The Comparative Study of the Effect of Accounting Conservatism on Cost of Capital at Collapse and Non-Collapse Firms in Tehran Stock Exchange (TSE)

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Abstract: The aim of this research is the comparison of the accounting conservatism effect on the cost of capital at collapse and non-collapse firms in Tehran Stock Exchange (TSE). To do this research, the number of 81 collapse companies and also 81 active and non-collapse companies during 2005-2010 were investigated. In order to measurement of conservatism in companies was applied Givoly & Hayn (2000) Model and for the measurement of the cost of capital were used proxy variables such as Dividend Per Share on Assets Ratio, Financial Expenses on Assets Ratio, Long Term Liability on Assets Ratio, Stockholders Equity on Assets Ratio, Earning Per Share (EPS) to Operating Income Ratio and Earning Per Share on Non-Operating Revenue Ratio. The findings indicate that conservatism in financial reporting has negative and weak effect on dividend per share on assets and stockholders equity on assets ratios and positive and weak effect on long-term liability on assets and earning per share on operating income ratios in non-collapse companies. Also, conservatism effect on financial expenses on assets and stockholders equity on assets ratios is negative and weak.

Key words: Cost of Capital, Accounting Conservatism, Collapse and non-Collapse Firms, Tehran Stock Exchange (TSE).

INTRODUCTION

Conservatism is an important and basic principle in financial accounting. It stipulates that possible errors in measurement should be in the direction of understatement rather than overstatement of net income and net assets. If two estimates of earnings or assets to be received or paid in the future are approximately equally likely, then conservatism dictates that the less optimistic one be used (Statement of Financial Accounting Concepts No. 2, FASB).

Conservatism in accounting imposes stronger verification requirements for the recognition of gains than for losses, and produces earnings that reflect bad news in a timelier fashion than good news. Explanations for the existence of conservatism posit that it benefits the users of financial reports, as it increases firm value by constraining management's opportunistic payments to themselves or other parties. The increase in value is then shared among all parties to the firm, increasing their welfare (Watts, 2003a).

Based on the previous discussion, the purpose of this study is to empirically determine the difference between influence of accounting conservatism on cost of capital at Collapse and non-Collapse Firms in Tehran Stock Exchange.

The rest of the paper is organized as follows: Section 2 reviews the related literature. Section 3 presents our hypotheses, Section 4 includes sample and data, Section 5 contains the research design, describing the measurement of conservatism and cost of capital, Section 6 introduces the Methodology, Section 7 Regression results, Section 8 contains the Discussion and Conclusions.

Literature Review:

Conservatism:

The seminal empirical research study dealing with accounting conservatism can be traced back to Basu (1997).

Conservatism, one of the most prominent characteristics of financial accounting, has influenced accounting practices for centuries and is associated with the contracting role of accounting (Watts, 2003a and 2003b). It is regarded as an efficient way to address the moral hazard problem arising from the asymmetric information among interested stakeholders.

LaFond and Watts (2008) conclude that information asymmetry between inside and outside equity investors generates the demand for conservatism in financial statements.

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The general definition of accounting conservatism is also often defined by the rule that "when there is a genuine doubt concerning which of two or more reporting alternatives should be selected, the alternative with the least favorable effect upon owners' equity should be chosen" (Givoly and Hayn, 2000).

Two important reporting features on conservative accounting are asymmetric timeliness in recognition of accounting gains versus losses and systematic understatement of net assets (Givoly Hayn, and Natarajan 2007, Roychowdhury and Watts, 2007). These two features result from accounts' predisposition to require a higher degree of verification 5 and certainty for the establishment of assets as compared with liabilities (Watts 2003a).

Under conservative accounting, the average market value is higher than the book value in the long run (Feltham and Ohlson, 1995; Zhang, 2000; Beaver and Ryan, 2000; Penman and Zhang, 2002). Such accounting recognizes bad news in a more timely way than it does good news, leading to asymmetric timeliness of earnings (Basu, 1997; Ball *et al.*, 2000; Givoly and Hayn, 2000; Holthausen and Watts, 2001; Ball *et al.*, 2003; Watts, 2003a). This type of conservatism is also known as conditional conservatism (Beaver and Ryan, 2005). Conservatism is beneficial for creditors, minority stockholders, the whole firm and regulatory authorities (Ahmed *et al.*, 2002; Watts, 2003a; Francis *et al.*, 2004; Ahmed and Duellman, 2007; Zhang, 2008).

