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The Effective Factors in the Profit Forecast Errors through Management on Companies Serving in Tehran'S Stock Exchange

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ABSTRACT

Representation of useful data for economic decision making is one of the objectives of accounting and providing financial data. Productivity in the forecast is one the characteristics about the data. Profit forecasts of each share in the investments involve high importance.

In The present paper, it has been attempted to observe the effective factors in the profit forecast errors through management on Tehran's stock exchange companies (2006-2011). The statistical society of present paper involves 98 companies serving in the Tehran's stock exchange which due to some specialties, these companies have been selected. The regression method as the statistical method was used in present paper. The obtained results of this research show that the profit forecast errors interrelates with the Financial Leverage variable in which the direct relation has been perceived, which the profit forecast errors have inverse relation with the variables such as the size of company, lifetime of company, the ratio of profit making and the price of stock, whereas the profit forecast errors have significant relation with the variable "type of industry".

KEYWORDS: profit forecast errors, Tehran's stock exchange, Financial Leverage, the size of company, lifetime of company.

1. INTRODUCTION

The necessity of profit forecast relies on the relation between deviation values with the reality. In what extent the value of deviation is lower, and then the forecast would be more accurate. The profit forecast of Accounting and the changes are as the economic event presenting through the companies, this issue is the most important informational data which from the early days attracted the investors, Trusters, Financial Analysts, managers, researchers and other users in the field of stock exchange.

Economic growth and development in each country relies on the existed investments in the economy. Stock exchange is as the main principle in the capital market which it has been specified as the market in which the savings and the people's payment have been specified through the financial invest in the economic departments. But the main role in the market relies on the investor who could bring about benefits to the markets and they have to be helped to increase the investment and their wealth. Forecasting the future benefit of enterprise department is as the necessary needs for the investors. Recognition of effective factors on the upcoming profit is as the requirements to forecast the benefit. The necessity to do the researches in which the forecast has increased and lead to the recognition of related variables would get obvious and clear. Capitalism is one of the important factors of development in current century which needs planning. Through planning, the possibility to exploit the opportunities would be possible. To increase the effectiveness of the planning, the ability to forecast accurately has to be increased. Forecast in the economic decision making is a key element. Investors, Trusters, managers and other ones in the economic decision makings need the forecasts and expectations. As the situation in the future is uncertain, and also because the decision making needs the assessment of effects and the results of the decisions in the future, so that the individuals have to forecast the situation of the companies in the future, in this case the information about the upcoming situation has to be given to the individuals by which in what extent the information be more accurate, then the forecast would be easier and more accurate. For a business enterprise, all the relevant financial information, presented in a structured manner and in a form which is easy to understand, are called the financial statements, which it is necessary to be provided for the users. Several studies studied the effective factors on the profit forecast in which the forecast profit and its effect on the user's decision making about the financial statement have been highlighted. Generally, the aim of forecast is to reduce the risk in decision making, and due to the point that through the forecast, risk could not be removed so in the decision making the results about the forecast have to be presented.

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So in order to make the best decisions to remove the risk, this paper aims to recognize and assess the effective factors in the profit forecast errors through management on Tehran's stock exchange companies. The relation between different variables like the lifetime of the company, the ratio of profitability, the stock price of the company and the type of the companies with profit forecast errors is studied in details. These findings help to reduce the risks in decision making and investments. Also the role of the other variables such as the ratio of profit, the type of industry, the size of company, company's exchange and financial leverage in relation with the profit forecast errors are determined.

LITERATURE REVIEW

Different researchers have studied various variables in relation with the forecast error in companies. For instance, Higgins (2008) observed the forecast error and performance of the companies. He only considered the companies' performance sale. The study accomplished by him showed that in the companies which the sale is decreasing, the forecast error would be higher. He observed the seasonal errors during the 1992-1999 in the American companies, by which finally the inverse relation between the size of company and forecast error was observed.

