

THE EFFECT OF CONSERVATIVE FINANCIAL REPORTING BASED ON ACCEPTED PRINCIPLES OF ACCOUNTING PROFIT AND LOSS REPORTS WITH ANALYTICAL REPORTS OF LOSS AND PROFIT

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Abstract: *Conservatism implies that the costs must be identified earlier and revenues later. In theoretical concepts of accounting, conservatism is recognized as cautious reaction against unreliability aiming at supporting shareholders' equity, so that a higher level of verifiability is required to detect goods news in financial statements to bad news. With regard to given explanations, the present research intends to examine effect of financial reporting of accounting conservatism in loss and profit based on accepted accounting principles with analytical reports of loss and profit among the companies listed in Tehran stock exchange during 2008-2013. Results of research indicated that the more conservatism is in loss and profit based on accepted accounting principles, the less incomes are reflected in financial statements, i.e. the hypothesis was confirmed. On the other hand, difference occurs in the analytical loss and profit reports by increasing conservatism in loss and profit based on accepted accounting principles. This result was determined and specified in positive and negative returns through determination of negative and positive coefficient for the companies.*

Key words: Loss and profit based on accepted accounting principles, stock return, analytical reports

1. INTRODUCTION

What must be considered in capital markets lies on this fact that most of individuals who take action for investment are typical people that the only way for them to access important information is the notifications which are released by companies in form of accounting reports and financial statements. However, the ultimate aim of accounting is to meet information needs of users of accounting services, it should take this point into consideration that in the conditions with high cost to access information, investors are obliged to develop their analyses about future profitability of company, cash flows and so forth through their mental impressions.

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As a result, the individuals who have better information will enable to provide better estimations, under which this information affects supply and demand of market, resulting in fluctuations in stock price. Some of the investors including intra-organizational individuals such as managers, analysts and institutions who receive information from the individual have access to confidential news (Easley, D., and M. O'Hara, 2004, p. 1554).

The more information is confidential, range of difference in proposed prices of purchase and sale of stock increases among investors, as a result return of the investors who have not access to this type of information reduces (Chung, H., Sheu, H., and Wang, J. 2009). This is consistent with the results of empirical studies. Ghaemi & Vatan parast(2006) indicated that increase in information asymmetry among traders widens the range of proposed price for purchase and sale of stock. Yet, difference between proposed price of purchase and sale of stock has rooted in abnormal supply and demand. Abnormal supply and demand emerge as the result of confidential information, so that supply of stock increases and proposed price of sale decreases due to bad confidential news. Conversely, good confidential news cause increase in demand and proposed price of purchase. If confidential information does not exist, effects of public information will be reflected in stock price by the marketers, that is, marketers conduct price to a suitable level in receiving information, whereby abnormal purchase and sale do not come to realize. Stock markets consider reduction in stock price and agency costs taking accuracy. In this research, effect of financial reporting of accounting conservatism in loss and profit based on accepted accounting principles with analytical reports of loss and profit is examined.

2. LITERATURE REVIEW

Heflin, Hsu & Jin (2014) conducted a study entitled "Accounting conservatism and street earnings" and provided evidence that conditional conservatism reduces the usefulness of GAAP earnings for valuation by investors. We find that conditional conservatism reduces GAAP earnings persistence and informativeness, makes income smoothing more difficult, and makes forecasting GAAP earnings more difficult for analysts. We also find that analysts forecast Street earnings numbers with less conditional conservatism. The decrease in conditional conservatism from adjusting GAAP earnings to Street earnings leads to improvements in persistence, smoothing, and informativeness and reduces analysts' forecast errors and dispersion. Furthermore, as GAAP conditional conservatism increases, Street earnings more likely differ from GAAP, and the magnitude of the difference between Street and GAAP earnings increases. Finally,

we find that exclusions (from GAAP to Street) are of higher quality for firms with higher GAAP conditional conservatism. Our results suggest that, as the conditional conservatism of GAAP earnings increases, analysts' exclusions make Street earnings more useful to investors.

Chi, W. Liu, C.H. and T, Wang. (2011) perceived that there is a positive significant relationship between institutional ownership and conservatism. With regard to findings of research, the companies with lower institutional ownership have lower demand for conservative accounting. Further, they perceived that there is more tendency to conservatism under lack of separation of role of director and board of directors.

