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## STUDYING THE RELATIONSHIP BETWEEN SYSTEMATIC AND ACCOUNTING CONSERVATISM

\*Ziba Taginezhad<sup>1</sup>, Younes Badavar-e-Nahandi<sup>2</sup> and Rasoul Bradaran-e-Hassanzadeh<sup>3</sup>

<sup>1</sup> MA student in Accounting, Islamic Azad University, Eastern Azerbaijan Science and Research Branch, Tabriz, Iran

<sup>2</sup> Assistant Professor in Accounting, Department of Accounting, Islamic Azad University, Tabriz Branch, Tabriz, Iran

<sup>3</sup> Assistant Professor in Accounting, Department of Accounting, Islamic Azad University, Tabriz Branch, Tabriz, Iran

\*Author for Correspondence

### ABSTRACT

Systematic risk is non-diversifiable risk attributable to market (or macroeconomic) factors. Nonsystematic Market risk is related to the variation portfolio, and it plays an important role in shaping the behavior of managers. On the other hand, accounting conservatism plays an important role in decisions on financial and corporate reporting. Accounting conservatism from the perspective of a balance sheet (unconditional conservatism) resulting in lower accumulated net assets and from the perspective of income (Conditional Conservatism) resulting timely identification loss is against the profit. Systematic risk and nonsystematic risk may increase managerial incentives to delay the recognition of bad news. Second, higher systematic risk reduces the demand for conservatism from investors and auditors. In this paper I would examine the relationship between systematic risk and nonsystematic risk and accounting conservatism (conditional conservatism and unconditional conservatism). In this study conditional accounting conservatism was measured by (Basu, 1997) and unconditional conservatism was measured by (Givoly and Hayn, 2000) model. By using the firm – year method during the years 2006 - 2011, 540 observations from 90 firms enlisted in Tehran Stock Exchange have been done. The findings showed negative and meaningful relationship between systematic risk and unconditional accounting conservatism. Also the findings show nonsystematic risk does not affect conditional conservatism and unconditional conservatism.

**Keywords:** *Systematic Risk, Conditional Conservatism, Unconditional Conservatism, Agency Theory.*

### INTRODUCTION

Accounting conservatism is defined as the tendency of accountants to obligate a higher degree of acceptability to recognize good news compared to the bad ones in financial statements. Also it is considered as an effort to choose a method of accepted accounting methods which results in more rapid recognition of costs or less assets' evaluation or measuring debts higher. Financial Accounting Standards Board (FASB) discussed about accounting conservatism and its definition and has defined accounting conservatism as follows: "it is a cautious reaction to the ambiguity in making sure that the ambiguity and natural risks of business conditions have been taken into consideration appropriately". This definition considers ambiguity and risk as the important factors in describing accounting conservatism. In this announcement, it has been pointed out that if there is not ambiguity, there is not any need for accounting conservatism. And where there is more risk, there would be more need for accounting conservatism. Accounting conservatism limits the optimism of managers towards the financial performance of the company by fostering the control of investors and doing the activities better (Zhang, 2008). Systematic risk can not be omitted through variety and results from uncontrollable factors that affect the price of all bonds due to overall market factors simultaneously. Nonsystematic risk is the part of overall stock set risk that is not unique for a company or certain industry and some factors such as: management, capacity, consumers' preferences, and labor strikes and ... create nonsystematic risk in a company. The present risks of the company and market affect the expectations of stockholders. Managers can have conservative or less conservative reporting in any risk condition by using their authoritative powers. Complicated,

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ambiguous, and non-transparent reporting does not present any information about current risks in the company. Managers, as the authorities to supply financial statements, try to present a desirable image of their business units having a complete knowledge about the financial status of company and a higher level of awareness compared to financial statements users. Managers are stimulated to hide losses to avoid being fired before their tenure ends. Incurring losses or projects with current negative net value can lead the stockholders to dismiss the manager (Adham, 2007). Results of some researches show that there is a relationship between accounting information (such as financial ratios, accounting profit, cash flow) with systematic and nonsystematic risk. The present research is among few studies that deal with the relationship between systematic risk and nonsystematic risk and accounting conservatism (conditional and unconditional) and tries to help to comprehend this field of accounting and capital market.

