

INVESTIGATING THE RELATIONSHIP BETWEEN FREE CASH FLOWS AND FIRM PERFORMANCE: EVIDENCE FROM TEHRAN STOCK EXCHANGE

IMAN HEYDARI^{a1}, MILAD MIRZAEIFAR^b AND MOHAMMAD JAVADGHAYEDI^c

^aMaster of Accounting, Central Tehran Branch, Islamic Azad University, Tehran, Iran

^{b,c}M.A. Student in Accounting, Science and Research Hormozgan Branch, Islamic Azad University, Hormozgan, Iran

ABSTRACT

In the present research, the relationship between free cash flows and the performance of firms listed in Tehran stock exchange is investigated. In particular, the goal of this study is to investigate the hypothesis of free cash flows. In this regard, one main hypothesis and four subordinate hypotheses are presented. 63 firms are selected from listed firms in Tehran stock exchange during 7 years, from 2006 to 2012 and tested. The methodology adopted here is a correlative regression and it aims at the pragmatic goals of the study. For testing the hypotheses, panel analysis for four factors were used: return on assets, return on equity ratio, Tobin's Q ratio and stock return. The findings of statistical analysis of research hypotheses showed that there is a negative meaningful relationship between free cash flows with all evaluative factors of performance. In other words, the findings revealed an increase in the conflict of interests between managers and property owners due to free cash flows, which lead to decrease in the firm's performance. So, the present research found evidence for proving free cash flows hypothesis in Tehran stock exchange.

KEYWORDS: Agency Theory, Free Cash Flows, Firm Performance

After the emergence of industrial revolution in 19th century and through development of stock organizations, a huge number of investors entered this area. These investors had no direct role in the management of the economic units they had participated in and they could only contribute in that process by selecting management and supervisory boards. The result of such procedure was the separation of organizations' ownership from its management. This separation led to the emergence of agency theory (Valipour & Khorram, 2011:62). According to Jensen and Meckling (1976:309), agency relationship refers to a contract according to which one or multiple individuals (owners) appoint (an agent or manager) to perform a certain task, hence delivering him the authority of making certain decisions. Establishing the agency relationship allows every party to maximize their personal benefits. Since the desirability function of managers is not the same as owners, an interest-conflict will arise. Due to this conflict of interests, managers obviously do not obtain the maximum advantage for owners (Abor, 2008:183). In that case, stockholders have to pay costs so they can rearrange managers' interests in line with their interests, or at least make sure about their actions in line with their interests. Since these costs emerge from agency relationship, it is called: agency costs (Jensen & Meckling, 1976:311).

Investment is a financial economic argument and one of the important factors contributing to resolving countries' economic problems, expansion and developing investments. Ineffective investment is rooted in agency theory and information economy theory and other issues

such as agency fees and information asymmetry. In other words, in complete investment market, financial providing and investment are not independent from each other. Defects in investment market such as information asymmetry and agency costs lead to ineffective investment (Saghafi & et al, 1390:38). Jensen (1986) combines the theory of information asymmetry and agency and proposes free cash flows hypothesis. He defines free cash flows as the remainder of cash flows after financial providing of all projects with positive present value (Jensen, 1986:324). Free cash flows are a criterion for measuring the performance of firm which shows the amount of cash possessed by the firm after spending the amount of costs which are required for keeping or expanding the properties and other expenses. Free cash flows are important since they allow the firm to chase opportunities which increase stockholder's assets. Without cash, expansion of new products, conducting business educations, paying cash profits to stockholders and decreasing debts are not possible (Gholamzade Ledari, 2009:10). However, in the relationship between firm managers and stockholders both parties seek the maximum amount of interest for themselves which brings about different ideas about choosing the best strategy for the firm. The conflict of interest among managers and stockholders about payment policies, are notably considered when the firm creates many free cash flows. Management is potentially able to waste mentioned funds only when the free cash flows are positive. The problem lies in how managers can be encouraged to instead of wasting excessive cash funds through ineffective investments or organizational deficiency, distribute them

among stockholders (Richardson, 2006:160). In other words, the agency problem is the issue of encouraging the agent to make decisions which maximize owners' assets (Noravesh & et al, 2009:5).

