

Study of the Role of Accounting Information on Investor's Decision Making in Tehran Stock Exchange

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ABSTRACT

Stock exchange is such a very interesting market which it is well-known with the symbol of economy in the states. In such a market, risk and efficiency are tangible. Here the main issue is that how to invest in this market and which factors are necessary and also which methods have to be used by which the most efficiency obtains. The objective of this research is to observe the extent at which the accounting information is used by the managers and stockholders in stock exchange market. Undoubtedly, information is the highly precious good using in the stock exchange market and this valuable good has to be accessed by the stockholders. In present paper, it has been attempted to observe the extent at which the managers and stockholders have used the accounting information and this is possible by observing the questionnaires distributed among the stockholders. To compare the mean of the Responses and the rejection of accuracy of the hypotheses, t-test has to be used and to determine the importance of the responses, Friedman test has to be used.

KEYWORDS: accounting information, managers, stockholders, stock exchange market.

1. INTRODUCTION

In today's world, information has a crucial role in achievements. In fact, successful individuals and organizations have access to more information; however, information will be efficient, if it leads to change in transactors' beliefs and actions. Moreover, efficient information is able to measure the amount of information efficiency based on changes happening in prices. (R. Scott, William, 2009:80)

In a nutshell, information brings about awareness and increases confidence; it affects people's decisions and encourages them to act. (Nitsky, John 1992: 203, 232)

In fact, it is somehow impossible to believe that a person's gained information does not affect his decisions. People's participation in stock exchange depends on their trust in financial accurate reports, the reason is that many changes in price and amount of companies' stock transactions is influenced by information distributed about them, this information may change investors' decisions. In financial societies, stock exchange is considered as an important element. People's confidence in accurate financial reports related to companies, productive organizations and service organizations that do activities with their shares in stock exchange makes them rely on accounting information, consequently it increases security of investing in stock exchange, and then with the increase of security of investments, capital of non-productive sections of society moves toward productive sections of society and then financial growth and general welfare will be improved. This condition has already been provided in developed countries of the world. However, these investments and participations will not be performed in Tehran stock exchange, unless people get encouraged to invest in it, however, achievement of this goal depends on improvement of role of accounting in Iran.

In developed countries and developing countries that try to get developed, capital market is the main source of financial providing and attracting reserves. On the other hand, this market makes a logical relation between average revenue group and financial entity to provide an opportunity for people to have a role in determining financial status of their society. As a result, in developed countries two factors of capital market and stock are considered as two key factors in creating a relation between national finance and international finance. Information of world federation of exchanges shows that portion of capital market from gross national product is more than 100% in industrial developed countries. Portion of this market for developing countries has increased as well. In financial sciences, exchange market is a place in which activities such as pricing, buying and selling of commodity and stock are done. Exchange is divided into two groups of commodity exchange and stock exchange. Stock exchange is a capital-based market in which share of governmental and private companies is bought and sold based on a special

law, it is also a place to collect cash and reserves of private section in order to do long term investing projects, moreover, it is a place for people to leave their surplus asset to companies and receive its profit.

Main body

Non- accounting information

Non- accounting information is not the product of accounting system; however, it affects decisions made regarding accounting information. Non accounting information is able to affect decisions as well as accounting information. Moreover, non accounting information reveals effect of accounting information on decisions. If we assume that non accounting information has a significant relation with decision maker's evaluation, then effect of accounting information will be decreased, and if we do not assume non accounting information effective on decisions, effect of accounting information will be increased. Therefore, it could be concluded that effect of accounting information on decisions depend on non accounting information which is available to a decision maker.

Accounting information versus non accounting information

One of the main issues of information finance refers to ambiguous existence of value related to each of the certain information resources. In fact, presence of non accounting information is important in understanding value of accounting information through emphasizing continuous decrease of production costs and information transition. Accounting and non accounting information resources must be formed based on specific patterns so that relative advantages of accounting could be recognizable. (Blue, 2005, p: 164)

Since there are many alternative approaches, accounting may not be suitable for providing valuation information needed in capital markets. Therefore, other auditing resources might be able to provide the information needed in this field.

