

## **The Study Impact of Financial Reporting Quality and Maturity Debt on Investment Efficiency in listed Companies in Tehran Stock Exchange**

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### **ABSTRACT**

The present study is to investigate this issue how debt maturities the impact of the quality of financial reporting, to improve investment efficiency adjusted, this means that the impact of the quality of financial reporting on the performance of investments with maturities of debt increases or will be reduced. Both of these effects can be expected: On the one hand, reducing the information asymmetry and more reliable accounting numbers, due to higher financial reporting quality, can better monitor (with respect to short-term debt) was as a result, the impact of the quality of financial reporting on the performance of the investment had to those companies with higher financial reporting quality and maturity of the lower, more. On the other hand, companies with higher financial reporting quality, Lenders have less need for behavior management in connection with shorter maturities enjoy, It is therefore expected that the importance of the quality of financial reporting in reducing information asymmetry with respect to the longer maturities increased and with shorter maturities will be reduced. The research, using financial information listed companies in Tehran Stock Exchange during the period of 2009-2013 years was carried out and 119 companies were selected by systematic elimination. This study is aimed at applications and in nature, descriptive survey and the method of research is the correlation and causal. The analysis panel and squares regression was used to test research hypotheses. The results show that, the quality of financial reporting through the reduction of more (or less) investment, can improve the efficiency of investment. Similarly, current liabilities can improve investment efficiency, and to reduce Investment problems too and insufficient investment, as well as the quality of financial reporting and the maturity of debt, mechanisms with a degree of substitution are raising investment efficiency. In this connection, it is subsequently concluded that the quality of financial reporting and debt maturities could be as an alternative mechanism, to improve investment efficiency into account.

**KEYWORDS:** Investment efficiency, the more investment, Low investment, financial reporting quality, Current debt.

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### **INTRODUCTION**

Valuable role in economic development and investment event of economic experts, financial reports available capital markets is a source of information is expected to play an effective role in the development of investment and increase the efficiency of the play (Haidari Kord Zangane and Alipoor, 2007).

In this context, professors, researchers and professionals in accounting seeks to enhance the quality of financial reporting as a means to fulfill the responsibility to meet the needs of their community, there are many arguments indicate that firms the ability to reduce information asymmetry through the quality of their financial reporting. Research line (Biddle and Hilary, 2006; McNichols and Stubben, 2008; Biddle et al. 2009; Chen et al. 2011) shows that reduce adverse selection and moral hazard, and The ability of managers to better identify investment opportunities and the higher the quality of financial reporting will increase the efficiency of investment .Previous research suggests these predictions are that Greater flexibility and shorter maturities are useful in improving inefficient investment. However, little evidence to suggest that, particularly in relation to investments or too extreme there. Based on these characteristics, the main purpose of this study, the combination of these two mechanisms together and analyze the impact of the quality of financial reporting and maturities of debt on investment efficiency in the context of national rules is, while short-term debt is considered as the main source of external financing. Accordingly, the hypothesis of this study is to investigate this issue how debt maturities impact on the quality of financial reporting in connection with the investment efficiency is affected.

The role of debt maturities on investment efficiency, this is the first study that experimentally to study its impact on both the extreme investment (more investment) and low investment than the (low investment) has moved.

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Study in cooperation with a growing set of issues raised in this area and can provide empirical evidence on the quality of financial reporting and Debt maturities in connection with the promotion of investment efficiency is the law of the country, the maturity of the debt as an important tool to control the behavior of management considered.

This finding indicates that in this context, the main concern creditors excessive investment (more investment) is, because through this kind of investment managers have the ability to expropriate creditors and minority shareholders, and that it can be both inefficient, higher financial reporting quality and lower maturities reduced. According to the investment under the (low investment), the results underscore the fact that shorter maturities positive impact on reducing the inefficiencies may behave better relationships with internal decisions of companies (Myers, 1977) compared to the control by the creditors. This study is the first study that comes to analyze the effects of interaction between financial reporting quality and maturity of the debt on the promotion of investment efficiency and so the findings suggest that both of these mechanisms can reduce the role of alternative investments are extreme. However, unlike previous studies in the United States and emerging markets (Biddle *et al.*, 2009; Chen *et al.*, 2011) found that the quality of financial reporting, the ability to solve problems in Spain will have less investment, Short-term debt as the main mechanism used to control the investment is less than the quality of financial reporting can be considered only when linked to short-term debt level is low (maturities above).