Zhang and el (2012) in a research entitled "The Effect of Increased Disclosure on Cost of Capital: Evidence from China" among Chinese companies concluded that there is a negative relationship between conservatism and percent of shareholders, and this significance is greater when percent of ownership among shareholders is greater than 30. Further, results of their research indicated that public ownership does not affect the relationship between ownership of shareholders and conservatism.

Lim, Roslinda (2011) conducted a research entitled "The Relationship between Corporate Governance and Accounting Conservatism: Australian Evidence"; he used three models of profit-return, time series changes of profit and accruals to measure accounting conservatism, and during 1998-2002 he concluded that there is a positive relationship between Corporate Governance and Accounting Conservatism in one model among three models.

3. RESEARCH METHOD

Quasi-experimental and prospective correlation has been used as the research method at the area of accounting research, categorized as an applied research as it can be used in the process of using information. The statistical population consists of all the companies accepted in Tehran stock exchange during 2009-2013.

4. RESEARCH HYPOTHESES

1. The more conservatism is considered in loss and profit based on accepted accounting principles, less incomes will be reflected in financial statements.
2. The more conservatism is considered in loss and profit based on accepted accounting principles, more costs will be reflected in financial statements.

5. RESEARCH VARIABLES

5.1. Dependant Variable

Reports of analysis

Since the 1980s, a substantial increase has occurred in number of companies which propose the analytical loss and profit reports together with official loss and profit reports based on accepted accounting principles. The analytical reports differ from the reports based on accepted accounting principles through removal of some items especially cost items (Bhattacharya, U., Daouk, H., Welker, M., 2003, pp. 641-678). These costs encompass the factors such as the costs for change of structure, changes in goodwill, changes pertaining to ownership, depreciation, interest cost, taxes, compensation programs via stock and etc. for instance, if company a purchases stock of company b, this will indicate analytical report of profit for new status in the integrated incomes of both companies before and after acquisition, and this is in contrast to the normal status which increase of income in company is shown. These items are omitted to represent a more associated report.

Since there is no standard format on how to represent analytical reports, we might face different reports in an industry. Representation of investment opportunities with a profitability structure is the early aim of analytical reporting which reflects the quality of profit, because loss and profit must have the highest degree of relevance to determine stock price. Yet, a reality lies on this fact that the companies take precaution in differentiation between operating and non-operating activities, which this is considered as the tendencies to smoothen profit (Bowen, G. A. (2005)). Analytical reports imply reducing depreciation, interest expense, the costs to change structure, costs of mergers and acquisitions, tax expenses, that is, we do not consider these costs, mentioned that analytical report is called to the acquired profit (Frederickson, J. R., & J. S. Miller. 2004).

5.2. Independent Variables

Accounting conservatism in financial reporting

There is no agreed-upon universal definition for accounting conservatism, yet two major characteristics of conservatism have been examined in accounting texts.

The first characteristic: Downward bias of book value to market value of capital.

The second characteristic: Tendency to proliferation in detecting costs and delaying at recognition of incomes (Shabahang, 2003).

How to measure conservatism can be measured via Basu coefficient or ratio of market value to book value of stock of companies. Basu coefficient refers to a

criterion of asymmetric onfirmability of losses and profits (LaFond, R., and R. Watts, 2008). The model designed by Basu(1997) to measure conservatism has been examined from different aspects by the researchers including Ahmed, A. S., B. K. Billings, R. M. Morton and M. Stanford-Harris (2002), Beekes, W, P. Pope and S. Young, (2004), Givoly D., C. Hayn and A. Natarajan, (2007), Lim R., (2006), LaFond, R., and R. Watts, (2008), LaFond R., and S. Roychowdhury, (2007) and Pae, J., (2007) hence, Basu model (1997) has been used to measure conservatism as follow:

$$NI = \alpha + \beta_1 DR + \beta_2 RET + \beta_3 RET * DR + \varepsilon$$

In model above, indices of company and time have been omitted, that their variables are as follows:

NI: Net interest before unexpected items divided by the market value of equity at the beginning of the financial period.

