

Investigation of the Relationship Between Earnings Management and Free Cash Flows in Firms with High Free Cash Flows and Low Growth Listed in Tehran Securities Exchange

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Abstract: In most large for-profit entities often operating as companies, firm affairs are handled by professional managers who are legal representatives of shareholders and in these types of firms, management and ownership are separated in practice. Managers may attempt to fulfill expected profit through discretionary accruals because manipulation of non-discretionary accruals is nearly impossible. Based on Jensen research, in companies with high free cash flows and low growth, managers likely engage in earnings management in order to fulfill their self-interest. Thus purpose of this study is to examine the relationship between earnings management and free cash flows in firms with high free cash flows and low growth. For testing research hypotheses, the required data were collected from 63 companies listed in Tehran Securities Exchange. Data analysis was conducted using three methods of linear regression, Pearson analysis, and variance analysis and showed that there was a direct significant relationship between discretionary accruals and free cash flows. Also based on Jensen theory and other related research, there was also a direct relationship between discretionary accruals and free cash flows in Iranian firms with high free cash flows and low growth.

Key words: Discretionary Accruals • Earnings Management • Firm Growth • Free Cash Flows

INTRODUCTION

In most for-profit entities often operating as companies, firm affairs are managed by professional managers who are legal representatives of shareholders. On the other hand, shareholders who make their owned resources available to managers in the form of capital in order to achieve more returns are interested in information about the way of treating their capital by firms and quality of management performance in order to be able to make rational decisions.

Among the most important characteristics of companies is that their ownership is separated from their management. Thus managers are able to access to some information exclusively and also prepare and present such information as financial one. This characteristic and also accrual accounting one because of outstanding items (difference between cash profit and accrual profit) and such motivations as gaining rewards, earning smoothing and lack of law obedience lead managers to manipulate

information or in a more accurate word, embark in earnings management towards their own interest at the expense of other groups' interests.

Based on the fact that shareholders and managers seek to increase their own wealth, conflict of interests may be created between them. So, managers may intentionally or unconsciously present a favorable image of firm in order to achieve a variety of goals e.g. staying with firm, gaining profits, etc. Conflict of interest between managers and shareholders increase probability of providing unreliable information. Earnings, as an information source available to users, may be manipulated by managers with the aim of maximizing their own benefits. Discretionary accruals as a part of total accruals which is subject to discretion of managers, makes it possible for managers to bring reported earnings closer to their favorable one. Also it is probable that managers manipulate and eliminate negative earnings from some recent investments through discretionary accruals [1].

With respect to increase in shareholder wealth, free cash flows are of importance because allow managers to seek growth opportunities which increase share value. Managers can invest free cash flows in net present value projects and in this way increase shareholders' wealth. Jensen [2] claimed that since free cash flows are faced with increased probability of being invested in projects generating no value for firm, they create agency problems. According to Jensen [2], with respect to theory of conflict of interest between owners and managers, managers may invest the mentioned funds in projects with negative net value in order to achieve their personal goals in short-term and with the aim of obscuring these investments engage in earnings management.

Rubin [3] also states that managers in firms with high free cash flows prefer investing them in projects with negative net value over paying them to shareholders as dividends and in order to obscure these investments engage in earnings management frequently. So, it may be expected that free cash flows is a factor encouraging managers to manage earnings.

Thus responding to following questions, the present study seeks to achieve its intended goals including identification of the relationship between discretionary accruals and free cash flows, determination of the extent of earning manipulation through discretionary accruals, clarification of the state of free cash flows as a measure of firm performance and also informing financial information users about the roles played by free cash flows and discretionary accruals in order to help them in judging and making decisions. Research questions are as follows:

- What is the relationship between discretionary accruals and free cash flows?
- What is the relationship between discretionary accruals and high free cash flows in low growth firms?

