000)	.021 (.359)	-.999 (0.000)	1.000		
	RELCF	-.042 (.232)	.046 (.241)	.027 (.321)	-.044 (.224)	.046 (.215)	1.000	
	SIZE	.014 (.405)	.007 (.453)	.408 (.000)	-.007 (0.450)	.006 (.462)	.028 (.312)	1.000

Figure in bracket indicates significance level.

Based on the above correlation table: 3 shows that, negative correlation can be seen between DAC and SFCF. Positive insignificant correlation can be seen between Ind. AC and DAC. Positive relation observed between TAC and DAC. Negative correlation can be observed between SFCF*Ind.AC and DAC and TAC, whereas 100% correlation between SFCF*Ind.AC and SFCF can be found. Negative insignificant correlation between RELCF and, DAC can be observed, while positive correlation between RELCF and SFCF. Size variable is least correlated with the other variables of cash flow.

Table: 4 Regression Output

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-43.659	28.771		-1.517	.130
SFCF	.000	.000	-3.012	-3.734	.000
Ind. AC	32.247	30.835	.020	1.046	.297
TAC	3.470E-05	.000	.547	1.166	.245
SFCF*Ind.AC	.000	.000	2.606	4.017	.000
RELCF	-6.887E-08	.000	.000	-.006	.995
SIZE	7.721	9.176	.016	.841	.401
Dependent Variable: DAC R Square: 0.916282					

Estimated Model:
DAC = -43.6589 -0.00019 SFCF + 32.2474 Ind. AC+ 3.47E-05 TAC + 0.000165 SFCF*In.AC - 6.9E-08 RELCF + 7.720797 SIZE
From the above regression table: 4 it is observed that Surplus cash flow is negatively but significantly related to DAC. There is positive insignificant effect of Ind.AC and Size on DAC, whereas negative insignificant relation between RELCF and DAC can be observed. The value of R-square is 0.957226, indicating that 95.72 percent variation in DAC is explained by all the independent variables jointly and hence model is powerful. Ind.AC is the highest contributor variable with insignificant positive relation with DAC followed by SIZE.

6. CONCLUSION

The study focused on the effect of free cash flow on earnings management. Thirty companies from six different sectors were selected for the study. In this study, the Earnings management is used as the explained variable, while surplus free cash flow; Independent Audit committee serves as the explanatory variable. The results did not support the fact that companies with high surplus free cash flow companies have incentive to engage in earnings management. Positive relation with independent audit committee shows that independent audit committee with their effective internal control mechanism help companies with high surplus free cash flow to reduce income increasing earnings management practices.

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