Evaluating the Influence of Conservatism on Profit Management in Tehran Stock Exchange

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ABSTRACT

The main goal of this research is to study relationship between conservatism and profit management in registered companies in Tehran stock market. Accordingly, 72 companies were chosen from 2006 to 2010 amongst all active companies in Tehran stock exchange market. RahAvard Novin software used to collect data. SPSS and EVIEWS softwares used for analyzing the data using multivariate regression and Pearson correlation coefficient.
The results show a meaningful relationship between conservatism and profit management but this relationship is negative. In other words, by increase in conservatism in companies, decrease of profit management happens. Also, company risk (measured by Beta coefficient) institutional shareholder percent have a meaningful and positive relationship with income management

KEYWORDS: conservatism, Jones' Model, Accruals, profit management, company size.

1   INTRODUCTION

Companies as economic entities are always in pursuit of more revenue and wealth. Due to various reasons amongst which separation of ownership from management is the most important one, companies are obliged to be accountable to individuals outside the company in addition to performing economic activities. The most efficient form of accountability, based on experimental evidence, is financial reporting. Therefore, it seems that companies not only are expected to carry out economic activities successfully but also they are needed to present the results of those activities in form of financial reporting. In this regard, they need to be as accurate and effective in presenting the financial report as they are expected to decrease the costs and expenses of their economic activities. Besides, they need to prevent the loss of wealth by avoiding any misinterpretations on behalf of the users of these reports [8]. In other words, companies apart from honest and true presentation of financial situation and operational results to developing institutions of accounting standards are always cautious about the consequences of such financial reporting. This conservatism for the potential consequences may stop the presentation of honest and true financial reports. This dishonesty generally shows itself in form of higher or lower profits. One kind of inefficient financial reporting in order to avoid unpleasant economic consequences is to step outside the accounting standards which is rarely observed due to the fact that the financial reports are audited and the users only response to the auditor's report.

The reported income is among the most important financial information that is always taken into consideration at the time of decision-making. Financial analysts generally consider the reported profit of a given company as one important and highlighted factor in their studies and judgments. Moreover, investors are also looking for investing their wealth and resources in the most efficient solution. On the other hand, managers' authority for timing and choosing the right form of presenting the financial events in the accepted accounting format makes it possible for them to manipulate the profit. Hence, any form of manipulation can influence the investors' decisions and may result in situations that could become even more influential in inefficient markets. According to Hilly and Wahlen (1999), profit management happens when managers decide to use their own judgment in order to manipulate the structural transactions or the financial reporting in order to deceive some of beneficiaries whereas the company's economic output or results of a contract in the accounting methods are to be manipulated.

The profit smoothing phenomenon has been an interesting topic to accounting and financial researchers for half a century. Belkoee believes that smoothing means to consciously coordinate the profit to ultimately reach a desired level [4].

Watts (2003) however, states that conservatism reduces managers' ability for overstatement about company's income and assets through making them dependent to higher standards for recognition. It also lessens their resistance in presenting the needed information about costs. [10]

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Another statement by Ball (2001) is that conservatism monitors the investment policies of companies and prevents faint investments through addressing projects with currently negative value. [1]

According to the above mentioned topics, the main question is that *"Does Conservatism have any influence on profit management in companies working in Tehran stock exchange market?"*

2   RESEARCH LITERATURE

2.1   Profit Management

Schipper (1989) says: profit management is applied to an intentional interference in external financial reporting in order to increase the profit [9].

2.2   Accruals

Zi (2001) described the accruals briefly as something between the operational cash trends and accounting profit. Jones (1991) described it as the difference between profit and cash achieved from an economic operation. Slovan (1991) described accruals as a change in non-cash working capital minus depreciation cost. Slovan's definition is derived from Hilli's (1985) and is exactly according to the definition of accruals in the statement of financial accounting No. 95 (1985). To achieve a total sum of accruals, it is explained that in case of not using the accrual accounting (using cash accounts), only cash accounts will be shown in the balance sheet. Therefore, reporting other asset and debit accounts in balance sheet is the result of using accrual accounting. As a result, accruals are the change in all non-cash assets minus the change in all the debts.

The accruals are divided into two categories simply known as *discretionary and non-discretionary accruals*. The discretionary accruals consist of those accruals which management can have some control over them. The management can decide on them and they are recorded based on the desire and preference of the management. For example, a company may want to increase the costs of expiration or depreciation; or record debts caused by product guarantee or possible research debts; or considers a high reserve for doubtful receivables or inventory obsolescence. These accruals (outstanding debts) are all optional and discretionary. The discretionary accruals can also be unrealized costs or assets which can be recorded in accounting system such as management reward. Unlike these accruals, non-discretionary accruals are limited by organizational laws\regulations and other external factors and cannot be interfered by the management.