RD: is a dummy variable, for firms with negative returns equals to one and for other companies equals to zero.

RET: annual return on shares of the company.

In this model, positive return represents good news and negative return represents bad news. Basu model measures the conservatism due to different onfirmability of incomes and costs by applying different sensitivity for the net profit to the returns. In this model, if stock return is positive and adverse of zero, indicates the equation below:

$$NI = \alpha + \beta_2 RET + \varepsilon$$

Degree of conservatism that is calculated for each company separately for each year

In equation above, β_2 measures sensitivity of profit reaction to good news. If the stock return is negative, there will be equation below:

$$NI = \alpha \beta_1 + (\beta_2 + \beta_3) RET + \varepsilon$$

In equation above, $\beta_2 + \beta_3$ measures sensitivity of profit reaction to the bad news. From point of view of Basu, reaction of profit to bad news is more immediate than reaction of profit to good news, that there will be $\beta_2 + \beta_3 > \beta_2$ and as the result $\beta_3 > 0$. Basu has called β_3 as the asymmetry coefficient of profit, indicating conservatism. Roychowdhury, S., and R. L. Watts, (2007) indicated that when measurement of conservatism via Basu coefficient is estimated in longer time intervals, there will be less error than measurement of this variable using ratio of Market Value of Equity (MVE) to book value, whereby Basu coefficient was adjusted via accumulated multi-period earnings and returns.

5.3. Control Variable

Stock return

Return is called to the benefit and profit which is acquired from an investment. In other words, return can be defined as the change in value of an asset at the end of a period of time to the beginning of that period. Stock return is called to the change in value from change in price in addition to any paid profit (Saeidi & Afkhami, 2012, pp. 65-80). In this research, the return from increase of share value to the first price of period is considered to determine the negative and positive return of companies. To calculate stock return in the companies under study, the factors including increase of capital, the source for increase of capital and the time of capital increase must be considered. To calculate return, the formula below has been used:

State 1: Increase of capital has not occurred in company.

$$R = \frac{P_1 - P_0 + D}{P_0}$$

In equation above, R , P_1 , P_0 and D represent stock return of company, price of stock market at the end of year, price of stock market in the beginning of year, the cash profit belonged to each share.

State 2: Increase of capital from saving has occurred in company, under which two states might occur, explained as follows:

a-increase of capital before general assembly, whereby there will be:

$$R = \frac{(1+a)(P_1 + D)P_0}{P_0}$$

In equation above, a represents increase of capital.

b-increase of capital after general assembly.

$$R = \frac{(1+a)P_1 + D - P_0}{P_0}$$

In equation above, a represents increase of capital.

It can be examined before and after assembly in two states.

a-increase of capital from Cash and Receivables before general assembly, that there will be:

$$R = \frac{(1+a)(P_1 + D) - P_0 - a(1000)}{P_0 + a(1000)}$$

b-increase of capital from cash and receivables after general assembly, that there will be:

$$R = \frac{(1+a)P_1 + D - P_0 - a(1000)}{P_0 + a(1000)}$$

State 4: Increase of capital from cash and receivables, that there will be two states dependant on the increase of capital which has come to realize before or after general assembly:

a-increase of assembly before assembly.

$$R = \frac{(1+a_1+a_2)(P_1 + D) - P_0 - a_1(1000)}{P_0 + a_1(1000)}$$

*a*₁: percent of increase of capital from cash and receivables

*a*₂: percent of increase of capital from saving

b-increase of capital after general assembly.

$$R = \frac{(1+a_1+a_2)P_1 + D - P_0 + a_1(1000)}{P_0 + a_1(1000)}$$

6. RESEARCH MODEL

Multivariate regression model is used for the samples with negative and positive return to test hypotheses:

$$RPLA^1 = \alpha + \beta_1RET + \beta_2NI + \beta_3NI*RET + \varepsilon$$

RPLA: analytical reports of loss and profit

RET: stock return

NI: conservatism

7. EMPIRICAL RESULTS

7.1. Hypotheses Testing

In this section, *t*-statistics and significance level are used to test hypotheses. If absolute *t*-value be greater than *t*-value shown in table, the null hypothesis will be rejected and the considered coefficient will be significant, otherwise it cannot reject

¹ Reports, Profit and Loss analysis

null hypothesis. Further, significance level indicates minimum probability for confirming null hypothesis based on the considered coefficient when equaled to zero, that it cannot reject null hypothesis if this probability be greater than 5%, otherwise the considered coefficient will be significant.

