Investigating the Effect of Management Profit Forecasting on Profit Management in Stock Market Companies

Fadaeei Pache Kenari[1], Khaligh Khiyavi Parisa[2*] and Mahfoozi Gholamreza[3]

[1] MSc Student of Accounting, Department of accounting, Rasht Branch, Islamic Azad University, Rasht, Iran.

[2]Department of accounting, Rasht Branch, Islamic Azad University, Rasht, Iran

*Corresponding Author

[3]Department of accounting, Rasht Branch, Islamic Azad University, Rasht, Iran

Abstract

Profit is one of the most important and major items in financial statements that absorbs the attention of financial statements users. Investors, creditors, managers, company employees, analyzers, government and the other financial statements users ,use profit as a basis for loan selling, policy of paying profit, assessing companies, calculating taxes and other company decisions. The excessive emphasis of capital market on profit and its relevant information made this item one of the most important factors of stock price change and by producing an normal output made the company value depending on itself. This research, studies the effects of forecasting profit of management on management of profits of listed companies in Tehran stock exchange. The statistical sample includes 97 selected companies during 2008-2013 which were studied using the panel data.

Empirical results showed there is a significant negative relationship between abundance of forecasting the profit of each stock of management and management of company profit. Also, there is a significant and positive relationship between the accuracy of forecasting the profit of each stock of management and management of company profit.

Key Words: Forecasting profit of management, management of profit, Stock Exchange, Iran.

1. Introduction

The importance of access to suitable and relevant information to the decision subject is so important that in democratic societies, the clarity of information and their accessibility are known as investors' rights. Applications for financial reports and management of profit is a result of lack of information symmetry and the existence of contrast of profits between managers and investors out of organization and management of profits plays an important role to decrease such problems. So, governments control the stock exchanges to get to different goals. An accurate, useful and impartial progress that helps the good operation of capital market and management of profit satisfies all users and causes financial growth and consistency in the society. But generally, the most financial exercisers believe that publication of financial forecasting helps making investing decisions. And forecasting it by the manager, comparing to other published information by the company, and since information related to profit is more accepted by investors, so paying attention to the characteristics of these information are vital. On the other side, existence or non-existence of information about companies and their stock can affect the total risk of the company. Since

(DOI: dx.doi.org/14.9831/1444-8939.2015/3-4/MAGNT.27)

management as an aware person describes the future of company by forecasting the profit of each stock for stock holders, information risk will decrease and investors will invest with more certainty in estimating cash flow.

The aim of financial reporting is representing suitable information to financial information users in order to make better decisions. Financial reporting may happen in form of financial statements or other data transferor tools. Most of the represented information by financial reporting contains a forecasting of future operations. One of the primitive goals of management of profit is protecting the reputation of company because the good reputation makes the company look more dynamic and active. Taking an appropriate place among competitors and capital market makes investors and creditors get a more favorable opinion toward company and company doesn't spent extra expenses to compete similar companies. And also the company can get loan and credits by consuming less expense.

Nowadays, economic development depends on accessing to financial sources for investing. On the other side, investors' decision is dependent on the existence of a suitable financial reporting. Financial reporting can clarify the appropriation of investing sources in a commercial company, its profitability, and management of profit. So, management of profit seems more important for public companies that their owner are various stock holders and a management team chosen by stock holders make decisions there. Evidences in former researches show that management of profit has a positive effect on company and stock holders. Various studies used the theory of agency to explain the level of disclosure by companies. Such studies suggested that management of profit decrease the problem of lack of informative symmetry so it can improve the process of decision making. It should be considered that despite all profits and activities of management of profit, the amount of researches in the field of management of profit of financial ratios is still very little. So this current research will study the factors that encourage a company to manage profit of financial ratios in annual reporting. According to the conceptual frame works codified by standards and theoretical basis formulators in recent decades, the major goal of accounting and financial reporting is representing useful information to the users of financial statements in order to make economic decisions. Standards and financial reporting formulators consider such information useful for economic decisions that have specific quality features. From the conceptual frame works of accounting point of view, if the quality of reporting and management of profit will be proportionate with optimum economic decisions if the information are ,relevant, certain, understandable and comparative. It's been supposed in codifying the conceptual frame works that containing qualitative features can improve the quality of financial reporting and management of profit, and consequently will cause the information to affect decision makers' point of view in order to choose among existing options, usefully. According to the above subjects which represents the role of forecasting of management of profit in supplying necessary information for financial statements' users and also obligation of legislating organizations in financial markets to represent forecasting of management in specified times in one hand and the effect of conservativeness on different aspects of accounting system and financial reporting, on the other hand, the most important motivation to smooth profit is this belief that the companies with appropriate profit procedure and no specific change in their profit are more valuable than similar companies. Smoothing will increase the value of company stock in stock market and absorb good investors for them.