According to Jensen (1986), cash payments to stockholders creates the main conflicts, because paying to stockholders decreases the resources controlled by managers and thus delimits their powers (Jensen, 1986:323). Managers can use the created cash funds in firm for their personal interests rather than firm's (Utami & Inanga, 2011:7). According to free cash flow theory, when a firm creates many free cash flows while there are not enough profitable investment opportunities available, the manager tends to abuse the free cash flows. So, ineffective allocation of resources and non-optimal investments are the consequences of increasing agency costs (Brush & et al, 2000:457). In other words, when the free cash flows are more than profitable investment opportunities, interest conflicts go higher; because managers seek only short-term interests for themselves (Talebnia & et al, 2012:119). So, when the managers of a business unit are confronted with free cash flows the important thing is first, they can invest mentioned funds in suitable profitable projects in order to create value for their owners. This happens when there are good opportunities of growth in business units and managers can invest effectively free cash flows and hence increase the growth of business unit (Gul & Tsui, 1998:221). As mentioned earlier, this research investigates the relationship between free cash flows and the performance of companies listed in Tehran stock exchange.

The structure of this article continues in the following order: in sections two and three, the theoretical background and review of literature are presented. Then, research methodology is discussed in section four which includes research hypotheses, research design, data collection, statistical population, sampling method, sample size, models definition and operational definitions of research variables, method of analysis and testing hypotheses. Finally, research findings are discussed and suggestions are provided.

THEORETICAL BACKGROUND

Companies conduct different strategies for survival and developing their activities. One of these activities is attempting to decrease firm's expenses. Agency theory indicates that agency costs are created with the aim of separating firm's ownership and management. In fact, stockholders resign firm's affairs to management and if management decides and operates contrary to the main objectives of firm, i.e. maximizing

the assets of stockholders, they would undergo agency costs. (Savadjani&AlameHaeri, 2011:410).

Agency costs can be reinforced in different ways; such as advantageous behavior from a number of managers who focus on increasing their own power or position, extra consuming from the obtained incomes, ineffective investment decisions, mismanagement in accounting, or frauds in firm's business contracts. Negative consequences of these actions emerge as destroying stock holders' assets and properties and in broader sense other people who benefit from firm (Gul&et al, 2012:269). Meanwhile, companies are established with the objective of maximizing stockholders' properties. When firm's activity leads to gaining profit, the acquired free cash flows can be utilized through different methods in order to meet the objectives of the firm. This means that companies can utilize the excess amounts of their cash flows on developing activities and increasing the future outputs for stock holders, or paying such cash as the profit of stocks to stock holders (Savadjani & Alame Haeri, 2011:411). But, as Jensen claims (1986), the excessive amounts of free cash flows, brings about internal incompetency and wasting organizational resources, so it leads to agency costs. In free cash flows theory he states that managers tend to reinvest the free cash flows in firm instead of distributing them among owners. Since paying money to stockholders decreases the amount of resources which are controlled by managers and thus delimits their powers. On the other side, this will probably increases the supervision on investment market due to the need for absorbing new investments for the firm. In other words, accumulation of free cash flows reduces the ability of market supervision on management decisions. Moreover, managers are inclined toward firm's growth more than its optimal capacity; because the growth of firm will increase the resources under their control and hence their powers and rewards. Regarding the difference in objectives among managers and owners, the existence of excessive free cash flows created inside firm leads to the waste of resources through (for example) ineffective investments (Jensen, 1986:328). Wasting available resources for providing managers' self-interest makes a reduction in firm's profits (D' Mello & Miranda, 2010:324). Following it, managers may intend to hide the side effects of their unaware decisions and advantageous actions through those type of accounting procedures which are able to increase the amount of reported profit. (Chung & et al, 2005b:766). In such cases, the agency problem of free cash flows effects on the direction of accounting profits and firm's decisions. (Talebnia& et al, 2012:120). So, according to free cash flows hypothesis,

the difficulty of stockholders' supervision on advantageous behavior of managers motivates managers to abuse the lavish cash flows for their own interests. (Hyungha, 2011:10). When managers confront free cash flows, their profiteering behavior can increase the agency costs and problems and from the other side, decrease the profits and stocks value. Stockholders may ultimately intend to substitute managers (Talebnia&et al, 2012:119). So, according to free cash flows theory it is expected that increasing free cash flows weakens firm's performance (Wang, 2010:411).

In sum, the main problem of present study is whether the interest conflict among managers and stockholders, and other agency-related issues leads to problems such as ineffective allocation of resources and wasting free cash flows, and whether they have an influence on firm's performance or not?