MATERIAL AND METHODS

Earnings Management: Earnings management is one of nearly novel issues in accounting literature drawn the intention of managers and it has been introduced to the world since early twelfth century through research works done by scholars in this field. Each of these works has addressed earnings management with respect to specific dimensions and via using various terms e.g. earnings manipulation, earnings smoothening and finally earnings management. According to review of academic and practitioner literature, no single definition is accepted for

earnings management and various definitions are provided from different perspective some of them being pointed out in the following:

- According to definition provided by Dechow and Skiener [1], earnings management consists of biased financial reporting based on which managers deliberately and with prior intention interfere with financial decision making process in order to achieve certain personal benefits.
- Also Healy & Wahlen [4] believe that earnings management occurs when managers employ their personal judgment for financial reporting and in this way changes are emerged in financial structure. These changes in financial reporting cause misleading of stakeholders on firm performance and/or influence outcomes of firm contracts depending on reported accounting values.
- For Scott [5], earnings management is a choice being selected based on corporate accounting policies so that the firm can achieve certain managerial goals.
- At last, Gordon et al. [6] argued that if at one point management choose certain accounting methods and fluctuations of earnings decrease as a result of it, so it may be known as earnings management or smoothening. They also note that managers can do the followings within their discretionary domain resulting from authority within the limits of accepted accounting principles and procedures: a) influencing reported earnings, b) influencing corporate earnings rate.

Free Cash Flows: Free cash flows (FCF) theory which firstly was proposed by Jensen [2] and was gradually developed since then is one of the novel issues in financial literature. It describes those behaviors of firms not explainable by previous economic theories. FCF is the cash obtained after some adjustments of operational cash flow (OCF) in which operational cash flow means the cash produced from firm operations. In the case of presence of free cash flows, cash from operational activities is usually a sign of corporate ability to create cash flows. Nevertheless many financial analysts believe that not only cash flows from operational activities should be invested in new fixed assets to enable the firm to keep current level of its activities, but also a part of this cash should be distributed to shareholders as dividends or stock buybacks in order to satisfy shareholders. Thus cash flow from operational activities cannot be considered as ability of firm to produce cash flows by

itself. Operational cash flow is the cash from corporate operations which usually is obtained by deducing all operational expenses from incomes. So in process of evaluation of corporate capability it is necessary to calculate and assess its free cash flows as well as cash from operational activities. Also it should be noted that old accounting measures e.g. earnings per share and asset returns cannot solely represent firm performance but they should be applied together with such measures as corporate free cash flows because manipulation and distortion of FCF is very difficult while earnings are frequently manipulated by firm managers [7].

As mentioned above, free cash flows theory initially was proposed by Jensen [2]; also theoretical analysis of agency costs with respect to free cash flows was performed by him. In this theory, free cash flow consists of cash flows being remained after deduction of cash required for projects with positive present value. According to Lehn and Poulsen [8] definition for free cash flow, it is operational income before depreciation expense and after tax, interest expense, preferred and common dividends. Finally Copland [9] believes that corporate free cash flow consists of operating income after tax plus non-cash expenses after deduction of the investments on property, plant, equipment and other assets.

Firm Growth: When firm managers face with free cash flows, the first critical issue is ability of them to invest those funds in appropriate and high return projects (with positive net present value) so that they can create value for firm owners in this way. This will be possible if there are proper investment opportunity sets for firms and by identifying them, managers can invest free cash flows of firm effectively and in this way enhance firm growth.

Hypotheses Development: According to Jensen [2] if free cash flow in a company is not employed towards the best interest of shareholders, then agency problems are created. Manager may decide to invest in unprofitable projects to fulfill their self interest. This may lead to company low growth. If effective monitoring or disciplinary actions are not offered by other independent stakeholders, managers may obscure information on the activities by providing poor disclosures or distorted accounting numbers. Investors are stakeholders who do not have access to inside information. They may not been offered adequate disclosures on the investment cash flows or the real motivations of the project. According to this inadequate information, investors may have difficulty in understanding outcomes of the project with respect to their wealth [10].

Managers may not provide cash flows for some profitable investments which are not favorable for them. As a result of personal interests, managers ignore the requirement for preparing projected cash flow and profit forecast. Motivation for engaging in poor investments may reduce future earnings and lead to removal of directors or senior executives. For avoiding the risk of facing the management turmoil, managers may distort accounting numbers to inflate reported earnings. It is assumed that investors are completely unaware of earnings numbers. Thus, managers are motivated to manipulate earning so that they can fulfill their personal needs. Thus:

- H1. There is a significant relationship between discretionary accruals and free cash flows.
- H2. There is a significant relationship between discretionary accruals and high free cash flows in low growth firms.

Methodology

Procedure and Research Variables: In present research, free cash flow was considered as independent variable and discretionary accruals were considered as dependent variable. Moreover, variable of firm growth was also included in the model. It is noteworthy that interest costs of long-term and short term debts and firm size were inserted as control variables in regression model.