Kamran Ahmad (2007) observed the effect of main factors on the forecast error in the profit existing in the companies involving the primary stock supply in the Dhaka stock exchange; Through the multi-varied regression analysis, the results of his study showed that there is an inverse relation between the economic growth circumstances and the profit forecast error, which there is also a positive relation between the company's lifetime and the profit forecast error.

Ball and Brown (1968) were the first ones who used these kinds of the researches. They observed the relation between the annual profit and abnormal rate of return, and they concluded that the profit involves the informational content. It means that the changes in the stock price for a particular period rely on the unexpected value on that period.

In the paper accomplished by Gholamreza Kurdistan and Ahmad Lotfi (2010) by the title of "observing the relation between the profit forecast error and Accruals", the obtained results of the research indicated a positive relation between Accruals and the profit forecast error. Mashayekh Shahrokhi (2005) in his study by the title of "observing the accuracy of profit forecast by the managers and the effect of effective factors on it", He tried to compare the forecast accuracy of managers from the profit with the forecast based on the data of randomized model. The results of this paper showed that there is a significant difference between the forecast error in managers and the forecast error based on the randomized stage.

The regulations forecasting the profits

1- Administrative instruction disclosing the registered companies' data by the Tehran's exchange organization. Upcoming programs of management and forecast for annual performance of main and consolidated company and giving the comments would be reported at least 30 days before a new financial year and 20 days after a presentation through the publisher.
2- Disciplinary regulation for the companies which are tackling through the exchange council. According to the regulation, the companies have to provide their budget and financial statement in a way that no difference with the real results could be observed by the organization or the Auditor.
3- The regulation disclosing the data of the companies about the exchange. Companies have to present the profit forecast of the share in the end of each three months by which they could present it 20 days after ending the three months.
4- Tehran's exchange (1998) made the companies to present the inter-period data during 6 months in the standard forms.
5- Tehran's exchange (1995) made the companies to present the profit in each real share during three months and the profit in each annual share.
6- America's exchange made the companies to present more data in order to provide convenience for the investors.
7- In New Zealand, the companies were made to present qualitative and quantitative data about the exchange, by which we could refer to the forecasted data about the profit of share, the cash profit of the share, sale forecast and production forecast.

Main body

According to the point that the aim of accounting and financial report is supplying the informational needs, in this relation, it could be said that Loss and profit statement are as the fundamental financial statements which are

provided in the assessment to account or control the resources. Loss and profit statement involves the return of the resources which are under supervision of the enterprise department management by which the enterprise department performance would be resulted. Due to the point that providing the financial statements is undertaken by enterprise management office, and also due to the point that managers have direct access to the data and are able to select the optional methods for accounting, thus in this case the possibility of profit management is possible. Forecasting The companies ‘s upcoming situation would be possible through several methods which we could refer to the forecast by managers , analysts , time sequences and randomized stages which through these methods , forecasting by manager would be more common . It could be said that finance managers are stuck in the manual data entry and consolidation phase of the finance cycle and have limited capacity for strategic planning and analysis. This may be because there aren't enough hours in the day, but more often than not, their current tool is simply not equipped to perform complex analyses. The method of financial analysts is more common than the method of time sequences, which the time sequences method is more common than the method of randomized stages and this is due to the point that there is a positive correlation between the pure profits in the periods. Capitalism is the main factor for development in current century, it needs planning. Planning provides the possibility of deriving the productivity from the available opportunities. To increase the effectiveness of planning, we have to improve the accurate forecast capability. Forecasting is a main factor in the economic decision making. Investors, thrusters, managers and others rely on the forecasting and expectations in economic decision making .Also, taking attention to the annual budget of company, production forecast, sale, and profit and controlling the budget in Time Period Report, and also the realization of the forecasts in the changes of exchange price are very influential. (Malekian, 2010,pp 2)

Many studies reported the financial report involve the forecast about the upcoming operation, it could be said that the forecasting helps the investors to improve their decision making process by which the risk about decision making would be reduced. Bior states that giving the forecasts could be possible without any decision making, but the very trivial decisions could not be possible without the forecasting.

