

Investigating relationship between types of cash and profitability based on economic, accounting and consolidated approaches

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Abstract

The main purpose of this study is to test the relationship between types of cash and profitability based on economic, accounting and consolidated approaches for manufacturing companies listed on the Tehran Stock Exchange. In this regard, first the theoretical foundations and internal and external background of the research are examined and in the next step a sample of 165 companies from manufacturing companies based on the fixed effects method and for three research models based on the panel econometric approach for the period 2016-2016. Is. The results of estimating the first model confirm the significant relationship between the criteria for measuring the profitability performance of manufacturing companies based on the economic approach of investors with the total flow of free and operating cash. On the other hand, the analysis of the second model of the research showed that there is a significant relationship between the criteria for measuring companies based on the integrated approach of investors with the total flow of free and operational cash. Also, the third hypothesis of the research, which states that there is a significant relationship between the criteria for measuring the profitability performance of manufacturing companies based on investors' accounting approach with the total flow of free and operational cash, was confirmed after estimating the third model of the research. Finally, suggestions for improving the financial performance of selected manufacturing companies were presented based on the results.

Keywords: Accounting approach, Cash flow, Manufacturing companies, Performance measurement, Tehran Stock Exchange

Introduction

The most important accounting product is financial statements, and financial statements are the most appropriate way to provide financial information to users of this information. Different users of financial statements such as investors, creditors, analysts, managers and auditors each have different goals and different information needs, and the purpose of providing financial statements is to meet the needs of users of these statements. For many years, the balance sheet, accumulated profit and loss statement, along with the disclosure of descriptive items and some details through notes and

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supplements, formed a complete set of financial statements and were used for analysis (Noroush Iraj et al., 2011).

The purpose of preparing a cash flow statement is to help stakeholders in the institution to make the following assessments

- The ability of the business unit to generate future cash flows
- The ability of the business unit to pay dividends and fulfill obligations
- Reasons for the difference between net and cash profit from operating activities, cash and noncash investments and national security transactions during the period. (Dr. Mahdavi and Barati Mehr, 2008).

Now, in this chapter, we will deal with the generalities of the research and explain the main issue of the research as well as its goals, then in the second chapter, we will express the research literature, including the theoretical foundations and background of the research. In the third chapter, the research method and in the fourth chapter, the analysis of the model and the results of the research are stated. Finally, in the fifth chapter, we will put the answer to the research hypotheses on our agenda and it will probably be proved that:

- There is a significant relationship between performance measurement criteria based on investors' economic approach with the total flow of free and operating cash.

- There is a significant relationship between performance measurement criteria based on the integrated approach of investors with the total flow of free and operating cash.
- There is a significant relationship between performance measurement criteria based on investors' accounting approach with the total flow of free and operating cash.

Evidence of research hypotheses shows that there is a positive and significant relationship between the sum of free and operating cash and the financial performance of manufacturing companies listed on the Tehran Stock Exchange. Finally, in the fifth chapter, suggestions based on the results obtained in this research will be presented.

Theoretical foundations

Free Cash Flow

Cash includes cash with the institution, sight deposits belonging to the institution held with banks or other financial institutions, and anything in return for which cash is paid to the financial units, immediately and unconditionally. There are two types of cash, free cash and operational cash. In the present study, free cash has been used. The reason for choosing free cash flows is that free cash flows are the operating cash flows arising from the ongoing operations of a company from which the payments and cash expenditures invested for growth are deducted. In other words, free cash flows are the remainder of operating cash flows



that can be distributed among the company's shareholders.