### **STATEMENT OF THE PROBLEM**

High systematic and nonsystematic risk increases the managers' incentives to postpone the recognition of bad news. Managers have several incentives to avoid bad news recognition or to foster the recognition of good news. The tendency of managers to avoid the recognition of bad news results from agency problems because managers are stimulated to increase their rewards by presenting desirable information. Systematic risk affects accounting conservatism's degree through one of the two ways below:

#### **1. Higher systematic risk increases managerial incentives to delay the recognition of bad news**

Managers tend to show their financial performance to be desirable through postponing the recognition of bad news and fostering the recognition of good news hoping to hide the weaknesses of current performance through the desirable future performances. The tendency to do such behaviors stems back to different factors such as rewarding contracts with managers based on earnings (Lambert et al., 2011). Agency theory states that managers have an information advantage over other external to organization individuals and there is not a convergence between the benefits of managers and stockholders; thus, in the presence of a high systematic risk, they tend to use their authority to increase earnings of the companies because in other conditions this authority will be useless. On the other hand, by considering *ceteris paribus*, higher risk would be followed by more return, specifically when there is a prediction for economical booms. Thus, in this condition, the tendency of managers for accounting conservatism would become less (Zhen Qi, 2011).

#### **2. Higher systematic risk reduces the demand for conservatism from investors and auditors**

The presence of systematic risk will reduce the demand for conservative reporting. When systematic risk is high, managers are not interested in reporting bad news to the market because the investors, auditors, and creditors receive information required from the market.

On the contrary, specific bad news about a business entity is investigated with more precision by the investors and auditors due to legal claims and other related factors. Nonsystematic risk results from internal factors in an organization. When nonsystematic risk is high in a firm, it shows that managers have not had a proper performance. In such a situation, the stockholders, creditors, and auditors of the company will deal with issues with more sensitivity and demand the firm managers to have a higher amount of conservatism in financial reporting of the company because accounting conservatism prevents lots of losses resulting from agency problems and reduce legal complaints' costs (Zhang, 2008).

Now, regarding the viewpoints posed about systematic and nonsystematic risk and accounting conservatism, the present research is going to respond this question: "Is there a relationship between risk (systematic and nonsystematic) and accounting conservatism (conditional and unconditional) in firms enlisted in Tehran Stock Exchange?"

### **RESEARCH LITERATURE**

(Chan et al., 1994) proved that accounting conservatism can have an effective role in reducing the benefits resulting from earnings' management carried out by top managers in an organization. On the

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whole, the proponents of accounting conservatism approach believe that accounting conservatism has informative role and can play an important role in reducing information asymmetry among suppliers of financial statements and users of financial statements. Conservatism is considered as an effective strategy to reduce nonsystematic risk and it is a method for exchanges when there is lack of assurance and this will result in increasing firm value. (Graham et al., 2005) found out in investigating some claims in operating cash flows that although there has been a high systematic risk, managers delayed the reveal of bad news hoping that the business status will be improved before the spread of information, because bad news will never be published if business status enhances. (Lara Penalva., 2007) stated that accounting conservatism reduces liquidation risk and bonds' exchange costs besides increasing the quality of financial information. (Francis et al., 2008) believed that accounting conservatism can affect the improvement of quality of information presented by management. Results of researches by (Lambert et al., 2008) showed that accounting conservatism reduces systematic risk because it may reduce ambiguity regarding the assessment of future cash flow in market, information risk. (Francis et al., 2008) studied the relationship between accounting conservatism and firm's capital cost. They concluded that gaining higher financial information quality will result in reducing overall risk of the company (Zhang, 2008) analyzed the real and predicted advantages of accounting conservatism for creditors and debtors. He concluded that conservative reporting enables the creditors to receive information and symptoms about inappropriate financial performance of companies in time to do whatever needed in time and reduce the risk of collecting the original amount and interests of loans rendered or reduce nonsystematic risk. (Zhen Qi, 2011) studied the relationship between systematic risk and accounting conservatism. He found out that there is a negative and meaningful relationship between systematic risk and accounting conservatism. Also his researches showed that changes in systematic risk result in accounting conservatism, but accounting conservatism does not result in changing systematic risk. (Gary and Frank, 2012) investigated about the relationship between accounting conservatism and bankruptcy risk. Their research results showed that by increasing bankruptcy risk, firms tend to use more conservative approaches. (Richard, 2013) studied about the relationship between operating risk and accounting conservatism. He found some evidences that showed those companies having low operating risk levels, would have higher levels of accounting conservatism, and there is a reverse relationship between operating risk and accounting conservatism. (Shahryari and Kordlar, 2008) studied the relationship between political costs and accounting conservatism in firms enlisted in Tehran Stock Exchange. They also studied the relationship between 7 variables of: size, competition degree in industry, risk, investment intensity, governmental ownership, effective tax rate, and ownership concentration and accounting conservatism. Results showed that by increasing firm size, accounting conservatism reduces. Also there was a direct relationship between competition degree in industry, governmental ownership, and accounting conservatism. There was not any meaningful relationship observed between risks and accounting conservatism. (Mashayekhi and Motmaen, 2013) studied the relationship between systematic risk and conditional conservatism. Their findings, using the data of 75 firms enlisted in Tehran Stock Exchange during the time period between 2001 and 2011, showed that there was a negative and meaningful relationship between systematic risk and accounting conservatism. (Nourifard, Ahmadzadeh, Maghsoudi, and Afshari, 2013) studied the relationship between systematic risk and accounting conservatism in firms enlisted in Tehran Stock Exchange. On the whole, the results of their research emphasized that systematic risk is very important and it is more effective than accounting conservatism. They concluded that systematic risk has a positive and meaningful relationship with conditional and unconditional accounting conservatism.