8.2. Hypotheses Testing

The first hypothesis: the more conservatism is greater in loss and profit based on accepted accounting principles in negative and positive returns, difference in analytical loss and profit reports will be greater.

- (a) The more conservatism is considered in loss and profit based on accepted accounting principles, less incomes will be reflected in financial statements.
- (b) The more conservatism is considered in loss and profit based on accepted accounting principles, more costs will be reflected in financial statements.

9. TESTING THE FIRST HYPOTHESIS

Multivariate regression model below is used for the samples with negative and positive return separately to test hypotheses *a* and *b*:

$$RPLA^2 = \alpha + \beta_1RET + \beta_2NI + \beta_3NI*RET + \varepsilon$$

The model for testing hypothesis *a*: for the companies with positive return

$$RPLA = \alpha + \beta_1RET + \beta_2NI + \beta_3Incom + \beta_4NI*RET + \varepsilon$$

The model for testing hypothesis *a*: for the companies with negative return

$$RPLA = \alpha + \beta_1RET + \beta_2NI + \beta_3Cost + \beta_4NI*RET + \varepsilon$$

In model above, indices of company, removal time an variables have been defined previously. Model above is the model proposed by Basu (1997) that Lafond and Watts proposed it by adding the information asymmetry index. In this research, the designed or adjusted models have been used by LaFond, R., and R. Watts, 2008 to test all the hypotheses.

Hypotheses *a* and *b* state that more conservatism in loss and profit based on accepted accounting principles causes detecting less income and more cost, as the result it is expected that analytical loss and profit reports decrease by increasing range of difference in the proposed price of purchase and sale of stock; in model above, β_3 has is negative and significant for the sample with positive return and positive and significant for the sample with negative return.

9.1. Results from Testing the First Hypothesis

The first hypothesis includes three secondary hypotheses, that the results of testing each of hypotheses are elaborated in following. To test hypothesis *a*, model 4 with

positive return has been used. As shown in table 1, β_3 , t -value and sig equal to -0.481, -2.113 and 0.038. As the result, this hypothesis is accepted at confidence level (95%). To avoid word lengthening, an emphasis put on this point that the used models are significant in sake of elaboration of behavior the dependant variable based on f -statistics, that there is not autocorrelation between observational errors in all the factors regarding Durbin-Watson. This result indicates that the more conservatism is considered in loss and profit based on accepted accounting principles, less incomes will be reflected in financial statements.

Table 1
Results from Testing Hypothesis a for the Sample with Negative Return

$$RPLA = \alpha + \beta_1RET + \beta_2NI + \beta_3Incom + \beta_4NI*RET + \varepsilon$$

$$RPLA = \alpha + \beta_1RET + \beta_2NI + \beta_3Incom + \beta_4NI*RET + \varepsilon$$

Variables	Coefficients	The expected sign of coefficient	t-value	Sig
A			5.111	0.000
β_1RET	0.383		2.019	0.019
β_2NI	0.017		1.01	0.981
$\beta_3NI*RET$	0.481-	Negative	2.113-	0.038
Determination coefficient	0.290	F-value 4.121	0.13 F sig	
Adjusted determination coefficient	0.219	Durbin-Watson	1.911	

To test hypothesis b , model 4 has been used for the sample with negative return. To test hypothesis a , model 4 with negative return has been used. As shown in table 2, b_3 , t -value and sig equal to 0.817, 2.984 and 0.014. As the result, this hypothesis is accepted at confidence level (99%).