Cash has always been a significant percentage of corporate assets. Cash is important in that it allows the company to look for opportunities to increase stock value. Managers are usually looking for a level of cash that is optimal for the and disadvantages of advantages maintaining cash. Cash should be kept at a level that balances the cost of maintaining cash and the cost of insufficient cash. In other words, companies are looking for the optimal level of liquidity that does not cause major losses to the company due to lack of liquidity, and on the other hand, by maintaining additional cash, opportunities are not lost, and this is the target level of liquidity in companies. Due to the different characteristics of companies and different time periods are different. The liquidity situation of companies is greatly affected by the nature of the companies' activities. Managers plan a period of time to determine the amount of liquidity and try to achieve it. They do. Free cash flow per share is a measure of the financial profitability of the company under consideration by dividing the free cash flow by the number of shares issued. This measure is an indicator for measuring the change in earnings per share and provides an initial forecast of future stock prices. For example, when stock prices are low and free cash flow is rising, it is likely that net income and stock value will rise soon, because high free cash flow per share means that earnings per share are likely to increase as well.

Companies with positive free cash flows perform well, so management tends to reduce profits downward due to political costs. Because the high performance of the company attracts the attention of public institutions (tax administration), they try to reduce or hide their high performance by using profit management. But companies with negative free cash flows are unable to support profit and revenue growth. Insufficient free cash flow can force a company to increase its debt level. Therefore, management tends to show better performance by increasing profit management. Cash flow from operating activities is also a sign of cash generated from the company's ongoing activities and these funds are used in various cases according to the board of directors. By dividing this criterion by the number of shares, the cash flow from operating activities for each share is determined.

Earnings per share is also a measure of performance that is considered by many financial decision makers, but as mentioned, the use of accounting estimates such as depreciation in calculating these criteria casts doubt on the quality of their results in decision making. (Peykani, 2012).

Evaluate Companies Approaches

Various approaches have been proposed to evaluate companies. The most important approaches are:

- Accounting approach: In this approach, the figures in the financial statements such as sales, profits, return on company assets, return on equity, etc. are used.

- Consolidated approach: In the consolidated approach, it tries to use the combination of figures of financial statements and market values of ratios such as, the ratio of market value of assets to their book value, for analysis.
- Financial management approach: In this approach, models proposed in financial management such as, capital asset valuation model are used to evaluate and forecast.
- Economic approach: In this approach, which uses economic concepts, the performance of the business unit is evaluated by emphasizing the profitability of the company's assets and according to the rate of return and cost of capital used. One of the most important methods of this approach is the method of economic value added. Economic value added is obtained by multiplying the difference between the rate of return and the cost of capital (C) in the amount of capital: (Anvari Rostami, Tehrani et al., 2010)

Research background

Zhuhang et al. (2020) in a study entitled "Study of the relationship between liquidity and performance of Chinese companies in the period 2006-2010, using regression analysis and financial performance indicators, concluded that cash flows are the result of business and activity of companies." The results showed that free cash flow from a company has a negative and significant relationship with the financial performance of that company, ie over-released cash flow reduces financial performance. Therefore, investors and senior executives should have a comprehensive analysis of free cash flow and avoid using it in inefficient business acquisition so that it does not cause a loss of capital.

Alex NG and H. Youngbike (2019), in an article entitled Liquidity, Financial Leverage and Performance of Canadian Companies in the period 1996-2000, examined about 569 companies and concluded that companies with high liquidity had a significant decrease. In the amount of return on assets, experienced the return on equity. On the other hand, reducing financial leverage increases the performance of companies.

Johnson (2019) in his research work entitled "Free cash flow agency costs, corporate financing, ownership" in 1986 for the first time examined the problems of free cash flow representation and the effect of corporate financing on it Is. In his research work, Jensen examines the role of debts and liabilities in stimulating organizational efficiency and productivity. Jensen predicted that when managers had more free cash flow, they would engage in opportunistic behaviors, such as investing in low-cash net projects, trying to generate revenue, incur additional costs, waste revenue, and so on. . He predicted that increasing leverage would discipline managers and reduce their opportunistic behaviors. This is because debt repayment will leave fewer extra cash available to managers.

Francis et al. (2018), in their research have concluded that the managers of companies with high accruals are motivated to use quality auditors to ensure the nonparticipation in profit management



opportunities. (Auditor size). The results of this study show that brand auditors (larger auditor size) are more likely to be excluded by owners who have an intrinsic desire to change accruals.