Basic financial statements

Financial statement is the main means of offering financial reports to individuals out of a business organization, these reports have general goals. (Technological committee of audit organization, 2001, no. 145, p: 14)

Components of financial statements

- a. Basic financial statements :
 - Balance sheet
 - Profit and loss statement
 - Thorough profit and loss statement
 - Cash flow statement
- b. Explanatory notes

Balance sheet and balance sheet information

Balance sheet refers to representation of a report during a certain period of time; this report includes information on assets, liabilities of a business unit, and difference between assets and liabilities declaring owners' rights. In fact, this balance sheet represents capital structure (current and non- current liabilities, components of shareholders' rights and the ratio of their combination), assets structure (the condition of investing in current and non-current assets), cash amount, ability to pay liabilities, and financial flexibility of a business unit in a certain period of time. Balance sheet items based on accepted principles of accounting in a certain period of time would be reflected in financial reporting after primarily recognition based on historical costs; moreover, assets value shows historical cost. It is possible to say that final purpose of representing classified information is related to financial resources in controlling business unit, financial structure, cash amount, ability to pay liabilities and compatibility capacity. Users especially creditors of balance sheet can recognize a business unit ability in doing its commitments by recognizing costs related to current assets and current liabilities through current and future ratios and working capital. Anyhow, assessing business unit ability in paying liabilities depends on increase of cash resources regarding commitments at the time of arranging balance sheet. Moreover, in balance sheet, enough awareness toward liabilities ratio to total assets, ownership ratio, liability ratio to specific value and other ratios whose effects are related to balance sheet items are represented to users out of organization in the form of a general attitude. (Hemati, 2006, p: 11-12)

One of the goals of accounting and financial reporting is to represent information on financial resources, financial commitments, and shareholders' interests in business unit resources at a specific date. This information allows investors, creditors, and other stakeholders to evaluate financial power, financial flexibility and cash of a

business unit. This evaluation helps decision makers predict future cash flow of business units. Mentioned information would be provided via balance sheet which includes assets report, liabilities report, and shareholders' rights at the end of each financial period. (Alivar, 1996, no. 76)

In other words, balance sheet is a statement that determines a business unit financial status in a certain period of time. Financial status includes information in relation to assets, liabilities, and shareholders' rights. (Meshki, Moghadam, 2006:56)

According to accounting standard no. 1, information represented in balance sheet needs to have following items. (Shabahang, 2002, no. 57)

- a. Tangible fixed asset
- b. Intangible fixed asset
- c. Investments
- d. Accessibility of commodity and material
- e. Accounts and received business documents plus other accounts and received documents
- f. Cash amount
- g. Accounts and documents of business payments plus other accounts and documents of business payments
- h. Tax reserves
- i. Workers' Salary and fringe benefits at the end of working period reserves
- j. Long term liability
- k. Minority portion
- l. Capital and reserves

Above factors are necessary in balance sheet, however, other factors may be included in balance sheet, usually, assets and liabilities in balance sheet are categorized into current and non- current assets and liabilities. (BozorgAsl, 2006:44)

Evaluating items of balance sheet

Balance sheet items are reported based on final value of a certain date. According to accepted principles of accounting, balance sheet financial elements are reflected in balance sheet regarding measurement standards mentioned here:

Cash amount based on current value

Demand for Net realizable value

Commodity availability and materials availability based on market price

Short term investments according to declaration no. 15(FASB) of market fair value and based on declaration 15 of Standard of Iran:

1. Quick ratio marketable investment measured based on:

Market value

Net sales value, lower of cost

2. Investments categorized based on current assets, they are evaluated based on one of the following procedures:

Net sales value, lower of cost

3. Current value , if its sales price is determinable, it will be measured based on net sales value

Investing in long term stocks according to declaration no. 15 (FASB):

Reserving up to its time based on book value, moreover, it would be ready for sale based on fair value.

Findings

H₀: managers and transactors of Tehran stock exchange do not use companies' accounting information for making decisions on stock investment.

H₁: managers and transactors of Tehran stock exchange use companies' accounting information for making decisions on stock investment.

