RELATIONSHIP BETWEEN FREE CASH FLOWS AND DISCRETIONARY ACCRUALS IN TEHRAN STOCK EXCHANGE

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Abstract

In the present study, an attempt has been made to examine the relationship between free cash flows and discretionary accruals in Tehran Stock Exchange. Since the time of public release of financial information impact on the research results and the fact that the financial year of most companies listed in Tehran Stock Exchange ended March ends, so all the companies listed in Tehran Stock Exchange, form the research population. Due to the extent of the population and existence of some inconsistency among the members of society, then the necessary restrictions was selected the statistical sample. Companies whose their price is below the nominal value, may have a good performance but even so are not at attention of market, so these companies were not suitable for the purposes of the present study and were excluded from the sample. After doing mentioned restrictions 63 companies were chosen as the statistical sample in which the observation period of the study in 315 selected companies was extracted and was used to analyze of the study. To collect the data, the library approach is used. Information required by the New Deal and software Tehran Stock Exchange site collection, data analysis was performed using software SPSS. Findings show that the research is approved so that free cash flows have meaningful effect on discretionary accruals.

Keywords: *free cash flows, discretionary accruals, Tehran Stock Exchange*

Introduction

Naturally, all individuals have been looking for increasing their wealth in order to maximize their benefit, security and so on. This tendency escorts them to look for suitable opportunities in order to maximize their wealth by the investment. Nonetheless, there have been individuals who are unable to manage their own properties to make profit, so they have to employ others to do this task behalf of them.

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Operating cash flows on cash flow statement indicate firm's ability to produce cash flows. However, most of financial analysts argue that cash flows from operating activities are funds that not only should be invested in new fixed assets to enable firms to keep current level of operating activities, but also a proportion of that fund should be distributed as a dividend or share-repurchase to satisfy stockholders. Therefore, cash flows from operating activities, on its own, can't be considered as a firm ability to produce the cash flows. Jensen (1989) was among the pioneers who introduced free cash flows theory and presented a definition for it. In his view, free cash flows is defined as the cash from operating activities after deducting the necessity cash in order to the investment in positive net present value projects. However, projects should be measured regarding to net present value through applying a reliable cost of capital; if the result is positive, the necessity cash for the investment deduct from firm's available cash, whatever remains will be considered as free cash flows.

According to Len and Poulsen (1989) free cash flows is operating income before depreciation expense after tax, interest expense and preferred and common stockholders' dividends. Also, Copeland et al (2005) defines free cash flows as the operating income after tax plus non-cash expenses after deducting the investments on working capital, property, plant, equipment and other assets. According to Dechow and Ge (2006) free cash flows is the cash flows from operating activities plus the cash flows from investment activities. In other words, FCF is the resources available for managers to invest, but that otherwise could be distributed to the shareholders.

For Bhundia (2012) and Jensen (1986), one of the greatest agency problems is the allocation of the free cash flow. According to Jensen (1986), the conflicts of interest between shareholders and managers over the dividend payout policy is especially severe when the organization generates large free cash flows. This is reflected in the problem of how to motivate managers to increase dividends instead of making investments with returns below the cost of capital or wasting cash through inefficiencies. Bhundia (2012) states that the operating cash flow disclosed indicate the firm’s capacity to generate resources. He further comments that the operational cash flow should not be used only for acquisition of new assets to allow the company to maintain its current level of activity; part of it should also be distributed as dividends. This situation of opposing uses generates an agency conflict between shareholders and managers.

According to Dechow, Ge & Schrand (2010), nondiscretionary accruals result from adjustments necessary to reflect the firm’s performance, while abnormal (discretionary) accruals are those that capture distortions induced by the accounting system or that result from earnings management. There is a general view that if the normal component of accruals is properly modeled, then the abnormal component of accruals has worse quality, so it impairs the overall quality of the information provided by earnings. Corroborating this view, Subramanyam (1996) affirms that discretionary accruals do not occur because of inefficiency of the market, but instead due to the fact that managers use accruals to smooth revenues and improve the persistence and prediction of earnings. He also suggests that to study earnings it is necessary to examine its components, namely accruals and cash flows.

Chung, Firth & Kim (2005) found that firms with excess FCF tend to use discretionary accruals to increase the announced earnings. This fact is consistent with the hypothesis that managers use DAs to camouflage the impact of investment projects with negative NPV. Bhundia (2012) also found this result. However, Opler & Titmen (1993) stressed that firms with high growth tend to have lower FCF, since the money is used on projects with positive NPV. It can thus be inferred

that a relationship exists between the amount of FCF and the propensity of firms to manage their earnings by means of discretionary accruals.

In the present study, therefore; an attempt has been made to examine the relationship between free cash flows and discretionary accruals in Tehran Stock Exchange.

