

Explaining the relationship between accounting conservatism and cost of capital in listed companies in Tehran stock exchange

Mohsen Hassani¹, Mohammad Hedayati², Azita Mohammadi³, Mohyedin Adel Lesan²

¹Department of Accounting, Payame Noor University, Tehran, Iran, ²Department of Accounting, Marand Branch, Islamic Azad University, Marand, Iran, ³Department of Accounting, Babol Branch, Islamic Azad University, Babol, Iran

Abstract

This study provided the theoretical basis for research and study the relationship between accounting conservatism and cost of capital for firms listed on the stock exchange deals. In this study, using a conservative model of Basu (1997) have been measured. Population studied in this research are listed companies in Tehran Stock Exchange. Using a sampling culled 63 companies listed in Tehran Stock Exchange during the period 2002 to 2009 were selected for correlation test was used to test the hypothesis. The results indicate that the capital cost of accounting conservatism and the conservatism of accounting education costs through debt financing, there is a significant relationship, Between accounting conservatism, but there is a significant relationship between the rate of return on common shareholders.

Keywords: accounting conservatism, cost of capital, cost of common equity, cost of debt, return on equity.

Introduction

Directors are responsible for preparing the Company's financial position and financial statements with the full awareness of having more knowledge than users of financial statements that are potentially trying to portray a favorable image of the business. For example, it may order the costs of the course as an asset, decrease costs and increase profits in the finan-

cial statements are reported. The entity's assets may be greater than the actual amount reported. The results of this operation will be such that the image of the business seems to be better than the real situation and Financial incentives and capital injection by people external to the company increases (Kordestani *et al.*, 2008). Two major suppliers, creditors, and investors are financial resources. Each of these two groups are always looking for their own gain. Principal and interest of the loan creditors seeking and expected return to shareholders from the profit from operations and stock price changes to follow. Meanwhile, financial managers to reduce costs and achieve sustainable profitability for shareholders to control capital costs are expected. However, accounting conservatism and conservative covenant with accurate measurement results from the activity of enterprises, led to a decrease in interest and dividend distribution is measured and Finally, the confidence required to settle the debt and the interest and principal investigator shareholders would realize long-term expected return (Trust *et al.*, 2009).

Statement of the problem and its importance

Accounting concept of conservatism, has a long history. Pulleys quoted Watts, as an expression of conservatism in accounting is defined as: "Do not anticipate no profit, but anticipate all losses you" (Watts, 2003). Basu as saying, "Accounting tendency to require a higher degree of confirmation to identify the good news or the amount of profit or loss for the verifiable necessary to identify the bad

Corresponding author: Mohsen Hassani, Department of Accounting, Payame Noor University, Tehran, Iran, Email: Mh66ma67@delijanpnu.ac.ir

news” is interpreted (Basu, 1997). Technical Committee of the audit, the theoretical concepts of financial reporting conservatism as a part of the qualitative characteristic is considered to be reliable. But instead of using the word conservative has a word of caution: “Caution is the degree of care in the exercise of judgment is required in accounting estimates under uncertainty. So that income or assets or liabilities, and costs less than actually is not actually present “(Technical Committee on Corporate Audit, 1380). The views of users of financial statements is an attempt to select a conservative accepted accounting procedures that will result in one of the following:

- slower revenue recognition,
- early recognition of expenses
- valuation of assets or less
- Further evaluation of Debts (Shabahang, 2008).

Watts and Zimmerman’s definition of conservatism has written: “This means that accounting conservatism may be of value for assets and liabilities minimum value, maximum value will be reported. Revenues should be recognized later rather than sooner, and costs should be recognized rather than later “(Watts *et al*, 1980). As can be seen, the three approaches in research related to accounting conservatism can be seen as follows:

A - behavioral approach: Optimism is better than pessimism. For example, guidance on accounting for contingent liabilities (potential losses) are recognized under certain circumstances, if the contingency guidelines on assets (profit potential) does not apply.

