

The Effect of Minimum Cash Flows of Earnings, Accruals, and Accruals Non-Current Current Market Value of Companies Listed on Tehran Stock Exchange

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Abstract

Minimum earnings and cash flows in the current and non-current accruals, including the financial information and variables that as a prominent factor in the deliberations and judgments, consider analysts to assess the company's market value. On the basis of this study, the impact of minimum cash flows of earnings, accruals, and accruals Non-Current current market value of companies listed in Tehran Stock Exchange during the period 2008 to 2014 in a sample of 819 data - company has been examined. The research data obtained through library research and application of new outcomes were collected. In order to test the hypothesis of multivariate regression analysis and their significance using the t test and F-test. Results of this study indicate that all companies reported earnings between a minimum of 4 variables, the value of the cash flows, accruals, current and non-current accruals, there is a negative relationship with the company.

Keywords: minimum earnings, cash flows, current accruals, accruals Non-Current.

1. Introduction

Securities market, the mirror of all views each country's economy. Move the economy towards a market-oriented economy led the Bank to greater economic prosperity will grow. Financial statements and accompanying notes as the final product of the process of accounting and financial reporting is one of the main tools to deliver information to users. Income statement and cash flow statements, which are two components of the first and one on a cash basis to accrual basis is provided. Funds flow mainly revenue accruals to flow through a change or adjustment to the cash flows recognized during the course of their transmission time, problems of compatibility lies in the timing of cash flows to reduce looks. So profit as the final product of the process of commitment, a measure of operating cash flow to describe superior return on equity (at least in the short term). But in the long term is expected to explain the power goes towards convergence (Dastgosar, Paiervand, 2010). Accruals can be separated into different subsets accruals current and non-current is biodegradable. Accruals current short-term nature and have more flow and working capital accounts but affect non-current accruals based accounts do not affect working capital in accordance with Financial Accounting Standards Board's view, one of the important roles of accrual, transfer or modification identification of cash flows over time so that the numbers are adjusted cash flows (interest), better corporate performance measures. The use of accruals and cash flows present to predict future earnings components of economic concepts. For example, the ability to predict accruals represents two fundamental actions: 1. The ability to convert to accrual anticipated cash flows realized (i.e. feasible). 2. On the other hand, one of the goals of creating more value for shareholders is in the present era. On Joint Stock Companies, these values are reflected in the stock price. In fact, managers will utilize all its efforts to optimize the company's market value, then the field of investment that is sure to create value for them. Market value represents the shareholders' wealth and the balanced scorecard approach as one of the criteria is performance: focus on value creation in recent years, due to the competitive environment and emphasis on high yield investors, has increased. In this study, we are considering issues related to minimum earnings, cash flow, current and non-current accruals on the effect of minimum earnings, cash flows, accruals, and accruals Non-Current current market value of companies listed on the stock exchange securities Tehran.

2. LITERATURE REVIEW AND PRIOR STUDIES

2.1 Information content of accounting earnings and market value of firm

The issue that different groups such as investors, shareholders, managers, employees and the government concentrate on and use profit has led to profit being introduced as an fundamental concept in accounting. So, profit is one of the most important financial information reported by companies. In fact, investors and many other users of accounting information consider profit as an important source of information to evaluate the performance of companies and regard it as one of the main components regarding pricing of stocks. Results of the first study that carried out in the area of the usefulness of accounting information by Ball and Brown showed that the securities market price reacted to announcement of net profit (Rezaei et al, 2012). In this context Penman et al (2007) state that if accounting earnings is able to predict the company's value it has a good quality (Zarif Fard et al, 2005).

2.2 Accruals Information Content and Market Value of Firm

Financial statements presented by companies' managers disclose the information of company that is effective on their stock prices. Researchers have applied many methods to determine how financial statements are real. A group of researchers have tried to create models that predict fraud management. Another group of researchers have also tried to determine some of financial statements artificial indicators by using financial ratios analyses. Francis and Michel (2005) by investigating quality of accruals as risk of information related to profit indicate that the weaker is quality of accruals (which is defined error standard deviation, changes in current accruals and cash flows), the more is cost of debt and cost of capital of companies. This issue reflects the effect of accruals quality on individuals' decision-making. Many past studies suggest that there is a creative accounting due to efforts of managers to manipulate financial statements and profit figures. These manipulations can make a difference in the actual value of stock returns and lead to a misleading picture of the market and the relationship between profits and

Returns. Hence, taking into account the effective measures for relevance profit can be useful in evaluating the future movement of stock prices and the overall relationship between earnings and returns. Accruals as one of these measures have attracted the attention of many researchers (Behzadfar, 2010).