Table 1: one sample T statistic results

Mean error	Standard deviation	Mean	Variable
0.04634	0.60591	3.3137	Using companies' accounting information for investment decision making

Table 2: one sample T-test results

Sig.	Freedom degree	T value	Variable
0.000	170	6.77	Using companies' accounting information for investment decision making

$$t = \frac{\bar{X} - \mu_0}{\frac{s}{\sqrt{n}}} = \frac{3 / 3137 - 3}{\frac{0 / 60591}{\sqrt{171}}} = 6 / 770$$

According to tables 1 and 2, t-value is 6.77 in H_0 rejection area, this value shows that observations mean is more than 3. It means that managers and transactors consider companies' accounting information for making decisions on investment.

H_0 : managers and transactors of Tehran stock exchange do not consider companies' financial ratios for making decisions on stock investment.

H_1 : managers and transactors of Tehran stock exchange consider companies' financial ratios for making decisions on stock investment.

Table 3: one sample T statistic results

Mean error	Standard deviation	Mean	Variable
0/05255	0/68723	3/1316	Using financial ratios for making investment decisions

Table 4: one sample T-test results

Sig.	Freedom degree	value	Variable
0/013	170	2/504	Using financial ratios for making investment decisions

$$t = \frac{\bar{X} - \mu_0}{\frac{s}{\sqrt{n}}} = \frac{3 / 1316 - 3}{\frac{0 / 68723}{\sqrt{171}}} = 2 / 504$$

T -value is equal to 2.504 in rejection area of H_0 and it shows that mean of observations is larger than 3, with 95% of assurance, it is possible to declare that managers and transactors of Tehran stock exchange consider companies' financial ratios for making decisions on stock investment.

- Managers and transactors of Tehran stock exchange use information included in companies' financial statements in order to make decisions on buying or selling stock.

H_0 : managers and transactors of Tehran stock exchange do not use information included in companies' financial statements in order to make decisions on buying or selling stock.

H_1 : managers and transactors of Tehran stock exchange use information included in companies' financial statements in order to make decisions on buying or selling stock.

Table5: one sample T statistic results

Mean error	Standard deviation	Mean	Variable
0/06381	0/83439	3/1942	Using information of companies' financial statements

Table 6: one sample T-test result

Sig.	Freedom degree	t value	Variable
0/003	170	3/043	Using information of companies' financial statements

$$t = \frac{\bar{X} - \mu_0}{\frac{s}{\sqrt{n}}} = \frac{3/1942 - 3}{\frac{0/83439}{\sqrt{171}}} = 3/043$$

t- value is equal to 3.043 which is in rejection area of H₀ and it shows that mean of observations is larger than 3, therefore, up to 95 percent it is true to say that managers and transactors use information included in companies' financial statements.

- managers and transactors of Tehran stock exchange use indexes related to companies' profitability value in order to make decisions on buying or selling stock.

H₀: managers and transactors of Tehran stock exchange do not use companies' profitability value in order to make decisions on buying or selling stock.

H₁: managers and transactors of Tehran stock exchange use companies' profitability value in order to make decisions on buying or selling stock.

Table 7: one sample T statistic results

Mean error	Standard deviation	Mean	Variable
0/05832	0/76267	3/5789	Using indexes related to companies' profitability

Table 8: one sample T-test results

Sig.	Freedom degree	t value	Variable
0/000	170	9/927	Using indexes related to companies' profitability

$$t = \frac{\bar{X} - \mu_0}{\frac{s}{\sqrt{n}}} = \frac{3/5789 - 3}{\frac{0/76267}{\sqrt{171}}} = 9/927$$

t- value is equal to 9.927 which is in rejection area of H₀ and it shows that mean of observations is larger than 3, therefore, up to 95 percent it is true to say that managers and transactors use companies' profitability value in order to make decisions on buying or selling stock.

- Managers and transactors of Tehran stock exchange pay attention to international financial and political issues to make decisions on buying and selling stock.

t- value is equal to 9.302 which is in rejection area of H₀ and it shows that mean of observations is larger than 3, therefore, up to 95 percent it is true to say that managers and transactors pay attention to international financial and political issues to make decisions on buying and selling stock.

Managers and transactors of Tehran stock exchange consider type of industry to make decisions on buying and selling stock.