Perotti, P. & Wagenhofer, A. (2011) studied the qualitative features of profit and the excess

(DOI: dx.doi.org/14.9831/1444-8939.2015/3-4/MAGNT.27)

output. They said that qualitative features of profit affects the expectable output by affecting the invest cost. They also studied the effects of stability, ability of forecasting, smoothing the profit, the quality of accrual items, abnormal accrual items, the balanced coefficient of reaction, the relation of profit to the stock value, on the excess output. They chose lots of samples from American none-brokerage companies and did their study in a period since 1998 to 2007. They conclude that characteristics based on market information, coefficient of reaction of profit and the relation of profit to the stock value have more reliable output than those characteristics based on accounting information such as the quality of accrual items and abnormal accrual items.

Artiach and Clarkson (2010) in a research studied the effect of being conservative and revealing once separately and then together on the cost of invests of stock holders' rights. Their research showed that there is an inverse relationship between the level of conservativeness of companies and the cost of invest of stock holders' rights. The interesting point is that, the relationship was so weak in a high disclosure mode.

Dimiter Polse and Sterio(2009) in a research called " the relationship between financial statements and value, and their effect on stock price" , by studying 101 listed companies in stock market of Athens in a 10 years period, studied the effect of accrual items, profit of each single stock, and six specific ratio as an indicator of changing the financial statements, on the stock price. Their research result showed that four of six studied ratios and both parts of accrual items(optional and none-optional) have increasing importance to describe changes of stock price, but the importance of none-optional accrual items is more than optional accrual items. Their research result also emphasized that the variable of profitability accounting is the most relevant variable and the less the managers invest in current assets the better effect it will have on their stock prices.

Kothari et al (2009) provided evidences showing that managers tend to publish bad news to foreign investors with delay. The management tendency to hide bad news from foreign investors creates a risk of falling or actually negative output.

Hirshleifer et al (2009) examined the relation between accruals and cash flows of the output of the stocks. According to their findings, there is a meaningful positive relationship between the size of accruals and output of stock and a meaningful negative relationship between the sizes of cash flows with between the sizes of accruals.

Forster et al (2009) in a research studied the effect of Voluntary disclosure of management profit forecast on Risk assessment and value of company by investors. These researchers considered the characteristics of profit forecast from different aspects and examined them. They found that there is a meaningful and inverse relationship between the disclosures of management profit forecast with information risk of the company.

Francis Nanda and Olsson (2008) created the voluntary index of 2001 and reached to an inverse relationship between the relevant standard and the capital cost. But the mentioned relationship can't be applied while the quality control of profit is being done by the managers.

In this research, the effect of forecasting profit of management on management of profit in accepted companies in Tehran stock exchange will be studied.

2. Materials and Methods

This study has two hypotheses:

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First hypothesis: There is a relationship between the abundance of profit forecast of management with the management of company profit.

Second hypothesis: There is a relationship between the accuracy of profit forecast of each management stock with the management of company profit.