Givoly and Hayn (2000) indicate that changes in the time-series properties of earnings, cash flows, and accruals, are consistent with increased reporting conservatism. They report conservatism has been increasing over time as evidenced by the market to book ratio, price-to book ratio, skewness and variability of earnings, and asymmetric timeliness (payan name).

The empirical evidence suggests that the trend in conservative financial reporting has been increasing over the past 30 years in the U.S. and in other common law countries (Givoly and Hayn, 2000). Informal explanations for this rise in accounting conservatism have been attributed to the use of financial statements in debt and compensation contracts (the contracting explanation), shareholder litigation, taxation, and accounting regulation (Watts, 2003a).

Givoly and Hayn (2000) show that the frequency of losses has been increasing in recent decades and is more pronounced for smaller companies. By measuring cash flow from operations to total assets ratio, they found that the decline in profitability was not a result of the underlying cash flows, but rather the result of a change in accounting accruals. The decrease in profitability was reported as being driven by selling and general administrative expenses and interest expense.

Managers can use accounting conservatism as a means to manage this risk component in their financial reporting strategies (Chaney, 2006).

The accrual-based measure of conservatism, CON-ACC, is income before extra-ordinary items less cash flows from operations plus depreciation expense deflated by average total assets, and averaged over a 3-year period centered on year t, multiplied by negative one.

Positive values of CON-ACC indicate greater conservatism. The intuition underlying this measure is that conservative accounting results in persistently negative accruals (Givoly and Hayn, 2000). The more negative the average accruals over the respective periods, the more conservative the accounting. Averaging over a number of periods also ensures that the effects of any temporary large accruals are mitigated, as accruals tend to reverse within a one to 2-year period (Richardson *et al.*, 2005).

Gary et al examine the relations between accounting conservatism and bankruptcy risk.

The results provide empirical evidence that conservatism's cash enhancing and informational properties help mitigate bankruptcy risk, which is fundamentally a condition of cash insufficiency. We examine both contemporaneous and causal relations. They find both unconditional and conditional conservatism to be negatively associated with contemporaneous and subsequent bankruptcy risk. Bankruptcy risk is found to be positively associated with subsequent unconditional conservatism and negatively associated with subsequent conditional conservatism, consistent with tradeoffs between managerial career and disciplinary incentives (Gary etal. 2010).

Louis et al. (2009) document that the timelier reporting of losses associated with conditional conservatism helps control value-destroying agency costs associated with increased cash holdings. Lara et al. (2009) argue that conditional conservatism increases managerial incentives to avoid suboptimal investments ex ante, and to abandon loss projects quickly ex post; Bushman et al. (2010) and Francis and Martin (2010) report that timely loss recognition curbs over-investment in cross-country settings and in acquisition settings, respectively. Loktionov (2009) argues that in distressed firms, conditional conservatism reduces cash wastage from risk-shifting in investment projects by speeding up technical defaults, signaling bad news more quickly, and by reducing information asymmetries.

The informational role of accounting conservatism also reduces bankruptcy risk indirectly by supporting its cash enhancing role. By reducing information asymmetry and information uncertainty, conservatism reduces adverse selection costs and risks to investors, and the cost of equity and debt capital, thereby increasing cash availability from external sources as firms approach default. For firms that have entered into conditions of distress, the informational properties of conservatism may further avert rightward progressions into bankruptcy by encouraging creditors and other capital providers to work more cooperatively with each other and with the

firm to avoid a bankruptcy filing, at least in the case of unconditional conservatism. Theoretical models in finance likewise suggest that less information asymmetry facilitates debt renegotiations and reduces bankruptcy filings (Gary *et al*, 2010).

Cost of Capital:

Cost of capital is one of the most important benchmarks to evaluate the ability of firms to invest their funds and to evaluate the quality of their existing investments (Habib, 2006). A firm's cost of capital is of interest to regulators, investors, accountants, academicians, and management for capital budgeting decisions, equity valuation, capital structure, and firm profitability (Easley and O'Hara, 2004).

Since the cost of equity capital serves as a summary measure of investors' resource allocations, a decrease in information asymmetry should reduce the cost of capital through reduced transaction costs and/or a reduction in uncertainty or estimation risk (Botosan, 2004).