REVIEW OF LITERATURE

Jensen (1986), investigated the relationship between ownerships, and fusions with free cash flows and their effect on the value of firm and stockholders' assets. He found that free cash flows have an inverse relationship with the value of firm and as the former increases; intentions to firm seizure are enhanced.

Eckbo & Verma (1994), stated in their study that institutional stockholders prefer to distribute free cash flows as stocks' profit so that agency costs would decrease. Stockholders use their voting right and urge managers to pay stock profit through opposing managers to keep excessive cash flows. Finally, the result of their research was that increasing institutional ownership increases the demands for profits and this relationship is positive.

Crutchely & Jensen (1996), concluded that change in free cash flows have a positive relationship with financial leverage.

Brush & et al (2000), investigated the theory of free cash flows and its relationship with sales growth and companies' performance. Their findings indicated that in companies with free cash flows, the ownership of management have a positive role in settling negative effects of free cash flows on companies' performance; while it provides a higher sales growth.

Boumosleh (2009), investigates the relationship between agency costs, free cash flows, and managers' right of stock purchase. The result of his research indicated that the authority of stock purchase which is given as a reward to the manager, puts the interests of

managers and stockholders in line each other when free cash flows are increased.

Wang (2010), conducted an empirical test of relationship between free cash flows and Taiwan companies' performance. The results show that there is a positive meaningful relationship between free cash flows and performance factors of companies; this implies lack of sufficient evidence in proving free cash flows hypothesis.

Gul & et al (2012), investigated the role of organizational ownership and leadership structures in reducing agency costs in a sample of 50 companies during 2003 to 2006. They used the ratio of asset circulation as the measuring factor of agency costs. The results show that higher percentage of institutional ownership and managers' ownership reduces agency costs. Management boards with smaller size lead to the reduction of agency costs. Moreover, the independence of management committee showed a positive relationship with the ratio of asset circulation. Separating head of management council from manager and higher rewards, decreases agency costs.

Truong & Heaney (2013), investigated the factors which determine agency problems between managers and owners in Australia stock market. In their study, the agency factors of 500 Australian companies were analyzed. For estimating the agency costs they used two criteria of assets circulation ratio and optimized sales operational costs ratio. Their findings showed that free cash flows, institutional ownership, management ownership, management council structure and financial providing through debt effect agency costs.

Rezvani Raz & Haghghat (2005), considered investment opportunities and firm size as the control variables and investigated the relationship between free cash flows and the sum total of short-term and long-term loans of listed companies in Tehran stocks exchange organization during 1375 to 1379 and found a meaningful positive relationship in companies which have low investment opportunities and in big companies between free cash flows and the amount of debt.

Garmroudi Lotfabadi (2005), examined the effects of agency costs on the ratio of profit division in Tehran stock exchange during 1997 to 2001 and found that there is a positive relationship between normal stock holders, pledged assets and free cash flows with the ratio of divided stock profits.

Taghavi & et al (2010), explain the relationship between agency costs and the value of firm with management profit. Their study shows that the managers

of companies listed in Tehran stock exchange organization, use profit management as a tool for enhancing their own personal interests (not firm's value). In other words, profit management in Tehran stock exchange organization is advantageous not useful. Besides, considering the connection between growth opportunities and free cash flows as measuring criterion of agency costs indicated Taghavi&et al findings as a meaningful negative relationship between agency costs and firm value.

Valipoor & Khorram (2011), investigated the relationship between leading system procedures of firm and agency cost of companies listed in Tehran securities and stocks exchange. Their findings indicate that there is a meaningful negative relationship between ownership percentage of institutional investors, percentage of stock ownership of managers, percentage of managementboard uncommitted members, the ratio of short-term debt to the total debt and agency costs.

METHODOLOGY

Research hypotheses

As mentioned earlier, the agency cost of free cash flows is defined as investment of such cash flows in projects with negative net value. In other words, it is expected that firm managers, invest free cash flows more probably in non-profitable projects. Although such projects reduce the amount of stockholders' wealth but it fulfills managers' personal interests. So we expect that free cash flows increase the conflict of interest among managers and stockholders and thus affect the performance of firm. Accordingly, research hypotheses are presented in the following order:

Main hypothesis: there is a meaningful relationship between free cash flows and firm's performance.

First subordinate hypothesis: there is a meaningful relationship between free cash flows and the return on assets ratio.

