

The Impact of Internal Financing and Institutional Investors Control on Cash Flows Resulting from Investment Fluctuations (Evidences from Tehran Stock Exchange)

Samaneh Pahlavan¹ & Roya Darabi²

¹ MA in Accounting, South Tehran Branch, Islamic Azad University, Iran

² Department of Accounting, South Tehran Branch, Islamic Azad University, Iran

Correspondence: Roya Darabi, Department of Accounting, South Tehran Branch, Islamic Azad University, Iran.
E-mail: royadarabi110@yahoo.com

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Abstract

The aim of the present research is to study the impact of financing within a company and institutional investors control on cash flows resulting from investment fluctuations in companies listed on Tehran Stock Exchange. To this end, historical data of 103 companies listed on Tehran Stock Exchange in the time period of 2007 - 2012 were extracted and analyzed by using panel data. Results indicated that the more increase in cash flows, the more companies have interest for investment. In other words, investment fluctuations are sensitive to cash flows. Also, increased financing within a company reduces company's interest for investment of cash flows and vice versa. To this end, increased supervision of institutional investors increases company's interest for investment of cash flows and reduced supervision of institutional investors reduces company's interest for investment of cash flows. However, this effect was not statistically significant. Also, it was indicated that when there was an increase in activity volume of a company, on the basis of assets, there was an increase in company interest for investment of cash flows and a decrease in activity volume of a company, on the basis of assets, and the company interest for investment of cash flows. Also, increased cash dividends payment increases company interest for investment of cash flows and reduced cash dividends payment reduces company's interest for investment of cash flows. Age of the company and financial leverages did not have any effect on investment fluctuations sensitivity to cash flows.

Keywords: internal financing within the company, institutional investor control, cash flows resulting from investment fluctuations

1. Introduction

According to internal resource hypothesis, companies for taking advantage of investment opportunities need cash. Cash can be both financed through internal resource in a company and also through external resources of a company. In perfect and complete markets, the choice between different options of financing doesn't have an effect on investment decisions and company's value (Modigliani & Miller, 1958). However, existence of some imperfections in markets, such as information asymmetry and agency costs, increases the cost of external capital comparing to internal capital (Jensen & Meckling, 1976; Myers & Majluf, 1984). This difference in cost is caused because external capital financiers (potential future investors) comparing to managers have less information about investment opportunities and also do not have sufficient power for ensuring that managers will act in their interests. Internal capital, the capital produced through company operations - belongs to the current shareholders of a company. These shareholders can monitor managers through governance mechanisms such as the board of the directors or through controlling institutional investors. If these monitoring mechanisms are effective, then agency costs that external capital financiers are facing will be considerably higher than the costs that internal capital financiers are facing (Pawlina & Renneboog, 2005).

In case of difference in financing costs, availability and access to internal recourses for pursuing and implementing investment opportunities increases company value. This increased value can be attributed to two factors. First, replacement of internal capital has a low capital cost comparing to external capital that has a higher cost in projects with positive net present value can increase the net present value of these investment opportunities. Second, those investment opportunities that their execution with external resources produces

negative net present value are justified economically with access to inexpensive internal resources (Schoubben & Cynthia, 2007). Operating cash flows are the main source of internal financing. The unpredicted changes in operating cash flows potentially causes investors to review their evaluation of the level of internal resources available for realization of final investment opportunities and in case of an unpredicted reduction in operating cash flows, they replace external resources with internal resources having a higher cost. Therefore, in perfect and complete capital markets, it is expected that all companies having an easy access to external resources for financing and to make their investment decisions merely on the basis of Expected future profitability and that access to internal resources will not have any effect on these decisions (Babakhani et al., 2011).

However, in the real world considering the mechanism of asymmetric information, the cost of financing by using internal and external resources is different and in these environments, asymmetric information existing between Lender and borrower is effective and influential on the ability of companies for gaining access to credit and hence on their investment potential and economic activities (Tehrani & Hesar Zadeh, 2011) and since, Tehran Stock Exchange during the recent years has gone through so many ups and downs, in a way that few investors have gained wealth at the cost of so many investors losing their wealth which is due to existence of information asymmetry and agency costs in inefficient capital market of Iran, all the users do not have similar and equal access to the financial information of a business entity and its financial statements. In the present research, we seek to study this question that whether investment fluctuations are sensitive to cash flows. In other words, whether the level of companies investment changes due to their cash flows. And, in the case of existence of any sensitivity, what is the effect of internal financing on this relationship? Finally, whether institutional investment control as one of the effective mechanisms of monitoring and controlling can play a role in reducing information asymmetry and agency costs or not.