Francis *et al.* (2004) document that information asymmetry can be caused by poor earnings quality and poor earnings quality is positively related to an increase in a firm's cost of capital. A reduction in information asymmetry through improved accounting disclosures, such as conservatism, may reduce a firm's information risk and reduce the cost of equity capital.

The ex ante cost of capital is a measure of a firm's financial reporting credibility and transaction costs. Firms with a lower cost of equity capital are perceived to have higher financial reporting credibility. Determining the cost of equity capital is also relevant to understanding fundamental financial statement analysis and the valuation role of accounting. Cost of capital serves as a summary indicator measure of investors' resource allocations (Francis *et al.*, 2004).

Botosan *et al.* (2004) examined the relationship between cost of equity and the quality of public and private information. They found a negative relation between the availability of public information and the firm's cost of capital. Thus, firms benefit by providing more disclosure of information to investors than by restraining this information.

Hail and Leuz (2006) suggest that a country's legal establishment and security regulations have a material effect on a firm's cost of capital. Firms that cross-list on U.S. exchanges experience a decrease in their cost of capital. Firms with established legal and security regulations that require more public disclosure are found to have a lower cost of capital.

Guay and Verrecchia (2007) articulate the mechanism underlying the predicted relation between conditional conservatism and cost of capital. They show that firm commitment to timely reporting of low realizations leads to full disclosure of information and lower cost of capital.

Suijs (2008) suggests an alternative link between firm reporting policy and cost of capital. In his model, overlapping generations of shareholders invest in a firm with a life cycle that exceeds shareholders' investment horizons. In such a setting, it is the volatility of firm future prices that determines investment risk and not the volatility of future cash flows. As a result, firm reporting policies become a primary determinant of investment risk. More informative disclosure of bad news reduces the cost of capital by improving risk sharing across generations of investors.

The Relationship between Accounting Conservatism and Cost of Capital:

Suijs (2008) provides an alternative link between conservatism, information precision, and cost of capital. He builds a model of overlapping generations of shareholders that invest in a firm with a life cycle that exceeds shareholders' investment horizons. In that setting, investment risk is determined by the dispersion of future stock prices and not by the volatility of future cash flows. Suijs (2008) demonstrates that an asymmetric reporting system that reports bad news more precisely than good news results in higher firm value and more efficient risk sharing amongst generations of investors. Suijs argues that firm reporting policies are a primary determinant of investment risk and that a conservative reporting system serves to reduce this risk, thereby lowering firm cost of capital.

Conditional conservatism is also expected to increase firm value indirectly through improved monitoring and contracting and reduced litigation costs. As shown by Guay and Verrecchia (2007) conservatism increases firm value (1) by improving corporate governance (which, in turn, allows early removal of poorly performing managers, prevents managers from engaging in self-serving projects and expropriating investors, improves firm investment efficiency, etc.), (2) by reducing agency costs arising from compensation and debt contracting, and (3) by reducing litigation costs. These arguments link to the work in Lambert *et al.* (2007), who show that there is also an indirect link between information quality and cost of equity.

Francis *et al.* (2004) examines the relation between cost of equity capital and conditional conservatism at the firm-year level. They study the link between cost of capital and seven earnings attributes: accrual quality, persistence, predictability, smoothness, value relevance, timeliness, and conservatism. They hypothesize and find that, generally, more favorable values of the individual earnings attributes are associated with lower cost of

capital, after controlling for known risks factors and innate determinants of the earnings attributes. However, they do not find evidence of an association between conservatism and cost of equity (Lara and et al, 2011).

Hypotheses Developments:

Main Hypothesis:

There is significant difference between the effect of accounting conservatism on cost of capital at collapse and non-collapse firms.

Sub Hypothesis:

- H_1 : There is significant difference between the effect of accounting conservatism on Dividend per share on assets ratio at collapse and non-collapse firms.
- H₂: There is a significant difference between the effect of accounting conservatism on financial costs on assets ratio at collapse and non-collapse firms.
- H₃: There is a significant difference between the effect of accounting conservatism on Long-term liability on assets ratio at collapse and non-collapse firms.
- H₄: There is a significant difference between the effect of accounting conservatism on stockholders equity on assets ratio at collapse and non-collapse firms.
- H_5 : There is a significant difference between the effect of accounting conservatism on Earning per share on operating income ratio at collapse and non-collapse firms.
- H₆: There is a significant difference between the effect of accounting conservatism on Earning per share on non-operating revenue ratio at collapse and non-collapse firms.