Miles and Seth Fallen (2018) in their study entitled "Optimal Capital Structure and Free Cash Flow Representation Costs" concluded that debts and liabilities for free cash flow representation costs are a cover and protection similar to the effect of your tax course.

Jones and Sharma (2017) examined the relationship between earnings management and free cash flow in Australia and in low and high growth companies and concluded that in low growth companies there is a significant direct relationship between discretionary accruals and free cash flow. There is. This is because in these types of companies, managers try to improve the poor performance of their business unit through optional accruals. But in high-growth companies, they did not achieve such a significant relationship.

In his research, Ferdinand Gewell & Stoway (2016) examined the "relationship between free cash flow, the debt supervisory role, and audit fees." In this study, Guell et al. concluded that the positive correlation between free cash flow and audit fees in companies with low / high levels of managers' capital ownership is stronger and weaker, respectively. They also found that the interaction between free cash flow and the ownership of managers' capital in high / low debt companies is less and more, respectively.

Chung et al. (2015) in their research entitled "Profit Management, Free Cash Flow, External Oversight" mentions that managers of companies with low growth

and high free cash flow to compensate for their low or negative profits, which inevitably with negative projects has a negative net present value, they use optional profit-enhancing accruals. In this study, he examined the role of high-quality independent auditors and institutional shareholders in reducing the relationship between surplus free cash flow and accruals. He concludes that high-quality auditors and institutional investors, who have significant stocks. adjust the relationship between free cash and accruals. He says that free cash flow, along with low investment opportunities, is one of the main agency problems, in which managers create costs for shareholders that reduce shareholder wealth, and if external oversight of external and external shareholders is effective and efficient., This opportunistic behavior will be limited.

Methodology and Method

Research method, model and variables Research purpose and hypotheses

Research Model: This study is applied in terms of descriptive-analytical research method and in collecting the required data, survey and documentation. On the other hand, in correlation studies (two-variable correlation. regression analysis and analysis of variance), the relationship between variables is analyzed based on the purpose of the research. Therefore, it can be said that considering the regression analysis with the nature of panel data and the fit of econometric models, in terms of implementation, this research will be of the correlation type (using Eviews.10 software).

Research hypotheses also include: Based on the research questions, (The following

questions), the following hypotheses are tested:

- Is there a significant relationship between the criteria for measuring the profitability performance of manufacturing companies based on the economic approach of investors with the total flow of free and operational cash?
- Is there a significant relationship between the criteria for measuring the profitability of manufacturing companies based on the integrated approach of investors with the total flow of free and operational cash?
- Is there a significant relationship between the criteria for profitability measuring the performance of manufacturing companies based on the accounting approach of investors with the total flow of free and operational cash?

Hypothesis 1: There is a significant relationship between the criteria for measuring the profitability of manufacturing companies based on the economic approach of investors with the total flow of free and operational cash.

Hypothesis 2: There is a significant relationship between the criteria for measuring the profitability performance of manufacturing companies based on the integrated approach of investors with the total flow of free and operational cash.

Hypothesis 3: There is a significant relationship between the criteria for

measuring the profitability of manufacturing companies based on the accounting approach of investors with the total flow of free and operational cash.

Analysis of the results of estimating research models

Experimental findings are presented in this section to investigate the relationship between cash and financial performance of manufacturing companies listed on the Tehran Stock Exchange for the years 2016-2017. In the relevant experimental findings, first the bound F test or Hausman test is performed and then the appropriate estimate is estimated based on the test results.

Test of the first hypothesis

Hypothesis 1: There is a significant relationship between the criteria for measuring the profitability of manufacturing companies based on the economic approach of investors with the total flow of free and operational cash.