### **RESEARCH HYPOTHESES**

In the present research the following hypotheses were designed to answer the main theoretical fundamentals posed about the role of research question based on the literature and the systematic and nonsystematic risks in reducing conservatism.

- 1- There is a relationship between systematic risk and conditional accounting conservatism.
- 2- There is a relationship between nonsystematic risk and conditional accounting conservatism.

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- 3- There is a relationship between systematic risk and unconditional accounting conservatism.
- 4- There is a relationship between nonsystematic risk and unconditional accounting conservatism.

### RESEARCH METHOD AND DATA ANALYSIS

Since the present research studies the effect of systematic and nonsystematic risk on accounting conservatism (conditional and unconditional), it is a post incidental and correlation type.

In this research some information related to the theoretical foundations of the topic were extracted from different sources such as: books, journals, international and local research articles which have been collected through internet databases or libraries. Also in the section for variables to test the hypotheses we have used different sources such as: bourse website ([www.irbourse.com](http://www.irbourse.com)), the website for Research and Development in Islamic Studies Organization ([www.rdis.ir](http://www.rdis.ir)), the website of research center and scientific documents of Iran ([www.irandoc.ac.ir](http://www.irandoc.ac.ir)), and Rahaward-e-Novin software. The data collected were processed through Excel software. We have used SPSS18 software in final data analysis.

### RESEARCH MODEL

To study the relationship between systematic and nonsystematic risk and conditional conservatism, we have used (Basu, 1997) model in this research. Post-incident conservatism is one of conservatism types which is also called as conservatism depending on news, conditional conservatism, or time asymmetry conditional conservatism.

Post incidental conservatism means the in time recognition of bad news compared to good news of earnings. According to (Basu, 1997) accounting earnings reflects the amount of conservatism in companies.

The calculation of conditional accounting conservatism based on Basu's measurement model is as follows:

$$\text{EARN} = \beta_0 + \beta_1 \text{RET} + \beta_2 \text{D} + \beta_3 \text{RET} * \text{D} + \varepsilon$$

**EARN:** accounting return (earning before unexpected items divided by owners' equity value at the end of year) that is considered as the dependent variable in this model.

**RET:** return on equity per year in firm i during the year t. D is the virtual variable that would be equal to 1 if the return is negative, otherwise it would be 0.

The return used in Basu's model is the representative for economic news. Positive return would represent economical profit and negative return would represent economical loss. In this model  $\beta_1$  means the in time earning compared to good news, and  $\beta_1 + \beta_3$  would represent in time earnings compared to bad news. Also  $\beta_3$  measures the coefficient for time asymmetry of earnings (accounting conservatism degree). In the present research (Givoly and Hayn, 2000) model has been utilized to measure unconditional conservatism. Unconditional conservatism (pre-incident) results form using those accounting standards that reduce the earnings independently from current economical news. Givoly and Hayn's accounting conservatism index is calculated as follows:

**conservatism index = earning operation + depreciation cost – operating cash flow / total assets at the first of fiscal year. \* (-1)**