Free Cash Flow: With respect to some difficulties associated with calculation of free cash flows using Jensen [2] model, in present research Lehn and Poulsen [8] model is used for calculation and determination of firm free cash flows. According to this model, free cash flows are calculated as follows:

$$FCF_{i,t} = (INC_{i,t} - TAX_{i,t} - INTEXP_{i,t} - PSDIV_{i,t} - CSDIV_{i,t})A_{i,t-1}$$

where:

- $FCF_{i,t}$: Free cash flows of firm i in year t
- $INC_{i,t}$: Income before depreciation for firm i in year t
- $TAX_{i,t}$: All taxes paid by firm i in year t.
- $INTEXP_{i,t}$: Interest expenditure of firm i in year t.
- $PSDIV_{i,t}$: Preferred shareholders dividends of firm i in year t.
- $CSDIV_{i,t}$: Common shareholders' dividends of firm i in year t.

It should be noted that in present model, in order to adjust effects of various variables before year t and with the aim of aligning independent and dependent variables, free cash flows are divided by book value of firm total assets at beginning of the period [10-11].

Discretionary Accruals: A fundamental factor in testing earnings management in firms is discretion and judgment applied by managers in determination of earnings. Review of literature on earnings management demonstrates various approaches together with different measures employed to estimate and measure management discretion in determination of earnings. One of the most important applied approaches is to use discretionary accruals as an indicator for determination and discovery of earnings management in firms. Dechow *et al.* [12] presented a model subsequently named as “Modified Jones model”. They compared this model with ones of Jones [13], concluded that this model is more powerful in discovery of earnings management in firms. Thus, in present research modified Jones [13] model was used in order to examine earnings management in firms listed in Tehran Securities Exchange.

Jones [13] identified the difference between earnings and operational cash as accruals. In this approach, it is believed that information captured in operational cash is a more objective measure for evaluation of actual economic performance of firm and therefore it is less subject to managerial manipulation; according to this model, accruals are calculated as follows:

$$Ta_{i,t} = E_{i,t} - OCF_{i,t}$$

where:

- $Ta_{i,t}$: Total accruals of firm i in year t
 $E_{i,t}$: Net profit before extraordinary items for firm i in year t
 $OCF_{i,t}$: Operational cash flow for firm i in year t

The above method for calculation of total accruals is known as cash flow approach for calculation of total accruals. But the second approach being used for calculation of total accruals is balance sheet approach as follows:

$$Ta_{i,t} = \Delta CA_{i,t} - \Delta CL_{i,t} - \Delta CASH_{i,t} + \Delta STD_{i,t} - DEP_{i,t}$$

where:

- $Ta_{i,t}$: Total accruals of firm i in year t
 $\Delta CA_{i,t}$: Change in current assets of firm i between years t and t-1

- $\Delta CL_{i,t}$: Change in current liabilities of firm i between years t and t-1
 $\Delta CASH_{i,t}$: Change in cash of firm i between years t and t-1
 $\Delta STD_{i,t}$: Change in share of long term debts of firm i between years t and t-1
 $DEP_{i,t}$: Depreciation of firm i between years t and t-1

Collins and Hribar [14] found that research works which used balance sheet approach in order to calculate total accruals were not so accurate. They suggested that cash flows approach was better than balance sheet one [11].

So with respect to Collins and Hribar [14] research, in present study cash flow approach was used for calculation of total accruals. It should be explained that since based on Iranian standards cash flow statements are prepared in five classes, so its operational cash flow is different from OCF produced from three class cash flow statement based on international standards. So, OCF was manually calculated for each of sample firms according to international standards.

After calculation of total accruals, parameters α_1 , α_2 and α_3 were used in order to calculate discretionary accruals via following formulae:

$$Ta_{i,t} / It_{i,t-1} = \alpha_1 (1 / A_{i,t-1}) + \alpha_2 (\Delta REV_{i,t} / A_{i,t-1}) + \alpha_3 (PPE_{i,t} / A_{i,t-1}) + \varepsilon_{i,t}$$

where:

- $TA_{i,t}$: Total accruals of firm i in year t.
 $\Delta REV_{i,t}$: Change in revenues of firm i between year t and t-1.
 $PPE_{i,t}$: Properties, plants and equipment of firm i in year t.
 $A_{i,t-1}$: Total assets book value of firm i in year t-1.
 $\varepsilon_{i,t}$: Unknown effects of random factors.
 $\alpha_1, \alpha_2, \alpha_3$: Parameters estimated for firm I.