To this end, in the following section, the conceptual model of the study is presented and then research method, findings and conclusion are presented.

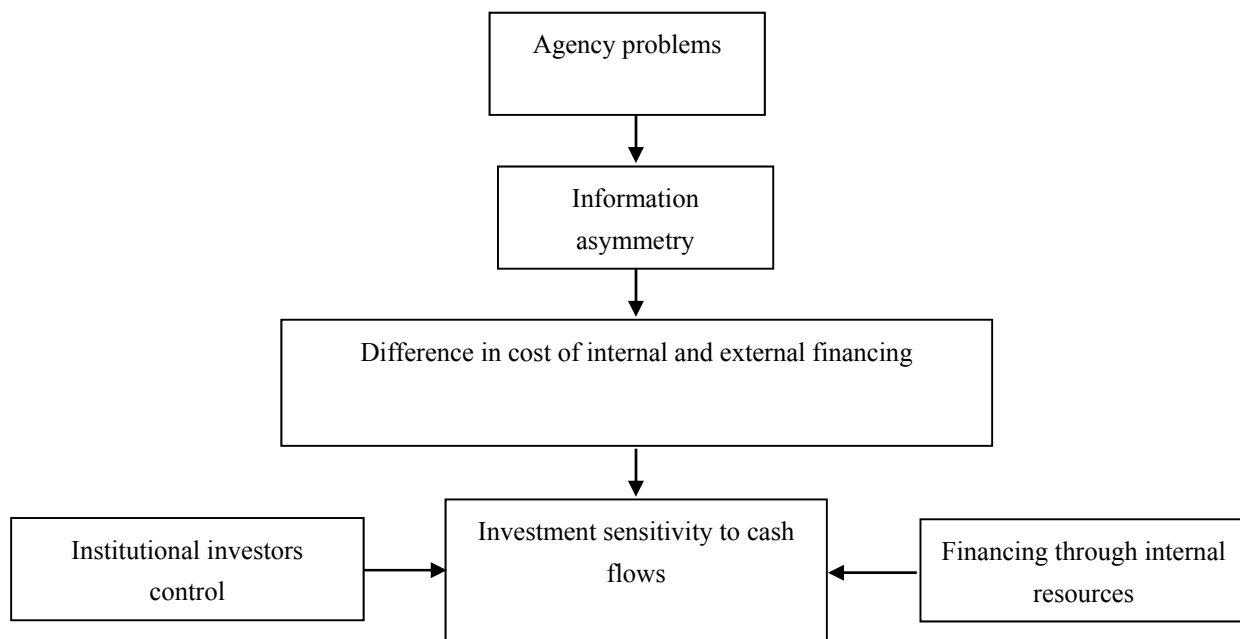


Figure 1. Research conceptual model

The dependent variable in this study is cash flows resulting from investment fluctuations that is measured on the basis on investment sensitivity to cash flows. Independent variables in this study are internal financing and condoling institutional investors that respectively have been measured on the basis of internal financing to external financing (IE) ratio and percentage or rate of institutional ownership (IO). Also, for avoiding the problem of correlation between the eliminated variables, the effect of company size (size), company age (age), dividend ratio (DPS) and debt ratio (Lev) variables have been controlled.

2. Research Method

The present study is an applied research in terms of nature and is a post-event study that tests research hypotheses by using historical financial data and information. The foundation of this study was based on Firth et al. (2014) method. First, the information and data related to internal financing to external financing ratio and institutional investors were collected and next the data and information related to cash flows resulting from investment fluctuations in companies have been collected. The present study is a descriptive study in terms of data collection method. Descriptive studies include a series of methods that their aims is describing the phenomena or situations being studied.

