



THE EFFECTS OF OPERATING CASH FLOW DISCLOSURE ON ANALYSTS' FORECASTS

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<p>Received: October 26th 2021 Accepted: November 28th 2021 Published: January 5th 2022</p>	<p>Shareholders and creditors pay special attention to companies' cash flow when investing. Because operating cash flow is one of the most important indicators of company performance, which is an essential tool for assessing debt repayment power and determines the degree of a company's financial flexibility, on the other hand, it has expected that with the increase in cash flow, it will reveal the opportunistic behaviors of managers and the problems of representation will increase. Analysts' noses have paid off. The present research has applied in terms of the type of purpose, and its method and nature is descriptive survey. In this study, 139 listed companies of the Tehran Stock Exchange have been selected using the rule of systematic elimination from 2014 to 2018. The study results indicate a significant relationship between earnings forecast error and operating cash flow. And there are positives. There is no meaningful relationship between profit forecast dispersion and operational cash flow. There is also a significant and positive relationship between analyst coverage and operating cash flow.</p>

Keywords: Cash Flows from Operating Activities, Profit Forecasting Error, Profit Forecast Scatter, Analyst Coverage, Operating.

INTRODUCTION

One of the accounting improvements that has been discussed in recent years is the requirement for business units to create cash flow statements as one of the fundamental financial statements. This introductory financial statement can be critical in determining a business's liquidity and ability to pay its debts.

People need financial information to make decisions. One source of information is accounting knowledge. One of the accounting items prepared and presented in the financial statements is "net profit." It is usually used to formulate dividend policies, forecast, and guide investment and decision-making. Accounting profit can be divided into two parts: cash and accrual. Accruals have been divided into optional and non-optional components. Management can judge and control the optional feature.

Investors have different strategies and perspectives when they are in different economic situations (boom or recession), and according to these perspectives, they collect and weigh information. For example, in a case where uncertainty pervades the economy, investors try to minimize the risks associated with their capital in times of recession; therefore, they seek information with the most reliance and high objectivity. Therefore, more weight has been given to sources with more detachment among the various information sources. On the other hand, the company's accounting profit is a source of high objectivity information. Therefore, they pay special attention to the benefit of accounting, which is a transparent and accurate source of information.

THEORETICAL FOUNDATIONS AND RESEARCH BACKGROUND

If companies logically invest in their investment activities, taking into account the type of environment in which they operate; Select and then tailor their strategies and policies so that each financial resource has best allocated to specific activities and operations; In that case, it will achieve the satisfactory results expected by the shareholders and creditors. Therefore, in this regard, general analysis and all aspects and factors affecting the company's performance will be necessary. It can state that the value of any company depends on the ability of that

company to obtain cash and adopt methods and policies to use it optimally. Shareholders and creditors pay special attention to companies' cash flow when investing. Because operating cash flow is one of the most important indicators of company performance, which is an essential tool for assessing debt repayment power and determines the degree of a company's financial flexibility, on the other hand, it has expected that as the flow of criticism increases, the opportunistic behaviors of managers will become apparent and the problems of representation will increase. In the event of a conflict of interest, managers, because they have access to financial resources, increase the difficulties associated with the agency issue, and investors, due to lack of necessary controls, need methods. They have mechanisms to control and reduce agency costs. On the other hand, the alignment of the benefits obtained from the favorable ownership structure and the appropriate debt structure can lessen the representation problems caused by the free cash flow (Fakhari et al., 2014).

Because profit reporting has long had a special place among users of financial statements to measure the entity's past performance in predicting its future cash flows, it has been considered one of the most controversial accounting topics. Even with accounting standards for earnings reporting, it still faces challenges in practice. Therefore, the phenomenon of profit smoothing, which is considered a suitable tool to influence the decision-making of users of financial statements, can potentially affect the behavior of users and cause consequences in particular. Invest in inefficient markets (Siri, 2009.)

Finally, the question arises as to whether the disclosure of cash flows arising from operating activities affects analysts' forecasts.

The liquidity status of any business depends on its capital structure. Therefore, one of the ways to reduce the conflict of interest between owners and managers is to use a favorable capital structure that increases the company's value (Rigi, 2010).