Table 9: The preference of the secondary dimensions related to the first main hypothesis

Hypotheses	Mean	Standard deviation	Statistic value	Critical value	Conclusion
First hypothesis	3.1316	0.68723	1.75	1.645	3
Second hypothesis	3.1942	0.83439	1.81	1.645	2
Third hypothesis	3.5789	0.72267	2.44	1.645	1

Results of analysis for subordinate hypotheses

With 95% assurance level, it could be stated that managers and stockholders in Tehran's stock exchange market pay attention on their investment decision making toward financial ratios of the corporations. (3.3161 > 3)

With 95% assurance level, it could be stated that managers and stockholders in Tehran's stock exchange market use information related to financial statements for selling and buying stock. (3.1942>3)

Managers and stockholders in Tehran's stock exchange market use the profitability indices for the corporations in decision making processes for buying and selling stock. (3.5789>3)

The results of analysis for secondary hypotheses related to main hypothesis

In viewpoint of stock holders serving in Tehran's stock exchange market, the indices related to first main. The conservation of the corporations is related to the profit ability which profitability is from the indices for assessment of management. Managers and stockholders in Tehran's stock exchange market have paid attention on the stability of profitability in the corporations over the years. The efficiency of stock in the corporations, EPS ratio/E ratio and the cash profit (DPS) are paid attention by the stockholders. The most important superior element of the share is the extent of profitability of it. The investors pay attention to the extent of profitability while buying the share. Various types of EPS are used, and its necessary for the stockholders to know the effects of EPS and whether EPS gives a validated effect of the profitability in the corporation or not?; for instance, a wide different may be in EPS acclaimed by the corporation rather than EPS reported in financial statements and newspaper, as a consequence stock related to EPS may be considered less or more than the real value. The changes of EPS in a corporation could give useful information about the trend of stock price to the stockholders, but it has to be considered that changes of EPS regarding the changes have to be considered. Observing the trend of EPS in a corporation shows the stability of it reporting at the same time its fluctuation, in this situation the stability for the price of stock is reported as well. According to the point that the stock extent is different in various corporations, thus the profitability of the share is the profit of a share or EPS. The ratio of divided profit for a share(DPS) obtains from dividing the cash profit of a share to the profit of a share. The difference of cash profit for a share and the profit of a share include the cases like finance, saving, profit and losses. It could be stated that in equality circumstances, the corporations having the more profits have better opportunities rather than the other corporations. But it has to be considered that the other profits not divided and remained in the corporation are from the most important and the easiest resources for providing the finance for the growth of the corporation. In most of cases, the decision about the profit division is the most challenging issue and this is due to the point that stockholders represent the maximum distribution to receive the cash value for the investment. In this case, managers are not intended to compensate the lack of liquidity and avoid the waste of the financial resources in the corporation. Generally, the stockholders are interested to receive the most cash profit. In the listed corporations in the stock exchange markets, 70% of the profits are divided in the societies. It seems that the origin of this attitude in the stockholders in Tehran is their short-term attitude toward investment, this is in such a way that most of the stockholders think that the profit in the corporation and lack of distributing it is ignoring its profits. According to the statistics in the developed states, generally more than 50% of financial supply in the corporations is possible through the gathered value showing the different attitude about the profit division in the investment domain.

Stockholders in Tehran's stock exchange market has mentioned the fundamental financial statements as the second range statements related to the subordinate hypotheses relating to the fundamental hypothesis. It has to be noticed that most of the stockholders in Stockholders in Tehran's stock exchange market are not that much familiar with financial statements and they could not use them accurately, thus it is desired from the official authorities to organize the educational classes to void the defects in this field for that a lot of efforts are needed which the efforts are necessary by the stockholders, specialists, and etc. In some cases, there is a possibility for corporations which their information might not be sufficient, clear, accurate, and complete-through this, the stockholders would not be desired to use the financial statements. The financial information represented by the corporations has gained importance for the investors, but unfortunately some corporations provided inaccurate information for the stockholders by which misleading and incorrect choice are realized. Among all the financial statements, Stockholders in Tehran's stock exchange market have paid attention on the information related to the interest and loss statement; through this, the information related to interest and loss statement, cash flows, balance sheet, and the notes attached to the financial statements are from the next important aspects.