This study in terms of topic and subject is considered to be in the category of studies that are related to financial accounting and management and has been conducted in Tehran Stock Exchange. The reasons for selection of Tehran Stock Exchange are as per the following:

1. Access to financial information and data of the listed companies in Stock Exchange is easier. Particularly because some of these information and data are available in the form of databases on CDs.
2. Considering the fact that the financial information and data of companies listed on Stock Exchange are inspected and monitored; it appears that the information mentioned in the financial statements of these companies to be of a higher quality.
3. Considering the fact that the companies listed on Stock Exchange are bound to follow the rules and regulations of financial accounting standards in the preparation of their financial statements, it appears that the information of these companies stated on their financial reports are more homogeneous and have a higher potential for comparison.

The present study in terms of time period contains a 7-year period (from 2006 to 2012), however, considering the fact that creating a scalable investment model with the use of first-period net fixed assets requires the changes of year t to year $t-1$, practically a 6-year period has been selected for this study. As a result, the number of observations related to the study variables are 618 firm-year observations, the selection procedure of which has been presented in Table 1.

Table 1. Selection procedure of study sample

Description	Quantity	Percentage
All the companies listed in Exchange on 15th March, 2013	520	100
Companies listed on Exchange after 2006	(44)	9
Companies that during the time period of this study were suspended or have exited Exchange	(124)	24
Companies that fiscal year doesn't end in 15th March (29th Esfand) or have changed their fiscal year	(92)	18
Financial Broking Company (investment, holding, leasing, and banks (Note 1))	(18)	4
Companies that during the time period of the study their stock hasn't been traded actively in the exchange	(58)	12
Companies that haven't submitted their financial statements for the year of 2012 at the time this study was being conducted	(3)	1
Companies that their data and information wasn't sufficient for obtaining some of the study's variables	(78)	15
Total sample of the study with the consideration of presuppositions	103	20

2.1 Instruments and Data Analysis Method

In order to collect data, theoretical background and research literature bibliographical method (books, articles and journals related to the field of the present study), reliable dissertation and publications available online in internet bases and other reliable scientific sources were used. Raw data and information required for companies also, in order to study main and control variables of research hypotheses, were collected through Rahavard

Novin application and in case of necessity through direct reference to financial statements of companies that are available on Tehran Stock Exchange website (Research, Development and Islamic Studies).

Also, in this study considering the type of data and the available methods of analysis, panel data method was used. Panel data are the data related to different companies in different years and are considered as firm-year observations. This type of data have some advantages such as: provision of more information, limited Variance anisotropy, less colinearity between variables, higher freedom degree and higher efficiency. In the present study first initial calculations of data related to sample companies in Spreadsheet software have been performed and data have been prepared for analysis and them statistical analyses have been conducted with the use of multi-variable regression through the software.

3. Data Analysis and Results

The results of durability test of the study variables with the use of Hadri unit root test was presented in Table 2. Considering the z-value and its probability (the probability of being less than 5% error level), research variables are durable.

Table 2. Results of durability test of research variables

Value	CFLOW	INV	Q	IE	IO	Size	Age	DPS	Lev
z-value	86.7331	67.0089	63.5047	74.8580	70.5995	66.4832	266.204	53.7752	71.9237
p-value	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

In research hypothesis one, the relationship between cash flows and investment fluctuations was tested by using hybrid regression. On this basis, investment in the role of dependent variable and cash flow in the role of independent variable and growth opportunities as possible influencing factor in the role of control variables were considered. Before final model fit, suitability test has been conducted for hybrid model against integrated model as well as for hybrid model with fixed effects against with random effect and the results of these tests were presented in Table 3.

Table 3. Results of selection of an appropriate pattern for 1st research model

Test value	Type	Value	Freedom degree	Probability
F-Limer value (Chaw test)	Cross-section	1.830407	(501,102)	.0000
Chi-square value (Hausman test)	Cross-section	1.778828	2	0.4109

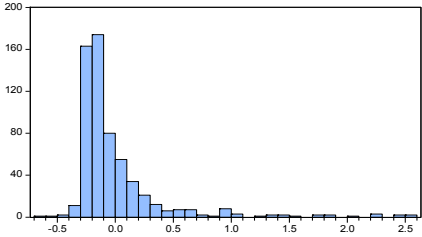
The results indicate that as per F-Limer value (1.830) and its probability (.000) (p-value less than 5% error level), the use of hybrid model is appropriate. Also, the results indicate that as per chi-square value (1.778) and its probability (0.410) (p-value more than 5% error level) the method of random effects is suitable. In the end, with the selection of hybrid multi-variable regression model with fixed effects the 1st research model is fitted as follows.