The shareholders, who are the owners of the economic units, expect the managers to maximize the value of their investment. Various indicators have been used to measure the value of stocks and judge the company's performance. Inadequate use of appropriate indicators to measure the performance and stock value of a company; causes the value of the company not to move towards the actual value and, as a result, causes one group of stock buyers to suffer and another group to be used by another group of buyers by using extraordinary profits (Hejazi and Hosseini, 2004).

Lou (2008) also investigated the relationship between abnormal operating cash flows and operating cash flows and future stock returns. This study showed that irregular operating cash flows have information content to predict future operating cash flows and stock returns.

Zeghal and Malol (2010), in a study entitled "The effect of capital and liquidity on the company performance," concluded that capital and liquidity have a positive effect on the financial and economic performance of the company.

Rop (2010), in a study, examined the relationship between earnings and operating cash flow on stock returns, emphasizing the role of information asymmetry. This study showed that, in principle, both operating profit and cash flow have positively related to the sum of stock returns. But as information asymmetry increases, this relationship with stock returns decreases. Other research findings showed that operating cash flows can better explain stock returns.

Hirschliffer et al. (2009) examined the relationship between accruals, cash flows, and equity returns. Their research shows that, contrary to the findings of the previous study, accruals are solid and positive predictors of stock returns, but cash flows are negative predictors.

Miao et al. (2016) studied the relationship between financing constraints, cash flow statement disclosure, and the value of accruals. The results show a significant relationship between financing constraints and the revelation of cash flows and accruals.

Lou and Melissa, (2018) in a study on the relationship between the company's information environment and market evaluation of research and development costs. Their results showed a significant relationship between analysts' coverage variables, profit forecasting error, and profit scattering with the market assessment of research and development costs.

In a current study, Maria et al. (2020) studied the effects of cash flow disclosures from operating activities on the ability to compare profits, analysts' forecasts, and corporate investment decisions. Their results show the impact of operating cash flow disclosures on the variables of profitability, analysts' forecasts, and investment decisions.

Pourfakharian et al. (2015) studied the ability to predict operating cash, net profit, and profit components. The results showed that yield is better than using the money for forecasting future cash. The results also showed that the explanatory power of earnings in predicting future cash increases by dividing earnings into its components, i.e., the cash and accrual component, but the division of accruals into optional and involuntary accruals could not increase profitability.

Tanani et al. (2016) investigated the relationship between operating cash flows and stock returns and earnings quality in the Tehran Stock Exchange companies. The results obtained from the test of research hypotheses show that the rate of profit has a positive effect on the relationship between operating cash flows and stock returns.

Rezaei et al. (2014), in a study entitled "Comparison of operating profitability, operating cash flow and components of accruals in predicting companies' future operating cash flows," compare the operating profit predictability, and Operating Cash Flows Predicted the company's future operating cash flows. Their results show that operating profit, operating cash flow, and accruals' components effectively predict future operating cash flow.

Darabi and Kelifard (2013), in their study of the relationship between operating cash flow and operating profit with the corporate return, returns concluded that the correlation between operating profit and operating cash flow with the practical return is positive, and correlation is more favorable than correlation return. Correlation between operating cash flows.

Izadinia et al. (2012), in the study, examined the relationship between operating cash flows, net profit, and accruals components with future free cash flows of companies listed on the Tehran Stock Exchange. The results showed that operating cash flows can predict free cash flows than net profit. Also, adding accruals components to the operating cash flow model improves the predictive power of free cash flows.

RESEARCH HYPOTHESES

Primary hypothesis

- Disclosure of cash flows from operating activities significantly affects analysts' forecasts.

Secondary hypotheses

- Disclosure of cash flows arising from operating activities significantly affects profit forecast error.
- Disclosure of cash flows arising from operating activities significantly affects the dispersion of earnings forecasts.
- Disclosure of cash flows arising from operating activities significantly affects analyst coverage.

Research Variables

Operating cash flow: Operating cash flow is the cash generated due to the company's operations; these funds have been obtained by deducting all operating expenses from revenues. But a set of adjustments is made to the net operating profit. Operating cash flow is the cash generated by the enterprise created by the company's economic activities. This criterion is likely a better measure of the company's net profit than net profit, as the firm can report a net gain in profit or loss while it may repay debt. Do not be yourself. Operational cash flow can control the quality of earnings of economic enterprises (Alizadeh, 2015).