Table 2
Results from Testing Hypothesis a for the Sample with Positive Return

$$RPLA = \alpha + \beta_1RET + \beta_2NI + \beta_3Cost + \beta_4NI*RET + \varepsilon$$

Variables	Coefficients	The expected sign of coefficient	t-value	Sig
A			0.18-	0.901
β_1RET	0.448-		2.12-	0.023
β_2NI	0.312		1.761	0.065
$\beta_3NI*RET$	0.817	Positive	2.984	0.014
Determination coefficient	0.217	F-value 3.113	0.029 F sig	
Adjusted determination coefficient	0.219	Durbin-Watson	2.017	

10. CONCLUSION

Companies are often accused due to representing aggressive reports and non-compliance with the principles of conservatism. In this state, investors assume official reports of companies unreliable and know negative adjustment of profit and return to the poorer states unavoidable. Hence, the question remains however, whether official reports of companies are the most suitable sources for analysis to achieve a reliable return and whether it can achieve them via analytical reports through removal of special items?; These reports which are prepared through removing the elements such as the costs for change of structure, changes in goodwill, changes pertaining to ownership, depreciation, interest cost, taxes, compensation programs *via* stock are called analytical reports. In other words, since the official reports of companies are prepared in a range of accounting conservatism, attention to these reports guarantees acquiring more suitable return or analytical reports which can be prepared for different companies. With regard to the given explanations, analysis of the results has been represented in this section:

Point: in this research, there is a major hypothesis included of two secondary hypotheses, that the results of secondary hypotheses determine the major hypothesis. The reason for this lies on this fact that Lafond and Watts (2008) believe that conservative accounting can be the best summarization from the definite information except for the stock price about current performance of companies for investors. Hence, result of conservative accounting implies providing more information to the status in which accounting standards necessitate similar onfirmability to recognize costs and incomes. With regard to the given explanations, summary of results from hypotheses is as follow:

The first hypothesis: the more conservatism is greater in loss and profit based on accepted accounting principles in negative and positive returns, difference in analytical loss and profit reports will be greater.

- (a) The more conservatism is considered in loss and profit based on accepted accounting principles, less incomes will be reflected in financial statements.
- (b) The more conservatism is considered in loss and profit based on accepted accounting principles, more costs will be reflected in financial statements.

With regard to the statistical analyses, β_3 , *t*-value and sig equal to -0.481, -2.113 and 0.038. As the result, this hypothesis is accepted at confidence level (95%). This result indicates that the more conservatism is considered in loss and profit based on accepted accounting principles, less incomes will be reflected in financial statements, *i.e.* hypothesis a was confirmed. On the other hand, with regard to the statistical analyses, β_3 , *t*-value and sig equal to -0.481, -2.113 and 0.038 for the companies with negative return. As the result, this hypothesis is accepted at

confidence level (95%). With regard to the results above, it must state that the more conservatism is greater in loss and profit based on accepted accounting principles in negative and positive returns, difference in analytical loss and profit reports will be greater. This result in negative and positive returns was determined and specified in positive and negative returns. Result from this hypothesis indicated that if conservatism in loss and profit based on accepted accounting principles occurs, less incomes and more costs will be reflected in financial statements, whereby this causes difference in official loss and profit report with the analytical reports. Analytical reporting is targeted in providing investment opportunities with a profitability structure which reflects quality of profit, because losses and profits must have the highest degree of relevance to determine stock price. Yet, anyhow, the reality lies on this fact that the companies take precaution in differentiation between operating and non-operating activities, and this is one of the tendencies for smoothening profit (Bowen et al. 2005). In analysis of this hypothesis, it must state that when conservatism increases in loss and profit of official reports, less income and more costs are reflected in financial statements, and this causes more difference in analytical reports. This indicates that analytical reports under increase of conservatism in loss and profit result in huge difference between official reports and analytical reports for the investors, because major aim of analytical reports lies on attractiveness of investment with a suitable profitability structure for the investors, seeking to display quality of profit. On the other hand, companies seek to show loss and profit more realistic under conditions with ambiguity by applying conservatism in loss and profit. Indeed, conservatism in financial reports indicates use of a degree of care in judgment for accounting estimations under conditions with ambiguity, such that the incomes or assets seem more than standards and costs or debts seem less than standards. These contradictions raise difference between official accounting reports and analytical reports. Result of this hypothesis is consistent with the result of research by Heflin, F., & Hsu, C & Jin, Q (2014), saying that there will be gap between analytical loss and profit reports and official reports based on accepted accounting principles.

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