Explain the Relationship Between Profit Forecasts by Management and Investors to Evaluate the Accrual of Investment Funds in the Capital Market in Iran

Amirhosein Jamali PH.D
Department of accounting, Yasouj Branch, Islamic Azad University, Yasouj, Iran
Marzieh Taj Ardekani
Department of accounting, Yasouj Branch, Islamic Azad University, Yasouj, Iran

Abstract
Today, due to the expansion of economic activities, development of financial markets and capital markets investment boom, especially Stock Exchange by natural and legal persons, the most important tool to make the right decisions and gain expected and optimum use of financial resources, access to which was based on the theory Hausman test and F been done. The aim of this study was to evaluate the relationship between management earnings forecast by 3 index variability of returns, distribution errors of prediction Forecast earnings per share earnings per share of accruals in the fund and investors assessed that the 60 companies listed on the Tehran Stock Exchange which is separately tested and evaluated through regression .significant investment relationship was confirmed.

Keywords: Variability of returns - Profit forecasts - Per share earnings forecast - Investment appraisal accruals

1 - Introduction
In all today’s societies, industrial, services, or commercial activities in the community need to have sufficient funds to operate. These units in order to reduce the risk of its activities, attempted to publish papers and through surplus funds of individuals and legal entities to their households and poorer. With regard to the fact that all capital market investors looking to increase their own interests and look to the risks that exist in various industries. Investors to invest in it should be a careful analysis of financial reports and papers act or of consultants and specialists in financial markets or a joint venture to invest their funds. Costs of adverse selection, an important part of the bid and sell shares in your account. Although the research models of investors for this study are almost the same but result yield from different study about relation between costs of adverse selection and Bid and sell shares have many difference. Profit forecast by management in investment companies listed on the stock exchange could reduce information asymmetry and cost of capital, improve the efficiency of resource allocation in the capital market. When company management feels the company's performance fluctuates or significantly perverted from its original expectations, it must publish predictions about corporate profits. This factor makes investors operate with more accurate information and with less information asymmetry in capital markets. In the field the relationship between profit forecasts and investment management is very important and very little research has examined the effect of profit anticipating by managing their investments (Wang et al., 2015).

One of the requirements of the Stock Exchange, profit forecast by managers. There are several models to predict profits. These models are not accurate. Predictions made by professionals, including analysts, more accurate predictions by these models are carried out, but the accuracy of these predictions is affected by many factors. Based on the above, the aim of this study is to answer the question are there relation between the predictions of profits by management and investor’s evaluation of accruals in respect of investment funds?

2. A review of the literature
Zstfn and Patrick (2014), showed that analysts shopping axis significantly influence trading decisions. They suggested fund managers strongly follow the recommendations of analysts. Abnormal returns than analysts offer buy axis effect on the performance of investment funds transactions. Transactions conducted through the suggestions analysts than any other buy axis transactions, yields higher. In total, the impact of purchase axis analysts more effective sell-oriented analysts. Chen et al (2013) also pay the impact of outsourcing the management of mutual funds on the fund's performance and incentives. They suggested, fund, manage a large part of their funds to consulting firms, and are outsourced. The researchers said that, after the initial outsourcing in the fund, fund performance, are estimated to be three times higher than the current time. They also said that more incentives and investment funds outsourced, but outsourcing is likely due to the poor performance of the fund and the fund managers Excessive risk-seeking, cause mutual fund fails.

Gong et al (2009) the relationship between earnings forecast error and accruals have studied from another angle. Mentioned studies reported on accrual management, after forecasting profit of emphasis and
evidence that these accruals for loss of earnings forecast error manipulated. From another angle, Gong and his colleagues examined relationship between accruals of current and management earnings forecast of next year. They concluded that in an uncertain operating environment prepared by management of the company's business future is not perfect.

Weber (2007) search for the best selection of portfolio with the lowest risk. Results of this study emphasize the before study results that all of them express by increasing number of stocks purchase from different company and creation of one basket investment , can minimized investment risk .Weber also do this method for investment fund and earn same result.

Morad Zadeh Fard et al (2014) in their study pay for effect of different variables on investment fund return. This variable consist of: number of investment fund unit, whether or not bunk funds, Rating agency funds, transaction Ratio funds, fund size, fund life, the issuance and cancellation of funds and return on market .in this study information of 39 common investment fund for two years has been exam. The results of hypotheses testing show there is significant relation between the number of investment units of the Fund, the Fund's trading activity, the size of the fund, the fund's life, the value of exports, the value of cancellation, market returns and fund returns but there isn’t significant relation between whether or not bank fund and funds return.