2.2.1 Classification of accruals to current and non-current

Many financial analysts believe that operating cash flows relative to earnings are a better measure for assessing the financial performance of business units because operating cash flows are less subject to distortion. So, the main question that arises is that whether accruals increase or decrease the ability of earnings in measuring company performance. It is predicted that accruals increase the ability of earnings in measuring the company performance in market (stock returns). Accordingly, the current and non-current accruals can also have different effects on firm value and performance (Rezaei et al, 2012).

2.3 Relationship between Earnings and its Components and Market Value of Firms

It is necessary to decompose earnings information to components of cash and current, non-current accruals. Particularly that such concept is useful to predict future cash flow and value the companies. Krishnan and Kumar (2008) show that there is a different relationship between cash flow and accruals in high and low levels of investment opportunities; therefore value of cash flow and accruals can be different among companies. Barrett et al (2001) state that the value relevance of earnings is not different on cash flow and it is dependent on financial reporting and other institutional factors. Also, some studies considered value relevance of cash and accruals in terms of effect on stock returns [1,2,3,5]. Therefore, there are still conflicting results about separation of value of accruals and cash flow. In researches on value relevance, evaluation and efficiency models have been complementary and advantages and disadvantages of valuation have been expressed by different researchers [6,8,11]. Saeed Akbar et al (2011) in a study state that operational cash flow or accruals have information related to profit. Mamoun L.B. (2011) compared the predictive ability of operating cash flow to profit in Jordan stock market. The period of his study was 2009 to 2011. His results showed that the predictive ability of operating cash flow was stronger than earnings to predict cash and thus market value of firm. Saeedi and Ghaderi (2007) examined the predictive power of book value, net profit, operating cash flow and investment as representative of accounting information related to market value of firms. Their results showed that book value and accounting profit were more related items and considering cash flow (operating and investment) could not increase explanatory power of models significantly.

Khodadadi et al (2009) investigated the ability of cash and accruals accounting information of profit in prediction of future cash flows of listed companies in Tehran Stock Exchange. The investigated sample of that study was selected among non-financial firms listed in Tehran Stock Exchange whose financial statements were available in the period 2001-2006. The results of their study showed that variables of past cash flows and accrual components of past earnings had ability to predict future cash flows. The results of testing their models indicated that the addition of accrual components of earnings into cash flows increased the predictive power of this model. Kordestani and Roodneshin (2006) assessed the relevance of cash components and accounting accrual of profit to market value of firm. They stated that accounting profit reported in financial statements was divisible into two cash and accrual components. In that study, operating cash flows as profit cash component and changes in accounts receivable, inventory changes and accounts receivable changes were considered as the three main components forming accrual of profit component. Their findings indicate that accounting profit cash components have prediction and explanatory power of market value of firm. But three components of accounting accrual of profit i.e. accounts receivable changes, inventory changes, and accounts payable did not have prediction and explanatory power of market value of firm. Hence, they stated that accounting profit cash components are more relevant to market value of firm and are more useful than accrual components. Charitou and Clubb (2000) in their study titled "The Value Relevance of

Earnings and Cash Flows: Empirical Evidence for Japan" studied information content of earnings and cash flows. The results of their study suggest that profit relative to cash flows has increasing information content. On the other hand, the results of their study show that Japanese investors by using profit and cash flows information

value the

Company. Saeed Akbar et al (2011) found that different components of profit including measures of operating cash and measures of current and non-current accruals had ability to explain market value of firms in the UK market. Their results show that cash flow has increased value relevance for profit or cash flows. As a result, cash flow can be a relevant added value for profit. There was little evidence that the current and non-current accruals had separate values relevance. Their findings show that considering cash flow is the main source of increasing exploratory power of market. Consequently, cash flows statement in the UK provides useful information for investors.