After calculation of parameters α_1 , α_2 and α_3 through least square method, non-discretionary accruals are determined based on following formulae:

$$NDA_{i,t} = \alpha_1 (1 / A_{i,t-1}) + \alpha_2 [(\Delta REV - \Delta REC) / A_{i,t-1}] + \alpha_3 (PPE_{i,t} / A_{i,t-1})$$

where:

- $NDA_{i,t}$: Non-discretionary accruals of firm i in year t.
 $A_{i,t-1}$: Total assets of firm i in year t-1.
 ΔREV : Change in net revenues of firm i between years t and t-1.

ΔREC : Change in net receivable accounts of firm i between years t and $t-1$.

$PPE_{i,t}$: Properties, plants and equipment of firm i in years t .

Finally, discretionary accruals are calculated as this:

$$Da_{i,t} = Ta_{i,t} / A_{i,t-1} - NDA_{i,t}$$

Firm Growth: In most various studies conducted on firm growth, two measures of MTBE and MTBA have been used in order to measure firm growth. Based on research by Adam and Goyal [15] which showed that measure MTBA contained more information compared to all other general models for growth calculation and less than them was affected by other factors, in present study this measure was used for measuring firm growth.

$$MTBA = (\text{number of shares owned by shareholders} \times \text{market value per share}) + \text{book value of total debts} \setminus \text{book value of total assets of firm}$$

Method for Division of Free Cash Flows and Firm Growth into High and Low Levels: Based on studies by Chung *et al.* [10], Paul *et al.* [11] and also aligned with Iranian study by Mehrani and Baqeri [7], in present study in order to determine statistical population, median statistic was used for division of firm growth and free cash flows. It means that if free cash flows of a firm is greater than median free cash flows of sample firms, that firm has a high free cash flow level and if it is smaller than median, the firm is considered as having low free cash flow level. Also if growth of a firm is lower than median growth of sample firms, then it is a low growth firm and if its growth is higher than median, it is considered a high growth one.

Sample and Data Collection: Statistical population consists of firms listed in Tehran Securities Exchange meeting the following requirements:

- Firm is a manufacturing one.
- Fiscal year ends in March 19th of each year.
- Fiscal year of firm is not changed during March 19th 2006 to March 19th 2011.
- Firm is listed in Tehran Securities Exchange by March 19th 2006 and is not delisted during March 19th 2006 to March 19th 2011.
- Given the fact that in order to determine firm growth, equity market value should be determined, so firm

shares should have been traded at least once yearly by the end of March 19th of each year.

- Required financial information, especially notes attached to financial statements should be available for collecting necessary data e.g. depreciation and discretionary accruals.

Total number of firms listed in Tehran Securities Exchange at the end of March 19th 2006 was equal to 341 which among them 300 ones were manufacturing entities. Among these 300 firms, 189 ones had fiscal years ended in March 19th of each year up to 19th March 2011 and were not delisted by this date. But only 189 of them had at least once yearly share trading during study period. So, applying above-said requirements, 63 firms were selected as statistical population. Because of limited number of statistical population, the whole population was selected as sample. Then data required for testing research hypotheses were collected from financial statements of these firms and also Tadbir-Pardaz and Rah-Avard-e-Novin data banks.

Data Analysis: In order to process and perform calculations on collected data, Excel software was used and software SPSS, linear regression, Pearson correlation test and one-way variance were employed for testing research hypotheses. Also before testing research hypotheses, test of normality for distribution of variables which is a requirement for using linear regression model and Pearson correlation test was conducted for research variables related with each hypothesis and when normal distribution of variables was verified, test of research hypotheses was conducted.

Hypothesis Testing and Results

Hypothesis1: Results of testing normality of variable distributions for pooled data of discretionary accruals and free cash flow in H1 is shown in Table1.

Significance level for discretionary accruals (0.265) and free cash flow (0.106) in Table. 1 and its comparison with error level of 0.05, demonstrates normal distribution of variables of discretionary accruals and free cash flow for H1.

Thus, given the normal distribution of variables, now analysis of relationship between discretionary accruals and free cash flow is conducted. In order to test H1, the following regression model is used which its results can be seen in Table1.

