



## The Effect of Internal Control Weakness on Investment Efficiency of Companies Listed in Tehran Stock Exchange

**Rahman Saedi**

Phd Candidate of Accounting, Islamic Azad University, Khorasgan Isfahan Branch, Isfahan, Iran  
saedi.rahman@yahoo.com

**Mohsen Dastgir**

Professor, Faculty of Accounting, Islamic Azad University, Khorasgan Isfahan Branch Isfahan, Iran  
(Corresponding author)  
dastmw@yahoo.com

### ABSTRACT

This study explores the effect of internal control weakness on investment efficiency of companies listed in Tehran Stock Exchange. The statistical population included all companies listed in Tehran Stock Exchange during the time period 2012-2015. Purposive sampling was the sampling method. Given the theoretical principles and the research literature, two hypotheses were proposed which were tested via regression model. Eviews was employed to perform final analyses. The results revealed that there is a significant relationship between internal control weakness and investment efficiency. In other words, in the event that there is internal control weakness or the number of internal control weaknesses is increased, lack of investment efficiency (over-investment and under-investment) will increase.

### Keywords:

Internal Control Weakness, Investment Efficiency, Number of Internal Control Weaknesses, Financial Reporting Quality



## 1. Introduction

Appropriate design and deployment of internal control systems in economic units is one of the most important factors for realization of effectiveness and efficiency of operations, enhancement of responsiveness and financial transparency, observing the rules, and preventing fraud and financial misuses. Therefore, professional and legislative institutions in different countries have prepared frameworks, statements and guidelines with regard to how to deploy, evaluate and report internal controls by management and internal control audit by auditors of the economic units (Ghanbarian, 2012). On the other hand, the importance of investment for economic and social growth and development is to the extent that it is mentioned as a strong leverage to achieve development. But it should be noted that inattention to this issue can be led to economic decline. Hence, it must be stated that economic growth and increased public welfare in long term is not possible without paying attention to investment and the existing important factors in the investment environment which are effective on it (Abzari et al., 2008).

Thanks to separation of ownership from control and the agency problem in the modern business world, institutional governance system has become essential through which the management is controlled in order to reduce agency costs and align shareholders' benefits with those of the investors. One of the most important control mechanisms which is led to effective direction of firms is strategies that are referred to as internal controls. Internal control is a process that is executed by the managing council, management and other employees in an institution and its purpose is to gain reasonable confidence in achieving the purposes of effusiveness and efficiency of operations, trustworthiness in financial reporting and binding to the current rules. The control system protects achieving the firm purposes and interests of all stakeholders. On the other hand, integrated financial reporting and internal control are presented on behalf of managers and independent auditors that are addressed to foreign shareholders. These integrated reports are useful for investors, because effective internal controls on financial reporting have a vital role in prevention and detection of financial distortions including fraud. Thus, it is expected that internal control weakness will decrease the quality of financial information and as a result provides opportunism

conditions for managers and firms with internal control weakness increase investment inefficiency.

## 2. Literature Review

Given behavioral hazards, conflict of interests among shareholders and managers, and lack of supervision over managers, it is possible that managers' attempt is led to optimization of personal interests. This is occurred via investments that may not be suitable for shareholders. Managers who have better information may do extra investment which will reject some profitable projects and thus, inadequate investment due to the existing limitation (Biddel et al., 2009). Over-investment and under-investment illustrate inefficient behaviors of investment that are led to losses and loss of social capital. Over-investment and under-investment are dependent on ineffective investment behaviors which are led to great losses for investors and loss of social capital (Vaez & Rashidi Baghi, 2014).