The objectives in the present paper are divided into general, secondary and other objectives:

The recognition and assessment of the effective factors in the profit forecast errors through management on Tehran‘s stock exchange companies is The main objective in this paper. As a matter of fact, we could mention the relation between the variables such as the size of company, financial leverage, the ratio of profit, company’s exchange and the type of industry with the profit forecast errors as the secondary aims.

METHODOLOGY

Specifying the studied matter is the most difficult stage in the research process. Firstly, there is doubt about a hedge, obstacle or a situation which it has to be determined. In any research, Firstly the type, subject and objectives of the research have to be specified in which we would be able to access the realities .Hence, the present paper is a kind of applied research. The objective of applied research is the advancement of applied knowledge in a particular field .Also; the correlation method has been used in present paper. In present paper, the aim is to determine the relation between the variables. For this, the significant indices in terms of variable’s measurement scales would be provided .The data’s measurement scale is a relative scale. The relative scale is the highest and the most accurate scale provided for the measurement level. This scale moreover involving all the other scales’ characteristics, also involves the absolute zero. The method of the research is inferential in which the theoretical theory and the research background have been collected from the library, paper and internet, and in the rejecting or approving the hypotheses of the research , the statistical methods through the inferential argumentation have been applied . Due to point that the objective of the research is the recognition of the correlation relation between effective factors on the profit forecast errors and the forecast profit by managers, thus it is attempted to determine the relation of different variables through coefficient. Therefore, the correlation coefficient is an accurate index which indicates that how much the changes of variable depend on each other.

The statistical society of the research include all the companies serving in the Tehran‘s exchange market (2006-2011), in which all the following requirements have to be involved:

1-The Company has to be activated up to end of the year 2005 in the exchange market

2-The last financial statement has to be reported at the end of the year

3-The number of days in which transaction accomplished must be at least 80 days.

4-The companies have to be activated in the field of exchange market during 2006 to 2011, and the transaction about the exchange has not to be posed more than 6 months.

5-The companies have not to be involved of the financial and capital companies which all the data about the companies have to be provided.

According to the interview with the Mr Ali Hoseinin, the Capital Finance Companies are not needed to forecast the performance, because they acclaim the NAV daily.
6-The value of stockholders has to be positive.
Independent variables

1- The size of company: In big companies, due to applying the accurate control systems, employing the managers and staffs, responding to the massive requests of investors, so that staffs are needed more accuracy in profit forecast .Thus, an inverse relation between the size of company and the profit forecast error has been expected.
2- The company ‘s lifetime : Old companies rather than the new ones involve more experiences about profit forecast .Thus , an inverse relation between the lifetime of company and the profit forecast error has been expected .
3- Financial leverage :To assess the effect of Financial leverage on profit forecast error by managers , firstly we obtain the ratio of Financial leverage in the statistical society including the companies , which this ratio is obtained through dividing the total debts of a company on the total finances of the company , then the ratio of Financial leverage and the forecast error would be observed :

   $F_{i,t}=D_{i,t}/A_{i,t}$
   where $F_{i,t}$, $D_{i,t}$ and $A_{i,t}$ are respectively the Financial leverage , total debts of a company and the total finances of the company .
4- Profitability ratios: One of the important financial indices is the company’s ability to achieve the profit through investment.
5- Stock price :To test the effect of the stock price on the profit forecast error through managers , firstly the stock price of the companies have to be extracted from the financial statement, then the relation between the stock price and profit forecast error have to be obtained .
6- The type of industry: To specify the profit forecast error in different industries, the statistical society is classified to four groups as automotive, Pharmacy, food and Plaster and cement industries, and the data in each industry is normalized, and then the relation with the profit forecast error would be observed.