Table 1: Results for Kolmogrov-Smirnov test of pooled data for discretionary accruals and free cash flows in H.1

Description	N	Mean	Standard deviation	Statistics Z	Significance level	Result
Discretionary Accruals	315	0.1031202	0.13107974	1.004	0.265	Normal
Free Cash Flow	315	0.0975666	0.11323004	1.212	0.106	Normal

Table 2: Results of regression model analysis for H1

Description	Coefficients				Model description					
	Coefficient	Statistics	Significance level	Beta	Determination coefficient	Modified determination coefficient	Statistic	Durbin-Watson	significance level	Result
Pooling										
constant	0.068	7.357	0.000	0.307	0.095	0.092	32.669	2.117	0.000	Supported
FCF	0.356	5.716	0.000							

Table 3: Study of the relationship between discretionary accruals and free cash flows using Pearson correlation test

Variables	N	p-value	Correlation value r
Discretionary accruals	315	0.000	0.367
Free cash flows	315		

Table 4: Evaluation of the difference between discretionary accruals at various levels of free cash flows in studied firms using one-way variance analysis

Variation Sources	Degree of Freedom	Sum Squared Deviation	Mean Squared Deviation	F Value	Significance Level
Inter-group	1	0.510	0.510	32.669	0.000
Intra-group	313	4.885	0.016		
Total	314	5.395			

Table 5: Results of Kolmogrov-Smirnov test for pooled data of discretionary accruals and high free cash flows in low growth firms for H2

Description	N	Mean	Z Statistic	Standard Deviation	Significance Value	Result
Discretionary accruals	60	0.0914158	0.11065219	1.134	0.153	Normal
Free cash flow	60	0.1476633	0.04674697	0.848	0.468	Normal

$$Da_{i,t} = \beta_0 + \beta_1 FCF_{i,t} + \varepsilon$$

where:

$DA_{i,t}$: Discretionary accruals of firm i in year t

$FCF_{i,t}$: Free cash flows of firm i in year t

ε : Unknown effects of random factors

According to Table 2 it is seen that model significance value is equal to 0.000 which by comparison with error level of 5 percent, demonstrates significance of regression model at coefficient level of 95 percent and regarding to the fact that free cash flow coefficient is positive, it is concluded that this significant relationship is direct. Also according to Table 2, it is observed that Durbin-Watson statistic is equal to 2.117 which is close to 2 and this shows lack of correlation between regression model error components.

In this stage, respect to the fact that the linear relationship between variables was confirmed, presence of a relationship between variables was examined using Pearson correlation test and the results are as shown in Table 3.

Information provided in Table 3 shows that calculated p-value (0.000) is less than standard (0.05) which demonstrates low error level of measurement and

correlation value (0.05) and its positive sign shows presence of a direct significant relationship between these two variables. So it can be concluded that there is a direct significant relationship between these two variables in studied firms.

H1 was also evaluated using variance analysis test in linear regression and the results are as shown in Table 4.

Based on information provided in Table 4. It is shown that calculated F-value (32.669) is greater than one in critical F value table at degrees of freedom of 1 and 313 (3.840) and also p-value (0.000) is smaller than standard one (0.05), so at confidence level of 95 percent it can be concluded that there is a significant difference between discretionary accruals at various free cash flow levels; it means that results from Pearson test can be supported and there is a direct significant relationship between discretionary accruals and free cash flows.

Hypothesis 2: Results for testing normality of variable distributions for pooled data of discretionary accruals and high free cash flows in firms with low growth rate for H2 are shown in Table 5.

Significance level values for discretionary accruals (0.153) and free cash flow (0.468), as seen in Table 5 and their comparison with error level of 5 percent

Table 6: Results of regression model analysis for H2.

Description	Coefficients			Model Description						
	Coefficient	Statistics	Significance level	Beta	Determination coefficient	Modified determination coefficient	Statistic	Durbin-Watson	Significance level	Result
Pooling										
Constant	-0.026	-0.574	0.568	0.3360	0.113	0.098	7.378	1.859	0.000	Supported
FCF	0.795	2.716	0.009							

Table 7: Evaluation of the relationship between discretionary accruals and high free cash flow in firms with low growth using Pearson correlation test

Variables	N	P-value	Correlation Value r
Discretionary accruals	60	0.000	0.336
Free cash flows	60		

Table 8: Evaluation of the difference between discretionary accruals at various levels of high free cash flows in low growth firms using one-way variance analysis

Variation Sources	Degree of Freedom	Sum Squared Deviation	Mean Squared Deviation	F value	Significance Level
Inter-group	1	0.082	0.082	7.378	0.009
Intra-group	58	0.641	0.011		
Total	59	0.722			

demonstrate normal distribution of variables discretionary accruals and high free cash flows in low growth firms related to H2.

