The Study of Effect of earning management on capital market reactions

Mina lalepour
M.A, Department of Accounting, East Azarbaijan Science and Research Branch, Islamic Azad university,Tabriz,Iran.
Lalepour_m@yahoo.com

Abstract: In the present research, following the previous ones, we have studied the stock market reaction of firms accepted in Tehran Stock Exchange towards unexpected earning and the interactions among unexpected earnings and earnings management. The statistical society for the present research involves 120 firms accepted in Tehran Stock Exchange which were chosen by an omitting sampling method. The results of testing research hypotheses approved the positive effects of unexpected earnings and qualitative characteristic of earning on price stock of companies. [Lalepour, M. **The Study of Effect Of earning management on capital market reactions.** *Life Sci J* 2013;10(6s):71-74] (ISSN:1097-8135). http://www.lifesciencesite.com.

Keywords: unexpected earnings, earnings management, capital market reactions

1. Introduction

There has been considerable interest in the quality of financial reporting. Many studies analyze earnings quality trends over time and their determinants; others measure the effects of specific changes in accounting standards, enforcement systems, or corporate governance requirements within or across countries; further studies use earnings quality to explain variations in economic outcomes, such as the cost of capital. Standard setters, including the FASB and the IASB, aim at improving the quality of financial reporting as noted in their Conceptual Framework (FASB 2010).

The relationship between stock prices and company performance measured by accounting numbers has attracted much attention among accountants and financial economists. Many studies have examined stock price reactions to earnings announcements.

Ball and Brown (1968), Beaver (1968), and Rendleman, Jones, and Latané (1982) report that stock returns are positively related to contemporaneous earnings surprises. This is a very robust result and subsequent work has confirmed the findings of the early studies in this area. The requirement to announce an earnings forecast, on a regular basis, and at the end of each quarter, has provided a unique opportunity to conduct research on the reaction of companies and the market, in response to this requirement. Based on the authors' findings, there is no such requirement in any other country. It suggested that the motivation of the Stock Organization for establishing this requirement is to move in line with the overall goal of improving the stock market transparency, and timely and pervasive access to information for users and investors, before and after transaction, (the information disclosure regulation for listed companies in the TSE, enacted in 2002).

This study contributes to advances in accounting theory as to pragmatics aspect, because it tries to assess the reaction of the providers of the information themselves to the information provided.

Other work has sought to determine if the composition of earnings contains information beyond that conveyed by the level of earnings alone. For example, Bowen, Burgstahler, and Daley (1987) and Wilson (1986, 1987) break earnings into accrual and cash (or funds) flow components. They show that innovations in both components are statistically significantly related to the abnormal stock returns of reporting firms.

There is a body of evidence that suggests that the information contained in accruals is not efficiently impounded in stock prices when it enters the public domain. Teoh, Welch, and Wong (1998a, 1998b), and DuCharme, Malatesta, and Sefcik (2001,Eckbo, Masulis, and Norli (2000) argue that these results are spurious, arising from inadequate controls for differences in risk between firms and the resulting mismeasurement of abnormal returns. DuCharme, Malatesta, and Sefcik (2001) show, however, that their results for IPOs hold even for risk-adjusted returns measured using the multi-factor CAPM of Eckbo, Masulis, and Norli (2000).

In addition, Sloan(1996) and Xie (2001) report that accruals have significant power to predict subsequent stock returns in general. Buying stock in firms with low accruals and selling stock in firms with high accruals generates significantly positive abnormal returns relative to the Sharpe (1964) CAPM and the three-factor model of Fama and French (1993).

How to interpret these provocative results remains debatable. Despite the results of DuCharme, et al. (2001), it is not possible to dismiss the central point raised by Eckbo, et al. (2000). We do not know the correct way to control for differences in risk and this is a crucial issue in the studies cited above, which attempt to measure abnormal returns over long holding periods.

Therefore, regarding the importance of earnings information and also the unprecedented profits resulted from the weak predictions of managers the main question of the present research will be as follows:

What is the effect of the interactions of earning management and the qualitative characteristics of earnings on abnormal return of the stocks of companies?

2. Review of the research literature

Hypothesis: The interaction of earnings management and unexpected earning effects on capital market reactions.

3. Research Literature

DeFond and Park (2001) also examine the relation between stock returns and earnings components, but within an event study framework using daily returns data. This avoids or mitigates the problems confronted by Subramanyam (1996). They present evidence that stock prices react less to earnings surprises when abnormal accruals increase the magnitude of the surprise, and react more when the opposite is true. This suggests that investors do distinguish among earnings components. However, DeFond and Park do not actually decompose earnings surprises themselves and they do not measure the marginal values of the earnings components.

