

The Investigation of the Impact of Conditional and Unconditional Conservatism on Agency Cost in Tehran Stock Exchange

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Abstract

The aim of this study is to investigate the relationship between conservatism and agency costs in firms listed in Tehran Stock Exchange (TSE). To do so, a sample of 588 firms is selected as research sample for the period of 2004-2010 and fixed effect regression model is used to test hypotheses. $C-score_{it}$ index is used to measure unconditional conservatism and Ball and Shivakumar (2005) model to measure conditional conservatism. Multiplying Tobin's Q by free cash flow is considered a proxy for agency cost as independent variable. The results show that conditional conservatism has a negative and significant impact on agency cost while unconditional conservatism has a positive and significant impact.

Keywords: Conditional Conservatism, Unconditional Conservatism, Agency Costs.

1. Introduction

Recently, the notion of earnings conservatism has received considerable attention in the empirical research literature. Accounting has become more conservative not only in the U.S. but also in the EU Grambovas et al. (2006). Watts (2003) asserts that conservatism mitigates agency problems associated with manager's investment decisions. However, accounting conservatism is mechanism to the alignment of the interests of managers

and shareholders. Conservative accounting practices give firms an opportunity to use incentive pay effectively to increase firm value while lowering the probability of managerial opportunism. While in its absence, the use of performance incentives in managerial and executive compensation contracts may encourage the risks of managerial opportunism, aggressive accounting, the overstatement of the financial performance of firms, and the diminishment of the integrity and information content of financial reporting (Iyengar and Zampelli, 2010). However, in the view of FASB and IASB, financial information needs to be neutral, so conceptual framework should not include conservatism or prudence among the desirable qualitative characteristics of accounting information. They argue that there is a conflict between accounting conservatism and neutrality. This is as a result of making a strong push for "fair value" accounting which demands symmetric timeliness: both good news and bad news are recognised, and recognition of good news is not deferred (Kim and Pevzner, 2011). On the other hand, Watts and Zuo (2012) argue that global financial crisis offers a unique opportunity for an investigation of accounting conservatism's valuation effects. First, the crisis profoundly limits firm's borrowing capacity highlighting the importance of accounting conservatism in strengthening a firm's funding ability. Second, the crisis period may bring firms to suffer from underinvestment. However, accounting conservatism's role in improving a firm's borrowing capacity results in value creation by mitigating underinvestment in the crisis period.

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The present paper is aimed to contribute the recent mass researches conducted all over the world in favour of conservatism and its prevailing importance in corporate governance and mitigating agency costs.

2. Literature Review

Basu (1997) defines “conservatism as tendency to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses”. Watts (2003) defines conservatism as the differential verifiability required for recognition of profits versus losses. He lays out three explanations (contracting; shareholder litigation; taxation and accounting regulation) and three types of measures (earnings/stock returns relation measures; net asset measures; and earnings/accrual measures) for conservatism. In his view, contracting explanation enhances the efficiency of earnings and net assets so mitigates agency problems associated with manager’s investment decisions. This is while Gigler et al. (2010) find that accounting conservatism affects the information content of accounting reports decreasing the efficiency of debt contracts. They argue that “first, conservative measurement principles not only increase the frequency of low accounting reports, but also change the information content of such reports. Second, optimal debt covenants will change with the degree of conservatism in accounting reports. Third, the interest rate on debt is not a measure of efficiency”.

The debate on usefulness of accounting conservatism is not a new issue. Young (2005) numbers two sources of agency costs under moral hazard: (1) distortions in incentive contracts and (2) implementation of suboptimal decisions. He also argues that, in a principal-agent setting in which the principal motivates the agent to expend effort using accounting earnings, accounting earnings become more useful for reducing agency costs of type (2) when measured conservatively than when measured aggressively. His results show that conservative accounting enhances the incentive value of accounting signals with respect to both types of agency costs. Following LaFond and Watts (2008), Chi and Wang (2010) examined the relationship between information asymmetry and accounting conservatism. Their findings suggest that conservatism mitigates information asymmetry. They show that the level of accounting conservatism is positively related to the level of information asymmetry, and information asymmetry in the current period will further drive an increase of conservatism in the