(Givoly and Hayn, 2000) believe that the growth of accruals can be considered as an index of change in accounting conservatism during a long-term period. To test the first hypothesis in (Basu, 1997) model, we use systematic risk and the model would be as follows:

$$\text{EARN} = \beta_0 + \beta_1 * \text{RET}_{i,t} + \beta_2 \text{D}_{i,t} + \beta_3 * \text{RET}_{i,t} * \text{D}_{i,t} + \beta_4 \text{SYSRISK}_{i,t} + \beta_5 \text{SYSRISK}_{i,t} * \text{RET}_{i,t} + \beta_6 \text{SYSRISK}_{i,t} * \text{D}_{i,t} + \beta_7 \text{SYSRISK}_{i,t} * \text{RET}_{i,t} * \text{D}_{i,t} + \varepsilon_{i,t}$$

The coefficient  $\beta_7$  shows the difference between earnings' time asymmetry degree between business units and high and low systematic risk. In other words, we can say that this coefficient expresses the relationship between systematic risk and in time recognition of good news. The first hypothesis predicts

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that the coefficient  $\beta_7$  is negative and meaningful and it shows that managers in business units with high risk, report earnings with lower conservatism. To test the second hypothesis we have used the model above through which instead of systematic risk variable, nonsystematic risk has been used.

The third hypothesis states that there is a relationship between systematic risk and unconditional accounting conservatism. To test this hypothesis we have used the following regression model:

$$CONS = \beta_0 + \beta_1 SySRisk_{i,t} + \beta_2 LEV_{i,t} + \beta_3 M/B_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 Auditor_{i,t} + \beta_6 INSIDERBM_{i,t} + \varepsilon_{i,t}$$

**CONS:** unconditional conservatism index and  $\beta_1$  states that there is a relationship between systematic risk and unconditional conservatism.

**LEVERAGE:** This variable is calculated by dividing total liabilities to total assets of the end of year.

**SIZE:** It is calculated by the natural logarithm of total assets at the end of the period.

**Market value to book value:** This variable is calculated by dividing the market value of stocks of a company at the end of the year into the book value of owners' equity.

**AUDITOR:** Is it a virtual variable, it is equal to one when the company is to be audited by Auditing Organization, Otherwise, it will be zero.

**The percentage of insider board members (INSIDERBM):** it is the result of dividing in charge members of board of directors to total members.

Also to test the fourth hypothesis we have used the model above, where nonsystematic risk is altered for systematic risk.

In this research we have used market model to measure systematic risk (Beta coefficient) as follows:

$$\beta_i = \frac{Cov[R_i, R_m]}{var[R_m]}$$

Where,  $R_i$  is the average return of the company,  $R_m$  is the average return of the market, and  $R_m$  is the return variance of the market.

**Cov[ $R_i$ ,  $R_m$ ]:** it is the covariance between firm stock return and return of total bonds in market.

**Var[ $R_m$ ]:** variance of return of total market bonds and  $\beta_i$  is the systematic risk index.

Also to measure the nonsystematic risk we have used the Single-index model. The overall form is as follows:

$$R_{it} = \beta_0 + R_{mt} + \varepsilon_t$$

Random error items (resulted from sampling) of  $i$  company in the year  $t$

In this model the standard error deviation of monthly returns of market and company ( $\varepsilon$ ) for the whole year have been considered as nonsystematic risk indexes.

### STATISTICAL SOCIETY AND STATISTICAL SAMPLE

To select an appropriate statistical sample the following conditions were taken into consideration to choose firms from among those enlisted in Tehran Stock Exchange:

- 1- To observe the comparability of the samples, the fiscal year ended on the 29th of Esfand (20th of March) every year.
- 2- During the research's time period, they shouldn't have quitted or changed their fiscal periods.
- 3- The companies shouldn't be banks or financial institutions (investment companies, financial intermediaries, holding companies or leasing).
- 4- Exchanges of stocks should not have been stopped for more than 3 months.

Thus, regarding the limitations above, 90 companies, 540 firm-year observations, were chosen during the time period between the years 2007 and 2011 to be included in our statistical society.