Dependant variable

The profit forecast error: The calculation of profit forecast error through managers in the process of “profit forecast error” is as following:
$FE_{it} =Ap_{it}- Fp_{it} /FP_{it}$
Where FE_{it} , Ap_{it} and FP_{it} are respectively the profit forecast error for company i in t period , the Gross domestic production for company i in t period and the forecasted Gross domestic profit . The mean of the (EF) , forecast error , is provided to assess the forecasts . Jelic (1998) stated that if the forecasts accomplish neutrally, then the mean of forecast error have to differentiate with zero. In this test, the sign of the forecast error could be a criterion for the managers’s attitude toward future . The positive forecast error shows a pessimistic event, and a negative value for MFE shows the optimistic inclinations.
Control variables

1- Economic changes; Gross domestic production is one of the economic scales and is the most complete variable showing the real performance of economy. Gross domestic production involves the value of all the goods and the final services manufactured in the country, which it is measured in a certain period of time.
2- Company’s growth

Company’s growth in viewpoint of capitalism and management is a main variable which could be effective on the managerial behavior and the manager’s reports.

3- Inflation rate :inflation is as a destructive variable in the economic structure and put the most effect on the economic growth , distribution of income and wealth , social and political circumstances

Discussion and results

Table 1- The regression model

Correlation coefficient	Determination coefficient	Standard determination coefficient	Forecast error	Dorbinstone
0.740	0.547	0.543	1.827105	2.061

In table one , it is observed that the correlation value between dependent and independent variables is equal to 0.740 , which this value is at high level . Also, the standard coefficient was equal to 0.543 which it could be said that

the independent variables were provided to show 54% of the model. It has to be stated that the value of Dorbinstone was equal to 2.06 indicating the errors' independency from each other .According to the outputs of SPSS software , as the value of sig was less than (1%) , thus the H_1 hypothesis would be accepted at 99% assurance level .In the other word , there would be an inverse relation between the size of company and the profit forecast error . This could be due to the reason by which whatever the size of company be bigger , then the access to greater markets would be possible in which the sale and profitability would be more probable in the company .It is obvious that the size of company indicates the extension of an activity in the company .

Table 2-regression model

Correlation coefficient	Determination coefficient	Standard determination coefficient	Forecast error	Dorbinstone
0.250	0.028	0.026	2.703319	1.942

In table two, it is observed that the correlation value between dependant and independent variables is equal to 0.250 , which this value is at high level . Also, the standard coefficient was equal to 0.026 which it could be said that the independent variables were provided to show 2.6 % of the model . It has to be stated that the value of Dorbinstone was equal to 1.94 indicating the errors 's independency from each other .According to the outputs of SPSS software , as the value of sig was less than (5%) , thus the H_1 hypothesis would be accepted at 95% assurance level . In the other word , there would be an inverse relation between the lifetime of company and the profit forecast error .This could be due to the reason that older companies comparing to newer ones involve more experiences about the profit forecast .

Table 3- regression model

Correlation coefficient	Determination coefficient	Standard determination coefficient	Forecast error	Dorbinstone
0.177	0.031	0.023	2.664145	1.988

In table three, it is observed that the correlation value between dependent and independent variables is equal to 0.177 , which this value is at low level . Also, the standard coefficient was equal to 0.023 which it could be said that the independent variables were provided to show 2.3 % of the model. It has to be stated that the value of Dorbinstone was equal to 1.98 indicating the errors' independency from each other .According to the outputs of SPSS software, as the value of sig was less than (1%) , thus the H_1 hypothesis would be accepted at 99% assurance level . In the other word, a direct relation between financial leverage and profit forecast error would be observed. As a matter of fact, it could be said that with the increase of financial leverage, the financial development might not be possible for the company.