Sample and Data:

The statistical population in this study includes the accepted companies in Tehran Stock Exchange in the period of 2005-2010. Existence of some heterogeneousness among the accepted companies in Tehran Stock Exchange led to consider some special conditions for selecting of studied companies as follows:

- 1. Financial year end should be 29 March.
- 2. Companies selected must be accepted in Tehran Stock Exchange before the year 2005.
- 3. Financial period of companies should not be changed in the study period.
- 4. Companies should not be members of any financial investment and mediators.
- 5. Companies' information should be available for the purposes of this study.
- 6. Companies should continuously be active in exchange from 2005 until 2010.

With regard to the above conditions, 162 firms (81 collapses and 81 non-collapses) were selected as the statistical sample.

Research Design:

This section presents a discussion of (i) measures of accounting conservatism and (ii), the proxies we use for cost of capital.

Measurement of the Conservatism:

In this paper, conservatism is Independent variable that for measuring of it, Givoly and Hayn (2000) model is use. Based on this model, conservatism is stated in forms of non-operating accruals (NOACC). The more non-operating accruals lead to the less conservatism. Therefore, in this study, Symmetry of non-operating accruals was applied as conservatism index (direct criteria).

$$ACC_{it} = (NI_{it} + DEP_{it}) - CFO_{it}$$

$$OACC_{it} = \Delta(AR_{it} + I_{it} + P_{it}) - \Delta(AP_{it} + TP_{it})$$

$$NOACC_{it} = ACC_{it} - OACC_{it}$$

$$NOACC_{it} / ACC_{it} = 1 - OACC_{it} / ACC_{it}$$

$$CSVT_{it} = 1/(1 - OACC_{it} / ACC_{it})$$

Where in above equations, NI (net income before extraordinary items), DEP (depreciation expenses of firm), CFO (cash flow from operating), AR (accounts receivable), I (inventories), P (prepaid), AP (accounts payable), TP is tax payable, csvt is conservatism index.

The accrual-based measure of conservatism, CON-ACC, is income before extra-ordinary items less cash flow from operations plus depreciation expense deflated by average total assets, and averaged over a 3-year period centered on year t, multiplied by negative one.

Positive values of CON-ACC indicate greater conservatism. The intuition underlying this measure is that conservative accounting results in persistently negative accruals (Givoly and Hayn, 2000).

Givoly and Hayn (2000) suggest that another method to measure the degree of conservatism is to observe the sign and magnitude of accumulated accruals over time. The authors explain that accruals will tend to reverse. For instance, a firm experiencing a period where net income exceeds (falls below) cash flow from operations will be 45 expected to have negative (positive) accruals in the subsequent period. For a firm in a steady state, the accumulated net income before depreciation is expected to converge to cash flows from operations in the long run. It is predicted that a constant predominance of negative accruals over a long horizon period indicates conservatism, while the rate of accumulation of net negative accruals indicates the change in the degree of conservatism over time.

Measurement of the Cost of Capital:

We use six Cost of Capital characteristics: (i) Dividend Per Share on Assets Ratio, (ii) Financial Expenses on Assets Ratio, (iii) Long Term Liability on Assets Ratio, (iv) Stockholders Equity on Assets Ratio (v) Earning Per Share (EPS) to Operating Income Ratio and (vi) Earning Per Share on Non-Operating Revenue Ratio.

Methodology:

This study is an archival research. In terms of purpose, this study is applied research that its results can be useful for extensive range of users including stockholders, auditors, and Tehran Stock Exchange and standard setters. Companies' information collected through the Stock Exchange official website and then data analyzed by the software SPSS 17.

Results:

Considering the fact that, the major part of the chart lies under the curve, so the Conservatism variable possess normal distribution.

7.1 Descriptive Statistics:

Descriptive statistics for non-collapse companies (486 firm-year observations) have been represented in Table 1. Results show that Stockholders equity on assets ratio variable among variables has the lowest variation coefficient (Std. dev. divided by mean) and Earning per share on non-operating revenue ratio variable is the most variation coefficient in study period. This means that investigated companies have had instability Earning per share on non-operating revenue ratio in during research period.