### **The main objective of the study**

Improve investment efficiency and more investment problems and low investment due to the maturity date of the debt on the Tehran Stock Exchange listed companies

### **Background research**

Chen *et al.* (2011) in a study to examine the relationship between financial reporting quality and investment performance of private companies in developing markets began. Financial data for the period 2002 to 2005 the 79 countries studied. The results show that the quality of financial reporting, to positively affect the investment efficiency. In addition, finance companies by banks, enhance the role of accounting information in investment decisions and reduces the incentive to minimize profits for tax purposes.

Biddle, Hillary and Verdi (2008) also found that the quality of reporting in companies that have business in the area tend to invest more (less investment) investment are negative (positive) is. In other words, the higher the quality of reporting will prevent more (or less) investment. Biddle *et al.* (2009) examined the relationship between the quality of financial reporting and the efficiency of investment in a sample of 34,791 companies paid for the fiscal period 1993-2005. Past research shows that improve the quality of financial reporting, improve investment efficiency and reduce over-investment and low investment. Their findings showed that the correlation negative (or positive) between the quality of financial reporting and investment firms is further. Operating environment they tend to invest less than or greater than the investment. Also, companies with high-quality financial reporting, Deviations lower than expected investment and low sensitivity to macroeconomic conditions. These results suggest that the mechanism of the financial reporting quality and investment efficiency can friction between the two to reduce as a result, leading to a decrease in adverse selection and moral hazard. Verdi (2006), to check the quality of financial reporting and investment performance that higher quality financial reporting with more investment and low investment is negative relationship. In addition, he indicated that the relationship between financial reporting quality and low investment the companies that face financing constraints and as well as the relationship between the quality of reporting and more investment in companies that have significant cash balances are stronger. He said that the relationship between financial reporting quality and investment efficiency for companies that have weaker data environment, is stronger,

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Khodaii Welle Zaqrd and Yahyaei (2010) the relationship between the quality of financial reporting in the research and investment efficiency to evaluate the relationship between the two variables studied in the Tehran Stock Exchange in research, as the relationship between financial reporting quality and investment efficiency to evaluate the relationship between these two variables in the Tehran Stock Exchange began. For this, 210 companies listed in Tehran Stock Exchange between the years 2004-2008 were examined. The results show that between the quality of financial reporting and investment lower than a negative relationship exists. Also, between the quality of financial reporting and investment of more than negative correlation, but not significant,

Modares and Hesarzade (2008) in a study titled, relationship associated financial reporting quality and investment efficiency by examining the 120 companies listed in Tehran Stock Exchange in theyears2000 to 2006 showed that in addition to the quality of financial reporting with investment efficiency relationship significant and positive, the quality of financial reporting is to improve investment efficiency. Also, this study

showed that the model used for investment efficiency between of more (or less) of investment and the quality of financial reporting, there is a negative relationship.

## **Theoretical Foundations of Research**

### **Definition of terms**

Terminology, used in this study is defined as follows.

**-The quality of financial reporting:** The quality of financial reporting means, power financial statements the data transfer company operation and more specifically, projected cash flows expected to investors (Biddle et al., 2009). Quality financial reporting can efficiency investment by reducing the information asymmetry between the company and the shareholders improved and thereby reduce the cost of capital and cost of shareholders to monitor managers to improve the selection of investment projects,

**-Current debt:** Corporate debt with maturities of less than one year, debts are certain that it is the amount and maturity. To calculate each company's ratio current debt short term debt, the total debt at the end of the period divided (Kvtlyas and John, 2014). Select debt policy or choosing the capital structure, the company is considered the most important decisions that affect the value of the company. The capital structure of a company, it is a combination of debt and equity (Abvr, 2005).

**-Investment efficiency:** Investment efficiency, symmetrical deviation size of the investment is expected, because the deviation is smaller in size, more efficient investments can be considered. Conceptually, investment efficiency means doing all projects with positive net present value (Modares and Hsarzadh, 2008).

The concept of investment efficiency can be achieved when companies in all projects with positive net present value investing. Of course, this scenario will only work if the whole market and none of the problems of market imperfections such as choosing the wrong and there is no agency costs (Verdi, 2006: 1) and (Biddle et al., 2009: 113)

**- Investment expected:** The amount of investment, the growth opportunities, explained (Modares and Hsarzadh, 2008).

**- More investment:** If next year's investment is higher than sales growth, investment too has been done (Biddle et al., 2009).