2.3   Conservatism

Conservatism plays an important role in theory and practice of accounting and yet there is no accurate and valid definition of it available [5]. The only official definition of conservatism can be found in principal No.2 of FASB standard (1980), where it is described as "a cautious reaction to unreliability in attempt to reach reliability that guarantees that all inherent unreliability and risks within the economic situations are adequately considered." However, this definition was not used in previous studies. More often, the Basu's definition (1997) or an adaptation of it has been used. Basu (1997) discusses that unrealized losses are usually identified sooner than unrealized profit. His major finding was that where good and bad news are respectively representing the annual unexpected shares return, the reported profit shows a faster response to bad news rather than good ones.

2.4   Corporate Government and Profit Management

Profit management is a form of profit manipulation which can probably decrease the reliability of reported profits. The less reliable the profits are, the less useful information they can offer. On the other hand, since profit management is controlled by monitoring regulatory systems all the time, accounting profits are more reliable and consist of more useful information [3]. Corporate government lessens the managers' ability for profit management and has the ability to increase the reliability of accounting profits. As a result, it improves the reliability of information provided by accounting profit [2]. The economic corporation & development organization defines the corporate government as follows: "Corporate Government is a system in which companies are directed and controlled. The structure of corporate government defines the distribution of responsibilities and rights to various sections of a company such as members of board of directors, managers, shareholders and other beneficiaries. It also assigns tasks and decision-making trends of the given company. The results of Gol and Tsui (2001) support the effectiveness of corporate government as a regulatory system.

3   RESEARCH BACKGROUND

Lafond and watts (2008) studied the relationship of conservatism and profit management in registered companies in London stock exchange market. The results showed that conservatism is a kind of deterrent factor for management, avoiding it from considering a far unrealistically optimistic future for the company and also as a factor

which stops the management from unrealistic presentation of profit. This research was conducted by studying 157 companies in course of 2001 – 2006 [7].

Hai et al (2009) studied the relationship between conservatism and profit management in Hong Kong companies and results showed that there is a meaningful and negative relationship between conservatism and profit management. The results also showed that the more a manger is conservative, the less he will act upon profit management. This survey was conducted by evaluating 112 companies in course of 2004- 2008 [6].

4   RESEARCH METHODOLOGY

Since the relationship of two variables is studied in this research, therefore this is a correlation research.

4.1   Research Hypothesis
There is a meaningful relationship between conservatism and profit management.

4.2   Model and Research Variables
Hypothesis one: to evaluate the hypothesis 1, model 1 is used. Model1 is as follows:

Model 1

$$EM_{i,t} = \beta_0 + \beta_1 CON_{i,t} + \beta_2 RET_{i,t} + \beta_3 BAD_{i,t} + \beta_4 BTM_{i,t} + \beta_5 MV_{i,t} + \beta_6 ISS_{i,t} + \beta_7 COI_{i,t} + \beta_8 BETA_{i,t} + \beta_9 OutDir_{i,t} + \beta_{10} INST_{i,t} + \beta_{11} Size_{i,t} + \varepsilon_{it}$$

Where:

EM: profit management

CON: level of conservatism in current year

RET: annual shares return

MV: Market value

BTM: Coefficient of book value to market

COI: Coefficient of operational profit to total assets

BETA: Shares' Beta index during the study

BAD: Years in which shares had negative return

ISS: No. of shares that company issues per year

INST: average institutional ownership of a regular share

OUT DIR: percentage of not-required members of board of directors to total number of members

Size: Company size which is measured using the asset value logarithm

ε_{it}: remaining error

4.3   Dependent Variable
Profit management: in current study, the profit management is the dependent variable. We use the adjusted Jones' model to measure this variable. It is measured as follows:

In order to measure discretionary accruals (the measuring standard for profit management), the total and non-discretionary accruals should be measured using the below formula in the first place:

The method:

In the so-called model, initially, the relationship between total accruals in a specific period of time known as *event period* with variables sales, properties, machineries and equipment is measured using below model:

$$TA_{i,t}/A_{i,t-1} = \alpha_1(1/A_{i,t-1}) + \alpha_2(\Delta REV_{i,t}/A_{i,t-1}) + \alpha_3(PPE_{i,t}/A_{i,t-1}) + \varepsilon$$