Second subordinate hypothesis: there is a meaningful relationship between free cash flows and the return on equity ratio.

Third subordinate hypothesis: there is a meaningful relationship between free cash flows and Tobin's Q ratio.

Fourth subordinate hypothesis: there is a meaningful relationship between free cash flows and stock return.

RESEARCH DESIGN AND DATA COLLECTION

This study is included in the category of financial research. Regarding the historical information used in testing its hypotheses, it is classified in quasi-experimental studies. Since the goal of this study is to investigate the relationship between free cash flows and firm's performance, the nature of research methodology is a correlational descriptive study.

In the present research, data were gathered in two ways:

1. In order to enrich the theoretical background of the study, Persian and English specialized books and magazines were used.
2. The information regarding research variables are gathered by reference to financial records, explanatory sheets and using the software "Rahavard Novin ed3."

STATISTICAL POPULATION, SAMPLING METHOD AND SAMPLING VOLUME

The statistical population of this study includes all companies listed in Tehran securities and stock exchange organization during 2006-2012. The quality of information and easy access to the information of financial documents and other data were important reasons for this choice.

Regarding the goals of research and some inconsistencies among companies listed in Tehran securities and stock exchange organization, the systematic deletion method of sampling was used. The following conditions were regarded necessary for being in research population:

1. It is not considered as a bank, financial, investment, holding or leasing institution. Because their special area of activity affects the relationship between factors which are investigated in this study and they cannot be generalized.
2. The firm must be listed in stock exchange organization before the end of 1383 and it must not have exited from stock exchange list during 2006-2012.
3. In the mentioned period, the firm must be actively engaged in stock exchange and their stocks must be continuously transacted.
4. For comparability issues, the financial year of firm must end 29thEsfand (20th March) of every year.
5. The firm had no change of financial year during 1385-1391, and it is not broken.

6. Financial accounts of firm must be available.

63 companies met the above criteria during 2006-2012, in other words 441 years of companies are selected as statistical sample.

CONSTRUCTING MODELS AND OPERATIONAL DEFINITION OF RESEARCH VARIABLES

For investigating the relationship between free cash flows and firm performance, multiple linear regression models are used as the following:

Model 1:

$$ROA_{it} = \beta_0 + \beta_1 FCF_{it-1} + \beta_2 Size_{it} + \beta_3 FL_{it} + \epsilon_{it}$$

Model2:

$$ROE_{it} = \beta_0 + \beta_1 FCF_{it-1} + \beta_2 Size_{it} + \beta_3 FL_{it} + \epsilon_{it}$$

Model 3:

$$Qtobin_{it} = \beta_0 + \beta_1 FCF_{it-1} + \beta_2 Size_{it} + \beta_3 FL_{it} + \epsilon_{it}$$

Model 4:

$$Ri_{it} = \beta_0 + \beta_1 FCF_{it-1} + \beta_2 Size_{it} + \beta_3 FL_{it} + \epsilon_{it}$$

Supposed as:

ROA_{it}: return on asset of i firm in the year t;

ROE_{it}: return on equity of i firm in the year t;

Qtobin_{it}: the ratio of QTobin's of i firm in the year t;

Ri_{it}: stock return of i firm in the year t;

FCF_{it}: free cash flows of i firm in the year t;

Size_{it}: size of i firm in the year t;

FL_{it}: financial leverage of i firm in the year t;

ε_{it}: error.

The variables are grouped into three categories: independent, dependent and control variable.

Independent variable

In this study, free cash flow is considered as the independent variable.

Free cash flows

Similar to Wang (2010) and Mahdavi & Monfared Maharloiee (2011) the present study used Lehn & Poulsen (1989) and Lang & et al (1991) model for estimating free cash flows which are constructed as the following:

$$FCF_{it} = (OCF_{it} - Tax_{it} - IExp_{it} - Div_{it}) / Sales_{it}$$

Where FCF denotes free cash flows; OCF operating cash flows; Tax_{it} corporate income tax expense, IExp: interest expense, Div: stock dividends and Sales: net sales.

Dependent variables

Similar to Wang study (2010), in this study we used four criteria to estimate firm performance:

Return on assets ratio

One of the important tests of management ability in obtaining return of resources available is the rate of total return on assets. The following equations used for estimating the return on assets:

$$ROA_{it} = NI_{it} / \frac{1}{2} (Assets_{it-1} + Assets_{it})$$

Where ROA denotes return on assets, NI: net income, assets: total assets from the first to the last.