next period. Their findings question IASB and FASB decision on conservatism as to its exclusion from the qualitative characteristics of accounting information. They suggest that while conservatism is excluded from the qualitative characteristics of accounting information, shareholders should keep a more careful eye on the issue of information asymmetry. Vakili Fard et al. (2011) investigated the relationship between earnings management and conservatism in accounting system of Iran. Their findings show that accruals items have negative and significant relations with conservatism. Ahmed and Duellman (2011) hypothesized that if conservatism reduces managers’ ex ante incentives to take on negative net present value projects and improves the ex post monitoring of investments, firms with more conservative accounting ought to have higher future profitability and lower likelihood (and magnitude) of future special items charges. Consistent with this expectation, they find that firms with more conservative accounting have (i) higher future cash flows and gross margins and (ii) lower likelihood and magnitude of special items charges than firms with less conservative accounting.

3. Hypothesis Development

To examine the relationship between conservatism and agency cost, following two hypotheses are posited which breaks conservatism into conditional and unconditional conservatism.

Conditional conservatism means that book value of net assets in unfavourable situations reduces but not in favourable situations. Conditional conservatism is reflected in the firms’ policies of timely recognition of bad news and delayed recognition of good news, i.e., conditional conservatism places higher verifiability standard on good earnings news recognition, as opposed to bad earnings news recognition (Kim and Pevzner, 2011). Watts (2003) argues that if firm’s contracts with investors and creditors are based on accounting figures, because of interest conflict between them, managers will try to manipulate accounting figures into their own favour. In this regard, conservatism can be a mechanism to prevent managers from this behaviour. However, increasing of conditional conservatism, decreases manager’s motivation to manipulate accounting figures leading to agency cost reduction. Therefore, following hypothesis is posited:

H_1 : There is a negative relationship between conditional conservatism and agency cost.

Unconditional conservatism refers to accounting process that leads to recognition of net assets below than their market values in their useful life such as charging costs of intangibles development to current expense. Beaver and Ryan (2005) assert that unconditional conservatism in previous periods is reapplication of conditional conservatism in next periods because nothing was recognised in previous periods. According to free cash flow hypothesis, Jensen (1986) arrests that managers may reinvest their free cash flows instead of its distribution among stockholders because distribution of dividend among stock holders decreases their control power as a result of reduction of their resources under their control. However, increasing of conservatism leads to reduction of dividends. In addition, new capital rising by company steps up capital market supervision on manager's performance. Managers have a motivation to overgrowth of firm to increase their controlled resources resulting in their power augmentation. Exceeds of cash flows may lead to investment in non-optimal investments which may result in wasting resources. However, firms with high free cash flows and low investment opportunities have high agency costs. Unconditional conservatism decreases dividend so increases agency costs. On the other hand, according to unconditional conservatism, more assets reduction provision leads to reduction of assets book value which in turn results in increasing Tobins Q and free cash flows. However, because agency cost is obtained from multiplying free cash flows by Tobins Q, agency costs increases. Taking above arguments following hypothesis is provided:

H_2 : There is a positive relationship between unconditional conservatism and agency cost.

4. Methodology and Data Collection

Considering that the study aims to find a significant relationship between conservatism and agency costs, the method of study can be classified as descriptive-correlation study using historical data. To test the hypothesis, linear regression is used. Documental method is used to develop literature and conceptual framework and filed method is applied to collect data of TSE listed financial statements for the period of 2004-2010 considering following conditions:

1. Sample firms' fiscal year must be end of year and must not have changed their fiscal year in this period.
2. Stock transactions must not have been stopped more than one month.

As result of these conditions, a sample of 98 firms is obtained to be investigated.

4.1 Variables Measurement

Conditional Conservatism

Ball and Shivakumar (2005) model is used to measure conditional conservatism which is as following:

$$TACC_{i\bar{i}} = \alpha_0 + \alpha_1 * DCFO_{i\bar{i}} + \alpha_2 * CFO_{i\bar{i}} + \alpha_3 * DCFO_{i\bar{i}} * CFO_{i\bar{i}} + \varepsilon_{i\bar{i} -1}$$

$TACC_{i\bar{i}}$ is total accruals, $CFO_{i\bar{i}}$ is operational cash flows, $DCFO_{i\bar{i}}$ is dummy variable which takes 1 if CFO is negative, 0 otherwise.