F-Limer test

According to the theoretical foundations of this test, if the computational F is greater than the table F, then the null hypothesis is rejected and therefore the bound regression is not valid and the width of different sources should be considered in the estimation. Because the probability is below 5%, the pooled estimate is rejected and the fixed or random effects are confirmed.



probability	d.f	F value
0.000	(34.207)	4.86

Source: Research Finding

Hausman test (combined method or fixed effects) for the research model

The Hausman test is used to distinguish between fixed or random effects. According to the above table, the computational value of F is smaller than the table F, so that the probability (F) based on the software output (Table 2) is less than 0.05, so the fixed effects model should be used for the estimation. Therefore, based on both F-Limer and Hausmann tests, the accepted estimate in the present study is fixed effects.

Table 2. Hausman test results

probability	d.f	K square value
0.000	3	24.05

Source: Research Finding

Estimate of Model 1: Model estimation: According to F-Limer and Hausmann F test and confirmation of the fixed effect method, the model is estimated and the following results are obtained. According to Table 3-4, the coefficient of determination is estimated to be 89%, which shows that the independent variables were able to explain 89% of the dependent variable changes Durbin Watson 2.2 is estimated to be close to 2 and indicates the lack of autocorrelation between variables as well as the correct specification of the model.

 Table 3.Experimental results of estimating the relationship between performances Measurement criteria

 Based on the economic approach of investors with the total flow of free and operating cash

t. statistics	probability	coefficients	Independent variables of
-0.38	0.69	-259	С
2.77	0.0064	0.59	(FCF+OCF)
2.67	0.0084	0.92	SIZE
-2.96	0.0035	-0.95	LEV
-4.55	0.0000	-0.50	AR (2)
DV	V=2.2	The coefficient of	f determination=0.89
E =	β0+ β1 (FCF+OCI	F) it + β 2 SIZEit + β 3	β Levit+ξ it

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Source: Research Finding

The total free and operating cash flow (FCF + OCF) with a coefficient of 0.59 at the level of 1% error is significant and has a positive effect on the average economic value added (EVA) and market value added (MVA). This means that with increasing cash flow. the average economic value added and market value added increases. Total assets (SIZE) with a coefficient of 0.92 is also significant at the level of 1% error and has a positive effect on the average economic value added and market value added. In other words, with the increase of total assets, the average economic value added and market value added also increase. The amount of debt (Lev) with a coefficient of -0.95 is significant at the level of 1% error and has a negative effect on the average economic value added and market value added. In other words, with the increase of the company's debt, the average economic value added and market value added decreases. As it is known, the coefficient of this variable is the largest coefficient and therefore has the greatest impact on the average economic value added and market value added. It should be noted that the existence of AR (2) is due to the existence of AR (2) type of autocorrelation, which by entering it in the model and making it meaningful, this type of autocorrelation in the model has been eliminated and also helped to improve the model.

Test of the second hypothesis

Objective: To investigate the relationship between performance measurement criteria based on the integrated approach of investors with the flow of free cash (Table 4).

F-Limer test: According to the theoretical foundations of this test, if the computational F is greater than the table F, then the null hypothesis is rejected and therefore the bound regression is not valid and the width of different sources should be considered in the estimation.



probability	d.f	F value
0.000	(34.171)	4.61

Source: Research Finding

Because the probability is below 5%, the pooled estimate is rejected and the fixed or random effects are confirmed.

Hausman test (combined method or fixed effects) for the research model

According to the above table, the computational value of F is smaller than

the table F, so that the probability (F) based on the software output (Table 4-5) is less than 0.05, so the fixed effects model should be used for the estimation. Therefore, based on both F-Limer and Hausmann tests, the accepted estimate in the present study is fixed effects.

Table.5. Hausman test results

probability	d.f	K square value
0.000	3	76.42

Source: Research Finding

Estimate of Model 2

According to Limer and Hausmann F test and confirmation of the fixed effect method, the model is estimated and the following results are obtained.

According to Table 6, the coefficient of determination is estimated at 46%, which shows that the independent variables were able to explain 46% of the dependent variable changes. Watson 2.01 camera is estimated to be close to 2 and indicates the lack of autocorrelation between variables

as well as the correct specification of the model.

The total cash and operating cash flow (FCF + OCF) with a coefficient of 0.0000015 is significant at the 5% error level and has a positive effect on the average ciotobin and price-to-earnings ratio. This means that as the cash flow increases, so does the average quota and the price-to-earnings ratio.