One of the most important factors of firms' lawfulness is disclosure of internal control information of firms. According to the legitimacy theory, firms always try to approve their presence in the society via performing legal activities (Naser et al., 2006). Various statements have been proposed about internal controls across time but in modern discussions, the concept of internal controls is applied to the process of designing, execution and protection by authorities in order to provide reasonable confidence about the credit and quality of financial reporting, efficiency and usefulness of operations and suitable execution of rules and regulations (Sorin et al., 2014). A report on important weaknesses of internal control can give information on weaknesses and performance of management to users but there is no such report in our country at present. After approving Article 18 of Securities Market Act of the Islamic Republic of Iran, the management has to prepare a report about internal control and also design and deploy the internal control report (Hajiha & Hossein Nezhad, 2015). Considering the internal control instructions for publishers listed in Tehran Stock Exchange and Iran Fara Bourse Co. which protects the investors' rights, prevents violations, and organizes and develops a transparent and fair securities market according to paragraphs 8, 11 and 18 of Article 7 of the Securities Market Act of the Islamic Republic of Iran (approved in December 2005 by the Islamic Consultative Assembly) and with

the purpose of implementing Articles 25 and 35 of instruction of accepting securities in Tehran Stock Exchange (amendment approved in July 6, 2011), this instruction was approved by the board of directors of the Securities and Exchange Organization with 18 articles and 2 clauses in May 6, 2012. In Article 17 of this instruction, the independent auditor binds to express his/her views about deployment and utilization of suitable and effective internal control systems by the firm to general meeting of shareholders given the internal control framework that is mentioned in chapter two of this instruction. Moreover, if there are important weaknesses in internal control system dominant over financial reporting of the firm but have not been disclosed in the "internal controls report" of the managing council or its disclosure is incomplete, this issue must be corrected in the auditor's report and essential actions should be taken with regard to its effects on achievement of the firm's purposes.

It is believed that high quality accounting information is effective on improvement of capital allocation and increased investment efficiency (Bushmam & Smith, 2001; Healy & Palepu, 2001). It is expected that the weaknesses in internal control will be effective on financial reporting quality, evaluation of future cash flow of investors, demand for risk premium and thus investment of the firm (Sun, 2016).

Accounting information can play an important role in the governance system of firms via investors' awareness and establishment of more efficient contracts (La Porta et al., 1998). It can influence investment productivity and create value for the firm through enhancement of efficient control mechanisms which encourage the managers to use the resources properly in projects and decrease managers' opportunistic behaviors (Bushmam & Smith, 2001). Since investors and managers rely on accounting information to prosecute and control management investment decisions, such supervisory effect via internal control weakness that facilitates manipulation of accounting figures and decreases accuracy and quality of financial information can be discredited (Doyle et al., 2007; Ashbaugh-Skaife et al, 2008). Financial reporting of internal control is a reflection of total quality of the firm's information system including accounting system and external reporting. Inefficient financial reporting of internal control influences the accuracy of management internal report and postpones access to internal information. Thus, internal control

weakness can be led to inefficient allocation of cash resources of a firm by managers (Feng et al., 2009).

Internal control can facilitate operating efficiency via increased reliability of the accounting system and as a result enhances the firm's value (Gao & Jia, 2016). On the other hand, weak supervision over managers can dissipate cash flow of the firm and investment in inefficient projects. Under these circumstances, internal control mechanisms will have high values if shareholders are supported against inaccurate use of cash resources (Cushing, 1974). Weakness in internal control over financial reporting decreases accuracy of financial information and consequently provides opportunism conditions and improper representation of cash flow for managers (Dhaliwal et al., 2011). Firms which have internal control weakness increase probability of over-investments or under-investments (inefficiency of investment) (Cheng et al., 2013).

Given the proposed principles, this study aimed to explore the effect of internal control weakness on investment efficiency of companies listed in Tehran Stock Exchange. So this question is proposed: Is there a significant relationship between internal control weakness and investment efficiency of companies listed in Tehran Stock Exchange?

## **Research background**

Sun (2016) examined the relationship between investment level of a firm and internal control weakness disclosure in a survey entitled "internal control weakness disclosure and firm investment". The findings showed that firms which receive rejected comment on internal control comparing to those that receive an acceptable comment observe a considerable reduction of their investments. Investment level of these firms is decreased when internal control weakness is discovered and investment of the firm will be increased after the weaknesses are eliminated. Also the results revealed that decreased investment of firms can be due to relative reduction of elements of investment risk too. Totally, the results showed that disclosure and evaluation of internal control have a significant effect on operating decisions of a firm.