Return on equity ratio

This ratio indicates firm management in effective use of stockholders money and the power of management in increasing the value of firm in an acceptable way. In fact, the return ratio on equity of stockholders is a situation where manager controls all aspects of activity in order to achieve better and more profitable utility of all available sources of the institution. One of the main tasks of management is evaluation and expansion of stock return on equity (Moradi & Pourhasan, 2010:189). The following equations are used to estimate the return on equity.

$$ROE_{it} = NI_{it} / Equity_{it}$$

Where ROE is the return on equity, NI: net income and equity is the return for stockholders.

Tobin's Q ratio

Tobin's Q ratio is an important technique for evaluating managers' performances (Wolf 2003, 156). This ratio is a statistic which can represent the value of firm for investment (Salehi,2001:45).

In this study, regarding the findings of Moradi & Pourhasan (2010) and high degrees of correlation and approximate equality of estimating different versions of Tobin's Q from one hand and the difficulty of substitution values of assets and debts in Iran exchange market from the other hand urged us to use simple Tobin's Q ratio as the following:

$$Qtobin_{it} = (MVPS_{it} * NOS_{it}) + Debt_{it} / TAB_{it}$$

Where Qtobin denotes Tobin's Q ratio; MVPS: market value per stock, NOS: number of stocks for

stockholder, Debt: book value of total debts and TAB: book value of total assets of firm.

Stock Return

Stock Return is one of the important evaluation factors of companies which is paid considerable attention by stockholders in financial decisions. Predicting return on stock is of special importance for stockholders investment decisions (Kashnipour&Rezaeian,2007:136). In the present study, stocks return of ordinary shares in a determined period is calculated regarding the first and last prices in that period and the proceeds obtained from ownership and increasing firm’s capital, through this equation (Ra’ee&Sa’eedi, 2004).

$$Ri_{it} = (1 + \alpha_{it}) \times P_{it} - P_{i(t-1)} + D_{it} - M / P_{it-1}$$

Where Ri denotes stock return, α : firm capital increase ratio, P: stock price, D: stock dividends, and M: stockholders cash proceeds.

Control variables

Size of firm and financial leverage are the control variables.

Firm size

In order to determine the size of firm, different researches used different indexes. Kroes&Manikas (2014) used sales logarithm, Abor (2008) used assets logarithm and Nakeur& et al (2006) used capital market value logarithm. Due to the inflammation dominated on Iran’s economy and unrelated assets based on historical values, using sales for determining the size of companies is better. Hence, natural logarithm of net sales is used here for determining the size of firm.

$$size_{it} = \ln (Sales_{it})$$

Where size denotes firm size, Ln: natural logarithm and sales: net sales.

Financial leverage

One of the most important scales of leverage is debt ratio which is calculated through the following equation(Bozorgasl, 2006:85).

$$FL_{it} = Debt_{it} / Assets_{it}$$

Where FL: financial leverage, Debt: total debts and Assets: total assets.

Data analysis methods and testing the hypotheses

In this study, combinatory data method is used. Testing statistical hypotheses is done through multiple linear regressions and ordinary least squares method (OLS). Data analysis is done through Excel 2010 and E-views edition 7.

When a regression model is used with combinatory data, it must be determined that from combinatory data models, panel data model with fixed effects and panel data model with random effects, which one better explains the relationship between dependent and independent variables. In order to understand which model is appropriated for research data, first we test combinatory data model and panel data model with presuppositions based on Chow test (or limited F) as the following:

H₀:Combinatorial model: all intercepts are equal

H₁:Panel model: at least one of the intercepts is different from others.

If hypothesis zero is confirmed, then combinatory model is preferred and is used for developing our model of study. But if hypothesis zero is not confirmed and panel model were proven to be preferred, we need to test it against fixed or random effects using Hausman test and regulating the following hypotheses:

H₀:Panel model-random effects: there is no correlation between personal effects and explained variables

H₁:Panel model-fixed effects: there is a correlation between personal effects and the explained variables

If hypothesis zero is confirmed panel model- random effects is the appropriate model for developing study model, otherwise, panel model-fixed effects must be used for developing study model (Aflatooni&Nikbakht,2010).

In order to investigate the significance of the model from F statistics and for investigating the significance of coefficient of dependent variables in every model t statistics is used and hypotheses are accepted or rejected at certainty level of 95%.