$$INV_{i,t} = \beta_0 + \beta_1 CFLOW_{i,t} + \beta_2 Q_{i,t} + \varepsilon_{i,t}$$

The results obtained from the above model fit were presented in Table 4. F-Fisher value (5.596) and its probability (0.003) (p-value less than 5% error level) indicate that the total regression model is significant in terms of existence of linear relationships in the model. Durbin-Watson value of the model (1.672) is in the range of 1.5 to 205 that indicates that there is no autocorrelation between residuals and error components of the model and hence model is suitable. Jarque-Bera value (6397.460) and its probability (.000) (p-value less than 5% error level) indicate that model residuals do not have a normal distribution, which might be due to lack of normality of distribution of the main variables of the study.

Table 4. Results of 1st research hypothesis test

Dependent variable: investment (INV)				
Descriptive variables	Coefficients	Standard error	t-value	p-value
Intercept	0.246102	0.046941	5.242780	.0000
CFLOW	0.047447	0.014412	3.292275	0.0011
Q	-0.001632	0.023873	-0.068354	0.9455
Fisher value	5.596221	Coefficient of determination		0.014967
Fisher p-value	0.003907	Durbin-Watson value		1.672580



Series: Standardized Residuals
Sample 1386 1391
Observations 606

Mean	-0.000572
Median	-0.130810
Maximum	2.530679
Minimum	-0.675458
Std. Dev.	0.420852
Skewness	3.474948
Kurtosis	17.32004
Jarque-Bera	6397.460
Probability	0.000000

$$NV = 0.0474468277814 * CFLOW - 0.0016317980393 * O + 0.246102035983 + [PER=R]$$

The results indicate that there is a significant and positive relationship (impact factor of 0.246) between the ratio of net cash flows resulting from operating activities to First-period net fixed assets as the cash flow (CFLOW) measure and investment (INV) on the basis of t-value (5.242) and its probability (0.001) (p-value less than 5% error level). It means that considering the obtained results, increase (reduction) in investment is a function of increase (reduction) of cash flows, indicating an investment sensitivity toward cash flows. In other words, the more an increase in cash flows, the more interest for investment among the companies. Therefore, 1st research hypothesis is confirmed. Also, the results indicate that there is no significant relationship between Tobin's Q indicator as growth opportunities measure (Q) and investment (INV), according to t-value (0.068) and its probability (0.945) (p-value more than 5% error level). Of course, in spite of this lack of significance in the relationship, the direction of the relationship is negative (impact factor of -0.001). In other words, considering the obtained results, increase (reduction) in investment is a function of reduction (increase) in growth opportunities; however, this effect does not have a statistical significance.

Second Research Hypothesis Testing

In 2nd hypothesis, the effect of internal financing on cash flows resulting from investment fluctuations was tested by using hybrid regression method. On this basis, investment in the role of dependent variable, cash flows and internal financing in the role of independent variables and growth opportunities, company size, company age, dividends ratio and financial leverage as possible influential factors in the role of control variables have been considered. Before final model fit, suitability test has been conducted for hybrid model against integrated model as well as for hybrid model with fixed effects against with random effects and the results of these tests have been presented in Table 5.

Table 5. Results for the test of selection of an appropriate pattern for 2nd research model

Test value	Type	Value	Freedom degree	Probability
F-Limer value (Chaw test)	Cross-section	1.662342	(468.102)	0.0002
Chi-square value (Hausman test)	Cross-section	23.738313	12	0.0221

The results indicate that as per F-Limer value (1.662) and its probability (.000) (p-value less than 5% error level), the use of hybrid model is suitable. Also the results indicate that as per chi-square value (23.738) and its probability (0.022) (p-value less than 5% error level) the method of fixed effects is suitable. In the end, with the selection of hybrid multi-variable regression model with fixed effects 2nd research model has been fitted as per following.