Table 1: Descriptive Statistics (Non-Collapse Firms)

Criteria	Observation	Mean	Minimum	Maximum	Std. dev.	Coefficient
Variables						of variation
Dividend per share on assets	486	0.004	0.000	0.054	0.006	1.5
Financial costs on assets	486	-0.039	-0.404	0.000	0.035	0.89
Long-term liability on assets	486	0.118	0.000	1.353	0.148	1.25
Stockholders Equity on assets	486	0.371	-1.146	1.897	0.272	0.73
Earning per share on operating	486	0.044	-0.433	2.845	0.154	3.5
income						
Earning per share on non-operating revenue	486	0.080	-21.128	29.5	2.502	31.27

Table 2: Descriptive Statistics (Collapse Firms).

Criteria	Observation	Mean	Minimum	Maximum	Std. dev.	Coefficient of
Variables						variation
Dividend per share on assets	486	0.001	0.000	0.048	0.004	4
Financial costs on assets	486	-0.104	-2.455	0.000	0.201	1.93
Long-term liability on assets	486	0.246	0.000	4.278	0.432	1.75
Stockholders Equity on assets	486	-0.784	-57.980	3.074	4.268	5.44
Earning per share on operating	486	-1.645	-886	31.638	40.238	24.46
income						
Earning per share on non-	486	-0.080	-38.484	23.428	3.338	41.72
operating revenue						

Descriptive statistics for collapse firms (486 firm-year observations) have been represented in Table 1. Results show that Long-term liability on assets ratio variable among variables has the lowest variation coefficient (Std. dev. divided by mean) and Earning per share on non-operating revenue ratio variable is the most variation coefficient in study period. This means that investigated companies have had instability Earning per share on non-operating revenue ratio in during research period.

7.2 Regression Results:

The regression model between Conservatism & Dividend per share on assets ratio in Table 3 shows that relationship between these variables is negative and significant (no significant at collapse firms) statistically. Determination coefficient shows that approximately 1% (.1% at collapse firms) of changes Dividend per share on assets ratio can be stated by Conservatism during the research period. In general, regression model is significant (no significant at collapse firms). Durbin-Watson statistic shows that the model hasn't autocorrelation problem. The negative relationship between above variables indicates that Conservatism causes to decrease Dividend per share on assets ratio as one of the cost of capital mechanisms in firms accepted in Tehran Stock Exchange.

Table 3: Regression Model between Conservatism and Dividend per share on assets ratio.

Non-Collapse firms							
Variables	β	Std.	Error	t	Sig		
Dividend per share	-0.107	.0	06	-2.36	.019		
on assets							
C	.004	.0	00	12.27	.000		
R-squared	Adjusted	R-squared	Durbin-W	atson Stat	F		
.011	.0	009 1.0		65	5.58		
		<u>Collaps</u>	se firms				
Variables	β	Std. Error		t	Sig		
Dividend per share	028	.0	04	626	.53		
on assets							
С	.001	.000		5.65	.000		
R-squared	Adjusted	R-squared Durbin-W		atson Stat	F		
.001	0	01	1	.5	.39		

 Table 4: Regression Model between Conservatism and Financial costs on assets ratio.

Non-Collapse firms							
Variables	β	Std.	Error	t	Sig		
Financial costs on	.068	.0	35	1.49	.13		
assets							
C	039	.0	02	-23.8	.00		
R-squared	Adjusted	R-squared	Durbin-V	Vatson Stat	F		
.005	.0	003		.53	2.23		
		<u>Collap</u> .	se firms				
Variables	β	Std. Error		t	Sig		
Financial costs on	098	.2		-2.162	.031		
assets							
C	104	.009		-11.369	.000		
R-squared	Adjusted	R-squared Durbin-W		Vatson Stat	F		
.01	.0	08 1		.7	4.676		

The regression model between Conservatism & Financial costs on assets ratio in Table 4 shows that relationship between these variables is positive (negative at collapse firms) and no significant (significant at collapse firms) statistically. Determination coefficient shows that approximately .5% (1% at collapse firms) of changes financial costs on assets ratio can be stated by Conservatism during the research period. In general, regression model isn't significant (was significant at collapse firms). Durbin-Watson statistic shows that the model hasn't autocorrelation problem. The positive (negative at collapse firms) relationship between above variables indicates that Conservatism causes to increase (decrease at collapse firms) financial costs on assets ratio as one of the cost of capital mechanisms in non-collapse firms accepted in Tehran Stock Exchange.