Xu and Zhou (2016) explored the relationship between internal control and over-investment with credit risk of Chinese firms in a study entitled "studying the relationship between internal control and over-investment with corporate credit risk". This study was conducted based on the information of the

Shanghai Stock Exchange and Shenzhen Stock Exchange in China in time period 2009-2013. A combination of theoretical analysis by showing proof test and linear regression model were used. The results showed that internal control and over-investment are effective on corporate credit risk.

In a study entitled "the effect of internal control weakness on investment efficiency", Lee et al. (2016) explored whether or not important weakness of accounting internal control has a negative relationship with investment efficiency in Korea during the time period 2006-2010. The results demonstrated that firms with accounting internal control weakness have tendency towards over-investment and under-investment. Likewise, the results showed that number of internal control weaknesses have a negative relationship with investment efficiency. Besides, exploring three types of beliefs (overall company level weakness, account-specific weakness, and disclaimer review opinion due to scope limitation) shows a different effect on investment efficiency. Exploring different opinions reveals that most severe issues in accounting internal controls determine over-investment and under-investment. According to research findings, accounting internal control weakness provides a weak supervision over the managers and cannot prevent them from adopting inefficient investment decisions.

In a study entitled "effective internal controls in investment companies from the perspective of independent auditors", Aghai et al. (2015) explored effective internal controls in investment companies from the perspective of independent auditors. A questionnaire containing effective internal controls in investment companies was designed by means of historical study, interview and consulting with managers of the investment companies as well as independent auditors who are responsible for the audit of investment companies. The questionnaires were distributed among the independent auditors. The statistical population included independent auditors who were members of the Iranian Association of Certified Public Accountants and 100 independent auditors were selected as the research sample. For data analysis, mean statistics and binominal test using SPSS software were employed. Through the results, a checklist (approving the transactions bylaw by the managing council, separation of tasks, periodic exploration of transactions and its adaptation with the

books via managing director) of effective internal controls in investment companies was presented.

Hajiha and Hossein Nejad (2015) investigated the factors influencing the importance of internal control weaknesses in a survey. The research sample was consisted of 97 companies listed in Tehran Stock Exchange. In order to respond to the hypothesis, the effect of eight explanatory variables on the dependent variable (importance of internal control weakness) was tested. Regression analyses showed that there is a positive and significant relationship between logarithm of stock price in the number of stock, ratio of inventory to total sum of assets and loss with importance of internal control weaknesses. Besides, there is not any relationship between rate of exchange, revenue growth, market value to book market, Altman Z-score and total sum of debt on assets and importance of internal control weaknesses. As a result, important weaknesses of internal control in the accounting report are affected by some financial criteria.

Vaez and Rashidi Baghi (2014) examined the effect of ownership structure on the relationship between accounting conservatism and investment efficiency given the investment level with regard to net value of internal capital in a study entitled "the effect of ownership structure on the relationship between accounting conservatism and investment efficiency". To this end, the data of companies listed in Tehran Stock Exchange during the time period 2005-2011 was extracted and the hypotheses were tested via regression model of pooling data. The results revealed that there is a significant relationship between accounting conservatism and investment efficiency in both states of higher investment with regard to net value of internal capital and lower investment with regard to net value of internal capital. But the relationship between accounting conservatism and investment efficiency was not confirmed given the levels of institutional ownership and managerial ownership.

## Research hypotheses

**Hypothesis 1:** There is a significant relationship between internal control weakness of a firm and investment efficiency.

**Hypothesis 2:** There is a significant relationship between number of internal control weaknesses of a firm and investment efficiency

### 3. Methodology

#### Dependent variable

There is one dependent variable, i.e. investment efficiency in this study that is calculated as below:

Richardson model (2006) will be used to calculate investment efficiency of firms. This is as follows:

$$Inv_{i,t} = \beta_0 + \beta_1 Grow_{i,t-1} + \sum \Phi_j Control_{j,t,t-1} + v_{i,t}$$

Where

$Inv_{i,t}$ : change in net fixed assets, long-term investments and intangible assets divided by total mean of assets of firm  $i$  in year  $t$