4-hypotheses

Given that the purpose of this study, the effect of minimum cash flows of earnings, accruals, and accruals Non-Current current market value, hypotheses are as follows:

1. There is a significant relationship between minimum earnings and market value,.
2. There is a significant relationship between values of cash flows market value of the companies.
3. There is significant relationship between accrual and current market value of the companies.
4. There is significant relationship between Non-current accruals and market value of the companies

5. The variables and how to measure them

5-1. Dependent variable

• Market Value

Current price, stock market values companies based on the number of shares obtained by the end of the financial period, which is measured as follows, it should be noted that since the market value calculated according to the following formula obtained a large number of number, so for Standardization the company's market value was obtained for the logarithm. This is calculated as follows:

$$MAV_{i,t} = P_i \times N$$

MAV_{i,t}: company's market value at the end of year t

P_i: price of shares at end of financial period

N: Number of Shares

5-2. Independent variables

• Minimum earnings

In the present study the following formula to calculate the minimum earnings used:

$$E = CF + CACC + NCACC$$

E: at least equal to the value of cash flows reported earnings, accruals, current and non-current accruals

CF: a benchmark for measuring the value of the cash flows.

CACC: criteria for measuring current accruals.

NCACC: the criterion for measuring non-current accruals.

The value of cash flow: cash flow into account as the value of the variable cash flow from operating activities reported in the cash flow statement is calculated as follows:

$$CF_{it} = (\text{Operating Cash Flow}) / (\text{total assets})$$

Accruals Current: Current accruals reflect items that are short-term timing differences that affect working capital accounts, which is calculated as follows:

$$C_{accit} = (\text{current commitments total items}) / (\text{total assets})$$

Non-current accruals

Non-current accruals are items that reflect the long-term timing differences that affect working capital accounts, which is calculated as follows:

$$N_{C_{accit}} = (\text{Non-Current liability total items}) / (\text{total assets})$$

5-3. Control variables

The book value of stock

Book value of equity on the balance sheet divided by the total number of shares to be achieved, that in the event of liquidation, after payment of all liabilities of the company per share, shareholders will be increased. It is calculated that follows, it is worth mentioning because it is a large number, so the book value of the book value of the log is used to standardize the calculation of the carrying value of our log:

$$Book\ Value = (\text{stock holders}) / (\text{the total number of issued shares})$$

• Research and development costs

The costs necessary to gain scientific knowledge or new technology that can be done as research costs and costs in line with the application of research findings in designing projects and products, etc. to be considered as

development costs.

In this study to calculate the cost of research and development of the following formula was used and there are a great number of R & D spending, therefore, standardization of the total R & D expenditures are divided by total assets of the company:

$$RD = (R \& D \text{ expense}) / (\text{total assets})$$

• Capital allocation

Capital allocation in this research is net increase (decrease) in net equity of balance sheet equity comes from the balance sheet in this study, the following formula is used to calculate it. It should be noted that the difference between allocated capital standard variable of net increase (decrease) in equity divided by total assets it

$$RD = \frac{\text{Net equity}_t - \text{Net equity}_{t-1}}{\text{total assets}}$$

Equity: Net increase (decrease) in equity in year t

Net equity_{t-1}: Net increase (decrease) in equity in Sal- t

Total assets: total assets in year t

• Dividend per share

The company is divided into profit and cash dividends to the shareholders will be called or DPS.

In other words DPS portion of the profit after tax per share paid by the company.

$$DPS = (\text{total dividend}) / (\text{stock company scored number})$$

6. The Community and sample

in this study, the companies listed in Tehran Stock Exchange as of their population. Among these companies, the companies that meet the following conditions were selected. Finally, 117 companies were selected.

1. The company shall be accepted before 2008.
2. The company may continue to operate until the end of 2014.
3. The Company's fiscal year shall not be changed during the period studied.
4. Data about the company is available.
5. Banks, insurance companies and investment will not be considered.

7. Methods

Since this study were to investigate the effect of minimum cash flows of earnings, accruals, and accruals Non-Current current market value, Methodology for the study, correlation and multiple regressions to test the relationship between these variables regression ordinary least squares (OLS) and to determine the accuracy of the values and importance of each independent variable. Also the t test to determine the significance of each variable, and the F statistic to determine the significance of regression and of an R2 to determine the performance and the explanation of the dependent variable was analyzed by the independent variable selection.