DuCharme & et. all (2004). They examine the stock price reactions to earnings announcements. They had used a database that contains analysts' forecasts of earnings and revenues. This allows us to decompose earnings surprises into three components: innovations to expected cash flow and expected normal accruals, and an abnormal accrual component. They find that abnormal stock returns are contemporaneously positively related to all three components of the earnings surprise. The impact on stock prices varies, however, across the components. The marginal value of innovations to expected normal accruals much exceeds the marginal value of innovations to expected cash flow, which exceeds the marginal value of abnormal accruals. they also examine the relation between the earnings components and future cash flow and stock returns. Innovations to the earnings components are positively related to future cash flow.

Francis, LaFond, Olsson, and Schipper (2004) also report correlations between their seven earnings quality measures. They are generally significant, but economically not large, which suggests there is little overlap between them. Dechow, Ge, and Schrand (2010) report correlations and find significant negative correlations among several of the earnings quality measures, indicating that they may provide conflicting results when applied to the same research question. Our approach provides new insights into these relationships.

Ewert and Wagenhofer (2011) model earnings quality in a rational expectations capital market equilibrium, and allow for private information by management and earnings management. They examine persistence, predictability, smoothness, discretionary accruals, and value relevance. By varying the incentives and operating and accounting characteristics, they compare these measures based on their ability to capture the change in the information content of reported earnings. They find that value relevance is a particularly good proxy, whereas earnings.

Marinovic (2010) examines earnings management and capital market reactions when there is uncertainty whether the manager can bias the earnings report. He finds that persistence is a useful measure, whereas predictability and smoothness do not reflect earnings quality because they behave non-monotonically in the information content of reported earnings.

Drymiotes and Hemmer (2011) study the implications of conservatism on stewardship and valuation. They find that value relevance from a price-earnings regression is an unreliable measure of earnings quality.

4. Research variables and their Measurement Methods

4.1. Dependent Variable:

Market reactions:

$$M\,R\,t = (Pt / Pt\text{-}1)*100$$

M R: Market Reaction

P: stock price

4.2. Independent Variables:

- **Unexpected earning:**

To calculate unexpected earning we have used absolute amount index of the difference between real earning and the predicted earnings per share:

$$UE_{it} = / AEPS_{it} - FEPS_{it} /$$

FEPS = predicted earning

AEPS = realized earning

- **Earnings Management:**

To calculate earnings management we have used Jones's model as follows:

$$TA_{it} / A_{i,t-1} = \alpha_1 (1/ A_{i,t-0}) + \beta_1 (\Delta REV_{it} / A_{i,t-1}) + \beta_2 (PPE_{it} / A_{i,t-1}) + \varepsilon_{it}$$

TA_{it} : total accruals in the year t for the firm i

$A_{i,t-1}$: total accruals at the end of the previous year for firm i

ΔREV: change in annual earnings

PPE_{it} : properties and machinery at the same year (fixed assets of each year after subtracting accumulated depreciation) in year t for the firm i

α: the parameters of each company are estimated through multi-variable regressions β_1 and β_2.

5. Research findings

Table (1): Statistical analysis results for hypothesis test

$MR_{it} = \beta_. + \beta_1 UE0_{i,t} + \beta_2 TAC_{it} + \beta_3 UE0_{it} \times TAC_{it} + \beta_4 Size_{it} + MTB_{it} + \beta_6 \Delta E + \varepsilon$

R^2	D-W	P-value	F	P-value	t	β	variable
.238	2.150	.000	16.01	.000	4.256	.546	UE
				.042	-2.043	-.064	TAC
				.007	2.722	.344	UE × TAC
				.830	-.215	-.004	Size
				.066	1.839	.009	MV/BV

The coefficient gained for the variable UE0, and (UE0 * TAC) which shows the abnormal return resulted from unexpected earnings and the interaction of unexpected earnings and earnings management, is positive and meaningful. Meanwhile, the reaction of return to TAC variable which shows earnings management is negative and meaningful. Thus, the fifth hypothesis is accepted in an assurance level of %95.

6. General Conclusions

The results of testing the hypotheses showed that investors have presented a positive reaction towards unexpected earnings in our statistical sample companies. In other words, by increasing (decreasing) unexpected earnings, market reactions. of firms have increased (decreased). The results showed that investors have had a negative reaction towards earnings management. This finding can be regarded based on the opportunistic incentives of the managers. When managers utilize optional accruals opportunistically to deviate the reported earnings and deviate the users, information asymmetry will

Increase and the enthusiasm of the investors towards firm's stocks will decrease. Meanwhile, it is possible that earnings management would be a desirable alternative for companies having unexpected earnings because managers can use these tools to make accounting earnings closer to the expected earnings and adjust the amount of unexpected earnings of the company to avoid the main fluctuations in firms' stock prices.

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Corresponding Author:
Mina lalepour
M.A, Department of Accounting, East Azarbaijan Science and Research Branch, Islamic Azad university,Tabriz,Iran
E-mail: lalepour_m@yahoo.com