Therefore according to normal distribution level of variables, in the next step, the relationship between discretionary accruals and high free cash flows in low growth firms are addressed. For testing H2, the following regression model was used and summary test results can be seen in Table 6.

$$Da_{i,t} = \beta_0 + \beta_1 HighFCF_{i,t} LowGrowth + \varepsilon$$

where:

- $DA_{i,t}$: Discretionary accruals of firm i in year t
 $HFCF, LG_{i,t}$: High free cash flows of low growth firm i in year t
 ε : Unknown effects of random factors.

Based on Table 6 it is seen that significance value of model is 0.009 which its comparison with error level of 5 percent (0.009) demonstrates that model regression is significant at confidence level of 95 percent and according to positive sign of high free cash flow in low growth firms, it is concluded that there is a direct significant relationship between variables. Also based on Table 6 it is seen that Durbin-Watson statistic value is 1.850 which is close to 2 and this shows lack of correlation between regression model error components.

In this stage, given the fact that a direct significant relationship between variables was confirmed, presence of a relationship between variables was studied using Pearson correlation and results are shown in Table 7.

Information in Table 7 shows that calculated p-value (0.000) is less than standard one (0.05) and this demonstrates low level of measurement error. Also correlation value and its positive sign show presence of a direct significant relationship between two variables. Therefore it can be concluded that there is a direct significant relationship between these two variables (discretionary accruals and high free cash flows from low growth firms) in studied firms.

This hypothesis was also assessed by variance analysis test in linear regression and its results are according to Table 8.

Based on information provided in Table 8, It is shown that calculated F-value (7.378) is greater than one in critical F value table at degrees of freedom of 1 and 58 (3.840) and also p-value (0.009) is smaller than standard one (0.05), so at confidence level of 95 percent it can be concluded that there is a significant difference between discretionary accruals at various high free cash flow levels in low growth firms; it means that results from Pearson test can be supported and there is a direct significant relationship between discretionary accruals and high free cash flows in low growth firms.

DISCUSSION AND CONCLUSION

Results obtained from test of H1 show that in firms studied in present research, there is a direct significant relationship between discretionary accruals and free cash flows and this is consistent with results from Jaggi and Gul [16] and Iranian study by Mehrani and Baqeri [7].

Thus, it can be said that free cash flows may be considered as a factor encouraging managers to engage in earnings management.

Results obtained from test of H2, developed based on Jensen theory, show that in sample firms with low growth and high free cash flow of present study listed in Tehran Securities Exchange, Jensen theory is confirmed; in other words results of present study show that in low growth firms with high free cash flows there is a direct significant relationship between discretionary accruals and free cash flows. And this is consistent with studies by Paul et al. [11], Chung et al. [10], Jones and Sharma [17] and Tsui and Gul [18].

Managerial Implications: Based on obtained results of present research, following managerial recommendations may be offered:

- It is suggested that performance evaluation of managers is based on created value and not merely on acquired earnings so that the conflicts of interest between managers and shareholders can be resolved.
- According to the fact that free cash flows can be a factor motivating earnings management, investors and shareholders are recommended to consider free cash flows in order to make rational decisions.
- It would be appropriate for Audit Organization and other legislative and regulatory entities and accounting and audit associations to pay more attention to earnings management and manipulation category in setting accounting standards and ratifying financial acts and also to provide users of financial information with more help in making optimal and informed decisions by limiting engagement of managers in earnings management.
- According to the fact that firm growth is also can be considered as a factor may be exploited for earnings management, so investors and shareholders should also pay attention to firm growth.
- Investors and financial analysts are suggested to always consider earnings management category and include analyses on difference between earnings and operational cash flows in their decision making model.

Future Research Directions: Based on results of present research and presented recommendations, it is suggested to future researchers to focus their research on the issues offered below so that possible remaining ambiguities can be resolved and literature on earnings management and free cash flows are enhanced and raise awareness of financial statement users:

- Study of the relationship between free cash flows and audit fees.
- Study of the relationship between cost of capital and free cash flows.
- Study of the relationship between accruals and market value of firms.
- Study of the relationship between accruals and future earnings.
- Study of the relationship between discretionary accruals and firm growth.

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