Research Findings

Descriptive statistical data

Variables descriptive statistics for the sample firms in Table (1) is presented.

Table 1: Descriptive statistical data of research variables

Descriptive statistics Subordinate variable	Mean	median	maximum	minimum	SD
Free cash flows	0.112758	0.074715	1.895431	0.000215	0.141278
Return on assets ratio	0.168034	0.133529	0.888896	0.001199	0.129542
Return on equity ratio	0.339124	0.319108	2.221602	0.005749	0.200207
Tobin's Q ratio	1.417072	1.214865	6.447337	0.628006	0.639479
Stock Return	1.308379	1.190560	9.060354	0.123420	.0510639
Size of firm	13.08159	12.88855	17.80855	10.67058	1.33732
Financial leverage	0.566852	0.588089	0.903357	0.096415	0.158781

Findings show that among all dependent variables, Tobin's Q ratio owns the highest mean and

standard deviation. Moreover, firm size has the highest mean and standard deviation among control variables.

Testing research Hypotheses

Table (2) represents the findings related to model selection for each subordinate hypothesis related to main hypothesis.

Model selection Test

Table 2: The results of model selection for testing each hypothesis

	test	Main hypothesis		Suitable model
		F-statistic	Significance level	
First subordinate H	Chow test	5.41	0/000	Panel
Second subordinate H	Chow test	5.65	0/000	Panel
Third subordinate H	Chow test	5.56	0/000	Panel
Fourth subordinate H	Chow test	5.51	0/000	Panel

As observed above, the significance level of Chow test is lower than accepted level of error (5%) in 1st-4th subordinate hypotheses, so hypothesis zero is rejected based on equality of intercepts and the other

hypothesis is accepted. As a result in this step, a panel model –fixed effects must be tested against panel model–random effects. This test is conducted through Hausman test as presented in table (3).

Table 3: The results related to model selection for testing each hypothesis

	test	Main hypothesis		Suitable model
		F-statistic	Significance level	
First subordinate H	Hausman test	94.02	0/000	Fixed effects
Second subordinate H	Hausman test	86.09	0/000	Fixed effects
Third subordinate H	Hausman test	89.83	0/000	Fixed effects
Fourth subordinate H	Hausman test	70.29	0/000	Fixed effects

As observed above, the significance level of Hausman test is lower than accepted level of error (5%) in 1st-4th subordinate hypotheses, so hypothesis zero is rejected and the other hypothesis is accepted. This quantity shows that the method of fixed effects must be used. In rest, a regression test through panel data-fixed effects must be conducted.

Main hypothesis test

In order to test the main hypothesis, the relationship between free cash flows and every measuring criteria of firm performance (return on assets ratio, return on equity ratio, Tobin's Q ratio and return on stocks) were

evaluated separately. The findings of testing main hypothesis are presented in table (4).

Table 4: The results of estimating regression models to test the main hypothesis

variables	First subordinate H			Second subordinate H		
	coefficient	t- statistic	Sig. level	coefficient	t -statistics	Sig. level
intercept	-3/490	-13/008	0/000	-2/434	-14/099	0/000
Free cash flows	-0/039	-1/413	0/001	-0/041	-1/917	0/005
Firm size	0/062	3/974	0/000	0/062	2/284	0/024
Financial leverage	0/112	3/410	0/000	0/336	5/267	0/000
Coefficient of determination	0/790			0/547		
Adjusted coefficient of determination	0/777			0/532		
F statistics	63/781			36/715		
Sig. level	0/000			0/000		
Durbin-Watson	1/796			1/546		

Continue Table 4: The results of estimating regression models to test the main hypothesis

variables	Third subordinate H			Fourth subordinate H		
	coefficient	t-statistic	Sig. level	coefficient	t-statistics	Sig. level
intercept	-0/249	-2/620	0/001	-0/023	-2/297	0/001
Free cash flows	-0/075	-7/780	0/000	-0/073	-2/212	0/021
Firm size	0/238	3/479	0/001	0/333	3/020	0/003
Financial leverage	0/243	-3/505	0/000	0/338	3/047	0/002
Coefficient of determination	0/596			0/589		
Adjusted coefficient of determination	0/583			0/576		
F statistics	44/932			40/526		
Sig. level	0/000			0/004		
Durbin-Watson	1/775			1/893		

As observed above, t-statistics significance level is related to free cash flows variable in all subordinate hypotheses is lower than 0.05 which means that there is a negative significant relationship between free cash flows and all other performance measurement criteria including return on assets ratio, return on equity ratio, Tobin's Q ratio and stock return. Moreover, results of investigating self-correlation of error sentences through Durbin-Watson statistics showed no self-correlational error of

model, since Durbin-Watson statistics was calculated 1.5-2.5 in every subordinate hypothesis.

