Exploring the Effect of Accounting Information on Systematic Risk: An Empirical Evidence of Tehran Stock Exchange

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Abstract—This paper highlights the empirical results of analyzing the correlation between accounting information and systematic risk. This association is analyzed among financial ratios and systematic risk by considering the financial statement of 39 companies listed on the Tehran Stock Exchange (TSE) for five years (2014-2018). Financial ratios have been categorized into four groups and to describe the special features, as representative of accounting information we selected: Return on Asset (ROA), Debt Ratio (Total Debt to Total Asset), Current Ratio (current assets to current debt), Asset Turnover (Net sales to Total assets), and Total Assets. The hypotheses were tested through simple and multiple linear regression and T-student test. The findings illustrate that there is no significant relationship between accounting information and market risk. This indicates that in the selected sample, historical accounting information does not fully reflect the price of stocks.

Keywords—Accounting information, market risk, systematic risk, efficient market hypothesis, EMH, Tehran Stock Exchange, TSE.

I. INTRODUCTION

THE human need for recording, processing, analyzing, and reporting of financial data has led to the emergence of accounting. Since accounting is ongoing in the everyday life of humans, changes in the environment have affected it. These changes, which can be social, political, economic, and financial, have expanded the scope of accounting objectives. In other words, accounting objectives and methods have been adapted to changes in environmental conditions and these objectives were developed to meet the information needs. Therefore, accounting plays a significant role in the economic system [1], [2]. On the other hand, investing is an essential process in economic growth. One of the most important factors affecting optimal investment is accounting information, which is the most significant source of information for investors [3], [4]. The information derived from the accounting system helps investors assess the future performance of the company and its associated risk; therefore, such information is very useful for valuing the company [5]. The accounting information role is fundamental because of its ultimate impacts on the asset price [6]. Also, the main objective of accounting defined in Statement of Financial

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Accounting Concepts [7] by the Financial Accounting Standards Board (FASB) is 'providing the users of financial statement with information that will help them in decision-making' [8], [9].

Risk and yield in investment have the same role that supply and demand have in the economy for pricing commodities [10]. Theoretically, the risk is simply defined as a potential and measurable loss that is estimated in investment [11]. By 1952, 'risk' was considered as a qualitative factor, but in Markowitz's [12] research, risk has been identified as a quantitative factor. The calculation of the impact of the risk of an especial investment on the total investment was very time consuming and difficult which required the complex computations of 'covariance' and 'correlation coefficient'. Subsequently, Sharpe [13] introduced a simple and practical model by determining the beta coefficient as a measure of risk.

Decision-makers need reliable information that can provide available resources [14]. The best way to access these kinds of information is the annual financial statements of the companies. Financial statements that are widely used are the most appropriate method for providing financial information to users [15]. The general objectives of financial statements are to meet the requirements of users, and the best example of this group is investors. Investors, who can be potential and actual, are generally interested in assessing the features of an investment [16]. Some of the features, which are important for an investor, are the risk of investment, returns on investment, dividends, investment security, liquidity, and growth [17], [18]. In financial researches, considering the impact of financial statements on the investor's financial orientation in a stock market has been an attractive issue [19]. Therefore, finding an answer to the question 'how financial information affects stock prices and investment decisions making?' has always been noteworthy. Hence, this paper considers practical indication about the relationship between accounting information and the systematic risk of stocks. Consequently, the main research question of the research is as follows:

- RQ: Is there a substantial association between accounting information and market risk?

According to the criteria considered as indicators of accounting information, the following questions can be examined:

- Is there an important association between the current ratio and beta?
- Is there an important association between the ROA and beta?

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- Is there an important association between the Debt Ratio and beta?
- Is there an important association between Asset Turnover ratio and beta?
- Is there an important association between Total Assets and beta?

The research sample is selected from companies listed on the TSE. We analyse five years financial statement of 39 companies.

Independent variables in this study are financial ratios. These ratios are ROA, Debt Ratio (Total Debt to Total Asset), Current Ratio (current assets to current debt), Asset Turnover (Net sales to Total assets), and Total Assets. The dependent variable in this research is beta (β), meaning systematic risk (market). The stock returns of the sample companies and market returns have been applied to calculate the beta (β) coefficient and by applying regression analysis and correlation tests the existence of the relationship has been estimated. Moreover, as described above, the following hypothesis has been developed to examine the main question of this research: 'There is a meaningful relationship between accounting information and beta (β)'.