**- Low investment:** If investment next year, less than sales growth, the investment is less than the (Biddle et al., 2009).

### **Hypotheses**

The hypothesis of the study is designed as follows:

First hypothesis: Current debt on investment efficiency has a significant impact.

- The first sub-hypothesis: Using more than current debt reduces the problem of more - investment.
- The second sub-hypothesis: Using more than current debt reduces the problem of low - investment.

The second hypothesis: The quality of financial reporting on the efficiency of investment due to the current debt level has a significant impact.

- The first sub-hypothesis: The impact the quality of financial reporting on the investment efficiency at less current debt, is stronger (higher maturity).
- The second sub-hypothesis: The impact of the quality of financial reporting on the investment efficiency at most, the current debt, is stronger (maturity less).

### **Research territory**

The research should be defined specific domain to researchers at all stages of research surrounded enough the work island be able to outcomes of cases, to extend community.

The realm of matter, time and space is as follows:

**Territory subject:** In terms of subject domain, to find the impact of financial reporting quality and maturity debt on investments efficiency in companies listed on the Stock Exchange in Tehran.

**Territory when:** The study period is from 2009 to 2013.

**Territory place:** The research in the area, the company is listed in the Tehran Stock Exchange.

### **Data analysis methods and tools**

In this study, calculations using the software Eviews, SPSS has been done. To determine the distribution of variables, Jarko - Bera test is used.

Regression model for each of the periods is estimated test separately. In the second stage, In order to provide a model that includes the variables affecting the stock than the annual output Regression testing phase leading (STEPLS -Forward) a significant level of 95 % in each of the periods is estimated .In the third stage, using the combined data to estimate the regression coefficient is estimated at five years.

For serial correlation test in the error terms of Durbin Watson test is used. For the use of hybrid or fusion, Lymr test used so that, if the test is significantly less than 5 %, the preferred method of compilation but if the significance level of the test, more than 5 %, the combined approach is preferable. To determine the type of model used in combined data Chavo Hausman test is used.

### Variables Research

In table 1, common name and abbreviated name of each variable is presented.

Table 1: Variables and models used in the study

Variable name	Name	Variable name	Name
investments efficiency	Inv Eff <sub>i,t</sub>	Total current accruals	TCAccr
Current debt ratio	ST Debt <sub>it</sub>	Operating cash flow divided by the logarithm of total assets	CFO
Company Size	LnSales <sub>it</sub>	Annual changes operating income divided by the logarithm of total assets	ΔRevi, t
Tobin Q ratio	QTobin <sub>it</sub>	Property , land and equipment divided by the logarithm of total assets	PPEi,t
Be clear	Tangit	Regression residuals	ε
Sales growth	SalesGrowth <sub>i,t</sub>		
Future investment in capital goods and non- capital	Investment <sub>i,t+1</sub>		
The model used in the study			
Model the main hypothesis the first:			
$InvEff_{i,t} = \beta_0 + \beta_1 STDebt_{i,t} + \beta_2 LnSales_{i,t} + \beta_3 QTobin_{i,t} + \beta_4 Tang_{i,t}$			
Model first and second sub- hypotheses:			
$Investment_{i,t+1} = \beta_0 + \beta_1 SalesGrowth_{i,t} + u_{i,t+1}$			
Model the main hypothesis the second:			
$FRQ + \beta_2 STDebt_{i,t} + \beta_3 LnSales_{i,t} + \beta_4 QTobin_{i,t} + \beta_5 Tang_{i,t} InvEff_{i,t} = \beta_0 + \beta$			
Dychv and Dchv model for the quality of financial reporting:			
$TCAccr_{i,t} = \alpha_0 + \alpha_1 CFO_{i,t-1} + \alpha_2 CFO_{i,t} + \alpha_3 CFO_{i,t+1} + \alpha_4 \Delta Revi_{i,t} + \alpha_5 PPE_{i,t} + \epsilon_{i,t}$			