$Grow_{i,t-1}$ : growth rate of annual sales revenue of firm  $i$  in year  $t-1$

$Control_{j,t,t-1}$ : they are control variables that are as follows:

$Lev_{i,t-1}$ : financial leverage of firm  $i$  in year  $t-1$  (ratio of total debts to total assets)

$Age_{i,t-1}$ : age of firm  $i$  in year  $t-1$

$Cash_{i,t-1}$ : cash ratio (cash plus short-term investments divided by mean of assets in year  $t-1$ )

$Size_{i,t-1}$ : firm size (natural logarithm of total assets in year  $t-1$ )

$Ret_{i,t-1}$ : annular stock return of firm  $i$  in year  $t-1$

According to Richardson's study (2006), sale is used as a variable to estimate expected investment opportunities. Based on this approach, investment has been a function of growth opportunities as well as the effective control variables. The argument of this model is that degree of sales of a firm shows expectation of the firm's investment in an efficient market. This model is calculated by replacing the calculated figure for total investment in the residue regression equation. Investment efficiency conceptually means accepting the plans with the positive net present value and investment inefficiency means passing these investment opportunities (under-investment) or choosing plans with the negative net present value (over-investment). Positive residue (positive deviation from expected investment) shows choosing projects with negative net present value or over-investment and negative residues (negative deviation from expected investment) show passing from investment opportunities with positive net present value or indeed under-investment (Li & Wang, 2010; Das & Pandit, 2010). According to Li and Wang's study (2010),

absolute value of model residues is used to measure investment efficiency. Value of this deviation shows a reverse index of investment efficiency (lack of investment efficiency).

#### Independent variables

**Internal control weakness:** it is a dummy variable. According to Li et al.'s study (2016) if a firm has internal control weakness, it receives code 1 and otherwise zero.

**Number of internal control weaknesses:** According to Li et al.'s study (2016), it is equal to the number of announced internal control weaknesses in the independent audit report.

#### Control variables

**Free cash flow (FCF):** it is equal to ratio of free cash flow (net profit plus depreciation expense minus changes of tangible fixed assets minus net changes of capital in flow) to total assets.

**Financial leverage (LEV):** ratio of total debts to total assets

**Firm size (SIZE):** natural logarithm of corporate total assets

**Return on assets (ROA):** ratio of net profit to total assets at the beginning of the period

#### Statistical population and sample

The statistical population included all companies listed in Tehran Stock Exchange. Hence, spatial domain of the study was companies listed in Tehran Stock Exchange. Also, temporal domain of the study was the time period 2012-2015. Systematic elimination method was used for sampling and its conditions are defined as below:

- 1) For comparability of information, end of the fiscal year of companies should be March 20.
- 2) For homogeneity of information, the companies should not be selected among banks, financial and credit institutions, insurance and leasing corporations.
- 3) The information related to the selected variables should be accessible.

The number of members of this study was equal to 104 companies by applying the above conditions.

This study is correlational from methodological aspect because it explores the current status from one hand and discovers or determines the relationship among various variables via regression analysis from the other hand. It is empirical from objective aspect. Multi-variable regression models and pooling data were used for data analysis. Likewise, Excel and Eviews software were employed. F-limer test and Hausman test were used to determine the type of pooling data. F-fisher test was used to test total significance of the regression model and t-test was applied to test the independent variables.

**Model for testing the research hypotheses**

The below model is used for data analysis and testing of hypotheses. If the regression relation and  $\beta 1$  coefficient are significant for variables of internal control weakness and number of internal control weaknesses, hypotheses one and two will be confirmed:

$$XINV_t = \alpha_0 + \beta_1 (IC_t \text{ or } NIC_t) + \beta_2 FCF_t + \beta_3 LEV_t + \beta_4 SIZE_t + \beta_5 ROA_t + \epsilon_t$$

(model 1)

Where:

XINV<sub>t</sub>: investment efficiency of firm *i* in year *t*

IC<sub>t</sub>: internal control weakness of firm *i* in year *t*

NIC<sub>t</sub>: number of internal control weaknesses of firm *i* in year *t*

FCF<sub>t</sub>: free cash flow of firm *i* in year *t*

LEV<sub>t</sub>: financial leverage of firm *i* in year *t*

SIZE<sub>t</sub>: size of firm *i* in year *t*

ROA<sub>t</sub>: return on assets of firm *i* in year *t*

**4. Results**

**Descriptive statistics**

Descriptive statistics is the regulation and classification of data, diagrammatic display, and calculation of values such as mode, mean, median, etc. that show characteristics of the population under study. In descriptive statistics, the obtained information from one group describes the same group and they are not generalized to similar classes. Generally, tables and diagram method is used to summarize data in descriptive statistics.

First, descriptive statistics of the data under study are calculated. Table 1 shows descriptive statistics of variables in models that contain the information related to mean, median, minimum and maximum, skewness, kurtosis, etc.

**Table 1: Descriptive statistics of the models' variables**

XINV	SIZE	ROA	LEV	FCF	RET	AGE	Variables Paramete
0.01	13.82	0.14	0.70	0.14	47.52	40.92	mean
0.01	13.65	0.08	0.65	0.07	25.72	43.00	median
2.46	18.47	14.11	5.23	12.16	912.00	63.00	max
2.72-	10.82	12.32-	0.01	-8.08	-110.63	17.00	min
.053	1.39	0.84	0.41	0.93	92.29	10.31	S.D
0.23-	0.73	4.06	5.54	4.87	3.37	-0.36	skewness
6.77	3.38	196.71	53.81	79.12	22.79	2.24	kurtosis

The most principal index is mean that shows the balance point and distribution centroid and is a good index for showing data centrality. For instance, mean value for free cash flows is equal to 0.14 that indicates the data is concentrated around this point. Median is another central index which shows the status of a population. As it is observed, median of this variable is equal to 0.07 that shows half of data is lower than this value and another half is more than it. Generally speaking, dispersion parameters are the criteria which

determine degree of dispersion from each other or with regard to the mean. One of the most important dispersion parameters is standard deviation. Among the variables, financial leverage has the lowest dispersion and firm age has the highest dispersion. This indicates that the two variables have the lowest and the highest changes respectively. Degree of asymmetry of the frequency curve is referred to as skewness. If coefficient of skewness is equal to zero, the population is totally symmetric and if it is positive,

there is skewness to the right and if it is negative, there is skewness to the left. Financial leverage has the highest asymmetry and firm age has the lowest asymmetry with regard to normal distribution. Degree of kurtosis in the frequency curve with regard to the standard normal curve is known as kurtosis. Return on assets has the highest kurtosis and firm age has the lowest kurtosis with regard to the normal curve. When value of kurtosis is equal to zero, data distribution is natural, i.e. the data is close to each other and the variance is low.

**Data analysis**

**Testing hypothesis 1**

The below multi-variable model is used to test hypothesis 1:

$$XINV_t = \alpha_0 + \beta_1 IC_t + \beta_2 FCF_t + \beta_3 LEV_t + \beta_4 SIZE_t + \beta_5 ROA_t + \epsilon_t \quad (\text{model 2})$$

Type of method (pooling data or panel data) and the classical regression assumptions should be explored before examining the model's goodness.

**F-limer test and Hausman test**

Considering that pooling data (year-firm) is used in this study which is in two forms of pooling data and panel data, F-limer test is used to choose one of the two methods for model estimation. If p-value of F statistic is greater than 0.05, pooling data method should be used; otherwise panel data method is employed. Summary of the results of F-limer test is presented in Table 2. As it is observed, p-value is equal to 0.11 and greater than 0.05. Consequently, pooling data method is accepted. For this reason, Hausman test is not conducted.

**Table 2: F-limer test and Hausman test**

F-limer test			model
result	Probability	F-limer	
pooling data	0.11	1.2	2

**Presuppositions of the regression model**

The model presuppositions are examined before the model's goodness.

Durbin-Watson test was used to determine existence or nonexistence of autocorrelation. If this value is equal to 2, there is no autocorrelation.

Given that Durbin-Watson test statistic is equal to 2.50, the above model does not have autocorrelation.