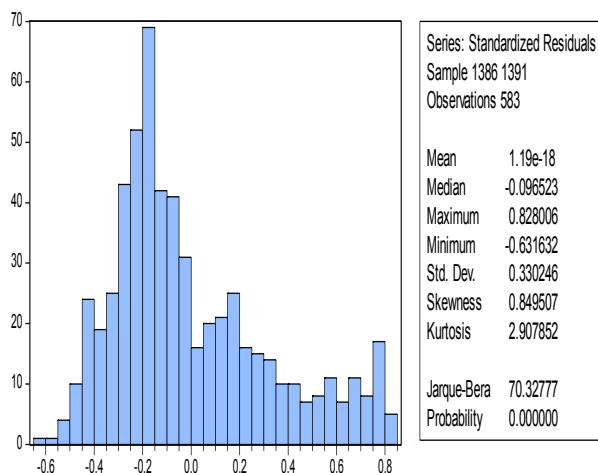
$$INV_{i,t} = \beta_0 + \beta_1 CFLOW_{i,t} + \beta_2 Q_{i,t} + \beta_3 IE_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 DPS_{i,t} + \beta_7 Lev_{i,t} + \beta_8 CFLOW_{i,t} \times IE_{i,t} + \beta_9 CFLOW_{i,t}$$

$$\times \text{Size}_{i,t} + \beta_{10} \text{CFLOW}_{i,t} \times \text{Age}_{i,t} + \beta_{11} \text{CFLOW}_{i,t} \times \text{DPS}_{i,t} + \beta_{12} \text{CFLOW}_{i,t} \times \text{Lev}_{i,t} + \epsilon_{i,t}$$

The results obtained from the above model fit were presented in table 6. F-Fisher value (5.299) and its probability (0.000) (p-value less than 5% error level) indicate that the total regression model is significant in terms of existence of linear relationships in the model. Durbin-Watson value of the model (2.186) is in the range of 1.5 to 205 that indicates that there is no autocorrelation between residuals and error components of the model and hence model is suitable. Jarque-Bera value is (70.32777) and its probability is (.000) (p-value less than 5% error level) which indicates that model residuals don't have a normal distribution; which might be due to lack of normality of distribution of the main variables of the study.

Table 6. Results of 2nd research hypothesis test

Dependent variable: investment (INV)				
Descriptive variables	Coefficients	Standard error	t-value	p-value
Intercept	-0.452828	0.210514	-2.151058	0.0320
CFLOW	0.203225	0.020107	10.10722	0.0000
Q	-0.004243	0.005619	-0.755178	0.4504
IE	-0.000331	0.003026	-0.109374	0.9130
Size	0.069073	0.012797	5.397500	0.0000
Age	-0.008801	0.001456	-6.043832	0.0000
DPS	-0.060479	0.017433	-3.469320	0.0006
Lev	0.265282	0.068898	3.850366	0.0001
CFLOW×IE	-0.070052	0.008323	-8.417108	0.0000
CFLOW×Size	0.015307	0.002704	5.661722	0.0000
CFLOW×Age	0.000256	0.000594	0.430696	0.6669
CFLOW×DPS	0.049510	0.019783	2.502605	0.0127
CFLOW×Lev	-0.002023	0.052626	-0.038482	0.9694
Fisher value	5.299458	Coefficient of determination		0.457160
Fisher p-value		Durbin-Watson value		2.186822



$$\text{INV} = 0.203225268084 * \text{CFLOW} - 0.0042431082529 * \text{Q} - 0.000331020050524 * \text{IE} + 0.069073391858 * \text{SIZE} - 0.00880118156945 * \text{AGE} - 0.0604789680412 * \text{DPS} + 0.265281914986 * \text{LEV} - 0.07005207430603 * \text{CFLOW} * \text{IE} + 0.0153071481175 * \text{CFLOW} * \text{SIZE} + 0.000256011025099 * \text{CFLOW} * \text{AGE} + 0.0495101778057 * \text{CFLOW} * \text{DPS} - 0.00202305111207 * \text{CFLOW} * \text{LEV} - 0.45282771629 + [\text{CX}=\text{F}]$$

The results indicate that there is a significant and positive relationship (impact factor of 0.203) between the ratio of net cash flows resulting from operating activities to first-period net fixed assets as cash flow (CFLOW) measure and investment (INV) on the basis of t-value (10.107) and its probability (0.000) (p-value less than 5% error level).