### Test hypotheses

#### The first hypothesis

Lymr test results for the first hypothesis shows that the significance level of less than 5% To Therefore, the assumption used to estimate the model the compilation methods used (This method in contrast the combination of higher reliability because the effects of the individual studies), so to estimate the coefficients of the model in this hypothesis the random effects method used. The Durbin Watson obtained (1.55) for the hypothesis of 1.5 to 2.5 were, Therefore, the independence of error has been accepted in other words, errors are independent variables, the coefficient of determination obtained 35 percent the amount of shows, the independent variable the dependent variable is the ability to predicting other words, the model is explained by the independent variables. On the other hand, the level of significance, Fisher (f) is less than 5%so, between the independent variables and the dependent variable in this hypothesis the correlation established and the model is significant also, this hypothesis can be seen that the level of significance, t test for changing the current debt, more than 5% (0.184) is therefore, the hypothesis  $H_0$  is not rejected it can be concluded, use more than the current debt, does not reduce the problem of more investment.

More Investment = -14.66 + 8.65(LNSALE) - 2.15(TANG)

#### The second hypothesis

Lymr test results for the second hypothesis shows that the significance level of more than 5% To Therefore, the assumption used to estimate the model the hybrid method used (This method compared with a consolidated approach the approach is a lower credit because in effect jointly review), So to estimate the coefficients of the model in this hypothesis the least Squares method used. The Durbin Watson obtained (1.92) for the hypothesis of 1.5 to 2.5 were, Therefore, the independence of error has been accepted In other words, errors are independent variables, The coefficient of determination obtained 2.9 percent The amount of shows, Independent variable the ability to anticipate not the dependent variable in other words, the model of independent variables , not the explanation On the other hand , the level of significance , Fisher (f) more than 5%So, between the independent variables and the dependent variable , in this hypothesis, not solidarity and the model is not significant .

Also, this hypothesis can be seen that the level of significance, t test for changing the current debt, more than 5% (0.119) is therefore, The hypothesis  $H_0$  is not rejected It can be concluded, Use more than the current debt, does not reduce the problem of low investment.

Low investment = Because of that a significant level more than 5% of all the variables the equation cannot be formed.

### **The third hypothesis**

Lymer test results for the third hypothesis shows that the significance level of more than 5% To Therefore, the assumption used to estimate the model the hybrid method used (This method compared with a consolidated approach the approach is a lower credit because in effect jointly review), So to estimate the coefficients of the model in this hypothesis the least Squares method used. The Durbin Watson obtained (2.06) for the hypothesis of 1.5 to 2.5 were, Therefore, the independence of error has been accepted In other words, errors are independent variables, The coefficient of determination obtained 22 percent The amount of shows, the independent variable the dependent variable is the ability to predict In other words, the model is explained by the independent variables. On the other hand, the level of significance, Fisher (f) is less than 5% so, between the independent variables and the dependent variable in this hypothesis the correlation established and the model is significant Also, this hypothesis can be seen that the level of significance, t test for the variable quality of financial reporting less than 5% (0.001), Therefore, the hypothesis  $H_0$  is rejected. It can be concluded the impact on the quality of financial reporting on investment efficiency at less current debt, is stronger.

$$\text{Investment efficiency} = -35.67 + 0.543(\text{FRQ}) + 11.93(\text{LNSALE}) - 3.18(\text{TANG})$$

### **The fourth hypothesis**

Lymer test results for the fourth hypothesis shows that the significance level of less than 5% To Therefore, the assumption used to estimate the model the compilation methods used (This method in contrast the combination of higher reliability because the effects of the individual studies), So to estimate the coefficients of the model in this hypothesis the random effects method used. The Durbin Watson obtained (1.9) for the hypothesis of 1.5 to 2.5 were, Therefore, the independence of error has been accepted In other words, errors are independent variables, The coefficient of determination obtained 32 percent The amount of shows, the independent variable the dependent variable is the ability to predict In other words, the model is explained by the independent variables. On the other hand, the level of significance, Fisher (f) is less than 5% so, between the independent variables and the dependent variable in this hypothesis the correlation established and the model is significant Also, this hypothesis can be seen that the level of significance, t test for changing the current debt, more than 5% (0.204) is therefore, The hypothesis  $H_0$  is not rejected It can be concluded the impact on the quality of financial reporting on investment efficiency at more current debt, is not stronger.

$$\text{Investment efficiency} = -45.27 + 13.25(\text{LNSALE}) - 7.21(\text{TANG})$$

### **Summary results of testing hypotheses**

In this study, two main hypotheses and four sub-hypothesis tested which outlined the results of which are paid:

#### **The first sub-hypothesis**

As a result the first hypothesis this study show, that between two variables to this hypothesis, a significant relationship has not been established. Therefore, it can not be said that using more than the current debt, reduces the problem of more investment. Although companies than the current debt more use more financial power in this hypothesis a confirmation of the high the current debt and more investment was found.