B - Approach time: Show earlier losses and expenses they show is better than later and Income earnings from show to show sooner than later is better.

C - the approach: Show more show less income earnings of more than demonstrate their losses and costs less to show them better.

Conservatism can be attributed to two effects: First, financial reporting standards, which required the reporting conservatism; And, other accounting policies selected by management in preparing the financial statements. Often the second aspect of the literature is presented as an image of conservatism. Watts accounting conservatism emanating from economic factors

as the main reason for the creation of four titles in the history of conservatism is:

- 1 - Contractual interpretation of conservatism
- 2 - Interpretation of lawsuits Conservatism
- 3 - Interpretation fiscal conservatism
- 4 - Detailed Legislative conservatism

Apparently one of the issues of conservatism and useful information for users of financial information, Reduce its impact on dividend policy conflicts between shareholders and bondholders and reduce the cost of financing (capital) is. Adherence to conservative practices and increasing conservatism reduces managers’ willingness to borrow and reduce the cost of financing is. In the process of signing a contract debt, the lender faces the risk of losing principal capital; Thus, all mechanisms that can reduce this risk, welcome. In fact, this mechanism is conservative (Zhang, 2008). Conservative, with the release of bad news faster than good news, which can help lenders to reduce the borrower’s credit and to reduce the risk of losing principal capital. Thus, we can conclude that conservatism to lenders and the information is very useful. But perhaps this inference, prove incorrect, because conservatism is beneficial to lenders, the borrowers will cause harm. In fact, this is not the case for both the conservative and information content. Therefore, borrowers should consider the benefits of partner lenders. Empirical studies also demonstrate that this conservatism is valuable for both the borrower and the lender and can be useful (Ahmed *et al*, 2002).

Review of the literature

Bt *et al*. (2003) investigated the importance of accounting changes in debt contracts and accounting analysis of mandatory and optional payments. They concluded that many of the loan contract, the borrower does not have permission to change accounting methods. The main reason for this action was believed that the creditors may receive credit by choosing different accounting methods to measure more than earnings and Most of the stock dividend distribution and risk of non-receipt of principal and interest of loans granted up. Zhang (2004) analyzes the real benefits and conservative prediction for

creditors and credit payment recipients. The first issue was that one of the benefits of conservatism to the creditors timely warning against the risks of non-compliance with the provisions of the loan contract is received by the credit. The second issue was considered one of the major benefits of accounting conservatism to receive reduced rates on loans received credit for them. Conservative reporting enables creditors to timely information and signs about the poor financial performance of the Company may obtain. Lara and others (2005) in a study entitled "Accounting conservatism and corporate governance" in a period from 1992 to 2003 among U.S. companies, the benchmark measure of conservatism Basu (1997) measure of corporate governance they used a combination of criteria. Results indicates that this was a positive relationship between corporate governance and accounting conservatism there. Gyvly and others (2006) measure of the asymmetry of power and reliability when profits were examined. Their particularity of the information that is related to conservatism, but the benefit is effective when asymmetry measure was defined and Found that a measure of the degree of uniformity in the content of the news during the period under review, the types of events that occur during the company's disclosure policy is sensitive.

Lafvnd and Rvychvdary (2008) in a study to examine the impact of managerial ownership (the company that is driven by internal managers) over financial reporting conservatism, began. They assumed that the level of managerial ownership decreases the severity of agency problems increases. They found that with increasing levels of managerial ownership, thereby reducing the conservatism of shareholders to demand evidence of conservatism offered.

Packing and others (2009), the study examines the role of accounting conservatism on the relevance and reliability of current interest, contributed. The results are also consistent with the number 2 SFAC statement indicates that accounting conservatism, reliability related sacrifices current profits to be. In this study pertain to the ability of current earnings to predict future cash flows and reliability as the ability of current earnings to predict future earnings is considered.

Lee (2009) in a study entitled "The effect of accounting conservatism on the cost of capital" effect of accounting conservatism on the cost of capital in different countries studied. He found that companies associated with countries with lower cost of equity is more conservative financial reporting system.