In the current study, panel data were used. The data have sufficient reliability provided that they have certain assumptions, the most important of which are normality, linearity, and homogeneity of variance, etc. Therefore, in this study, the model assumptions were examined and their authenticities were checked before establishing fitness. Furthermore, Jarg-Bera test was used to assess the normality assumption for dependent variables.

The statistical population of this research includes companies which were active in Tehran stock exchange 2008-2013. In this research the method of systematic elimination is used to select the statistical sample. To select the statistical sample, companies that have the following characteristics were selected and the rest were eliminated:

1. Due to the need to calculate the variables and test hypotheses for each company, full details of each company in relation to the studied variables should have been studied and disclosed.
2. Collected data should be continuous.
3. Due to this point that the nature of the financial statement items is affected by the nature and type of companies, hence, in order to increase the feature of uniformity and comparability of data, companies should not be financial intermediaries. So the financial and investment institutions and banks are not included in the sample.
4. For the same reporting date, remove seasonal effects and increase the comparability of information, the financial period of companies should end29 Esfand (19 March) each year and during the period of researching the financial year have not changed.

The independent variable is the same stimulus and any aspect of physical, social and other environments are known as stimulus that affects a specific kind of behavior. (Houman, 1995)

$$EM = a + b_1 LnF_{it} + b_2 Dfeq_{it} + b_3 Size_{it-1} + b_4 Lev_{it} + b_5 LnMv \qquad (1)$$

$$EM = a + b_1 PREC_{it} + b_2 DPREC_{it} + b_3 Size_{it-1} + b_4 Lev_{it} + b_5 Ln \qquad (2)$$

Dfeq: It is a dummy variable which its value will be one if the accuracy of company forecast has been published profits for each predicted share more than four times in a single financial period, and it will be zero otherwise.

LnF: It reflects the abundance of forecast distribution.

PREC: It reflects the accuracy of profit forecast for per share.

DPREC: It is a dummy variable which its value will be one if the accuracy of company forecast is higher than the average accuracy of forecast of all statistical sample company, and it will be zero otherwise.

A dependant variable is a variable that is observed or measured in order to clarify the straight effect of the independent variable on it. Profit management, will be earned as written below:

$$NDA_t = a_1(1/A_{t-1}) + a_2(\Delta REV_t - \Delta REC_t) + a_3(PPE_t)$$

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NDAt: Non-discretionary items in year "t"

ΔREV_t : The earning of year" t" minus the year" t-1"

PPEt: The gross value of property, machines and equipment in year"t"

A_{t-1}: Total assets at period t-1

ΔREC_t : Net received account in year "t" minus the net received account in year "t-1"

Control variables in this study are listed below:

SIZE: The size of the company is considered as an alternative to information environment of the company. The larger the size of the company, the company will have more credibility. Large companies because of the possibility of more diversifying, investing in different asset, ability to use various financial sources and regular disclosure of information, have lower risk. To control the effect of these variables on the cost of equity, the logarithm of the market value of the shares at the end of the previous year has been used.

Lev: Financial leverage as a control variable (Ratio of total liabilities to total assets).

LnMv: Natural logarithm of the market value of the control variable.

Ret: Stock output as a control variable (Net profit divided by the number of shares).

3. Results and Discussion

In this section, descriptive statistics of the research variables is represented in table 1 considering the classification has been done in previous part. Normal distribution of the dependent variable has been studied using Jarque-Bera test because one of the regression model assumptions is normal distribution of the dependent variable. For normal distribution of data, the null hypothesis is the normal distribution of data. If the possibility provided by this test is higher than 5%, the null hypothesis will be accepted and will be rejected otherwise.