II. SYSTEMATIC RISK (BETA)

The concept of risk has always been one of the most vital elements in the investment of a company's stock. In a simple definition, this concept is known to investors as a 'risk of loss of value' and is as uncertainty about its future share [20]. Systematic and unsystematic risks are two parts of the total risk of a firm's stock. Systematic risk is the market-related risk, and unsystematic risk is the firm-specific risk. Intrinsically, investors are always eager to minimize the unsystematic risk of their investment. Unlike systematic risk, which is a market-related risk, the unsystematic risk, which is a firm-specific risk, can be reduced by creating a diversified portfolio of stocks. Thus, the concern in an investment is the systematic risk portion. The Capital Asset Pricing Model (CAPM) theory explains the systematic risk calculation method [21], [22].

The CAPM model suggests that the return on an asset is determined by adding the risk-free rate to a risk premium which growths as the systematic risk of company growth [23].

III. ACCOUNTING INFORMATION AND EFFICIENT MARKET HYPOTHESIS (EMH)

The study of price behaviour of physical assets and capital from the beginning of the formation of markets has attracted investors and numerous scholars have conducted several empirical types of research in this regard [24], [25]. Since the early twentieth century, a group of securities market makers believed that a historical price survey contains useful information for predicting future prices, hence the trend pattern is known as a pattern of change [26]. From the beginning of the 1930s, new ideas emerged, to the extent that some of them were completely opposed to the theory of 'predictable prices based on past trends.' The focus of these groups of research was on the randomness of stock price behaviour [27]. The results of these studies turned into an economic and investment debate as a strong intellectual and theoretical trend. For the first time, Bernstein [28] stated that future price behaviour could not be predicted. Then, Roberts [29] reviewed the price changes for 52 weeks using a random number table. He concluded that the time-series behaviour of prices is similar to random numbers.

The results of other studies have led the researchers to turn to the Random Walk Hypothesis. As long as in 1965, Fama [30] studied this subject. He concluded that using logarithmic variations in the price of 30 shares and the correlation coefficient, there is a very weak correlation between successive price changes and an important pattern in successive stock price variations is not observed. Therefore, by analyzing past price information, its future cannot be predicted. Fama's theory shook the US capital market. Because for the first time, professional investors, speculators and securities analysts were told that the price trend is unpredictable. He argued that claims for profits based on foreseeable future could only be defined based on chance. According to this theory, in the long run, nobody can acquire a return on a systematic basis more than the risk it has suffered. In such a market, stock prices are a reflection of their information, and price changes are not based on a specific pattern and predictable [31].

The existence of sufficient information on the capital market and its quick reflection on the price of securities is closely related to market efficiency [32]. In an efficient market, information released on the market quickly influences prices. In such a market, the price of securities is closer to its intrinsic value. The efficient market should be sensitive to new information [33]. Therefore, the rate of efficiency, divided the market into three common forms; weak-form, semi-strong form, and strong form [34]. The weak-form of the patrol indicator is random and no one can obtain unusual returns using historic price tracking, and thus technical analysis in the market will not be beneficial. In the semi-strong form, it is assumed that prices reflect the prices at any given moment since all public information is available, hence the fundamental analysis will not lead to unusual profits. In a strong-form, it is said that prices at any time reflect all public and private information which will not create unusual profits [33].

IV. LITERATURE REVIEW

Many studies have been conducted to consider the accounting information and market risk. Ball and Brown [35], as the pioneer researchers in this subject, studied the relationship between the accounting figures and the company's risk. They used net income, operating income, and earnings per share as accounting information indicators. The outcome confirmed the existence of a relationship between the three types of earnings and systematic risk. Beaver and Manegold [36] used the accounting variables (profit margin, growth, financial leverage, liquidity, size, profitability variability, and accounting beta) as an alternative to total

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market outflow changes. For two periods, 1947-56 and 1957-65, and a sample of 307 companies, they calculated the degree of correlation between accounting and market beta. The result indicated that the degree of correlation between accounting and market beta was between 23% and 44%.

Jensen et al. [37] studied common stocks of listed companies in the New York Stock Exchange for the period from 1926 to 1965 explicitly. Their research was about the relationship between stock returns with market risk. The results showed that there is no correlation between the risk and returns of stocks. In other words, companies that did not have high stock returns had high rate risk. Another result of this study was that the S-L model did not provide a sufficient description of the risk and returns associated with the stocks. There are some financial and non-financial events such as changing the structure of capital, acquiring capital assets, and acquisition, which changes the systematic risk of stocks and are important factors for potential and actual investors but is not included in the calculation of risk.