The regression model between Conservatism & Long-term liability on assets ratio in Table 5 shows that relationship between these variables is positive and significant (no significant at collapse firms) statistically. Determination coefficient shows that approximately 2% (.2% at collapse firms) of changes Long-term liability on assets ratio can be stated by Conservatism during the research period. In general, regression model is significant (no significant at collapse firms). Durbin-Watson statistic shows that the model hasn't autocorrelation problem. The positive relationship between above variables indicates that Conservatism causes

to increase Long-term liability on assets ratio as one of the cost of capital mechanisms in firms accepted in Tehran Stock Exchange.

Table 5: Regression Model between Conservatism and Long-term liability on assets ratio.

		Non-Colla	ipse firms		
Variables	β	Std. I	Error	t	Sig
Long-term liability on assets	.15	.1	4	.502	.0039
С	.11	.0	0	17.19	.000
R-squared	Adjusted R-	squared	Durbin	-Watson Stat	F
.02	.031	031		1.83	9.24
		<u>Collaps</u>	e firms		
Variables	β	Std. Error		t	Sig
Long-term liability on assets	.04	.43		.878	.38
C	.24	.02		12.5	.00
R-squared	Adjusted R-	R-squared Durbir		-Watson Stat	F
.002	.000.		1.43		.77

Table 6: Regression Model between Conservatism and Stockholders Equity on assets ratio.

		Non-Colle	apse firms		
Variables	β	Std. 1	Error	t	Sig
Stockholders Equity on assets	134	.2′	70	-2.967	.003
С	.363	.0	13	28.83	.000
R-squared	Adjusted	R-squared	Durbin-W	atson Stat	F
.018	.0	016 1.9		90	8.80
		<u>Collaps</u>	se firms		
Variables	β	Std. Error		t	Sig
Stockholders Equity on assets	126	4.23		-2.802	.005
C	763	.192		-3.964	.000
R-squared	Adjusted	R-squared Durbin-W		atson Stat	F
.016	.0	14		.7	7.84

The regression model between Conservatism & Stockholders Equity on assets ratio in Table 6 shows that relationship between these variables is negative and significant statistically. Determination coefficient shows that approximately 1% of changes Stockholders Equity on assets ratio can be stated by Conservatism during the research period. In general, regression model is significant. Durbin-Watson statistic shows that the model hasn't autocorrelation problem. The negative relationship between above variables indicates that Conservatism causes to decrease Stockholders Equity on assets ratio as one of the cost of capital mechanisms in firms accepted in Tehran Stock Exchange.

Table 7: Regression Model between Conservatism and Earning per share on operating income ratio.

		Non-Colle	apse firms		
Variables	β	Std. 1	Error	t	Sig
Earning per share on operating income	.53	.1	5	.676	.000
С	.045	.00	07	6.30	.000
R-squared	Adjusted R-	-squared	Durbin-W	atson Stat	F
.004	.006	5	2.0)5	6.95
		<u>Collaps</u>	se firms		
Variables	β	Std. Error		t	Sig
Earning per share on operating income	.001	40.	27	02	.984
С	-1.64	1.82		89	.369
R-squared	Adjusted R-	R-squared Durbin-W		atson Stat	F
.001	002	2	2.0	01	.000

The regression model between Conservatism & Earning per share on operating income ratio in Table 7 shows that relationship between these variables is positive and significant (**no significant at collapse firms**) statistically. Determination coefficient shows that approximately .4% (.1% at collapse firms) of changes Earning per share on operating income ratio can be stated by Conservatism during the research period. In general, regression model is significant (**no significant at collapse firms**). Durbin-Watson statistic shows that the model hasn't autocorrelation problem. The positive relationship between above variables indicates that

Conservatism causes to increase Earning per share on operating income ratio as one of the cost of capital mechanisms in firms accepted in Tehran Stock Exchange.

Table 8: Regression Model between Conservatism and Earning per share on non-operating revenue ratio.

Non-Collapse firms							
Variables	β	Std.	Error	t	Sig		
Earning per share on non-operating revenue	045	2.	50	989	.323		
С	.053	.1	17	.458	.647		
R-squared	Adjusted	R-squared	Durbin-W	atson Stat	F		
.002	.0	000 1		340	.977		
		<u>Collap</u>	se firms				
Variables	β	Std. Error		t	Sig		
Earning per share on non-operating revenue	031	3.34		688	.492		
С	076	.152		502	.616		
R-squared	Adjusted	R-squared	Durbin-Watson Stat		F		
.001	0	001	2.14		.473		

The regression model between Conservatism & Earning per share on non-operating revenue ratio in Table 8 shows that relationship between these variables is negative but no significant statistically. Determination coefficient shows that approximately .02% (.01% at collapse firms) of changes earning per share on non-operating revenue ratio can be stated by Conservatism during the research period. In general, regression model isn't significant. Durbin-Watson statistic shows that the model hasn't autocorrelation problem. The negative relationship between above variables indicates that Conservatism causes to decrease Earning per share on non-operating revenue ratio as one of the cost of capital mechanisms in firms accepted in Tehran Stock Exchange.