Table 1: Descriptive statistics for research variables

Research variables					
Symbol in the model	**EM**	**Lnf**	**PREC**	**SIZE**	**Lev**
Average	0.005	962.50	0.12	11.74	3.93E-09
Median	-0.02	-1715.95	0.09	11.71	2.74E-09
Maximum	3.02	13616914	2.00	14.19	3.05E-07
Minimum	-2.34	-12661878	-1.04	10.06	-6.00E-07
Standard Deviation	0.97	1170411	0.28	0.72	3.92E-08
Skewness	0.17	-0.277048	3.47	0.59	-9.270489
Elongation	2.74	77.14407	25.89	3.57	144.8890
Jarque – Bera statistics	4.55	130569.2	13596.65	41.52	486310.9
Statistics possibility	0.10	0.00	0.00	0.00	0.00
Number of Observations	**582**				

Source: Research findings

The main objective of this research is to study the disclosure of income forecast policy and the current cost of equity and the cost of equity capital in the future .In order to determine the exact impact of each of the dependent variables, each of these components have been considered and tested in an independent hypothesis as you see below.

First Hypothesis: There is a meaningful relationship between the abundance of profit forecast of management with the management of company profit.

$$EM = a + b_1 LnF_{it} + b_2 Dfeq_{it} + b_3 Size_{it-1} + b_4 Lev_{it} + b_5 LnMv_{it} + b_6 Ret_{it} + e_{it}$$

Second Hypothesis: There is a meaningful relationship between the accuracy of profit forecast of each management stock with the management of company profit.

$$EM = a + b_1 PREC_{it} + b_2 DPREC_{it} + b_3 Size_{it-1} + b_4 Lev_{it} + b_5 LnMv_{it} + b_6 \mathrm{Ret}_{it} + e_{it}$$

To investigate the relationship between variables, 3 types of panel data assessments, i.e. OLS model, random-effects model, and fixed-effects model were employed. Firstly, F-Test was used to select between OLS estimator of the combined group and fixed-effects model and thus the fixed-effects model was superior to the OLS estimator based on the test results. Then, Hausman's test was applied to select either the fixed-effects model or random-effects model. Again, the fixed-effects model showed superiority to the random-effects model based on the results of this test.

Table 2: Estimation results obtained from model test study

Variables	coefficient	Standard Deviation	t Statistic	significance
Constant number	6.678466	1.145124	5.832092	0.0000
Profit management	-3.68E-08	3.15E-08	-1.166377	0.0041
Profit forecast of each share	0.106605	0.064993	1.640238	0.0016
Company size	-0.567102	0.097401	-5.822329	0.0000
Financial Leverage of company	285507.7	954731.2	0.299045	0.7650
Systematic risk	-0.038097	0.020338	-1.873208	0.0617
	0.554437	Adjusted coefficient of determination	8.010272	F Statistic
	2.257219	Durbin-Watson statistic	0.000000	F Statistic contingent

Source: Research findings

As you see in table 2, according to **F** statistic it can be said that the above regression model is significant. And the value of Durbin-Watson is equal to 2.25 that this amount is appropriate and shows the removal of self autocorrelation in Disturbing details of the initial model. The value of the adjusted coefficient of determination shows that the model estimated variables for explaining the dependant variable have explanatory power (55%). Due to the earned results, there is a meaningful relationship between the abundance of profit forecast of management with the management of company profit. There is also a straight and meaningful relationship between the accuracy of profit forecast of each management stock with the management of company profit.

The total result gained from examining the hypothesis by different relationships is represented in table 3.

(DOI: dx.doi.org/14.9831/1444-8939.2015/3-4/MAGNT.27)

Table 3: Results of the research hypothesis testing

Hypothesis	**Type of Relationship**
First hypothesis	negative
Second hypothesis	positive

Source: Research findings

After examining all the assumptions and getting to a conclusion about each of them, it's the time of a total conclusion. Since the main objective of this research is studying the effect of management profit forecast on profit management in listed companies in Tehran Stock Exchange. The summary of results shows that due to the fact that in examining the assumptions, Regression model with control variable has been used, the test results show that control variables affect the relationship between independent variable and dependent variables. Due to the summary of mentioned results, the first and second examined assumptions are confirmed; it means that there is a meaningful and reverse relationship between the profit of each management stock with the management of company profit and likewise between the accuracy of profit forecast of each management stock with the management of company profit. So it can be concluded that there is a meaningful relationship between the effects of profit forecast of management with the management of profit in listed companies in Tehran Stock Exchange.