In this relationship, **TA** stands for total accruals, **A** for total assets, **REV** for total revenue (sales) and **PPE** for properties, machineries and equipment. After estimating the parameters of the above model, non-discretionary accruals (NDA) are measured for the assessment period based on the below model:

$$NDA_{i,t} = \alpha_1(1/A_{i,t-1}) + \alpha_2(\Delta REV_{i,t}/A_{i,t-1}) + \alpha_3(PPE_{i,t}/A_{i,t-1}) + \varepsilon$$

In final stage, the discretionary accruals (DA) are measured using this model:

$$DA = (TA_{i,t}/A_{i,t-1}) - NDA_{i,t}$$

Total accruals are obtained using this model:

$$TA_{i,t} = E_{i,t} - OCF_{i,t}$$

$$TA_{i,t} = (\Delta CA_{i,t} - \Delta Cash_{i,t}) - (\Delta CL_{i,t} - \Delta STD_{i,t}) - DEP_{i,t}$$

CA stands for current asset, **Cash** for cash, **CL** for current debt, **STD** for current share of long term debt and **DEP** stands for company's depreciation. Also, **E** is the net profit before unexpected items.

In this study, a second criterion is used to measure the accruals. The current share of long term debt is out listed from the financial invoices of companies.

4.4   Independent Variable

Conservatism: in current study, a definition of conservatism measured by Giuli and Hin (2000) is used as the independent variable and as the influential factor over profit management in companies.

1. Sum of assets in the beginning of period/ operational cash trend- depreciation cost + operational profit = conservatism index

4.5   Control Variables

According to research literature, the below variables are chosen as control variables; variables which can in fact affect the profit management.

EM: profit management
CON: level of conservatism in current year
RET: annual shares returns
MV: Market value
BTM: Coefficient of book value to market
COI: Coefficient of operational profit to total assets
BETA: Shares Beta index during the study
BAD: Years in which shares had negative return
ISS: No. of shares that company issues per year
INST: average institutional ownership of a regular share
OUT DIR: percentage of not- required members of board of directors to total number of members
Size: Company size which is measured using the asset value logarithm
$\varepsilon_{it:}$ remaining error

4.6   Statistical Population and Sample

In the current study, the registered companies in Tehran stock market were chosen as the statistical population.
The statistical sample was selected from registered companies in Tehran stock market. The sampling process is carried out based on systematic elimination, so that, amongst all registered companies in Tehran stock market only those with below specifications were chosen:

2. The selected company should have been registered in the market before 2006;
3. The selected company should have put the end of its fiscal year in Esfand month-solar calendar;
4. The selected company should not have any change in its fiscal year during the course of study;
5. The required data regarding the selected company should be available during the course of study;
6. Investor companies, banks and insurance companies were eliminated.

72 companies were selected in the end of sampling.

4.7   Data Gathering Methodology

The required data for this study was gathered from companies' financial invoices that were presented to the stock market organization and also available information regarding companies in the stock market data base. Desk research methodology was used in order to develop the research literature and background. *Rah Avard* and stock market organization softwares were used to analyze the provided information of financial invoices in order to examine the research hypothesis.

5   HYPOTHESIS TESTING

5.1   The Statistical Analysis

The descriptive statistics of research variables are presented in table 1.

Table 1:

	N	Min	Max	Average	Standard Deviance
con	432	-0.8417	0.6669	-0.0607	0.1466
RET	432	-0.6328	4.52	0.2069	0.5295
MV	432	4.125	7.409	5.57	0.6207
BTM	432	-0.6673	2.609	0.7252	0.4957
BAD	432	0	5	2.25	1.2
COL	432	-0.6669	0.8417	0.0604	0.1473
ISS	432	0	2654000000	44884154.06	8E2.101
Inst	432	0	0.98	0.3936	0.3298
Outdir	432	0	1	0.556	0.2486
Size	432	4.662	7.724	5.813	0.5843
EM	432	-0.89	0.83	0.0035	0.1831
Beta	432	-3.90	4.8285	0.5727	1.5881

Descriptive statistics of research variables
5.2   The Illative Statistics
5.2.1   Hypothesis Test

The aim of this hypothesis is to examine the relationship between conservatism and profit management. As shown in table 2, this relationship has a negative direction, which means, by increase in conservatism, we can observe decrease in profit management. Among corporate government variables, the percentage of institutional shareholders has a positive and meaningful relationship. The not-required member's variable lacks a meaningful relationship with profit management. Variables Beta, company size, book coefficient to market, revenue and proportion of operational profit in regard to assets have positive relationship with profit management, which means, by increase in these variables, profit management is increased too. In addition, the number of issued shares, company's value and profitable years have a negative relationship with profit management.