Methodology

Since the time of public release of financial information impact on the research results and the fact that the financial year of most companies listed in Tehran Stock Exchange ended March ends, so all the companies listed in Tehran Stock Exchange, form the research population. Due to the extent of the population and existence of some inconsistency among the members of society, then the necessary restrictions was selected the statistical sample. Mentioned conditions are:

1. Companies that are presented the necessary information for conduct research in the period 2010 to 2014 in full.
2. The financial year of company has not changed during the years 2010 to 2014.
3. The financial year of company ended to the end of March.
4. Companies whose share prices are not below the nominal value.
5. Company stock trading is constantly carried out in Tehran Stock Exchange and trading stop was not happened for over a month in the mentioned stock.
6. Not to be investment companies.

Companies whose their price is below the nominal value, may have a good performance but even so are not at attention of market, so these companies were not suitable for the purposes of the present study and were excluded from the sample. Monthly returns distribution of companies that are not available data on their return more than two-month, this was not statistically reliable because those companies were excluded from the samples.

After doing mentioned restrictions 63 companies were chosen as the statistical sample in which the observation period of the study in 315 selected companies was extracted and was used to analyze of the study.

To collect the data, the library approach is used. Information required by the New Deal and software Tehran Stock Exchange site collection, data analysis was performed using software SPSS.

The research model:

By the following model the linear relation and multiple informative is calculated with the profit predictability and disclosed quality.

$$DA_{i,t} = \beta_0 + \beta_1 X_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 INTEXP_{i,t} + \varepsilon$$

Findings

In this paper we have one main hypothesis. The statistical way of analysis of hypotheses is two ways, H_1 is acceptance of hypothesis and H_0 is rejecting of hypothesis. In other words, it means that H_1 has positive meaning and H_0 has negative meaning.

The hypothesis1: there is a relationship between free cash flows and discretionary accruals.

H_0: *there is not relationship between free cash flows and discretionary accruals.*

H_1: *there is relationship between free cash flows and discretionary accruals.*

According to the regression test this issue investigated and the results have come in table 1. But prerequisite of regression test is that the data should have normal distribution. For investigation of this issue we used Kolmogorov-Smirnov test which its results have come in table 1.

Table 1: Kolmogorov-Smirnov test

Variable	Kolmogorov-Smirnov	P-Value
DA	1.004	0. 265
FCF	1.212	0.106

Since the possibility amount is bigger than 0.05 and statistical number is 1.004 for DA and 1.212 for FCF, hypothesis H_0 based on data normal distribution, due to available documents, can be rejected. So it can be claimed that between the distributions of variable "free cash flows "and "discretionary accruals" normal distribution.

Table 2 show the results of correlation coefficient between free cash flows and discretionary accruals

Table 2: Results of Correlation coefficient between variables

Correlation coefficient			
n	p	r	free cash flows and discretionary accruals
315	0.000	0.307	

According to Table 2, the correlation between free cash flows and discretionary accruals in the $p \leq 0.01$ has been significant, so there is a coefficient relationship between free cash flows and discretionary accruals at Tabarok and Delpazir companies in Ahvaz City. We can reject H_0 and accepted H_1 hypothesis with 95% confident.

Now, using regression test, we are testing the first hypothesis which its results have shown in tables 3 to 5.

Linear regression is one the statistical technics which is used in predicting the amount of dependent variable according to the amount of independent variable. When the standardized regression coefficient is more, we can conclude that independent variable has more influence on dependent variable. The results of regression have come as follows;

Table 3: Model summary

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.307[a]	.095	.092	.12493095	2.117
a. Predictors: (Constant), FCF					
b. Dependent Variable: DA					

As you can see, in this model R is equal to 0.307 which shows that between free cash flows and discretionary accruals there is a strong correlation. Also the amount of determined coefficient is equal to 0.095 which shows that independent variable of free cash flows is able to determine and explain the 9.5 percent of changes of dependent variable of discretionary accruals.

Table 4: Anova test

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.510	1	.510	32.669	.000[a]
	Residual	4.885	313	.016		
	Total	5.395	314			
a. Predictors: (Constant), FCF						
b. Dependent Variable: DA						

According to the results of above table the amount of F which is meaningful in the level of faults minimal than 0/01, shows that independent variable has the high explanatory power and is able to explain the changes scales and variance of dependent variable. In other words, the regression model of the research is a good model and we are able to explain the changes of dependent variable of discretionary accruals according to the independent variable of free cash flows.

Table 5: Coefficients test

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.068	.009		7.356	.000
	FCF	.356	.062	.307	5.716	.000
a. Dependent Variable: DA						

For interpretation of above numbers we can say; Since standardized regression coefficient (beta) for variable free cash flows is meaningful in a fault level smaller than 0/01 and is equal to 0/307, so we can conclude that free cash flows variable is affecting discretionary accruals variable.

According to the above hypothesis of the research is approved so that free cash flows have meaningful effect on discretionary accruals.

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