Operating cash flow= profit before interest and taxes+ Depreciation cost- taxes

Profit forecasting error: Forecasting plays a crucial role in deciding economic activities. At the enterprise level, investors, creditors, corporate executives, and other users rely on and usually depend on the results of financial statements to make predictions made by themselves or others. Because most users of financial statements do not have direct access to financial information, they have to rely on forecasts provided by management (Payne, 2008). In this regard, the country's stock exchange organization required listed companies to present their firms' future earnings forecasts as earnings per share forecasts.

The calculation of earnings forecast error is the difference between actual earnings and projected earnings divided by the absolute value of earned forecasts used by managers (Cohen et al., 2014).

$$EFE_{it} = \frac{AE_{it} - FE_{it}}{FE_{it}}$$

EFE_{it}= AE_{it}-FE_{it} FE_{it}

EFE_{it}: profit forecast error of company I in year t

A.E. it: real profit of company I in year t

F.E. it: profit forecast of the company I in year t

Forecast Scattering: The second criterion is the profit forecast scatter, defined as the standard deviation. The dispersion scale has been measured according to the standard deviation of changes in net profit this year or next year (Dastgir et al., 2015).

Standard deviation is the criterion of earnings forecasts during year t, measured based on the final share price (t-1) (Dastgir et al., 2015).

Analyst coverage: Stock market professional analysts collect data and information about companies in the portfolio or potential firms for new investments by shareholders. By analyzing this information, data and information about the intrinsic value of the enterprise, earnings per share forecast, the percentage of the company's products in the market, the level of technology in the company, etc., are obtained. During the process of data collection and information acquisition, especially when the volume of investment is high; Analysts work closely with corporate executives; And not just oversee managers' investment, financing, and operating decisions; Accounting and reporting also examine and analyze the results of these activities (Yousefi Asl et al., 2014).

The first measurement of the natural input information environment is the number of analysts who predict the company's earnings per share in the coming year until the announcement of the company's annual revenues (Lou and Melissa, 2018).

$NANALYST_{i,t} = \log(1 + \text{number of analysts}_{i,t})$

RESEARCH METHODOLOGY

The present study, because using existing models, methods and theories seek to improve the decision-making situation in companies in the field of research, in terms of research purpose, applied in terms of data type, general, in terms of how it has performed, is descriptive-survey and causal. In this study, all companies listed on the Tehran Stock Exchange from 1393 to 1397 have been considered a statistical population. The rule of systematic removal about the following restrictions has been used:

- .It has not been a holding company member (investments, banks, and investment funds.)
- .To observe comparability, the companies' fiscal year-end has been the end of March each year.
- .The company has not changed its fiscal year between 2014 and 2018.
- .it listed the company on the Tehran Stock Exchange until the end of 2013, and during the years 2014 to 2018, it was not listed on the Tehran Stock Exchange.
- .The company's shares have been traded at least once every year at the end of March, and there has been no stoppage of trading for more than six months on the mentioned shares.

According to the imposed restrictions, which selected 139 companies, these companies' information was collected through Rahvard Novin software, Tadbirpardaz databases, and the Tehran Stock Exchange website. According to the imposed restrictions, 139 companies were selected and the information of these companies was collected through Rahvard Novin software, Tadbirpardaz databases and Tehran Stock Exchange website.

DATA ANALYSIS

First, the F-Limer test has been used to determine the type of data to be panel or pulled. Hausman test has been performed to assess the use of fixed effects model versus random-effects model. The Watson camera test examined whether the error sentences were self-correlated in a regression model. The coefficient of determination is a measure that describes the strength of the relationship between the independent variable and the dependent variable. The value of the coefficients of the independent variables determines what percentage of the changes in the dependent variable are explained by the independent variable. Significance of regression equation has done using F-statistic. After the regression significance test, the importance of each coefficient was tested, and a t-test has used. It is worth mentioning that which performed all statistical tests at a significance level of 95%.

Testing Research Hypotheses

Primary hypothesis

- Disclosure of cash flows from operating activities has a significant effect on analyst forecasts.

Secondary hypotheses

- Disclosure of cash flows arising from operating activities has a significant effect on profit forecast error.

$EFE_{it} = C_{it} + b_1 OCF_{it}$

Model 1

- Disclosure of cash flows arising from operating activities has a significant effect on the dispersion of earnings forecasts.

$PFE_{it} = C_{it} + b_1 OCF_{it}$

Model 2

- Disclosure of cash flows arising from operating activities has a significant effect on analysts' coverage.