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**FINDINGS' ANALYSIS:  
 DESCRIPTIVE STATISTICS**

**Table 1: The descriptive statistics related to variables utilized in testing hypotheses**

Variables	Symbol	No.	Min.	Max.	Mean	Deviation
earning before accruals	EARN	540	0.156	0.688	223	0.148
stock return	RET	540	0.494	0.730	212	0.318
systematic risk	SYSRISK	540	0.861	0.751	329	0.548
nonsystematic risk	NONS	540	0.013	0.759	161	0.185
conservatism	CONS	540	0.481	0.852	650	0.159
leverage	LEV	540	0.100	1.3	588	0.198
market to book value	MB	540	0.511	0.629	640	1.886
firm size	SIZE	540	0.726	0.254	799	1.584
insider board member percentage	INSID	540	0	1	594	0.238

As it can be seen in Table1, EARN has the least standard deviation and it shows that the data of this variable are close to each other and do not have much dispersion. Also the highest standard deviation belongs to MB ratio and it shows that the data of this variable have more dispersion. According to the figure above it can be said that an average of about 0.32 of the sample firms were affected by fluctuations in market and about 0.16 of them were affected by firm's performance. Results of table 1 show that about %60 of managers in sample firms were among in charge board members. An average of %59 financial leverage was seen for sample firms. Leverage shows the amount of liabilities of the company against assets. The average leverage showed that these firms supply a high percentage of their financial needs through liabilities (loans). The average amount of firm size showed that about %20 of sample firms deal with vast financial and operational resources.

**CORRELATIONS AMONG VARIABLES**

**Table 2: Correlations between variables**

Variables	Sig. Coefficient	EARN	RET	SYSRI SK	NONSYS RISK	CONS	LEV	M/B	SIZE	INSIDE RBM	
EARN	Sig.	1									
RET	Sig.	-0.135**	1								
SYSRISK	Sig.	-0.123**	0.198**	1							
NONSYSRI SK	Sig.	-0.156**	0.106*	0.252*	1						
CONS	Sig.	0.046	-0.012	-0.071	0.011	1					
LEV	Sig.	0.083	-0.51	0.003	-0.053	0.040	1				
M/B	Sig.	-0.002	-0.004	0.028	0.103*	-0.181**	*.110	1			
SIZE	Sig.	0.958	0.931	0.521	0.016	.000	0.011	.0203*	0.270**	1	
INSIDERB M	Sig.	.103*	-0.058	0.023	-0.094*	-0.018	.000	.000	.0125*	.000	1
	Sig.	0.042	0.091*	-0.003	-0.057	0.083	0.106*	0.080	.004	.000	
	Sig.	0.328	0.034	0.951	0.187	0.055	0.014	0.063	0.004		

\*Significant95% \*\*Significant99%

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Table 2 shows the results of correlations between variables. Regarding table 2 and in meaningfulness level of %99, firm's return has a reverse relationship with earnings before accruals and it means that by increasing firm's return, earnings before unexpected items will decrease. Regarding the variables used in the adjusted model of (Basu, 1997) the variables of earnings before unexpected items and nonsystematic risk will have the least amount of correlation (-0.156). Also systematic risk and stock return have had the highest correlation (0.198) in a meaningfulness level of %99. Regarding the variables used in (Givoly and Hayn, 2000) the variables of systematic risk and leverage have had the highest amount of correlation (0.953). Also there was a positive relationship (0.004) between independence of board members and firm size. In fact, by increasing firm size, more in charge managers would be in board of directors.

**Table 3: Results of testing the first hypothesis**

$$EARN = \beta_0 + \beta_1 * RET_{i,t} + \beta_2 D_{i,t} + \beta_3 * RET_{i,t} * D_{i,t} + \beta_4 SYSRISK_{i,t} + \beta_5 SYSRISK_{i,t} * RET_{i,t} + \beta_6 SYSRISK_{i,t} * D_{i,t} + \beta_7 SYSRISK_{i,t} * RET_{i,t} * D_{i,t} + \varepsilon_{i,t}$$

Symbol	Beta coefficient	t statistic	P-Value	Studying co-linearity	
				Amounts	Index
$\beta$	0.218	0.305	0.000	-	-
RET	-0.046	0.771	0.441	0.111	0.985
D	0.058	2.097	0.036	0.215	0.648
RET*D	0.155	1.762	0.076	0.217	0.600
SYSRISK	-0.028	0.865	0.388	0.129	0.735
SYSRISK*RET	0.044	0.487	0.626	0.135	0.424
SYSRISK*D	-0.047	1.008	0.314	0.119	0.402
SYSRISK*RET*D	-0.215	1.406	0.160	0.150	0.668
<b>Total regression</b>					
Statistic	P-Value	F statistic	R <sup>2</sup>	AdjR <sup>2</sup>	
1.836	0.002	3.213	0.204	0.041	