Table 6. Experimental results of estimating the relationship between performance measurement criteria Based on the integrated approach of investors with the total flow of free and operating cash

t. statistics	probability	coefficients	Independent variables
3.53	0.000	18.81	С
2.26	0.025	0.0000015	(FCF+OCF)
2.09	0.037	0.00000177	SIZE
-2.24	0.026	-0.0000017	LEV
3.47	0.000	0.50	AR(2)
DW=	=2.01	The coefficient of determination=0.46	
I =	= β0+ β1 (FCF+OC	F)it + β 2 SIZEit +	β 3 Levit + ξ

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Total Asset (SIZE) with a coefficient of 0.00000177 is also significant at the 5% error level and has a positive effect on the average cytobine and price-to-earnings ratio. This means that with increasing total assets, the average cytobin and price-to-profit ratio also increase. As it is known, the coefficient of this variable is the largest coefficient and therefore has the greatest impact on the average cytobine and the price-to-market ratio.

The amount of debt (Lev) with a coefficient of -0.000017 is significant at the level of 5% error and has a negative effect on the average of cytobin and price-to-earnings ratio. This means that with increasing the amount of debt of the company, the average price of ciotobin and the price to profit ratio decreases. It should be noted that the existence of AR (2) is due to the existence of AR (2) autocorrelation,

which by entering it in the model and making it meaningful, this type of autocorrelation in the model has been eliminated and has also helped to improve the model.

Test of the tired hypothesis

Hypothesis 3: There is a significant relationship between the criteria for measuring the profitability of manufacturing companies based on the accounting approach of investors with the total flow of free and operational cash.

F-Limer test: According to the theoretical foundations of this test, if the computational F is greater than the table F, then the null hypothesis is rejected and therefore the bound regression is not valid and the width of different sources should be considered in the estimation.

Table 7.	Summary of F-Limer test method
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probability	d.f	F value
0.000	34.207	5.53

Source: Research Finding



Because the probability is below 5%, the pooled estimate is rejected and the fixed or random effects are confirmed.

Hausman test (combined method or fixed effects) for the research model

The Hausman test is used to distinguish between fixed or random effects. According to the table above, the computational value of F is smaller than the table F, so that the probability (F) based on the software output (and Table 8) is less than 0.05, so the fixed effects model should be used for the estimation. Therefore, based on both F-Limer and Hausmann tests, the accepted estimate in the present study is fixed effects.

Table 8.	Hausman	test	results
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probability	d.f	K square value
0.000	3	186.04

Source: Research Finding

Estimate of Model 3

According to Limer and Hausmann F test and confirmation of the fixed effect method, the model is estimated and the following results are obtained.

According to Table 9, the coefficient of determination is estimated at 97%, which shows that the independent variables were able to explain 97% of the dependent variable changes. Durbin Watson 2.03 is estimated to be close to 2 and indicates the lack of autocorrelation between variables as well as the correct specification of the model. Total cash and operating cash flow (FCF + OCF) with a coefficient of 0.13 at the level of 1% error is significant and has a positive effect on average earnings, earnings per share, operating cash flow, return on assets, return on equity (A). This means that as the cash flow increases, so does A.

Total Asset (SIZE) with a coefficient of 0.26 is also significant at the level of 1% error and has a positive effect on A. In other words, as the sum of assets increases, so does A.

The amount of debt (Lev) with a coefficient of -0.32 at the level of 1% error is significant and has a negative effect on A. This means that as A's debt increases, it decreases. As it is known, the coefficient of this variable is the largest coefficient and therefore has the greatest impact on the average profit, earnings per share, operating cash flow, return on assets, and return on equity. It should be noted that the existence of AR (3) is due to the existence of AR (3) self-correlation, which with its entry in the model and its significance, this type of self-correlation in the model has been eliminated and also helped to improve the model.