Aziz and Sharif Far (2013) also examined the factors that affect the behavior of investors in mutual fund selection. The two researchers used in their study of quantitative-qualitative plug. Finally came to the conclusion that the most important factors affecting the selection of mutual funds in order of priority are: efficiency and performance, knowledge and understanding of fund investors, the risk aversion of investors, environmental factors, life / size of the fund, and accessibility finally invitations.

Ghalibaf asl and Kurdish (2013) examined the relationship between trading activity and risk, return and portfolio diversification of investment funds, their research results indicate that the trading activity of investment funds with admins man, experienced, less educated and younger most of the funds have investment manager woman, experienced, higher education and older.

3-Hypotheses
Considering that the aim of this research is determining the relationship between profit forecasts by management and investors to evaluate the accrual of investment funds in the capital market in Iran, hypotheses are as follows:

The main hypothesis:
There is significant relationship between profit predictions by management and investors evaluation of accruals in the investment funds.

Sub hypotheses:
First sub-hypothesis: there is significant relationship between the variability of returns and evaluation of accruals investors in investment funds.

The second sub-hypothesis: there is significant relationship between the distribution per share profit forecast and investor’s evaluation of accruals in investment funds.

The third sub-hypothesis: there is significant relationship between forecast error of per share and investors evaluation of accruals in investment funds.

4-Variables and how to measure them

- **Depend variable**
  Investor’s evaluation of accruals: Investor valuation of accruals means pricing of accruals and earnings manipulation is detected. Accordingly, in order to manipulate elements of benefit accruals are pricing model using the following equation has been modified Jones as: (Hosni and Ghorbani, 2016).

  \[
  ACC_{i,t} = \alpha + \beta_1(\Delta REV_{i,t} - \Delta REC_{i,t}) + \beta_2 PPE_{i,t} + \epsilon_{i,t}
  \]

  Here:
  - \(ACC_{i,t}\): Accruals (the difference between operating income and operating cash flow) (also scale with a book value of assets)
  - \(\Delta REV_{i,t}\):Changes in income (both scale assets with a book value)
  - \(\Delta REC_{i,t}\):Changes in receivables (time scale with a book value of assets)
  - \(PPE_{i,t}\): Gross property, plant and equipment (time scale with a book value of assets)
  - \(\epsilon_{i,t}\): residual regression model with a model error of index accruals.

- **Independent variable**
  In this study, the independent variable is management earnings forecast by 3 criteria of variability of returns, distribution and prediction error is measured entity's earnings per share:
  - Variability of returns: standard deviation of returns during the quarter \(t\) (because companies are obliged to provide quarterly reports).
  - Forecast earnings per share distribution: the standard deviation of earnings per share projected in the
budget and the adjustments made during t

- prediction error earnings per share: basic differences between predicted and actual earnings per share in
  year t

- Control variables
  - Company growth: the division of book value to market value is obtained (when Zamani and Zangirdar, 2013).
  - Leverage: Based on the theory of capital structure and financial leverage should be measured based on
    the market value. But in many empirical studies used the book value rather than market value because
    book value-is more objective (Jrmays, 2008). In addition Astvnhyl and others 15 (1974) have shown a
    measure of financial leverage in the discussions, book value exceeds the market value is used. So
    leverage based on the book value of debt and assets is calculated as follows:
      - Financial leverage is the ratio of total debt (current liabilities + long-term liabilities + Other
        liabilities) by the total book value of assets.
      - In this study, the final formula for the calculation of financial leverage is used.

5. The population and sample
In this research, investment funds listed on the Stock Exchange were selected as the population. The reason
for this choice, considering investing in these funds, given the availability of information and transparency of
accounting information, enhance the comparability of its funds have been invested.

The stock requirements for timely publication of the financial statements has led to a more suitable
environment for researchers to develop. On the other hand, shares of investment funds listed on the stock
exchange and encompass a wide range of users of financial statements, has companies listed on Tehran Stock
Exchange be considered. A sample of investment funds listed on the Tehran Stock Exchange has been selected.
So that all the funds listed in the Tehran Stock Exchange, companies that are eligible have chosen the following:
1. In fiscal years 2011 to 2014 in stock in attendance.
2. The fiscal year end of March each year and during the above mentioned period in fiscal year has not
   changed.
3. In all the years studied during the fiscal year and their required data is available.
4. The interruption of trading companies that have more than 4 months.
5. Companies that March 29 was the end of the fiscal year.
6. The trading symbol for the active participation and its shares are traded at least once a year.

Companies that have not provided the information needed to calculate variables, the research
community and ultimately remove 60 companies were selected as study population study for a period of 5 years.
The final volume is 300 years as the data were used to test the effects.

6. The research method
This article aims to explain the relationship between the profit forecasts by management and investor’s
evaluation from the accrual of investment funds in the market of the capital of Iran, research methodology for the
study, the correlation shown to the relationship between these variables multiple regression test was used.