Reza Zadeh (2008), to examine the relationship between information asymmetry and conservatism in financial reporting, using data from a sample of 81 companies listed in Tehran Stock Exchange during the period 2002 to 2006 began. They were used to measure the Basu measure of conservatism And concluded that the information asymmetry between investors and the level of conservatism in the financial statements of a significant positive relationship exists Information asymmetry between investors and cause changes in the level of conservatism. The results indicate that seek to increase information asymmetry between investors demand to exercise conservatism in financial reporting increase Thus, the usefulness of conservatism as one of the qualitative characteristics of financial statements will be approved.

Mashayekhi, Abadi and Hsarzadh (2009) investigated the effect of accounting conservatism on earnings persistence paid. They concluded that increasing conservatism in accounting firms listed in Tehran stock exchange, dividend distribution is reduced. The researchers also compared the results to accept or reject the hypothesis that the stability of the profit will decrease with the increase of accounting conservatism, did not comment.

Hypothesis

In this study, a main hypothesis and sub-hypothesis is in line with the following consideration:

The main hypothesis between accounting conservatism and cost of capital, there is a significant relationship.

The first sub-hypothesis: between accounting conservatism and the cost of debt financing education, there is a significant relationship.

The second sub-hypothesis: the relationship between conservatism and accounting rate of return on common shareholders significant.

Population, sample and time-domain study

The population examined in this study, all listed companies in Tehran Stock Exchange for the period 2002 to 2009 is research. In this study, a systematic elimination method was used to obtain the sample applied to the sample selection criteria are as follows:

A - From 2002 till 2009 the company listed on the Tehran Stock Exchange and the trading halt should not be more than 6 months.

B - Financial year ended 29 Esfand and participated in the study, has not changed its financial year.

C - the company's shares during each year of the study period (2002 to 2009) to be traded.

D - among banks and financial institutions (investment companies, financial intermediaries, holding companies, and leasing) is not.

E - the information needed to calculate the variables available in the years studied.

Thus, applying the above criteria, 63 companies were selected as samples.

The data collection and data

The theoretical literature by studying the library of books, theses, articles and internet websites of reputable foreign and domestic, is obtained. The data and information collected free hypothesis test, the information in the financial statements of listed companies in Tehran Stock Exchange during 2002 to 2009 were used.

The measure of conservatism

In the present study, multivariate regression models that inspired Basu (1997) is to examine the relation between accounting conservatism and cost of capital is used. In 1997, Basu conservatism reflected in the bad news faster than good news in earnings interpreted. This interpretation reflects a systematic difference between good and bad news from dual "when" and "stability" in profits. Stock returns can be used to measure Basu news, annual returns because the shares acquired during the year are included news. This interpretation of the relationship between earnings conservatism - will affect the outcome. Hence, Basu regression between earnings and stock returns relative benefits received responses to bad

news (negative stock returns) than the response to gains than good news (positive stock returns) is. He also showed that the stability of its negative changes than positive changes that benefit. The Basu measure of conservatism model is used as follows:

$$NI_{i,t}/P_{i,t-1} = \beta_0 + \beta_1 \cdot DR_{i,t} + \beta_2 \cdot R_{i,t} + \beta_3 \cdot DR_{i,t} \cdot R_{i,t} + \varepsilon_{i,t}$$

In the above model:

$NI_{i,t}$ = Profit before items of unexpected company i in year t

$P_{i,t-1}$ = I's market value of equity at the beginning of year t

$R_{i,t}$ = Annual return on stock i in year t

$DR_{i,t}$ = 0 and 1 is a dummy variable for firms whose returns (R_i, t) are negative and equal to one otherwise zero is considered.

β_2 = Response and reaction to yield positive profit measures.

$\beta_3 + \beta_2$ = Responses and reactions to negative earnings yield is measured.