Table 4 –regression model

Correlation coefficient	Determination coefficient	Standard determination coefficient	Forecast error	Dorbinstone
0.284	0.057	0.053	2.697147	1.936

In table four, it is observed that the correlation value between dependent and independent variables is equal to 0.284, which this value is at high level. Also, the standard coefficient was equal to 0.053 which it could be said that the independent variables were provided to show 5.3 % of the model. It has to be stated that the value of Dorbinstone was equal to 1.93 indicating the errors' independency from each other .According to the outputs of SPSS software, as the value of sig was less than (5%) , thus the H_1 hypothesis would be accepted at 95% assurance level . In the other word, there would be an inverse relation between the ratio of profitability and the profit forecast error in the management. In the other word , it could be said that there is an inverse relation between the ratio of profitability and profit forecast error in the management .Based on this , it could be concluded that whatever the ratio of profitability in the company be higher , thereafter the profit forecast error would be lower .This is due to the point that whatever the ratio of profitability in the company be lower , thereafter the managers would estimate the company's profit to show better performance in the future which this would lead to the increase of profit forecast error .

Table 5–regression model

Correlation coefficient	Determination coefficient	Standard determination coefficient	Forecast error	Dorbinstone
0.338	0.114	0.107	2.555	1.971

In table five, it is observed that the correlation value between dependent and independent variables is equal to 0.338, which this value is at low level. Also, the standard coefficient was equal to 0.107 which it could be said that the independent variables were provided to show 10 % of the model. It has to be stated that the value of Dorbinstone was equal to 1.97 indicating the errors's independency from each other .According to the outputs of SPSS software, as the value of sig was less than (1%) , thus the H_1 hypothesis would be accepted at 99% assurance level . In the other word, an inverse relation between stock price and profit forecast error would be observed.

Table 6 – regression model

Correlation coefficient	Determination coefficient	Standard determination coefficient	Forecast error	Dorbinstone
0.147	0.022	0.013	2.677332	1.989

In table six, it is observed that the correlation value between dependent and independent variables is equal to 0.147, which this value is at high level. Also, the standard coefficient was equal to 0.013 which it could be said that the independent variables were provided to show 1.3% of the model. It has to be stated that the value of Dorbinstone was equal to 1.98 indicating the errors 's independency from each other .According to the outputs of SPSS software , as the value of sig was less than (5%) , thus the H_1 hypothesis would be accepted at 95% assurance level .In the other word , a significant relation between the type of industry and profit forecast error could be observed .As a consequence , a particular industry in which company serves would put the effect on the profit forecast error .

Conclusion

According to the previous assessments and tests, there is an inverse relation between the size of company and profit forecast error. This result is relevant with the obtained results of the studies accomplished by HIGGINS (2008) ,Kiel, Nicholson and Barclay (2003) , Wattz and Zimmerman (1990). But this result is against the results of the study accomplished by Bahramian in 2006.

It could be concluded that there is a direct relation between the financial leverage and the profit forecast error in the company .This result is relevant with the results of the study accomplished by Bahramina (2006) and Kamran Ahmad (2007).

It could be concluded that there is an inverse relation between the lifetime of the company and profit forecast error .This result is relevant with the obtained results of the study accomplished by Mack (1989), Kamran Ahmad (2007) , but the obtained results accomplished by Bahramian (2006) and Kamran Ahmad (2007) is against the results of this study .

It could be concluded that there is an inverse relation between the ratio of profitability and the profit forecast error in the management .The obtained results of this study is relevant with the studies accomplished by Shahrokhi (2007) and Higgins (2008).

It could be concluded that there is an inverse relation between the stock price of the company and profit forecast error . The obtained results of this study is relevant with the results of the studies accomplished by Bior et al (2008) , Mojtahed zadeh and Nazari (2007).

It could be concluded that there is a significant relation between the type of the companies and profit forecast errors . The obtained results of this study is relevant with the study accomplished by Kamran Ahmad (2007), but the obtained results accomplished by Mack is against the results of this research.

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