**Table 3: Durbin-Watson test statistic**

Durbin-Watson Statistics	Accepted range
2.50	2.5 <DW< 1.5

**Heteroscedasticity test**

One of the major assumptions of a suitable regression model is the homogeneity of variance assumption. To examine this assumption, White test is utilized. The null hypothesis is testing homogeneity of variance. If p-value is greater than 0.05, H0 is accepted. Given the below table and the obtained p-value for White test that is equal to 0.24 and greater than the significance level 0.05 (p-value ≥ 0.05), H0 (homogeneity of variance) is accepted.

**Table 4: Homogeneity of variance of the model**

Statistic value	p-value
F-statistic(0.88)	0.24

Results of model's goodness for testing the first hypothesis are displayed in Table 5

**Table 5: Results of data analysis for testing the first hypothesis**

P-value	T-statistic	Std. Error	Coefficient	Variables
0.000	-10.732	0.176	-1.890	C
0.000	4.037	0.032	0.129	IC
0.009	-2.622	0.009	-0.023	FCF
0.000	5.644	0.022	0.126	LEV
0.000	9.596	0.013	0.127	SIZE
0.000	-4.526	0.006	-0.026	ROA
5.8	F-statistic	0.76	R-squared	
0.00	Prob(F-statistic)	0.63	Adjusted R-squared	

Given the obtained p-value for F statistic that is equal to zero (p-value ≤ 0.05), H0 is rejected and it shows all regression coefficients are not equal to zero simultaneously. Thus, there is a significant relationship among all independent variables and the dependent variable simultaneously.

Given Table 5 and p-value, t-statistic for internal control weakness that is equal to zero and less than error level 0.05 (p-value ≤ 0.05), H0 (there is no relationship between internal control weakness and

investment efficiency) is rejected. As a result, there is a significant relationship between internal control weakness and investment efficiency. Therefore, hypothesis one is accepted.

Similarly, considering the positive coefficient of internal control weakness, it is concluded that there is a positive relationship between internal control weakness and investment efficiency.

Value of adjusted  $R^2$  is equal to 0.63 that shows 63 percent of changes of the dependent variable are explained by independent variables. In other words, 63% changes of the dependent variable are related to independent variables.

### Testing hypothesis 2

The below multi-variable model is used to test hypothesis 2:

$$XINV_t = \alpha_0 + \beta_1 NIC_t + \beta_2 FCF_t + \beta_3 LEV_t + \beta_4 SIZE_t + \beta_5 ROA_t + \epsilon_t \quad (\text{model 3})$$

Type of method (pooling data or panel data) and the classical regression assumptions should be explored before examining the model's goodness.

### F-limer test and Hausman test

The summary of the results of F-limer test is presented in Table 6. As it is observed, p-value is equal to 0.11 and greater than 0.05. Consequently, pooling data method is accepted. For this reason, Hausman test is not conducted.

**Table 6: F-limer test and Hausman test**

F-limer test			model
result	Probability	F-limer	3
pooling data	0.11	1.2	

### Presuppositions of the regression model

The model presuppositions are examined before the model's goodness.

Given the Durbin-Watson test statistic that is equal to 2.50, the above model does not have autocorrelation.

**Table 7: Durbin-Watson test statistic**

Durbin-Watson Statistics	Accepted range
2.50	1.5 <DW< 2.5

### Heteroscedasticity test

Given the below table and the obtained p-value for White test that is equal to 0.23 and greater than the significance level 0.05 ( $p\text{-value} \geq 0.05$ ),  $H_0$  (homogeneity of variance) is accepted.

**Table 8: Homogeneity of variance of the model**

Statistic value	p-value
F-statistic(0.90)	0.23

Results of model's goodness for testing the second hypothesis are displayed in Table 9.