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t. statistics	probability	coefficients	Independent variables
1	0.31	95242.2	С
12.86	0.000	0.13	(FCF+OCF)
13.02	0.000	0.26	SIZE
-19.7	0.000	-0.32	LEV
5.80	0.000	0.51	AR(3)
DW=2	2.03	The coefficient of	determination=0.97

 Table 9. Experimental results of estimating the relationship between performance measures Based on the accounting approach of investors with the sum of free and operating cash flows

Source: Research Finding

Results

This section examines the hypotheses. The hypotheses of this research are:

Hypothesis 1: There is a significant relationship between the criteria for profitability of measuring the manufacturing companies based on the economic approach of investors with the total flow of free and operational cash. According to the interpretation of the obtained coefficients, it can be said that in the estimated model, the coefficient of variable cash flow is equal to 0.59 and is statistically significant at the level of 99%, indicating that this variable has a positive effect and It has a significant effect on the average economic value added and market value added (performance measurement criteria based on economic approach). Therefore, the first hypothesis of the research is confirmed that there is a significant relationship between the criteria measuring profitability for the

performance of manufacturing companies based on the economic approach of investors with the total flow of free and operational cash.

Hypothesis 2: There is a significant relationship between the criteria for measuring the profitability of manufacturing companies based on the integrated approach of investors with the total flow of free and operational cash. According to the interpretation of the obtained coefficients, it can be said that in the estimated model, the coefficient of variable cash flow is equal to 0.0000015 and is statistically significant at the level of 95%, indicating that this variable has a positive effect and It is significant on the average of cytobin and price to profit ratio (performance measurement criteria based on integrated approach). Therefore, the second hypothesis of the research is confirmed that there is a significant relationship between the criteria for measuring the profitability performance of



manufacturing companies based on the integrated approach of investors with the total flow of free and operational cash.

Hypothesis 3: There is a significant relationship between the criteria for measuring profitability of the manufacturing companies based on the accounting approach of investors with the total flow of free and operational cash. According to the interpretation of the obtained coefficients, it can be said that in the estimated model, the coefficient of variable cash flow is equal to 0.13 and is statistically significant at the level of 99%, indicating that this variable has a positive effect and Significant on average earnings, earnings per share, operating cash flow, return on assets, return on equity (performance measurement criteria based on the accounting approach). Therefore, the third hypothesis of the research is confirmed that there is a significant relationship between the criteria for measuring the profitability performance of manufacturing companies based on the accounting approach of investors with the total flow of free and operating cash.

For corporate executives, creating wealth is essential to maintaining the company's economy. Managers who ignore the importance of this in a market economy endanger the organization's business and its owners. With more accurate analysis tools, portfolio managers will probably be able to translate their passive strategies into active performance at a higher rate of return and the same initial risk (Anvari Rostami, 383, 4). The main purpose of this study is to investigate the relationship between cash and financial performance of products, petroleum products, coke and nuclear fuel listed on the Tehran Stock Exchange. The research method is applied in terms of purpose, in terms of developing new fundamental indicators, in terms of the method of collecting documentary and library information, and in terms of the method of causal analysis. The statistical population of the study is 165 listed companies. Production companies listed on the Tehran Stock Exchange are on the Tehran Stock Exchange from the beginning of 2016 to the end of 2016. According to the research results, it can be stated that according to the interpretation of the obtained coefficients, it can be said that in the model related to the economic approach, the coefficient of variable cash flow is equal to 0.59 and is statistically significant at the level of 99%., Indicates that this variable has a positive and significant effect on the average economic value added and market value added (performance measurement criteria based on economic approach). Also in the estimation model related to the integrated flow approach, the cash variable coefficient is equal to 0.0000015 and is statistically significant at the level of 95%, indicating that this variable has a positive and significant effect on the average cytobine and price-to-earnings ratio (criteria). Performance measurement is based on the integrated approach) and in the estimation model related to the accounting approach, the cash flow variable coefficient is equal to 0.13 and is statistically significant at the level of 99%, indicating that this variable has a positive