Also, there is a significant and positive relationship (impact factor of 0.069) between natural logarithm of assets as a measure for company size (size) and investment (INV) as per t-value (5.397) and its probability (.000) (p-value less than 5% error level); It means that considering the obtained results, increase (reduction) of investment is a function of increase (reduction) of company size; this indicate that the bigger the size of a company in terms of its assets, the more its investment rate would be. In other words, investment of larger companies is more comparing to smaller companies.

There is a significant and negative relationship (impact factor of -0.060) between cash dividends to earnings per share ratio as a measure of dividends (DPS) and investment (INV) ratio of a company as per t-value (-3.469) and it probability (.000) (p-value less than 5% error level); it means that considering the obtained results, an increase (reduction) in investment is function of reduction (increase) in dividends ratio.

There is a significant and negative relationship (impact factor of -0.070) between the multiplication product of cash flows and internal financing variables (CFLOW x IE) and investment (INV) as per t-value (-8.417) and its probability (.000) (p-value less than 5% error level).

Also, the results of 2nd research hypothesis test indicate that there is a significant and positive relationship (impact factor of 0.049) between the multiplication product of cash flows and company size variables (CFLOW x Size) and investment (INV) as per t-value 5.661) and its probability (.000) (p-value less than 5% error level) and there is a significant and positive relationship (impact factor of 0.049) between the multiplication product of cash flows and dividends ratio variables (CFLOW x DPS) and investment (INV) as per t-value 2.502) and its probability (0.012) (p-value less than 5% error level).

Thirs Research Hypothesis Testing

In the 3rd hypothesis, the effect of institutional investors control on cash flows resulting from investment fluctuations has been tested with the use of hybrid regression method. On this basis, investment in the role of dependent variable, cash flows, internal financing and institutional investors control in the role of independent variables and growth opportunities, company size, company age, dividends ratio and financial leverage as possible influential factors in the role of control variables have been considered. Before final model fit, suitability test has been conducted for hybrid model against integrated model as well as for hybrid model with fixed effects against with random effects and the results of these tests were presented in Table 7.

Table 7. Results for the test of selection of an appropriate pattern for 3rd research model

Test value	Type	Value	Freedom degree	Probability
F-Limer value (Chaw test)	Cross-section	1.699468	(464.102)	0.0001
Chi-square value (Hausman test)	Cross-section	31.730873	16	0.0108

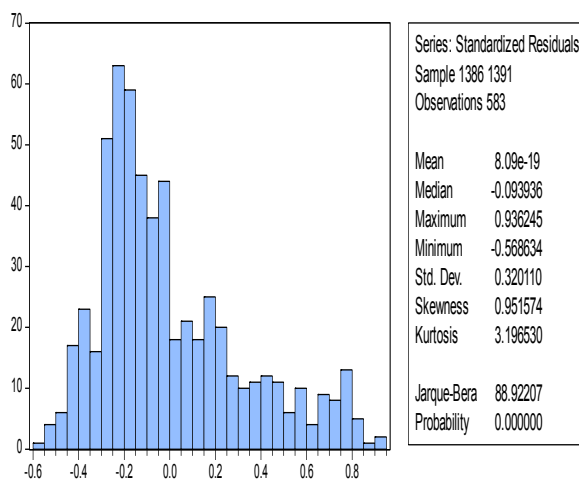
The results indicate that as per F-Limer value (1.699) and its probability (.000) (p-value less than 5% error level), the use of hybrid model is suitable. Also the results indicate that as per chi-square value (31.730) and its probability (0.010) (p-value less than 5% error level) the method of fixed effects is suitable. In the end, with the selection of hybrid multi-variable regression model with fixed effects the 3rd research model has been fitted as per following.

$$INV_{i,t} = \beta_0 + \beta_1 CFLOW_{i,t} + \beta_2 Q_{i,t} + \beta_3 IE_{i,t} + \beta_4 IO_{i,t} + \beta_5 Size_{i,t} + \beta_6 Age_{i,t} + \beta_7 DPS_{i,t} + \beta_8 Lev_{i,t} + \beta_9 IE_{i,t} \times IO_{i,t} + \beta_{10} CFLOW_{i,t} \times IE_{i,t} + \beta_{11} CFLOW_{i,t} \times IO_{i,t} + \beta_{12} CFLOW_{i,t} \times IE_{i,t} \times IO_{i,t} + \beta_{13} CFLOW_{i,t} \times Size_{i,t} + \beta_{14} CFLOW_{i,t} \times Age_{i,t} + \beta_{15} CFLOW_{i,t} \times DPS_{i,t} + \beta_{16} CFLOW_{i,t} \times Lev_{i,t} + \epsilon_i$$