Regression models were used to test the hypothesis follows:

$$\text{ACC}_{i,t} = \beta_0 + \alpha_1 \text{Return Volatility}_{i,t} + \alpha_2 \text{Forecast Dispersion}_{i,t} + \alpha_3 \text{Forecast Error}_{i,t} + \alpha_4 \text{SIZE}_{i,t} + \alpha_5 \text{LEV}_{i,t} + \alpha_6 \text{GROWTH}_{i,t} + \epsilon_0$$

In the above equation:

- ACC: investor's assessment of accruals;
- Return Volatility: variability of returns
- Forecast Error: error in forecasting earnings per share.
- Forecast Dispersion: dispersion Forecast earnings per share.
- Company size: SIZE
- Debt ratio: LEV
- GROWTH: Growth Company

7. The method of data analysis
After collecting data, the researcher must provide their category and analysis. Then, to test their hypotheses that
have helped make this stage of his research to find answers to research questions. Data analysis a multistep
process in which the data in different ways Summary, Categories and finally processed. To contact field types
and relationships between data analysis in order to test the hypotheses provided. In this process, both
conceptually and in terms of empirical data and are refining a variety of ways to derive statistically significant role to play. To analyze the data in the first phase, the data are descriptive analysis assign fall. This section includes statistics, centrality and distribution data. To test the hypothesis of a cross-sectional regression to partial least square method was used. All tests by statistical software Eviews7 been done.

8. Results of statistical hypothesis testing

- Viability test variables

<table>
<thead>
<tr>
<th>variables</th>
<th>Probability</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>0.0416</td>
<td>62.8444</td>
</tr>
<tr>
<td>FOD</td>
<td>0.0000</td>
<td>268.542</td>
</tr>
<tr>
<td>FOE</td>
<td>0.0000</td>
<td>330.376</td>
</tr>
<tr>
<td>RTV</td>
<td>0.0000</td>
<td>284.692</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.0000</td>
<td>370.635</td>
</tr>
<tr>
<td>LEV</td>
<td>0.0000</td>
<td>314.884</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.0184</td>
<td>55.2864</td>
</tr>
</tbody>
</table>

As can be seen in all variables P-Value in unit root test indicates that the variable is less than 0.05 and Manna (valid) are. This means that the mean and variance and covariance of variables over time between 2011 to 2014 have been fixed. As a result of the use of these variables in the regression model creates is not false.

- Normality test of the variables

<table>
<thead>
<tr>
<th>variables</th>
<th>Probability</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>154828.5</td>
<td>0.0</td>
</tr>
<tr>
<td>FOD</td>
<td>4294.347</td>
<td>0.0</td>
</tr>
<tr>
<td>FOE</td>
<td>25975.97</td>
<td>0.0</td>
</tr>
<tr>
<td>RTV</td>
<td>1464.565</td>
<td>0.0</td>
</tr>
<tr>
<td>SIZE</td>
<td>61.82800</td>
<td>0.0</td>
</tr>
<tr>
<td>LEV</td>
<td>1083.324</td>
<td>0.0</td>
</tr>
<tr>
<td>GROWTH</td>
<td>48799.12</td>
<td>0.0</td>
</tr>
</tbody>
</table>

- F-Limmer test and Hausman test

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Method</th>
<th>test</th>
<th>p-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>F-Limmer</td>
<td>42.36</td>
<td>0.0</td>
<td>Panel method</td>
</tr>
<tr>
<td>Second</td>
<td>Hausman</td>
<td>1.586</td>
<td>0.0513</td>
<td>Random effects</td>
</tr>
<tr>
<td>Third</td>
<td>F-Limmer</td>
<td>18.269</td>
<td>0.0</td>
<td>Panel method</td>
</tr>
<tr>
<td></td>
<td>Hausman</td>
<td>4.824</td>
<td>0.0</td>
<td>Random effects</td>
</tr>
<tr>
<td></td>
<td>F-Limmer</td>
<td>6.359</td>
<td>0.0</td>
<td>Panel method</td>
</tr>
<tr>
<td></td>
<td>Hausman</td>
<td>3.4782</td>
<td>0.0126</td>
<td>Random effects</td>
</tr>
</tbody>
</table>

As Table 3 shows, the probability –Limmer test all assumptions smaller than 5%, so assuming H0 (combined model) cannot be verified in other words, the effects of individual or groups and the technique of panel data to estimate the model is used. For other assumptions, hypotheses less than 5%. So for the first hypothesis of random effects for other assumptions and hypotheses H0 (fixed effects model) will be accepted. This means the relationship between independent variables and the estimated regression error. According to Chow and Hausman test results for parameter estimation and hypothesis testing for the first hypothesis of random effects model and fixed effect model was used for other assumptions. After F-Limmer and Hausman tests to determine the estimation method (panel or a combination) is estimated models. The results of the model used in this study are described in the following presentation.