Ismail & Kim [38] determined the degree of correlation between market and accounting beta. They used four types of profit (net profit, net profit plus depreciation, earnings per share (EPS) plus deferred tax and cash flows from operating activities) of 272 companies between 1967 and 1985. The results illustrated that there is a significant relationship between the accounting beta and the market beta. Karels and Sackley [39] calculated the correlation between the beta coefficient in accounting and market in 71 commercial banks by considering two criteria of return (return based on total assets and return on equity) to calculate the accounting beta. They proved the existence of a 30% to 60% relationship. Garred and Rees [40] considered the relationship between four variables (equity, net profit, dividend, and stock prices) and prediction of changes in earnings in three countries: Germany, England, and France. The results of the research express the effect of accounting variables on net profit.

Asl [41] investigated the effect of the capital structure (financial leverage) on the systematic risk of the common shares in Iran. He considered financial information of 26 companies listed on the TSE from 1989 to 1993. The results illustrated that the average of unlevered Beta is smaller than the levered beta. He found those companies, which use leverage more in their capital structure, their systematic risk increases in the market. Ahmadpour [42] considered the effects of operating leverage, financial leverage and size of the company on the systematic risk of common shares of listed companies in TSE. The results demonstrated that financial leverage affects the systematic risk rate; in other words, with the increase in corporate debt, a systematic risk also increases. Noravesh and Vafadar [43] examined the effectiveness of accounting information in measuring the market risk of companies in Iran. In this study, the relationship of some financial ratios (net profit ratios to equity, current ratio, sales to equity and total assets) as criteria of accounting information, with market risk In 39 companies listed on the TSE for 1996 and 1997, has been tested. The results indicated a significant relationship between the ratio of net profit to

equity and the market risk of companies. Other financial ratios have not had a meaningful relationship with market risk. The results of this study suggested that historical accounting information in Iran is not completely reflected in the price of securities. In other words, the TSE is inefficient.

Almisher and Kish [44] focused on the market variables and the accounting variables in an initial public offering (IPO) of the company. They found that the accounting beta is related to market beta in the first quarter after the IPO. Moghadam and Rahmani [45] considered the effectiveness of the accounting information. They considered the financial statement of 71 companies listed on the TSE during 1991-2000. The results showed that the items in the financial statements can predict earnings. Generally, the efficiency of accounting in providing useful information has been proved. Barton and Waymire [46] examined the impact of the quality of financial information on the loss. According to the results, the shareholders of companies with a higher quality of information, compared with the shareholders of companies with lower quality information, suffered much less damage. Besides, the results indicated that weak financial information increases market risk and creates bubbles in share prices. Sinaei and Khorram [47] studied the relationship between financial leverage and the systematic risk of companies listed on the TSE. Their sample includes 86 companies for 2002 and 2003. The results expressed that there was no significant relationship between the systematic risks of companies with a swell of corporate debt (leverage). Namazi and Khajavi [48], in a paper entitled 'The usefulness of accounting variables in predicting the systematic risk of companies listed in the Tehran Stock Exchange' examine the ability of accounting variables in predicting the systematic risk of companies listed on the TSE. Accordingly, the relationship between 19 accounting variables as independent variables with systematic risk as an associated variable was investigated. The results of this study indicated that there is a relationship between the accounting variables of this research and the systematic risk coefficient.

Kim and Qi [49] studied the effects of the quality of accounting information on stock prices. They found that there is an inverse relationship between quality and fluctuations, which means when the quality of accounting information rise (in their study, quality of accrual items) the variation of the share price in the market will decrease, and as a result, the exchange price of stocks is closer to their intrinsic value. Saqhafi and Ebrahimi [50] surveyed the relationship between accounting standards and the quality of accounting information. The result indicated when the quality of financial reporting increased, and the more reliable standards to be used in the preparation and reporting of information, the risk of information would be reduced.

Dianati et al. [51] tested the relationship between the quality of financial information and risk and concluded that when the quality of financial information increases, the risk reduces. In other words, the correlation is negative. Lambert and Verrecchia [18] argued that higher-quality information could reduce market risk and cost of capital based on the CAPM. Jeffrey [52] examined the effect of financial information on

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the risk and cost of capital. The outcomes of this study indicate that information is affected by the risk of capital cost. Therefore, information quality reduces systematic risk and ultimately reduces capital costs.