The results obtained from the above model fit were presented in table 8. F-Fisher value (4.468) and its probability (0.000) (p-value less than 5% error level) indicate that the total regression model is significant in terms of existence of linear relationships in the model. Durbin-Watson value of the model (2.198) is in the range of 1.5 to 205 that indicates that there is no autocorrelation between residuals and error components of the model and hence model is suitable. Jarque-Bera value (88.92207) and its probability (.000) (p-value less than 5% error level) indicate that model residuals don't have a normal distribution; which might be due to lack of normality of distribution of the main variables of the study.

Table 8. Results of 3rd research hypothesis test

Dependent variable: investment (INV)				
Descriptive variables	Coefficients	Standard error	t-value	p-value
Intercept	-0.340355	0.284609	-1.195870	0.2324
CFLOW	0.248722	0.048318	5.147599	0.0000
Q	-0.001162	0.000634	-1.834298	0.0670
IE	-0.004051	0.010150	-0.399076	0.6900
IO	0.009508	0.022967	0.413984	0.6790
Size	0.058112	0.019131	3.037623	0.0025
Age	-0.009602	0.001359	-7.064702	0.0000
DPS	-0.052309	0.017222	-3.037328	0.0025
Lev	0.231109	0.070760	3.266116	0.0012
IE×IO	0.008658	0.012150	0.712565	0.4765
CFLOW×IE	-0.211975	0.036692	-5.777156	0.0000
CFLOW×IO	0.015249	0.039854	0.382620	0.7022
CFLOW×IE×IO	-0.007823	0.018919	-0.413486	0.6794
CFLOW×Size	0.019996	0.004036	4.954566	0.0000
CFLOW×Age	0.000131	0.000583	0.225261	0.8219
CFLOW×DPS	0.044281	0.016024	2.763519	0.0059
CFLOW×Lev	-0.027192	0.053580	-0.507492	0.6121
Fisher value	4.468925	Coefficient of determination		0.412912
Fisher p-value	0.000000	Durbin-Watson value		2.198886



$$\begin{aligned}
 \text{INV} = & 0.248722284934 * \text{CFLOW} - \\
 & 0.0011622808662 * \text{O} - 0.0040507064012 * \text{IE} + \\
 & 0.0095081985885 * \text{IO} + 0.0581116425994 * \text{SIZE} - \\
 & 0.00960222177921 * \text{AGE} - 0.0523089361499 * \text{DPS} + \\
 & 0.231109018591 * \text{LEV} + 0.00865779247085 * \text{IE} * \text{IO} - \\
 & 0.211975340399 * \text{CFLOW} * \text{IE} + \\
 & 0.0152490075091 * \text{CFLOW} * \text{IO} - \\
 & 0.0078225873198 * \text{CFLOW} * \text{IE} * \text{IO} + \\
 & 0.0199960293091 * \text{CFLOW} * \text{SIZE} + \\
 & 0.000131325004017 * \text{CFLOW} * \text{AGE} + \\
 & 0.0442813035328 * \text{CFLOW} * \text{DPS} - \\
 & 0.0271916349763 * \text{CFLOW} * \text{LEV} - 0.340355346804 + \\
 & [\text{CX}=\text{F}]
 \end{aligned}$$

The results indicate that there is a significant and positive relationship (impact factor of 0.248) between the ratio of net cash flows resulting from operating activities to First-period net fixed assets as cash flow (CFLOW) measure and investment (INV) on the basis of t-value (5.147) and its probability (0.000) (p-value less than 5% error level).

Also, there is a significant and negative (impact factor of 0.009) between institutional investors ownership as a measure for institutional investors control (IO) and investment (INV) as per t-value (0.413) and its probability (0.679) (p-value more than 5% error level); It means that considering the obtained results, increase (reduction) in investment is a function of increase (reduction) in institutional investors control; however, this effect is not statistically significant. Obtained results indicate there is a significant and positive relationship (impact factor of

-/058) between natural logarithm of assets as a measure of company size (size) and investment (INV) as per t-value (3.037) and its probability (0.002) (p-value less than 5% error level).