The conservative $\beta_2 + \beta_3 > \beta_2$, the other hand is $\beta_3 > 0$

Method of measuring the cost of capital

To calculate the weighted average cost of capital of the company cost of capital rate used in the formula is as follows:

$$WACC = \frac{D}{V} \times kd + \frac{E}{V} \times kj$$

In which:

D = Financed through loans and financial liabilities = liabilities + debt + Long-term bonds payable

E = Equity value

V = The total value of the company's capital structure = financing and loan debt + equity value

Kj = Rate is the cost of common stock is calculated by the following formula:

$$kj = \text{dividend} / \text{stock market}$$

Normality test data

These hypotheses using the Kolmogorov - Smirnov test and the results are shown in the following table.

Table 1. Kolmogorov - Smirnov test

The company's capital expenditure	Rate of return on common stock	Cost of debt	Conservatism	
63	63	63	63	Number
19008/0	08221/0	36816/0	04841/76	Mean
337219/0	052478/0	031130/1	460015/284	SD
354/0	103/0	400/0	430/0	Absolute
354/0	103/0	400/0	430/0	Positive
302/0-	063/0-	361/0-	376/0-	Negative
811/0	819/0	177/0	412/0	Kolmogorov-Smirnov Z
518/0	514/0	739/0	621/0	Significant

Given that the level of significance for all variables ks test more than 0/05 of the normal distribution of variables follows. Therefore,

the Pearson correlation test and a parametric test for normally distributed variables are to be used.

Table 2. The results of testing hypotheses

The second sub-hypothesis		The first sub-hypothesis		The main hypothesis		Year
Significant	Pearson	Significant	Pearson	Significant	Pearson	
826/0	028/0	700/0	050/0-	752/0	041/0-	2002
733/0	044/0-	632/0	062/0	318/0	128/0	2003
181/0	171/0	206/0	161/0	119/0	198/0	2004
372/0	114/0	941/0	010/0	488/0	089/0	2005
324/0	126/0	857/0	023/0	296/0	134/0	2006
007/0	(**)338/0	838/0	026/0-	659/0	057/0	2007
017/0	(*)299/0	601/0	067/0	015/0	(*)305/0	2008
132/0	192/0	732/0	044/0-	718/0	046/0-	2009
000/0	(**)237/0	770/0	013/0-	988/0	001/0-	2002-2009

In the picture above the mark (*) indicates a significant relationship. Since the main hypothesis test significant correlation between the conservatism of listed companies in Tehran Stock Exchange and the company's capital expenditures for the entire study period (except for the year 87,) is more than 0/05 is, Therefore it can be concluded with 95% confidence that the relationship between conservatism and cost of capital does not exist. The first sub-hypothesis, significant Pearson correlation between the conservatism of listed companies in Tehran Stock Exchange for all of the years of debt and spending more than 0/05 is, Therefore it can be concluded with 95% confidence that the relationship between conservatism and education

costs through debt financing from 2002 to 2009 years is not finance. The second sub-hypothesis, significant Pearson correlation between conservatism and the rate of return on common shareholders of the Company during fiscal years 2007 and 2008 and generally 2002 to 2009 years less than 0/05, Therefore it can be concluded with 95% confidence that the relationship between conservatism and the rate of return on common shareholders in the year there.

Conclusions

One of the main hypotheses and sub-hypotheses, results indicated that the overall significance of these two hypotheses can be 2002 to

2009 years of financial rejected. The second sub-hypothesis can be seen by examining the relation between accounting conservatism and the rate of return on common equity is 95%. The significance of this theory in general can be 2002 to 2009 years of financial confirmed. Outside the subject of extensive research with a focus on accounting conservatism is performed. Due to the lack of internal investigations in this field, some of them are:

1 - Relationship between accounting conservatism and conservative measure of capital cost with other models include: Model Rychvdary and Watts (2006) and Khan and Watts (2007)

2 - The relationship between conservatism and ownership of institutional shareholders

3 - Relationship between Accounting Conservatism and Earnings Quality

4 - Evaluation of the relationship between conservatism and board characteristics such as (financial expertise of board members and board meetings, etc.)

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