Following regression models were used to test the hypothesis:

The first hypothesis model

$$(1) MV_{it} = \beta_0 + \beta_1 E_{it} + \beta_2 X_{it} + \varepsilon$$

The second hypothesis model

$$(2) MV_{it} = \beta_0 + \beta_1 CF_{it} + \beta_2 X_{it} + \varepsilon$$

The third hypothesis model

$$(3) MV_{it} = \beta_0 + \beta_1 CA_{it} + \beta_2 X_{it} + \varepsilon$$

The fourth hypothesis:

$$(4) MV_{it} = \beta_0 + \beta_1 NCA_{it} + \beta_2 X_{it} + \varepsilon$$

MV_{it}: the company's market value at the end of the year

E_{it}: minimum earnings

CF_{it}: the value of the cash flows of firm i at the end of the year

CA_{it}: current accruals for firm i at the end of the year

NCA_{it}: Non-Current accruals for firm i at the end of the year

8. The method of data collection and spatial and temporal territory

The required data through observation and review of documents including financial statements of companies were collected. In this study, to develop research literature library method is used to test hypotheses of the Company's financial statement information contained in the Rahavard Novin software, Tadbir Pardaz software, stock organization library and stock sites such as www.rdis.ir and www.irbourse.com were used.

Also the research on companies listed in Tehran Stock Exchange has been done and the time period in question, from the beginning of 2008 until the end of 2014.

9. The method of data analysis

In this study, according to the type of data and methods of analysis, the method of "aggregate data" is used in all statistical techniques EXCEL and SPSS software using the normal set of variables and remaining regression in SPSS of Kolmogorov-Smirnov test was used, so that if the possibility of statistics for more than 5% is a variable, that variable distribution of normal and non-normal otherwise.

10. Statistical results hypotheses

• The first hypothesis

Table 1: the combination model

Probe.	T-student	STD	coefficient	Variable
0.0000	-7.899327	769058.9	-6075048.	E
0.1385	-1.483117	1543697.	-2289483.	RD
0.0001	3.838770	3726824.	14306419	R & D
0.0000	7.650214	639.5688	4892.838	DPS
0.0000	35.53949	441.5308	15691.78	BV
0.0000	-15.47462	1285267.	-19889021	C
0.692932	Adjusted k-square		0.815545	k-square
1.660412	Durbin-Watson		25.46866	F-statistic
			0.000000	Probe(F-statistic)

The results in Table 1 it can be seen as a P-Value of the statistic Probe F-statistic that indicates the significance of the regression is equal to 0.553498, and indicated that the level of model significant is 99% . The camera test Watson equation, which is a number between 1.5 to 2.5, and show that the minimum earnings and market value and there is a significant inverse relationship.

As well as on the basis of Table 1 can be seen in all companies, the minimum market value affect reported earnings and Pearson correlation coefficient is negative and significant relationship between reported earnings and market value of the company at least confirmed has. It can be concluded that the companies that reported earnings are more minimal, less than the company's market value. Namely in such companies, increasing the minimum earnings as an information and stock prices and thus reduce the company's market value in the eyes of investors in the capital market has been effective.

• The second hypothesis

Table 2: The combination model

Probe.	T-student	STD	coefficient	Variable
0.0001	-3.942161	4215684.	-16618905	CF
0.0025	-3.030747	1793052.	-5434285.	RD
0.0000	4.395502	3405955.	14970880	R & D
0.0000	7.742814	770.5173	5965.972	DPS
0.0000	30.84084	477.3117	14720.70	BV
0.0000	-15.42864	1245996.	-19224023	C
0.752734	Adjusted k-square		0.789310	k-square
1.618357	Durbin-Watson		21.58004	F-statistic
			0.000000	Probe(F-statistic)

Based on the table (2) As you can see the amount of P-Value and the Probe F-statistic that indicates the regression is significant, also value of Durbin Watson test are 1.618 that indicate data of model are normal and there are negative relationship between cash flow and market value .