8-1. Analysis Assumptions

- The First hypothesis

There is significant relationship between profit predictions by management and investors evaluation of accruals in the investment funds
Table 4: Results of the first hypothesis test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Standard ERROR</th>
<th>T Test</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>357940.1</td>
<td>506528.5</td>
<td>0.706653</td>
<td>0.4803</td>
</tr>
<tr>
<td>RTV</td>
<td>-337.9439</td>
<td>794.3212</td>
<td>-0.425450</td>
<td>0.6708</td>
</tr>
<tr>
<td>SIZE</td>
<td>-18737.99</td>
<td>36529.21</td>
<td>-0.512959</td>
<td>0.6084</td>
</tr>
<tr>
<td>GROWTH</td>
<td>-76645.64</td>
<td>154007.4</td>
<td>-0.497675</td>
<td>0.6191</td>
</tr>
<tr>
<td>LEV</td>
<td>-990077.8</td>
<td>681116.0</td>
<td>-1.453611</td>
<td>0.1471</td>
</tr>
</tbody>
</table>

As can be seen in Table 4 t-test probability for variables and control variables more than 5% variability of returns. This relationship is not statistically significant. The hypothesis for this variable was rejected by 95%. The coefficient of determination shows that the explanatory power of the independent variables is able to explain variability in the amount of 8%. Because between 1.5 and 2.5 of Durbin-Watson. So there is no autocorrelation in the model. Therefore, the test results indicated that the variability index returns expected profit based management and investors to evaluate accruals there is no significant relationship between the first and hypotheses will be rejected.

This result and the results of Hijazi and Qeytasi (2012) and Kurdistan and Lotfi (2010) conflict because the use of other indicators and timeframe could be different ... Based on the above, it can be seen that the assumptions of previous studies like this research to compare the results there.

- The second hypothesis
The second hypothesis there is significant relationship between the distribution per share profit forecast and investor’s evaluation of accruals in investment funds.

Table 5: results of the second hypothesis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Standard ERROR</th>
<th>T Test</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>346243.6</td>
<td>506253.4</td>
<td>0.683933</td>
<td>0.4946</td>
</tr>
<tr>
<td>FOD</td>
<td>72.35097</td>
<td>147.0963</td>
<td>0.491861</td>
<td>0.6232</td>
</tr>
<tr>
<td>SIZE</td>
<td>-20469.69</td>
<td>36460.97</td>
<td>-0.561414</td>
<td>0.5749</td>
</tr>
<tr>
<td>GROWTH</td>
<td>-76115.58</td>
<td>153963.3</td>
<td>-0.494375</td>
<td>0.6214</td>
</tr>
<tr>
<td>LEV</td>
<td>-961319.9</td>
<td>679650.4</td>
<td>-1.414433</td>
<td>0.1583</td>
</tr>
</tbody>
</table>

As can be seen in Table 5 Forecast earnings per share probability distribution for the variable t test and control variables is greater than 5%. The relationship is not statistically significant. The hypothesis for this variable was rejected by 95%. The coefficient of determination shows that the explanatory power of the independent variables is able to explain variability in the amount of 0.8%. Because between 1.5 and 2.5 of Durbin-Watson. So there is no autocorrelation in the model. Therefore, the results indicated that the distribution of index earnings forecast pro forma earnings per share based management and investors to evaluate hypotheses accruals no significant relationship will be rejected.

That the results of the first creator 1998) consistent with results Hejazi and Qeytasi (2010) and Kurdistan and Lotfi (2008) conflict cause the use of other indicators and timeframe could be given different ... the above, it can be seen that the assumptions of previous research, there have been similar this research to compare the results.

- The third sub-hypothesis:
The third sub-hypothesis there is significant relationship between forecast error of per share and investors evaluation of accruals in investment funds.
As can be seen in Table 6, the probability of t-test for variables and variable earnings per share growth forecast error is less than 5% of the company. The relationship is statistically significant. Thus, 95% hypotheses for these variables are confirmed. And for other variables because of the high incidence of 5% is rejected. The coefficient of determination shows that the explanatory power of the independent variables is able to explain variability in the amount of 16%. Because between 1.5 and 2.5 of Durbin-Watson. So there is no autocorrelation in the model.

That the results of the Hijazi and Qeytas (2011) and Kurdistan and Lotfi (2009) match. Given the above, it can be seen that the assumptions of previous research, there has not been the same this research to compare the results.

9. Recommendations for future research
   ➢ Its ownership structure on assessment of accruals investors in investment funds;
   ➢ Its assessment of accruals investors in investment funds and the cost of capital and information asymmetry in Tehran Stock Exchange;
   ➢ Investors assess the impact of accruals in the fund's dividend policy.

References