Results of testing the first hypothesis are represented in table 3. The amount of F statistics of the regression equals 3.213 and the meaningfulness level equals 0.002. This coefficient shows the meaningfulness of the regression in first hypothesis in an assurance level of %95. According to the figure, the meaningfulness level of the relationship between systematic risk and conditional accounting conservatism is 0.160 and it is more than %5. Thus, the first hypothesis is not approved. Also the coefficients of control variables and their assurance level showed that the type of return has had a positive relationship with conditional accounting conservatism. In this regression model, it can be stated that %20 of the changes in dependent variables can be predicted through adjusted regression model. The adjusted identification coefficient of this regression showed that independent variable along with control variables can distribute %4 of the changes in dependent variable. The amount of Durbin-Watson statistic for the first hypothesis equals 1.836; since this amount is between 1.5 and 2.5, this error has had a normal distribution.

**Table 4: Results of testing the second hypothesis**

$$EARN = \beta_0 + \beta_1 * RET_{i,t} + \beta_2 D_{i,t} + \beta_3 * RET_{i,t} * D_{i,t} + \beta_4 NONSYSRISK_{i,t} + \beta_5 NONSYSRISK_{i,t} * RET_{i,t} + \beta_6 NONSYSRISK_{i,t} * D_{i,t} + \beta_7 NONSYSRISK_{i,t} * RET_{i,t} * D_{i,t} + \varepsilon_{i,t}$$

Symbol	Beta coefficient	t statistic	P-Value	Studying co-linearity	
				Amounts	Index
$\beta$	0.219	0.504	0.000	-	-
RET	-0.015	0.963	0.336	0.290	0.451
D	0.047	1.837	0.067	0.241	0.147
RET*D	-0.008	0.134	0.893	0.250	0.992
NONSYSRISK	-0.012	0.222	0.824	0.317	0.151
NONSYSRISK*RET	-0.055	0.809	0.419	0.237	0.212
NONSYSRISK*D	-0.037	0.299	0.765	0.138	0.273
NONSYSRISK*RET*D	0.559	1.893	0.059	0.144	0.932
<b>Total regression</b>					
Statistic	P-Value	F statistic	R <sup>2</sup>	AdjR <sup>2</sup>	
1.871	0.000	5.932	0.270	0.073	

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Results of testing the second hypothesis are represented in table 4. The amount of F statistics of the regression equals 5.932 and the meaningfulness level equals 0.000. This coefficient shows the meaningfulness of the regression in second hypothesis in an assurance level of %95. According to the figure, the meaningfulness level of the relationship between nonsystematic risk and conditional accounting conservatism is 0.059. This coefficient shows the lack of a relationship between nonsystematic risk and conditional accounting conservatism in an assurance level of %95. Thus, the second hypothesis is not approved. Also the identification coefficient and the adjusted identification coefficient of this regression showed that independent variable along with control variables can distribute %27 and %7 of the changes in dependent variable. The amount of Durbin-Watson statistic for the second hypothesis equals 1.871; since this amount is between 1.5 and 2.5, this error has had a normal distribution.

**Table 5: Results of testing the third hypothesis**

$$CONS = \beta_0 + \beta_1 SySRisk_{i,t} + \beta_2 LEV_{i,t} + \beta_3 M/B_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 Auditor_{i,t} + \beta_6 INSIDERBM_{i,t} + \varepsilon_{i,t}$$

Variable name	Symbol	Beta coefficient	t statistic	P-Value	Studying co-linearity	
					Amounts	Index
<b>Fixed amount</b>	$\beta$	-0.195	-2.180	0.030	-	-
<b>Risk</b>	<b>SYSRISK</b>	-0.025	-2.007	0.045	0.987	1.013
<b>Leverage</b>	<b>LEV</b>	0.062	1.752	0.080	0.949	1.054
<b>M/B ratio</b>	<b>M/B</b>	-0.016	-4.242	0.000	0.899	1.112
<b>Firm size</b>	<b>SIZE</b>	0.006	1.235	0.218	0.882	1.134
<b>Auditor type</b>	<b>AUDITOR</b>	0.006	0.424	0.672	0.892	1.121
<b>Insider member percentage</b>	<b>INSIDERB M</b>	0.049	1.653	0.099	0.927	1.079

  

Total regression				
Durbin-Watson statistic	P-Value	F statistic	R <sup>2</sup>	AdjR <sup>2</sup>
1.857	0.000	4.741	0.228	0.052