As well as on the basis of Table 2 can be seen in all companies, the value of cash flows have an impact on the company's market value and the Pearson correlation coefficient is negative and significant correlation between the value of cash flows and the value of the company has confirmed. Therefore it can be concluded that the value of cash flows are more companies, the company's market value is lower. This means that such companies reported an increase in the value of cash flows as a data and stock prices and thus reduce the company's market value in the eyes of investors in the capital market has been effective.

• **The Third hypothesis**

Table3 :the combination model

Probe.	T-student	STD	coefficient	Variable
0.0000	-6.861092	859447.7	-5896750.	CACC
0.0886	-1.705446	1830058.	-3121064.	RD
0.0114	2.538326	4050491.	10281468	R & D
0.0000	7.121359	627.6079	4469.422	DPS
0.0000	33.29245	456.3913	15194.38	BV
0.0000	-15.42864	1245996.	-19224023	C
0.687329	Adjusted k-square		0.805291	k-square
1.644060	Durbin-Watson		23.82402	F-statistic
			0.000000	Probe(F-statistic)

Based on the table (3) As you can see the amount of P-Value and the F-probe statistic that indicates the significance of the regression is equal to 0.129293.

As well as on the basis of Table 3 can be seen in all companies , the accruals has effect on market value and Pearson correlation coefficient is negative and significant relationship between current accruals and market value has confirmed. It can be concluded in companies that have more current accruals; the company's market value is lower. This means that such companies reported an increase in current accruals as an information and stock prices and thus reduce the company's market value in the eyes of investors in the capital market has been effective.

• **The Forth hypothesis**

Table4 :the combination model

Probe.	T-student	STD	coefficient	Variable
0.0030	-2.981623	3074780.	-9167836.	NAACC
0.0009	-3.328981	2000341.	-6659099.	RD
0.0003	3.626774	4012508.	14552461	R & D
0.0000	6.391247	643.8999	4115.324	DPS
0.0000	31.53657	473.0141	14917.24	BV
0.0000	-10.66040	1680178.	-17911365	C
0.753382	Adjusted k-square		0.789863	k-square
1.624881	Durbin-Watson		21.65188	F-statistic
			0.000000	Probe(F-statistic)

Based on the table (4) as you can see the amount of P-Value and the statistic Probe F- that indicates the significance of the regression is equal to 0.493688, and indicated that significance level of model is 99%.

As well as on the basis of Table 4 can be seen in all companies, non-current accruals on the company's market value impact and Pearson correlation coefficient is also negative and significant relationship between the accrual-current value is confirmed . It can be concluded in companies that are more non-current accruals; the company's market value is lower. This means that such companies reported an increase in accruals related information as Non-Current and stock prices and thus reduce the company's market value in the eyes of investors in the capital market has been effective.

11 –suggestions

11-1.Suggestions on results

1-The effect of minimum earnings, cash flows, current and Accruals Non-Current accruals on the Company's market value, taking into account the type of industry.

2. The effect of economic conditions, political and cultural relations least on reported earnings, cash flows, current and Accruals Non-Current accruals on the Company's market value.

1- Due to minimal negative impact on the market value of the company all companies reported earnings over the course of the study, potential investors, especially minority shareholders users of financial statements of listed companies in Tehran Stock Exchange is suggested that in their investment decisions to a minimum negative impact on reported earnings for investment decisions considering their market value.

2- Due to the positive effect of dividend per share and the market value of all companies participating in the study period, the financial managers of listed companies in Tehran Stock Exchange is suggested the decisions of the company's capital structure to the positive effect of dividend per share and the market value of their own companies.

3- - Due to the positive impact of the company's book value and the market value of all companies in the study to potential investors, especially minority shareholders users of financial statements of listed companies in Tehran Stock Exchange is suggested. The positive impact on their • Recommendations for future

research investment decisions to the book value and the market value of their own companies.

11-2. Suggestions for future research

According to the researcher, there are still various issues in this area that could be important for future research. Therefore, in order to use as much of the research results, and help to clarify the relationship between the minimum earnings, cash flows, current and Accruals Non-Current accruals on the company's market value in the future, pay attention to the following issues there is:

1. The effect of minimum earnings, cash flows, current and Accruals Non-Current accruals on the Company's market value, taking into account the type of industry.
2. The effect of economic conditions, political and cultural relations least on reported earnings, cash flows, current and Accruals Non-Current accruals on the Company's market value.

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