4.Conclusion and suggestions

It is recommended to investors in the Stock Exchange to invest in companies with better profit forecasts policy. Investors should consider that cost of capital affects profit management of companies, so that high quality profits are in a relationship with lower invest cost and low quality profits are directly related to higher invest cost.

It will be great if in other researches, some researchers study the existed industries in Tehran Stock Exchange separately in order to specify the efficacy of the tested industry.

REFERENCES

1. Eskandari, Jamshid. *Financial Accounting*. Kiumars, 2012.
2. Parsaeeyan, Ali. *Financial Accounting Theory*. William Scott .Termeh, 2011.
3. Islamic Consultative Assembly. *Law of Diffusion of Bonds*. Stock Exchange Organization, 1997.
4. Islamic Consultative Assembly. *The Law of Development of New Financial Instruments and Institutions*. Stock Exchange Organization, 2009.
5. Majidi, Reza, and Iraj Noravesh. "Studying The Relationship between Quality and Cost of Capital Profits on Listed Companies in Tehran Stock Exchange." *Electrical Accounting* 1 Jan. 2006.
6. Accounting Standards Committee. *Accounting Principles: Accounting Standards*. Auditing Organization Publications, 2011.
7. Supreme Council of Tehran Stock Exchange. *Issuing Instructions of Securities Rent*. Stock Exchange Organization, 2011.
8. Rahimian, Nazamoddin. "A Reflection on Ways of Financing." *Journal of Accounting* 1 Jan. 2001.
9. Ball, R., Shivakumar, L., 2006. The role of accruals in asymmetrically timely gain and loss recognition. Journal of Accounting Research 44 (2), 207–242.
10. Ball, R., Kothari, S.P., Robin, A., 2000. The effect of international institutional factors on properties of accounting earnings. Journal of Accounting and Economics 29, 1–51.

(DOI: dx.doi.org/14.9831/1444-8939.2015/3-4/MAGNT.27)

11. Balsam, S., 1998. Discretionary accounting choices and CEO compensation. Contemporary Accounting Research 15 (3), 229–252.
12. Barro, R., Barro, J., 1990. Pay, performance, and turnover of bank CEOs. Journal of Labor Economics 8, 448–481.
13. Basu, S., 1997. The conservatism principle and asymmetric timeliness of earnings. Journal of Accounting and Economics 24, 3–37.
14. Beatty, A., Chamberlain, S., Magliolo, J., 1995. Managing financial reports of commercial banks: the influence of taxes, regulatory capital and earnings. Journal of Accounting Research 33 (2), 231–262.
15. Beatty, A., Ke, B., Petroni, K.R., 2002. Earnings management to avoid earnings declines across publicly and privately held bank. The Accounting Review 77 (3), 547–570.
16. Bebchuk, L., 2009. Written Testimony, Hearing on Compensation Structures and Systemic Risk, June 11, 2009, Committee on Financial Services, U.S. House of Representatives. Harvard Law School.
17. Adrian, T., Shin, H.S., 2009. Liquidity and leverage. Journal of Financial Intermediation 19 (3), 418–437
18. Ahmed, A.S., Takeda, C., Thomas, S., 1999. Bank loan loss provisions: a reexamination of capital management, earnings management and signaling effects. Journal of Accounting and Economics 28 (1), 1–25
19. Anderson, K., Woodhouse, K., Ramsay, A., Faff, R., 2009. Testing for asymmetric effects in the accrual anomaly using piecewise linear regressions: Australian evidence. Pacific Accounting Review 21 (1), 5–25.
20. Repullo, R., Saurina, J., 2011. The Countercyclical Capital Buffer of Basel III: A Critical Assessment. Working Paper No. 1102. CEMFI

(DOI: dx.doi.org/14.9831/1444-8939.2015/3-4/MAGNT.27)