#### **The second sub-hypothesis**

As a result the first hypothesis this study show, that between two variables to this hypothesis, a significant relationship has not been established. Therefore, it can not be said that using more than the current debt, does not reduce the problem of low investment. The results of these two hypotheses with Myers (1977) are inconsistent, he believes, Due to the efficiency of investment debt maturities in order to reduce the problem of investment can be too much and lower than used. When control projects have a positive net present value, Companies the ability to fund its short-term debt and in this way problems of investment low will be lost because the debt in a shorter time, will liquidate and profitability also in full, the company will be considered.

#### **The third sub-hypothesis**

As a result the third hypothesis this study showed that the relationship between the quality of financial reporting and the efficiency of investments less current debt level, is stronger.

#### **The fourth sub-hypothesis**

As a result the fourth hypothesis this study showed that the relationship between the quality of financial reporting and the efficiency of investments more current debt level, is not stronger.

The quality of financial reporting impact on investment decisions can be found through the short-term debt the adjustment because through, short-term debt, Creditors can exercise its supervisory role the directors to reduce problems radical investment and The short-term debt can also for managers to perform positive investment processes under conditions of low investment helpful way.

Based on this the impact of the quality of financial reporting on the efficiency of investment in those companies that have shorter maturities are lower than estimated because the information provided by the public, by the quality of financial reporting and Private closer and more frequent communication with access to internal information which is caused by the shorter maturities, as the alternative will be considered.

## Conclusion

In this study, the impact of financial reporting quality and maturity of the debt, on the investment efficiency using a sample of companies in the Tehran Stock Exchange, during the years 2009 to 2013 were studied.

The results are representative of the quality of financial reporting more and more use of short-term debt (maturity less liabilities) increased efficiency of investment.

However, if you must a distinction between excessive investment and investment lower than expect, the quality of financial reporting played a significant role in reducing investment will be extreme. In contrast, less debt maturities as a mechanism which is which is positive engage in promote investment efficiency in both cases is provided.

In addition, we have evidence of this is found financial reporting quality and lower debt maturities a relationship replacement in the field improving the efficiency of investment. In those companies amounts less short-term debt, the impact of the quality of financial reporting on investment efficiency most of those companies that have a higher value short-term debt. This case indicates this is an issue that in companies the quality of financial reporting lower, debt maturities as the main mechanism seen by the creditors / debtors to control the behavior of managers and avoid foreclosures they used to be.

This results in dealing with issues of efficiency investment and indicates that in such content, in which the quality of financial reporting less significant role in reducing problems, information asymmetry is responsible, shorter maturity debt as a valid alternative to monitor the managers were considered and consequently the efficiency of investment is effective.

## REFERENCES

- Akerlof, G.A. (1970), "The market for 'lemons': quality uncertainty and the market mechanism", *Quarterly Journal of Economics*, 84 (3), pp. 488-500.
- Amini, Zohre. (2010), "The effect of applying accounting standards on accounting influencing", Department of Accounting
- Barclay, M. J. and Smith, C. W. (1995), "The maturity structure of corporate debt", *Journal of Finance*, 50, P .609-631
- Beatty, Anne & Joseph, Weber & J Scott (2007), "The Role of Accounting Quality in Reducing Investment Inefficiency in the presence of Private Information and Direct Monitoring", Working Paper, The Ohio State University.
- Bertrand, M., and Mullainathan, S. (2003) "Enjoying the Quiet Life? " Corporate governance and managerial preferences", *Journal of Political Economy* 111, 1043-1075
- Biddle, G., G. Hilary. Verdi, R. (2008). "How Does Financial Reporting Quality Improve Investment Efficiency?", Working Paper.
- Biddle, G. Hilary, G. and Verdi, R.S. (2009). "How does financial reporting quality relate to investment efficiency? *Journal of Accounting and Economics*", Vol. 48, PP.112-131
- Biddle, G., G. Hilary. (2006). "Accounting Quality and Firm-Level Capital Investment", *The Accounting Review*, 81, 963-982
- Bushman, R.M., Smith, A.J. (2001) "Financial Accounting Information and corporate governance", *Journal of Accounting Economics* 31, 237-333.
- Chen, F., Hope, O.K., Li, Q., Wang, X (2011). "Financial Reporting Quality and Investment Efficiency of Private Firms in Emerging Markets", *The Accounting Review*, 86 (4): 1255-1288
- Childs, P.D. Maure, D.C. and Ott, S.H., (2005), "Interactions of Corporate Financing and Investment Decisions: The Effects of Agency Conflicts", *Journal of Financial Economics*, 76, P. 667-690.
- Dechow, P and Dichev, I. (2002). "The Quality of accruals and earnings: The role of accrual estimation errors", *The Accounting Review*, Vol. 77, pp. 35-59.
- Diamond, D.W. (1991), "Debt maturity structure and liquidity risk", *Quarterly Journal of Economics*, 106(3), P. 709-37
- Healy, P. M. and K.G. Palepu. (2001). "Information Asymmetry, Corporate disclosure, and the Capital markets: A Review of the Empirical Disclosure Literature", *Journal of Accounting and Economics*, 31, pp: 405-440.