As it can be seen in table 5, the amount of F statistics of the regression equals 4.741 and the meaningfulness level equals 0.000. This coefficient shows the meaningfulness of the regression in third hypothesis in an assurance level of %95. According to the figure, the meaningfulness level of the relationship between systematic risk and unconditional accounting conservatism is 0.045. This coefficient shows a negative relationship between systematic risk and unconditional accounting conservatism in an assurance level of %95. Thus, the third hypothesis is approved. Also the coefficients of control variables and their assurance levels showed that the variable of MB ratio has had a negative relationship with unconditional accounting conservatism and the variables of firm size, auditor type, the percentage of in charge board members, and leverage have had a positive relationship with unconditional accounting conservatism. Also the identification coefficient and the adjusted identification coefficient of this regression showed that independent variable along with control variables can distribute %22 and %52 of the changes in dependent variable. The amount of Durbin-Watson statistic for the third hypothesis equals 1.857; since this amount is between 1.5 and 2.5, this error has had a normal distribution.



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**Table 6: Results of testing the fourth hypothesis**

$$CONS = \beta_0 + \beta_1 NoNSySRiSk_{i,t} + \beta_2 LEV_{i,t} + \beta_3 M/B_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 Auditor_{i,t} + \beta_6 INSIDERBM_{i,t} + \varepsilon_{i,t}$$

Variable name	Symbol	Beta coefficient	t statistic	P-Value	Studying co-linearity Amounts	Index
Fixed amount	$\beta$	-0.172	1.895	0.059	-	-
Risk	NONSYRISK	0.003	0.073	0.942	0.899	1.113
Leverage	LEV	0.062	1.727	0.085	0.945	1.058
M/B ratio	M/B	-0.001	0.518	0.605	0.901	1.110
Firm size	SIZE	0.004	0.811	0.481	0.876	1.142
Auditor type	AUDITOR	-0.003	0.178	0.859	0.825	1.212
Insider member percentage	INSIDERBM	0.002	0.072	0.942	0.931	1.074
<b>Total regression</b>						
Durbin-Watson statistic	P-Value	F statistic	R <sup>2</sup>	AdjR <sup>2</sup>		
1.823	0.593	0.765	0.093	0.009		

According to table 6, the amount of F statistics of the regression equals 0.765 and the meaningfulness level equals 0.593. This coefficient shows the lack of meaningfulness of the regression in fourth hypothesis in an assurance level of %95. The lack of a meaningful regression means lack of entering into a discussion about coefficients of the variables. Also the coefficients and meaningfulness level of testing the fourth hypothesis equals 0.003 and 0.94. thus, the fourth hypothesis is not approved.

**DISCUSSION AND CONCLUSION**

In this research there has been a concise analysis of the relationship between systematic and nonsystematic risk and accounting conservatism (conditional and unconditional).

The result of testing first hypothesis showed a lack of relationship between systematic risk and conditional accounting conservatism in firms enlisted in Tehran Stock Exchange. The lack of a relationship showed that the investors have been indifferent about the type of financial reporting of business units with high or low systematic risks and do not expect to postpone the recognition of bad news hoping to get good news. Also the creditors and firm auditors do not demand more or less conservatism in financial reporting by the company. This hypothesis does not accord with results gained by ( Zhen Qi, 2011). He showed in his research that when systematic risk is high in a firm, its' operational results depend on macroeconomics to a great extent and it would be easy for stockholders and auditors to gain information in such a situation and thus there would be less demand for applying accounting conservatism in the company. Also the result of this hypothesis does not accord with those in the research carried out by (Nourifard et al., 2013). They found out that there was a positive and meaningful relationship between systematic risk and conditional accounting conservatism. In first hypothesis, the coefficients of control variables and their assurance level showed that the type of return has had a positive relationship with conditional accounting conservatism; this means that when the return of a firm is positive, regarding CAPM model theory, firm risk would also be more and the company would act more conservatively. Results of testing second hypothesis showed that the relationship between nonsystematic risk and conditional accounting conservatism is not meaningful. Managers are easily able to apply managerial methods (personal incentives) in the company and increase or decrease that. However, due to concerns of stockholders and legal claims (complaints), bad news in certain companies is noticed more and in such a condition, the stockholders and creditors demand managers to report financial reporting with more conservatism due to controversies in benefits and the cost of legal claims. The lack of a