$NAN_{it} = C_{it} + b_1 OCF_{it}$

Model 3

OCF: Operating Cash Flow, Company i in year t.

NAN: Coverage of Analysts, Company i in t.

PFE: Dispersion of Company i's forecast in year t.

EFE: Company i forecast error in year t.

C: Constant

Table 1: F-Limer test results

Description	F statistics	P-value	Test result	Method
Hypothesis Model 2-1	1.199	0.000	H ₀ is rejected	Panel
Hypothesis model 2-2	12.009	0.000	H ₀ is rejected	Panel
Hypothesis Model 2-3	17.156	0.024	H ₀ is rejected	Panel

Based on the F-Limer test in Table (1) in the first model of the hypotheses, considering that the P-Value value at the 95% confidence level is less than 0.05, in other words (P-Value <0.05) Therefore, the null hypothesis that the model is polishing (which is the hypothesis that the width of the origin is equal for all sections) is rejected and the opposite view is accepted. The result, then, is that a different width of birth must be considered for each section studied. So the panel method can be used for estimation.

Table 2: Hausmann test results

Description	Chi-square statistics	P-value	Test result	Method
Hypothesis Model 1-1	6.199	0.0000	H ₀ is rejected	Fixed effects
Hypothesis model 1-2	21.569	0.000	H ₀ is rejected	Fixed effects
Hypothesis Model 1-3	14.108	0.001	H ₀ is rejected	Fixed effects

According to the results of Table (2) based on the Hausman test, For the first hypothesis, considering that for every value obtained, the Hausman test for the first model is 12.029, and on the other hand, the value is (P-Value <0.05), therefore, the hypothesis is zero. Rejection of Hypothesis Zero (H₀) means that the fixed effects method should be used, and the random effects method is incompatible.

Table 3: Results of the fixed effects model (Model 2)

EFE _{it} = C _{it} + b ₁ OCF _{it}					
P-Value	t statistic	SD	Coefficients	fixed effects model	Mode
003.0	582.13	0.086	0.078	OCF)EFE(Model 2
000.0	929.15	0.356	2.803	C	
0.86				R ²	
0.83				\bar{R}^2	
1.76				D.W	
(prob=0.0000) 0289.298				F Fisher	

According to the results observed in Table (3) in the companies studied in the present study, in the second model and the case where the dependent variable is EFE (profit forecast error); According to the value of t-statistic (14.582) and the level of probability related to it (0.003), the variable of operating cash flow variable has a significant and direct relationship with the amount of 0.078 units with the profit forecast error. Therefore, a positive and meaningful relationship between the two variables is confirmed. The coefficient of determination (R2) obtained in the second equation indicates that the independent variable of the model can explain 0.86% of the changes of the dependent variable. According to the adjusted coefficient of determination (0.83), it has found that this statistic is a high coefficient, and its meaning is the ability to explain the research equation. The estimated Watson camera statistic (D.W. = 1.76) indicates the absence of autocorrelation in the equation, and according to Fisher's test statistic (298.0689) and (prob = 0.0000), the total regression fit is valid.

Table 4: Results of the fixed effects model (Model 3)

PFE _{it} = C _{it} + b ₁ OCF _{it}					
P-Value	t statistic	SD	Coefficients	fixed effects model	Mode
0.167	1.358	0.069	0.082	OCF)PFE(Model 3
0.000	13.093	0.274	2.177	C	
0.96				R ²	
0.95				\bar{R}^2	
1.96				D.W	
(prob=0.0000) 109.327				F Fisher	

According to the results observed in Table (4) in the studied companies, in the third model and the situation where the dependent variable is PFE (profit forecast dispersion); Considering the amount of t-statistic (1.358) and the level of probability related to it (0.0000), the operating cash flow variable has no significant relationship with the dispersion of earnings forecast. Therefore, a substantial connection between the two variables is not confirmed.