One of the factors which plays important role in advancement and growth of finance market is the familiarity of investors and Transactors with the analysis methods of stock exchange and the increase of their power in analysis. Undoubtedly, through the accurate analysis- risk in the finance market and danger for the investors would be reduced-consequently the loss and also risk in stock exchange market would be minimized. One of the best and the most important ways for the analysis of the stock exchange is using the financial statements. In present paper, the extent of using financial ratios by the stockholders is from the third position from the subordinate hypotheses related to the first main hypothesis; actually, this issue could be for the reason that the stockholders in Tehran's stock exchange market have not sufficient information about the financial statements and this is due to the fact that

the best way for the analysis of the financial statements is suing the financial ratios. Surely, stockholders in Tehran’s stock exchange market have mainly paid attention on the indices of profitability in the corporations including EPS,DPS,P/E ratios. Managers and Transactors in Tehran’s stock exchange market have prioritized the ratios of profitability in the corporations as the first position, and then the liquidity ratios, efficiency ratios and leverage ratios are classified as the second, third and fourth positions.

DISCUSSION AND RESULTS

According to tests which are done to prove or reject null hypothesis, one can say that managers and transactors of Tehran stock exchange use companies’ accounting information in making decisions on investments. The main hypothesis (H1) has three secondary hypotheses which are discussed here:

- Managers and transactors consider companies’ financial ratios for making decisions about investment.

According to tests done to show approval or rejection of null hypothesis, one can maintain that managers and transactors of Tehran stock exchange consider companies’ financial ratios to make decisions on stock investment.

Table 10: one sample T statistic results

Mean error	Standard deviation	Mean	Variable
0/06940	0/90752	3/0760	question 1
0/07389	0/96623	3/0409	question2
0/07617	0/99600	2/7661	question3
0/07117	0/93065	3/6433	question4

Table 11: one sample T-test results

Sig.	Freedom degree	Value t	Variable
0/275	170	1/095	question 1
0/580	170	0/554	question2
0/002	170	-3/071	question3
0/000	170	9/039	question4

According to tests done to show approval or rejection of null hypothesis, it is possible to declare that managers and transactors of Tehran stock exchange use information included in companies’ financial statements in order to make decisions on buying or selling stock.

Table 12: one sample T statistic results

Mean error	Standard deviation	Mean	Variable
0/08597	1/12421	3/0292	Question5
0/07630	0/99776	3/6433	Question6
0/07906	1/03379	3/2456	Question7
0/08072	1/05556	3/1637	Question8
0/09065	1/18542	2/8889	Question9

Table 13: one sample T-test results

Sig.	Freedom degree	t value	Variable
0/734	170	0/340	Question5
0/000	170	8/431	Question 6
0/002	170	3/107	Question7
0/044	170	2/029	Question8
0/222	170	-1/226	Question9

according to tests done to show approval or rejection of null hypothesis, it is possible to declare that managers and transactors of Tehran stock exchange use indexes related to companies’ profitability value in order to make decisions on buying or selling stock.

Table 14: one sample T statistic results

Mean error	Standard deviation	Mean	Variable
0/07876	1/02993	3/5797	Question10
0/07874	1/02963	3/4444	Question11
0/07163	0/93670	3/5965	Question12
0/07424	0/97082	3/5556	Question13
0/08340	1/09057	3/7485	Question14

Table 15: one sample T-test results

Sig.	Freedom degree	t value	Variable
0/000	170	6/976	Question10
0/000	170	5/645	Question 11
0/000	170	8/327	Question12
0/000	170	7/483	Question13
0/000	170	8/976	Question14

According to tests done to approve or reject null hypothesis, it is possible to declare that managers and transactors of Tehran stock exchange consider international financial and political issues to make decisions on buying and selling stock.

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Appendices

How much do you use the financial ratios in the investment field in stock exchange market in your decision makings?

1-liquidity ratios

2-efficiency ratios

3-leverage ratios

4-profitability ratios

How much do you use the financial statements in the investment field in stock exchange market in the listed corporations in your decision makings?

5-information about the balance sheet

6-information about the loss and interest statement

7-information about the total loss and interest statement

8-information about the cash flows

9-the notes attached to the financial statements

How much do you use the indices related to profitability of the corporations in the investment field in stock exchange market in the listed corporations in your decision makings?

10-EPS ratio

11-DPS paid cash interest

12-the efficiency of stock in the corporation

13-P/E ratio

14-the stability of profitability for the corporation comparing the last years