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relationship shows that stockholders and creditors are not sensitive to inappropriate performance of management and the enforced risk on the part of management and do not demand conservatism in financial reporting in order to remove agency problem controversy and the reduction of legal claims' costs. Also auditors are not sensitive towards the firm's status and management's performance; thus, demanding more or less conservatism in financial reporting is not practiced. Also, among control variables the return type has had a positive relationship with conditional accounting conservatism. (Chang et al., 2008) studied over-confidence of investors and increase in nonsystematic risk and concluded that nonsystematic risk has had a positive correlation with over-confidence of investors. The result of third hypothesis showed that there was a negative and meaningful relationship between systematic risk and unconditional accounting conservatism. The existence of a negative and meaningful relationship showed that when systematic risk in firms enlisted in Tehran Stock Exchange is high, the stockholders and creditors demand managers less conservatism in financial reporting and this may be due to the nature of systematic risk which affects total market. In such a situation, the stockholders and creditors are aware that increasing systematic risk in the company is due to the overall factors in economics (macroeconomics). Thus, there would be less demand of conservativeness for financial reporting from managers. The results of this hypothesis contradict with those in (Lara, 2010; Nourifard et al., 2013). They showed that when systematic risk increases, managers act more conservatively due to agency problems and information asymmetry and this creates some limitations in profit and assets' distribution among the stockholders. Also the coefficients of control variables and their confidence level showed that the variable of the ratio of M/B has had a negative relationship with unconditional accounting conservatism. According to the theoretical foundations of this research, those companies that have a high level of financial leverage need conservatism more due to the existence of agency costs among the creditors and investors and the problems of these two groups. Thus, in the present research the variable financial leverage has had a positive relationship with unconditional accounting conservatism. Results of 4<sup>th</sup> hypothesis showed that the relationship between nonsystematic risk and unconditional accounting conservatism is not meaningful and the 4<sup>th</sup> hypothesis is not approved. Lack of meaningfulness of the regression means lack of entering the issue of variables' coefficients. Since there has not been any researches carried out regarding this hypothesis up to now, it is impossible to generalize its results.

### **SUGGESTIONS RESULTED FROM THE PRESENT RESEARCH**

- 1- Due to the existence of a relationship between systematic risk and unconditional accounting conservatism, this finding can be useful for the investors in order to present a new criterion because in companies where there is a high systematic risk, there would be less probability of accounting conservatism and the reliability of financial statements and the efficiency of contracts is affected in this way. Also auditors can broaden the range and volume of their supervision especially regarding accruals and estimations due to this relationship.
- 2- Stock Exchange Organization can suggest some rules and regulations to reveal information regarding the negative relationship between systematic risk and unconditional accounting conservatism in determining the real firm value and let companies to use accounting conservatism methods to the extent that there would result a reduction in controversies between managers and investors.
- 3- Regarding the negative relationship between systematic risk and accounting conservatism, it is suggested for firm creditors to consider this result in firms enlisted in Tehran Stock Exchange, assess the validity of the company and then do activities, because by increasing systematic risk, conservatism reduces, the reduction of conservatism in financial reporting avoids presenting information and symptoms about inappropriate financial performance of the company in time for the users (creditors). Thus, the creditors consider the effect of systematic risk on unconditional accounting conservatism and consider the amount of the implemented conservatism in financial reporting.
- 4- Based on results of second and fourth hypotheses, there is not a relationship between nonsystematic risk and accounting conservatism (conditional and unconditional). This means that we can not predict managers' performance and thus the amount of accounting conservatism (conditional and unconditional)

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utilized in financial reporting based on nonsystematic risk. According to theoretical foundations, accounting conservatism is an effective approach to reduce nonsystematic risk and it is a method to do exchanges in lack of assurance condition which will result in increasing firm value. It is suggested to use other variables such as nonsystematic risk to assess the amount of conservatism applied in financial reporting by managers.

### SUGGESTIONS FOR FUTURE RESEARCH

Regarding the literature and research backgrounds related to conservatism, it is suggested to consider the following subjects for the future researches:

1. Studying the relationship between systematic risk and capital structure
2. Studying the relationship between characteristics of board of directors (such as the percentage of stocks of managers, the ratio of internal managers and managers' age) and accounting conservatism
3. Studying the relationship between characteristics of firm (age, size, ...) and nonsystematic risk
4. Studying the relationship between optional reveal and nonsystematic risk
5. Studying the relationship between accounting conservatism and firms' bankruptcy
6. Studying the relationship between leverage and institutional ownership and nonsystematic risk
7. Studying the relationship between accounting conservatism and operational risk
8. Studying about the effect of financial information quality and its transparency on liquidation risk

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