Also, there is a significant and negative relationship (impact factor of -0.009) between the number of years of activity of the company as a measure of company age (Age) and investment (INV) as per t-value (-7.064) and its probability (.000) (p-value less than 5% error level); it means that considering the obtained results, increase (reduction) in investment is function of reduction (increase) in the age of the company.

There is a significant and positive relationship (impact factor of 0.231) between debt ratio as a measure of financial leverage (Lev) and investment (INV) as per t-value (3.266) and its probability (.001) (p-value less than 5% error level).

Also, there is a significant and negative relationship (impact factor of -0.211) between the multiplication product of cash flows and internal financing variables (CFLOW x IE) and investment (INV) as per t-value (-5.777) and its probability (.000) (p-value less than 5% error level)

There is no significant and positive relationship (impact factor of 0.015) between the multiplication product of cash flows and institutional investors control (CFLOW x IO) and investment (INV) as per t-value (0.382) and its probability (0.702) (p-value more than 5% error level).

There is no significant and negative relationship (impact factor of -0.007) between the multiplication product of cash flows, institutional investors control and internal financing (CFLOW x IE x IO) and investment (INV) as per t-value (-0.413) and its probability (0.679) (p-value more than 5% error level).

There is no significant relationship between the multiplication product of cash flows and the age of the company (CFLOW x Age) variables as per t-value (0.225) and its probability (0.821) (p-value more than 5% error level); it means that considering the obtained results, age of the company doesn't have any effect on investment sensitivity on cash flow. The results indicate that there is a significant and positive relationship (impact factor of 0.044) between the multiplication product of cash flows and dividends ratio (CFLOW x DPS) and investment (INV) variables as per t-value (2.763) and its probability (0.005) (p-value less than 5% error level).

4. Conclusion

In the present study, the effect of internal financing of companies and institutional investors control have been studied on cash flows resulting from investment fluctuations with the use of evidences from Tehran Stock Exchange. Research dependent variable is cash flows resulting from investment fluctuations of the company that has been measured based on investment regression model to cash flow and growth opportunities. The independent research variables are internal financing and institutional investors' control that respectively have been measured based on internal financing ratio to external financing and share percentage in the hand of banks, insurance companies, holdings, investment companies, pension funds, capital financing companies, investment funds, governmental and non-governmental organizations, institutions and companies. Control variables of this study include company size, company age, dividend ratio and financial leverage. Company size is a measure of the activity volume of company based on its assets. Age of the company is a measure of the number of years of its activity. Dividends ratio is a measure of stock cash dividend payment and financial leverage is a measure of debt ratio of the company.

For performing analyses and hypotheses test, a number of 103 companies listed on Tehran Stock Exchange for a 6-year time period during 2007 - 2012 have been studied and a total number of 618 firm-year observation have been considered for analyses.

Normal condition of data was studied and the results indicated that research variables does not meet this condition that, of course, due to large number of observations and as per Central limit theorem, analyses were performed as per the same data. For making sure of the proper simultaneous placement of all variables in the model, colinearity phenomenon was studied on the basis of correlation test between descriptive variables of the study and the results indicate that there is no significant correlation between the research variables and therefore, entering all research variables in one model simultaneously will not cause any problem. In the end, the method of panel data regression was used and the relevant models fit was performed for 1st, 2nd and 3rd research hypotheses.

Research findings indicate that as much as cash flow increases, companies show a higher level of interest for investment. In other words, investment fluctuations is sensitive to cash flows. Also, an increase in internal financing reduces interest for investment of cash flows among the companies and on the contrary reduced internal financing increases company interest for investment of cash flows. To this end, increased monitor and institutional investors control reduces company's interest for investment of cash flows. However, this effect is

not statistically significant. Also, the reserach findings indicate that increase volume of company's activities (on the basis of assets) increases investment of cash flows and reduces volume of company's activities (on the basis of assets) reduces company's interest for investment in cash flows. Also, increased cash dividends payment increases company's interest for investment of cash flow and reduced cash dividends payment reduces company's interest for investment of cash flows. Age of company and financial leverage also don't have any effect on sensitivity toward investment fluctuations and cash flow.

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Note

Note 1. Insurance companies have been eliminated after the application of 1st, 2nd and 3rd presuppositions.

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