- Huang, G., & F. Song. (2006). "The Determinants of Capital Structure: Evidence from China". *China Economic Review*, 17, pp.14-36
- Hubbard, R. (1998). "Capital – market imperfections and investment", *Journal of Economic Literature* 36, 193-225.
- Kale, J., & T. Noe. (1990). Risky Debt Maturity Choice in a Sequential Game Equilibrium. *Journal of Financial Research*, 13, pp. 155-165.
- Khodaii Welle Zaqr, Mohammed and Munira Yahyaei (2010), "The relationship between the quality of financial reporting and the efficiency of investment, Tehran Stock Exchange", *Journal of Management Accounting*, the third year, N. 5
- Kothari, S.P ., Leone, A . J., Wasley, C.E. (2005) "Performance matched discretionary accrual measures", *Journal of Accounting and Economics*, 39, 163-197.
- Lambert, R. (2001). "Contracting theory and accounting", *Journal of Accounting and Economics*, 32 (1-3): 3-87.
- Lambert, R., Leuz, C. and Verrecchia, R. (2005). Accounting information, disclosure, and the cost of capital. *Journal of Accounting Research*, 45 (2): 385-420.
- Lambert, R. C, Leuz. Verrecchia, R. (2007). Accounting information, disclosure, and the cost of capital. *Journal of Accounting Research* 45, 385-420
- Lenard, M., Yu, B. (2012). Do Earnings Management and Audit Quality Influence Over-Investment by Chinese Companies? *International Journal of economics and finance*, 4 (2): 21-30.
- Leuz, C., & Verrecchia, R. (2000). "Economic Consequence of Increased Disclosure", *Journal of Accounting Research*, 38, 91-124
- M<sup>a</sup> Fuensanta Cutillas Gomariz, Juan Pedro Sánchez Ballesta. (2014). Financial reporting quality, debt maturity and investment efficiency, *Journal of Banking & Finance*, Vol. 40 , PP. 494–506.
- McNichols, M.F. and Stubben, S.R. (2008). Does earnings management affect firms investment decisions?. *The Accounting Review*, Vol. 83, pp. 1571-1603.
- Modares, Ahmad and Reza Hsarzadh. (2008), "Financial reporting quality and investment efficiency", *Quarterly Stock Exchange*, the first year, N. 2, P. 85-115
- Morris, S. and H. S. Shin (2009). Illiquidity component of credit risk. Working Paper, Princeton University.
- Richardson, S. (2006). Over-Investment of free cash flow. *Review of Accounting Studies*, 11 (2-3): 159-189.
- Stephana, A., & O. Talaverab, & T. Andriy. (2011). Corporate Debt Maturity Choice in Emerging Financial Markets. *The Quarterly Review of Economics and finance*, 51 , pp. 141-151.
- Stubben, S. (2010). "Discretionary revenues as a measure of earnings management", *The Accounting Review*, Vol. 85, No. 2, pp. 695-717.
- Tehran, Reza and Askr Nvrkhsh (2006), "Investment management", Tehran, Publication emission Negahe Danesh
- Verdi, R. (2006). "Financial Reporting Quality and Investment Efficiency", M.I.T. Working Paper, University of Pennsylvania