**Table 9: Results of data analysis for testing the second hypothesis**

P-value	T-statistic	Std. Error	Coefficient	Variables
0.000	-8.464	0.211	-1.787	C
0.000	3.806	0.006	0.024	NIC
0.000	-4.219	0.006	-0.024	FCF
0.000	4.714	0.024	0.111	LEV
0.000	7.718	0.016	0.121	SIZE
0.006	-2.804	0.009	-0.026	ROA
5.4	F-statistic	0.74	R-squared	
0.00	Prob(F-statistic)	0.61	Adjusted R-squared	

Given the obtained p-value for F statistic that is equal to zero ( $p\text{-value} \leq 0.05$ ),  $H_0$  is rejected and it shows all regression coefficients are not equal to zero simultaneously. Thus, there is a significant relationship among all independent variables and the dependent variable simultaneously.

Given Table 9 and p-value, t-statistic for number of internal control weaknesses that is equal to zero and less than error level 0.05 ( $p\text{-value} \leq 0.05$ ),  $H_0$  (there is no relationship between number of internal control weaknesses and investment efficiency) is rejected. As a result, there is a significant relationship between number of internal control weaknesses and investment efficiency. Therefore, hypothesis two is accepted.

Similarly, considering the positive coefficient of number of internal control weaknesses, it is concluded that there is a positive relationship between number of internal control weaknesses and investment efficiency.

Value of adjusted  $R^2$  is equal to 0.61 that shows 61 percent of changes of the dependent variable are explained by independent variables. In other words, 61% changes of the dependent variable are related to independent variables.

## 5. Discussion and Conclusions

This study explored the effect of internal control weakness on investment efficiency in companies listed in Tehran Stock Exchange for 104 manufacturing companies listed in Tehran Stock Exchange for a four-year period. Accounting information can influence investment efficiency and create value for the firm through enhancement of efficient control mechanisms which encourage the managers to use the resources properly in projects and decrease managers' opportunistic behaviors (Bushmam & Smith, 2001). Financial reporting of internal control is a reflection of total quality of corporate information system including accounting system and external reporting. Inefficient financial reporting of internal control influences the accuracy of management internal report and postpones access to internal information. Thus, internal control weakness can be led to inefficient allocation of corporate cash resources by managers (Feng et al., 2009). The obtained results of this study that are consistent with theoretical principles show that there is a significant relationship between internal control weakness and investment efficiency. In other words, if there is internal control weakness or increased number of internal control weaknesses, investment inefficiency (over-investment or under-investment) is increased. The results are consistent with those in studies done by Sun (2016), Xu and Zhou (2016), Li et al. (2016) and Cheng et al. (2012). Therefore, it is suggested to the beneficiary institutions to oblige the firms to eliminate their important weaknesses in internal control. Also, it is suggested to investors to pay special attention to this subject in their decision makings. The results of this study can be considered by financial managers in adopting reporting approaches. Likewise, they will be effective on decisions of analysts and investors. It is suggested to the Iranian Association of Certified Public Accountants and the Stock Exchange Organization to have more supervision over the quality of internal controls of firms. It seems that accuracy and exertion of extra controls on firms which have internal control weakness is important. Therefore, authorities in the capital market should improve the quality of internal controls via enactment of stricter rules. For future studies, it is suggested to repeat the current study in different industries of the stock exchange separately so that various characteristics of industries and legal requirements governing each special type of industry are considered and more accurate results are

obtained. Similarly, as increased investment efficiency is an effective factor on increased wealth of the firm and shareholders, the effect of other mechanisms like role of the auditor, employees' skill level, managers and auditors' tenure, and supervision of foreign investors over investment efficiency can be explored in future studies.

The limitations of this study which should be considered in interpretation and generalizability of the results are mentioned below.

- 1) Financial statements which had been prepared based on historical cost price were used to calculate the research variables. If the information of financial statements is justified for inflation, the research results may be different from the current ones.
- 2) Given that the statistical population was limited to the manufacturing companies listed in Tehran Stock Exchange and their fiscal year was March 20, generalization of the results to other companies should be done cautiously.
- 3) The results of this study were obtained via data of companies listed in Tehran Stock Exchange. Thus, generalization of the results to non-stock corporations should be done cautiously.
- 4) The information related to financial statements of some companies listed in Tehran Stock Exchange was incomplete because their existing files were corrupted. Hence, they were omitted.

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