Table 5: Results of the fixed effects model (Model 4)

NAN _{it} = C _{it} + b ₁ OCF _{it}					
P-Value	t statistic	SD	Coefficients	fixed effects model	Mode
0.040	-5.54	0.061	-0.044	OCF)AN(Model 4
0.000	9.115	0.520	3.168	C	
0.622				R ²	
0.609				\bar{R}^2	
2.33				D.W	
(prob=0.0000)182.119				F Fisher	

According to the results observed in Table (5) in the studied companies, the present study is in the fourth model, and the case is the dependent variable NAN (Analysts coverage). According to the value of t-statistic (-5.54) and the level of probability related to it (0.040), the operating cash flow variable had a negative and significant relationship of 0.044 units with analyst coverage. Therefore, a substantial and inverse relationship between the two variables is confirmed. The coefficient of determination (R2) obtained in the fourth model indicates that the independent variable can explain 0.62% of the changes in the dependent variable. According to the adjusted coefficient (0.60), it has been determined, a relatively high coefficient and means the ability to explain the model correctly. The estimated Watson camera statistic (D.W. = 2.33) indicates the absence of autocorrelation in the model, and based on Fisher's test statistic (119.182) and (prob = 0.0000), the total regression fit is valid.

Table 6: summary of the research hypotheses results

Hypothesis	Result
Hypothesis 1.1: Disclosure of cash flows arising from operating activities has a significant effect on earnings forecast error	H ₀ rejected
Hypothesis 1.2: Disclosure of cash flows arising from operating activities has a significant effect on the earnings forecasts scattering	H ₀ accepted
Hypothesis 1.3: Disclosure of cash flows arising from operating activities has a significant effect on analysts' coverage	H ₀ rejected

DISCUSSION AND CONCLUSION

Suppose company managers keep less cash in the company and instead seek to invest in places to convert their capital into money as soon as needed. That is, to seek investment in projects with a high degree of liquidity. This does not mean that companies will deviate from their primary goal and switch from production to investment. For example, the goal is to reduce the liquidity within companies.

This study suggests that corporations with corporate governance can make decisions about their investments by reducing financing constraints and capital expenditures and providing a platform. Improve oversight and control over the selection of investment projects.

Primary hypothesis

- Disclosure of cash flows from operating activities significantly affects analysts' forecasts.

Secondary hypotheses

- Disclosure of cash flows arising from operating activities significantly affects profit forecast error.
- According to the value of the t-statistic (14.582) and the level of probability related to it (0.003), the variable of operating cash flow variable had a positive and significant relationship of 0.078 units with the profit forecast error. Therefore, a substantial and direct connection between the two variables is confirmed.
- The findings of the hypothesis are consistent with the results of Fatma et al. (2011). It is also opposed to the conclusions from Azad (2014) and Setayesh and Salehinia (2015).
- Disclosure of cash flows arising from operating activities significantly affects the dispersion of earnings forecasts.
- Considering the value of the t-statistic (1.358) and its related probability level (0.1670), the operating cash flow variable has no significant relationship with the dispersion of earnings forecasts. Therefore, a substantial connection between the two variables is not confirmed.
- The findings of the hypothesis are consistent with the results of Azad (2014) and are contrary to the conclusions from Zarni et al. (2010).
- Disclosure of cash flows from operating activities significantly affects analyst coverage.

According to the value of t-statistic (-5.54) and the level of probability related to it (0.040), the operating cash flow variable had a negative and significant relationship of -0.044 units with analysts. Therefore, a negative and significant relationship between the two variables is confirmed.

The findings of the hypothesis are consistent with the results of Richardson (2006) and are contrary to the conclusions from Afsharzadeh (2012).

CONCLUSION

Company managers have advised keeping less cash in the company and instead seek to invest in places to convert their capital into money as needed. That is, to seek investment in projects with a high degree of liquidity. This does not mean that companies will deviate from their primary goal and switch from production to investment. For example, the goal is to reduce the liquidity within companies.

Investors have been advised to pay special attention to the amount of cash flow from the companies 'operating activities and compare the company's profit when making their economic decisions based on trading and buying and selling companies' shares.

Operating cash flow can be used to control and improve the quality of reported profits. Therefore, investors have been advised to invest in companies with good quality profits.

Investors must pay close attention to recommendations, analysis, and forecasts when using financial statements to decide whether to invest in corporate stocks or sell stocks. To. Identifying and examining the effective indicators with the company's investment and sales can help to understand the accounting environment and identify its features and limitations.

RECOMMENDATIONS FOR FUTURE RESEARCH

- It determines the relationship between operating cash flow and incorrect pricing of accruals.
- It determines the relationship between operating cash flow and earnings management.
- Comparative analysis between operating cash flow and accruals in determining dividend changes
- Comparative analysis between operating cash flow and profitability capability can forecast financial crises.
- Researchers have suggested doing this research separately for industries in future research.

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