Unconditional Conservatism

Following Givoly, et al. (2007), $C\text{-score}_{i\bar{i}}$ index is used to measure unconditional conservatism

$$C\text{-score}_{i\bar{i}} = (INV_{i\bar{i}}^{res} + R \text{ and } D_{i\bar{i}}^{res} + ADV_{i\bar{i}}^{res}) / NOA_{i\bar{i} -1}$$

Where: $INV_{i\bar{i}}^{res}$ is reserve for inventory value reduction, $R \text{ and } D_{i\bar{i}}^{res}$ is reserve for research and development costs, $ADV_{i\bar{i}}^{res}$ is reserve for advertisement and $NOA_{i\bar{i} -1}$ is net operational assets.

Agency Costs

According to Doukas and Mcknight (2005), agency costs can be considered as a function of interaction between Tobins Q and free cash flows each calculated as following:

Tobins Q= total debt book value+ (stock market value * outstanding stocks)/total firms assets value.

Lehn and Poulsen model (1989) is used to measure free cash flow as following:

$$FCF = (INC\text{-}TAX\text{-}INTEXP\text{-}PSDIV\text{-}CSDIV)/ASSET$$

FCF: free cash flow

Table 1: Descriptive Statistic

	<i>Unconditional Conservatism</i>	<i>Conditional Conservatism</i>	<i>Agency Costs</i>
Observation	588	588	588
Mean	.170	-.109	.749
Median	.046	.004	.126
Standard deviation	1.326	2.973	14.179
Skewness	18.807	-24.135	24.235
Kurtosis	414.765	584.418	587.550
Min	-4.666	-71.969	-.849
Max	29.605	3.612	343.931

Table 2: Kormogrof-Smirnov Test

	<i>Unconditional Conservatism</i>	<i>Conditional Conservatism</i>	<i>Agency Costs</i>
Observation	588	588	588
Mean	.749	.170	-.109
Standard deviation	14.179	1.326	2.973
Sig	.064	0.052	.045

INC: income before depreciation

TAX: income tax

INTEXP: interest cost

PSDIV: dividend to preferred share holders

CSDIV: dividend to common share holders

ASSET: total book assets

Multiplying Tobins Q by free cash flow, agency cost is obtained in which agency costs is more if obtained value is more.

5. Empirical Results

5.1 Descriptive Statistic

Descriptive statistic illustrates a picture of variables distribution and it does not talk about the relationship between variables. Table 1 describes the descriptive statistics of research.

5.2 Kormogrof-Smirnov Test

To test normality of research variables, Kormogrof-Smirnov test is used which is shown in Table 2.

The results of this test show that all three variables have normal distribution as significance value of than is more than 5 percent other than conditional conservatism. However, because the value of conditional conservatism is near 5 percent and it is dependent variable, we can say that normality of variable is accepted so we can use regression model to test the hypotheses.

5.3 Reliability Test

To obtain a reliable result, Augmented Dicky Fuller test is applied to examine variables stability which is shown in Table 3.

According to Table 3, since Dicky Fuller statistic is more than extreme value in all of variables; the variables stability is accepted.

5.4 Correlation

Correlation between dependent variable and independent variables is presented in Table 4.

The results of Table 4 show that there is a negative correlation between dependent variable and independent variables and this correlation is significant at 99 percent level.