DISCUSSION AND CONCLUSION

According to the findings of first and second subordinate hypotheses, there is a negative significant relationship between free cash flows and other performance measurement criteria including return on assets ratio, and return on equity ratio. The analysis showed that increasing free cash flows, disposes more

resources to firm managers and their bad usage of this money does not contribute to the increasing income and profits. As a result, increasing free cash flows from one hand reduces management ability in obtaining return from resources and in fact, brings about return on assets which is directly related to management performance. From the other hand, increasing free cash flows decreases the opportunities by which the manager can use available resources and increases stockholders return.

According to findings from third subordinate hypothesis, there is a negative significant relationship between free cash flows and, Tobin's Q ratio. Increasing free cash flows is not effective on management ability in increasing firm value because managers use this income for self-interests or investment in non-optimal projects.

According to findings from fourth subordinate hypothesis, there is a negative significant relationship between free cash flows and, firm stock return. The results show that increasing free cash flows related to ineffective performance of managers does not increase income growth or firm profits. As a result it leads to decreasing the value of stocks. Hence, firm value from one side and firm return stock decreases on the other hand.

In general, this study has found evidence on confirming free cash flows theory in relation to companies listed in Tehran stock exchange. The findings indicate that in the studied firms, lack of motive in managers and ineffectiveness of controlling procedures allows managers' profiteering and making decisions which minimizes owners' welfare. Therefore, increasing free cash flows prevents linear arrangement of managers' interest and stockholders' which ultimately increases agency costs and firm performance. The results of this research is consistent with research conducted by Jensen (1986), Brush & et al (2000) which confirmed negative impact of free cash flows on stock return, however inconsistent with Wang (2010) research.

Regarding control variables, the significant positive relationship between firm size and all other measuring criteria were confirmed. It can be argued that a closer look at the companies listed in Tehran stock exchange reveals that bigger companies are those companies which are state companies or a huge part of them belongs to government which due to disclosure constraints, they may operate actions to represent themselves consistent with authorities' demands and government policies. Besides, financial leverage is one of the evaluative factors of performance in view of creditors, so the existence of a positive relationship between financial leverage and performance can be

justified. Among other studies which confirm the impact of size we can refer to Wang (2010) and Taghavi&et al (2010).

RESEARCH SUGGESTIONS

Suggestions based on research findings

Since the main hypothesis was confirmed "free cash flows have a negative impact on firm performance", we suggest that:

1. Investors pay more attention to decisions related to investment in firms for financial proceeds i.e. free cash flows.
2. Companies need to inhibition procedures and encouragements more that before in order to avoid managers and stockholders conflicts due to agency issues; among such procedures we can refer to increasing debts, dividend payments and increasing managers' ownership. Positive relationship is observed between free cash flows and firm debt policy by Crauchley & Jensen (1996) and Rezvaniraz & Haghighat (2005) from one hand and positive relationship observed between free cash flows and firms' division payment policy in Eckbo & Verma (1994), and Garmroodi Lotfabadi (2005). Moreover, other actions such as awarding shares, right of stocks purchase or rewarding based on evaluating manager's performance also means that firms are intended to decrease agency costs due to interest conflicts by engaging managers with activities and operations in line with firm interests, according to Boumosleh (2009) such activities encourage managers to act upon firm interests. Indicating a negative relationship between ownership management and agency costs in studies of Gaul & et al (2012), Valipour & Khorram (2011) is another evidence of confirming the mentioned argument. Namazi (2005) believes that creating motive in managers is effective in decreasing agency costs. This is consistent with findings of Gaul & Teasui (1998) and Crauchly & et al (1999).

SUGGESTIONS FOR FUTURE RESEARCH

Several subjects are suggested for possible related future research:

1. Conducting a research in separate fields of industry
2. Conducting a research regarding firms with positive and negative free cash flows
3. This research indirectly deals with the effective control procedures of agency problems; so it is suggested that a research investigates specifically the role of control procedures of agency costs in determining the relationship between free cash flows and firm performance.

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