Discussion & Conclusions:

According to the results of the first hypothesis test and table 3, it is inferred that managers of Iranian firms, using conservatism mechanism, have reported lower earnings per share, and consequently pay lower dividend per share. The use of this mechanism may be because of supporting the rights of creditors, and also reducing stockholders' expectations in terms of interest dividing policy and employing in other investing opportunities. The high variable regression coefficient of Dividend per share on assets ratio in non-collapse firms to collapse firms can be inferred as that in collapse firms, due to repetitive losses, there is no way to use conservatism mechanism as use in non-collapse firms. That is because not only the loss is not restored but also it goes worse.

According to the results of the second hypothesis test and table 4, it is inferred that since the significant level of t-statistics in collapse firms is lower than 5%, it can be said that there is a relation between Financial costs on assets ratio and conservatism in these firms. But in non-collapse firms, because of insignificant level of t-statistics, there is no relation. The negative relation between Financial costs on assets ratio and conservatism in collapse firms can be explained as that Iranian firms, due to their conservative attitude in financial reports and attracting investors, have their financial provision in low cost. Collapse firms may use conservatism mechanism as a means of supporting credit providers and escaping from collapse.

According to the results of the third hypothesis test and table 5, the relation of long-term liabilities on assets ratio has been confirmed, but this relation is not true for collapse firms. This relation in non-collapse firms may be because of the fact that they use conservative mechanism to present a better financial reporting quality to their investors, and also receive more long-term facilities with lower costs and rarely rely on other financial resources.

According to the results of the four hypothesis test and table 6, the negative relation between conservatism and Stockholders' Equality on assets ratio can be inferred as follows: since conservatism in financial reporting directs reported financial interests to firm's capital cycle, it is expected that by increasing conservatism, interests- instead of being divided among stockholder- are added to firm's capital as retained earnings. The value of β for non-collapse firms is higher than collapse firms and it may be because of the non-collapse firms' status of profitability and cash to collapse firms.

According to the results of the fifth hypothesis test and table 7, the positive relation between conservatism and Earning per share on operating profit ratio can be inferred as that maybe gaining financial support from other sources, namely investors, costs loss than owners; so the firm, despite conservatism in financial reporting, reports more profits. This relation is not confirmed for collapse firms.

According to the results of the six hypothesis test and table 8, considering the significant level of t-statistics in terms of the relation between conservatism and Earning per share on non-operation revenue, this

relation is confirmed for neither collapse nor non-collapse firms. In other words, there is no relation between conservatism and Earning per share on non-operation revenue in firms accepted in Tehran stock exchange.

REFERENCES

Ahmed, A.S., B.K. Billings, R.M. Morton, M. Stanford-Harris, 2002. "The Role of Accounting Conservatism in Mitigating Bondholder-Shareholder Conflicts Over Dividend Policy and in Reducing Debt Costs", The Accounting Review, 77(4): 867-890.

Ahmed, A.S., S. Duellman, 2007. "Accounting Conservatism and Board of Director Characteristics: An Empirical Analysis", Journal of Accounting and Economics, 43: 411-437.

Ball, R., S.P. Kothari, A. Robin, 2000. "The Effect of International Institutional Factors on Properties of Accounting Earnings", Journal of Accounting and Economics, 29: 1-51.

Ball, R., A. Robin, J. Wu, 2003. "Incentives vs. Standards: Properties of Accounting Income in Four East Asian Countries", Journal of Accounting and Economics, 36: 235-270.

Basu, S., 1997. "The Conservatism Principle and the Asymmetric Timeliness of Earnings", Journal of Accounting and Economics, 24: 3-37.

Beaver, W., S. Ryan, 2000. "Biases and lags in Book Value and their Effects on the Ability of the Book to Market Ratio to Predict Book Return on Equity", Journal of Accounting Research, 38: 127-148.