Table 3: Augmented Dicky Fuller Test

Variables	Dicky Fuller statistic	Extreme level	Extreme value
Agency cost	-30.10335	0.05	-2.866
Conditional conservatism	-23.54691	0.05	-2.866
Unconditional conservatism	-18.54406	0.05	-2.866

Table 4: Pearson Correlation

	Agency cost	Conditional conservatism	Unconditional conservatism
Agency cost	1	-.293**	-.353**

**significance in 99 level

Table 5: Results of Regression

sig	β	Standard deviation	t	
Constant	0.131941	0.071756	1.838750	0.0665
Conditional conservatism	-1.418846	0.448327	-3.164754	0.0016
Unconditional conservatism	0.001214	0.000476	2.548257	0.0111
R ²	0.561861	F	9.855958	
Durbin-Watson	1.928560	Sig	0.0000	
F-limer	0.1721	Husman	0.00000	

5.5 Hypothesis Test

Firstly, F-limer test is used to decide on if data is pooled or paneled. The result of F-limer test shows that data is panel as significance level is more than 5 percent (0.178). However, ordinary least square is not appropriate method for regression. Next step is to decide on fixed and random effect for regression. To do so, Husman test is applied. The result of Husman test shows that model of fixed effect is preferred as significance level is less than 5 percent (0.00).

As the results shown in Table 5, taking β coefficient (-1.41) into account, the results show that there is a significant and negative relationship between conditional conservatism and agency cost. However, the first hypothesis is accepted. In addition, taking β coefficient (0.001) into account, the results show that there is a significant and positive relationship between unconditional conservatism and agency cost. However, the second hypothesis also is accepted. Therefore, we can conclude that conditional conservatism and unconditional conservatism have a negative and positive effect on agency cost, alternatively. Considering the results, the impact is much greater for conditional conservatism than unconditional

conservatism. In addition, taking F statistic significance (0.000), significance of model is accepted and also Durbin-Watson shows that there is not autocorrelation problem among model residuals. R² indicates that 0.56 of agency cost is explained by unconditional conservatism and conditional conservatism which is a great value.

These results show that if TSE firms' managers apply conditional conservatism in financial statement reporting, agency cost mitigates. And if they practice unconditional conservatism in financial statement reporting, agency cost increases.

6. Discussion and Conclusion

This study aimed to investigate the relationship between conservatism and agency costs in firms listed in Tehran Stock Exchange (TSE). To do so, a sample of 98 firms was selected as research sample for the period of 2004-2010 and fixed effect regression model is used to test hypotheses. $C\text{-score}_{i,t}$ index is used to measure conditional conservatism and Ball and Shivakumar (2005) model to measure unconditional conservatism. Multiplying Tobins Q by free cash flow is a proxy for agency cost

as independent variable. In this study two hypotheses are posit based on following arguments. First of all, we break down conservatism into conditional and unconditional conservatism. The conditional form of conservatism improves the contracting efficiency of reported accounting information in contrast to unconditional conservatism. Unconditional conservatism could lead to lower agency costs and litigation risks and possibly facilitate managerial opportunism (Iatridis, 2011). Watts (2003) argues that if firm's contracts with investors and creditors are based on accounting figures, because of interest conflict between them, managers will try to manipulate accounting figures into their own favour. In this regard, conservatism can be a mechanism to prevent managers from this behaviour. However, increasing of conditional conservatism, decreases manager's motivation to manipulate accounting figures leading to agency cost reduction. Our result is according to this expectation and shows that conditional conservatism has a negative and significant impact on agency cost. In addition, according to free cash flow hypothesis, Jensen (1986) arrests that managers may reinvest their free cash flows instead of its distribution among stockholders because distribution of dividend among stock holders decreases their control power as a result of reduction of their resources under their control. However, increasing of conservatism leads to reduction of dividends. In addition, new capital rising by company steps up capital market supervision on manager's performance. Managers have a motivation to overgrowth of firm to increase their controlled resources resulting in their power augmentation. Exceeds of cash flows may lead to investment in non-optimal investments which may result in wasting resources. However, firms with high free cash flows and low investment opportunities have high agency costs. Unconditional conservatism decreases dividend so increases agency costs. On the other hand, according to unconditional conservatism, more assets reduction provision leads to reduction of assets book value which in turn results in increasing Tobins Q and free cash flows. Our result in this regard is also according to this expectation and shows that unconditional conservatism has a positive and significant impact. This result is according to Young (2005) and Chi and Wang (2010) research. These results also warn accounting standard setters not to ignore conservatism in the process of standard setting while recent researches all are in favour of accounting conservatism.

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