Table 2:

	Coefficient	Standard error	Statistical t	Prob	H_0	
Fixed coefficient	-0.4248	0.0538	-7.8848	0.000		
con	-0.0434	0.0459	-2.945	0.0048	Rejected	
RET	0.0518	0.0124	4.1487	0.000	Rejected	
MV	E-09-7.29	E-093.05	-2.395	0.0699	Rejected	
BTM	0.0603	0.0121	4.961	0.000	Rejected	
BAD	0.00022	0.0052	0.0432	0.9655	Confirmed	
COL	0.3307	0.0329	10.029	0.000	Rejected	
ISS	E-115.90	E-113.31	1.7824	0.0754	Confirmed	
Inst	0.0467	0.0192	2.424	0.0157	Rejected	
Outdir	0.0283	0.0255	1.1087	0.2682	Confirmed	
Size	0.0595	0.009	6.133	0.000	Rejected	
Beta	0.0128	0.004	3.008	0.0028	Rejected	
Coefficient of Determination	0.5523		**Adjusted coefficient of determination**	0.5399		
Statistic F	46.9783	**F Meaningful level**	0.000	**Watson's Camera**	1.9964	

Analysis results of model 1

Here, we can see that the research hypothesis is approved and the existence of a meaningful relationship between profit management and conservatism is proven. This is a negative relationship.

According to the statistical result, it can be said that all variables except conservatism do have a positive relationship with profit management. It means that by increase in so-called variables profit management is also increased. Regarding the market value, it can be said that by increase in company value and level of conservatism, profit management will be decreased. It can be inferred that MV, not -required members (**Outdir**), issued shares (**Iss**) and **Bad** have no meaningful relationship with profit management.

Watson's camera shows the number *1.99* in this model which proves that the model doesn't have any difficulty with autocorrelation of remaining.

6   DISCUSSION AND CONCLUSION

The results proved a meaningful and negative relationship between profit management and conservatism. Results obtained by Hai et al (2009) prove a negative relationship between conservatism and profit management in Hong Kong companies. They stated that the more a manager is conservative, the less probable he/she will act upon profit management. The results of this research are perfectly matched with the results of theirs and it can be said that in companies where managers apply more conservatism, less profit management is observed. As a result, the research hypothesis regarding a meaningful relationship between profit management and conservatism is confirmed.

In the applied model of hypothesis test, two variables were considered as corporate governments which are: percentage of not-required members of board of directors and percentage of institutional shareholders. The results showed that by increase in percentage of institutional shareholders' ownership, profit management is increased as well. These results are compatible with Aloz's (2012). Elfayomi (2010) in a research proved the non-existence of a meaningful relationship between institutional ownership and profit management which is totally different from the results obtained in the current study. Also, there is no meaningful relationship between not-required members and profit management. This can be considered as a proof to the fact that not-required members of boards of directors do not perform their responsibilities adequately.

The Beta variable, which is measured in research literature as a systematic risk index, has a meaningful and positive relationship with profit management. It means that by increase in company's systematic risk, profit management is increased consequently. The reason behind this seems to be the management endeavor to reduce the systematic risk.

6.1   Recommendations based on the Study
- In big companies, stronger regulatory systems must be installed and run. They are needed to prevent the management from practicing profit management;
- Number of not-required managers does not have any influence on profit management. Therefore, it is recommended to use managers who can have more control over management;
- According to the positive relationship between the percentage of institutional shareholders and profit management, legislators should force the companies to reduce the number of their institutional ownership and increase the number of minority shareholders by considering the ongoing situation so that there will be more supervision over management.
- Since the percentage of not-required members of board of directors hold no influence over profit management, it is recommended that members of board of directors become more acquainted with their responsibilities among which supervision and monitoring are the most important ones.
- According to the negative relationship between conservatism and profit management, it is proven that conservatism can decrease the occurrence of opportunistic actions on behalf of management. Therefore, it is possible to make managers adopt more conservative methods in accounting actions so that profit management will be decreased.

6.2   Recommendation for Future Studies
- The same study can be conducted in various industries;
- Since auditing quality was considered as an influential factor over management in the research literature, it is recommended to add *auditing quality* and *auditor's specialty* variables to the list of influential variables.
- Since variables such as Beta and Book value to market have a meaningful relationship with profit management, it is recommended that the influence of these variables be examined in a research on the relationship of conservatism and profit management;
- Others may like to include the effects of other variables such as corporate ownership, ownership concentration, level of domestic ownership and ownership of not-required mangers in the model; this may result in more explanatory strength of the model.

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