Beaver, W., S. Ryan, 2005. "Conditional and Unconditional Conservatism: Concepts and Modeling", Review of Accounting Studies, 10: 269-309.

Botosan, C., M. Plumlee and Y. Xie, 2004. "The role of information precision in determining the cost of equity capital". Review of Accounting Studies, 9: 233-259.

Bushman, R.M., J.D. Piotroski, A. Smith, 2010. "Capital Allocation and Timely Accounting Recognition of Economic Losses". Working Paper, The University of North Carolina at Chapel Hill.

Chaney, P.K., 2006. "Discussion--Did earnings conservatism increase for former Anderson clients", Journal of Accounting, Auditing and Finance, 165-174.

Easley, D. and M. O'Hara, 2004. "Information and the cost of capital". Journal of Finance, 59: 1553-1583.

Feltham, G., J.A. Ohlson, 1995. "Valuation and Clean Surplus Accounting for Operating & Financial Activities", Contemporary Accounting Research, 11: 689-731.

Financial Accounting Standards Board (FASB), 1980. "Qualitative Characteristics of Accounting Information". Statement of Financial Accounting Concepts No. 2. Stamford, CT: FASB.

Francis, J. and X. Martin, 2010. "Acquisition Profitability and Timely Loss Recognition". Journal of Accounting and Economics., 49: 161-178.

Francis, J., R. LaFond, P. Olsson, K. Schipper, 2004. "Costs of Equity and Earnings Attributes", The Accounting Review, 79: 967-1010.

Gary C. Biddle, Mary L. Ma, Frank M. Song, 2010. "Accounting Conservatism and Bankruptcy Risk", at: http://ssrn.com/abstract=1621272.

Givoly, D., C. Hayn, 2000. "The Changing Time-Series Properties of Earnings, Cash Flows and Accruals: Has Financial Accounting Become More Conservative?", Journal of Accounting and Economics, 29: 287-320.

Givoly, D., C. Hayn and A. Natarajan, 2007. "Measuring Reporting Conservatism", the Accounting Review, 82(1): 65-106.

Guay, W. and R.E. Verrecchia, 2007. "Conservative disclosure". Working paper. University of Pennsylvania.

Habib, A., 2006. "Information risk and the cost of capital: Review of the empirical literature". Working Paper.

Hail, L. and C. Leuz, 2006. "International differences in the cost of equity capital: Do legal institutions and securities regulations matter?" 44(3): 485-531.

Holthausen, R.W., R.L. Watts, 2001. "The Relevance of Value-Relevance Literature for Financial Accounting Standard Setting", Journal of Accounting and Economics, 31: 3-75.

Lambert, R., C. Leuz and R. Verrecchia, 2007." Accounting information, disclosure, and the cost of capital". Journal of Accounting Research, 45(2): 385-420.

Lara, J.M.G., B.G. Osma and F. Penalva, 2011. "Conditional conservatism and cost of capital". Rev Account Stud., 16: 247-271.

Lara, J.M.G., B.G. Osma and F. Penalva, 2009c. "Conditional Conservatism and Firm Investment Efficiency". Working paper, Universidad Carlos III De Madrid.

Loktionov, Y., 2009. "Does Accounting Quality Mitigate Risk Shifting?" Working paper, Sloan School of Management, Massachusetts Institute of Technology.

Louis, H., A. Sun, O. Urcan, 2009. "Value of Cash Holdings and Accounting Conservatism". Working paper, Pennsylvania State University.

Penman, S.H., X.J. Zhang, 2002. "Accounting Conservatism, the Quality of Earnings, and Stock Returns", The Accounting Review, 77(2): 237-264.

Roychowdhury, S. and R.L. Watts, 2007. "Asymmetric Timeliness of Earnings, Market-to-Book and Conservatism in Financial Reporting", Journal of Accounting and Economics, 44: 2-31.

Suijs, J., 2008. "On the value relevance of asymmetric financial reporting policies". Journal of Accounting Research, 46(5): 1297-1321.

Watts, R.L., 2003a. "Conservatism in accounting part I: Explanations and implications". Accounting Horizons, 17: 207-221.

Zhang, J., 2008. "The Contracting Benefits of Accounting Conservatism to Lenders and Borrowers", Journal of Accounting and Economics, 45: 27-54.

Zhang, X., 2000. "Conservative Accounting and Equity Valuation", Journal of Accounting and Economics, 29: 125-149.