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and significant effect on the average profit. Earnings per share, operating cash flow, return on assets, return on equity (performance measurement criteria based on the accounting approach). Therefore, all three research hypotheses are confirmed and it can be concluded that there is a significant relationship between performance measurement criteria based on the economic, consolidated and accounting approach of investors and the flow of free cash. Also, by reviewing the studies conducted in the second chapter of this study, it was concluded that the results of the study based on a significant relationship between free cash flow and performance financial with Dr. Gholamhossein Mahdavi and Sara Barati Mehr (2008), Dr. Mahmoud Hemmatfar and Dr. Ali Lali Bar (2012), Jones and Sharma (2001), Chiong et al. (2005).

Recommendations

- 1. Considering the positive relationship between companies 'free cash flow and companies' financial performance with three integrated approaches, economic and accounting, it is suggested that in manufacturing companies listed on the Tehran Stock Exchange, try to increase cash through various means such as receiving Cash facilities and so on.
- 2. Investors and other stakeholders are also advised to pay attention to the

factors affecting the growth of the company and the total amount of free and operational cash changes in accruals when making decisions.

3. Since a fundamental change in the principles of accrual accounting requires fundamental research and is not easily possible, it is suggested that while maintaining the accrual accounting reporting process, special attention be paid to the reporting process to meet the information needs of the shareholder community and the stock exchange. Production companies listed on the Tehran Stock Exchange should be required to submit an annual report of total free and operating cash flows and provide information on the cost of capital and the rate of return on capital, and in this regard by the Exchange Organization rules and requirements, it need to disclosure. The above measures are expected to improve the efficiency of capital market information.

References

- Jhonson. R. West. (2019). Fees for free cash flow, corporate finance, property rights, Review of Quantitative Finance and Accouting, Vol. 16,pp. 33-42.
- Francis k. Richard Jackson. (2018), The impact of accruals and bookkeeping quality on earnings management, Financial Management Journal, Vol.17, No.4, pp. 41-52.
- Jones Marshal and sharma. Campel (2017), The relationship between earnings management and free cash flows, Asian Journal of Management, Vol. 18, No. 3, December, pp. 142-152.



- Machuga,S. M, Peeiffer, P. J and Verma, K. (2017). "Economic Value Added, Future Accounting Earnings, and Financial Analysts' Earnings Per Share Forecasts", Review of Quantitative Finance and Accounting, Vol. 18, pp. 59-73.
- Fred Neyand Geeiol & Setvai. F. (2016), The relationship between free cash flow, the role of regulatory oversight and audit fees ", The International Journal of Accounting, Vol. 11, No. 12, December, pp. 85-96.
- Zhou Hong. (2016), Investigating the relationship between liquidity and performance of Chinese companies, Australian Journal of Management, Vol. 12, No. 5, December, pp. 124-136.
- Alex N.G & H. Yang Bang. (2015), Liquidity, leverage, and performance of Canadian companies, International Journal of Science and Research (IJSR), Vol. 7, No. 4, pp. 52-63.
- Chiyong Yang (2015), Earnings management, Free cash flow, Outsourcing supervision,

Business & Management Journals, Vol. 22, No. 5, December, pp. 26-37.

- Biddle, G.C, Bowen, R. M and Wallace, J.S. (2013). "Does EVA Beat Earnings? Evidence on Association With Stock Returns and Firm Value", Journal of Accounting and Economics, Vol. 24, No. 3, pp. 301-336.
- Bolek, Monika Kacprzyk, Marta and Wolski Rafał. (2012). The Relationship Between Economic Value Added and Cash Conversion Cycle in Companies Listed on the WSE, Journal of Financial Internet Quarterly e-Finanse vol. 8, nr 2
- Worthington, A and West, T (2012).
 "Australian Evidence Concerning the Information Content of Economic Value Added", Australian Journal of Management, Vol. 29, No. 2, December, pp. 201-242.
- Fernandez Pablo. (2002). Valuation Method and Shareholders Value Creation, Academic Press, San Dieago, CA, Chapter 9.