V. HYPOTHESES DEVELOPMENT

A fundamental issue in accounting is the ability of companies to pay their short-term debts. Financial analysts consider a company as a successful enterprise that provides a reasonable balance between short-term debt and the source of payment for this debt. This means that the company has a high level of ability in converting assets into current assets. This is known as liquidity that is always known as one of the most important scales in financial management and accounting. When a company has a high liquidity power, it can meet its short-term obligations without creating problems and crises. One of the criteria that indicate this ability is the current ratio. Although the high rate of this ratio reflects the company is more likely to pay the creditor back, but it is not always a good sign. In a company, if this ratio is too high it may indicate there inefficiently in the use of current assets or short-term financing facilities [53]. Beaver et al. [54] argued that liquid assets have a less volatile return than non-current assets. Therefore, the first hypothesis is about the relationship between the current ratio and beta.

- H1: Current ratio has a significant influence on beta

One of the criteria for the profitability of a company is of how profitable a company is relative to its total assets and ROA indicates this rate. Generally, ROA gives a manager, investor, or analyst an idea about the management's effectiveness in generating earnings by using the company's assets [8]. By the ROA figure, investors can have an idea of how effective the enterprise is in converting the money it invests into net income [39]. By the second hypothesis, we examine the relationship between the ROA ratio and the systematic risk and we want to examine whether there is a relationship between the efficiency of using a company's assets with the beta. Hence, the second hypothesis is;

- H2: ROA has a significant influence on beta

There are some financial methods in companies plan for increasing the assets from. One of these sources is the creation of long-term debt [55]. They usually apply the long-term debt to acquire some part of the assets in the balance sheet. Thus, determining the portion of a business's assets that are financed through debt is an important issue in every firm. The debt ratio is a financial leverage ratio used along with other financial leverage ratios to measure a company's ability to handle its obligations [56]. If a company does not manage to remain solvent and become overleveraged, for instance, has too much debt, this may be limited to obtaining cash for its economic performance and finally may lead to a gradual bankruptcy. Just as in consumer loans, companies are evaluated when taking on new obligations to determine their risk of non-repayment. To investigate the association between this concept of accounting information and systematic risk, we examine the relationship between debt ratio and beta in the third hypothesis.

- H3: Debt ratio has a significant influence on beta

Another important issue about accounting efficiency is the relationship of asset value with company sales. This means how much assets are effective in generating revenue. Asset turnover illustrates this function; therefore, a higher ratio is always more favourable [57]. Higher turnover ratios mean that the company is using its assets more efficiently. Lower ratios mean that the company most likely has management or production problems. Using this ratio as one of the accounting information tools helps managers identify problems between assets and sales [58]. Since the information content of this financial ratio is high, in the fourth hypothesis, the relationship between this ratio and beta will be considered.

- H4: Asset turnover has a significant influence on beta

Another accounting metric in financial research is the size of a company. In accounting information, there are several indicators to examine the meaning of the 'size'. One of these is the number of total assets of a company [59]. Beaver et al. [36] asserted that there is a large belief that big companies have less risk than SMEs. To investigate the relationship between market risk and firm size in the fifth hypothesis, we examine the relationship between total assets and beta.

- H5: Total assets have a significant influence on beta

The nature of accounting information relates to the internal and external factors of the company [60], [61]. By the H1 to H5, we developed the theoretical relationship of each type of accounting information with a systematic risk (market). Directly or indirectly, the sources of accounting information (financial ratios) are financial statements, which are prepared and published by the companies. The existence of a relationship between items in financial statements that are used as data for 'financial ratios' in their calculations cannot be denied. This initial connection is also related to the secondary analysis of financial ratios with other financial and economic factors. As a result, it is necessary to examine the existence of multiple relationships. Hence, in the main hypothesis (which is extracted from the main question in this research), we examine the effect of all variables selected with the beta coefficient (market risk).

- H: accounting information has a significant influence on beta

VI. METHODOLOGY

This research is descriptive and also covers some variables related to information accounting and systematic risk. First, a statistical society was used. The statistical population of this study is the companies listed on the TSE. This research has been conducted in the period between 2014 and 2018. For the proper selection of the community, criteria have been considered. These criteria include the following:
1. Items of financial statements are available for calculating variables during the studied period.
2. The fiscal year is based on the official calendar of Iran.
3. The companies are listed on the TSE.
4. Stock transactions have not been interrupted for a long time.

According to these criteria, 39 companies were analyzed as

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the final sample.

The needed information for a literature review of the research has been gathered from various sources; this information can be found in library resources such as books, Persian and English journals.

A financial statement is the best source for that financial information which is essential for this research. Historical information related to assemblies' approvals and stock price index has been obtained from the weekly reports on the TSE.

In this study, financial ratios are independent variables. These ratios are defined as:
1. ROA (Return on Asset)
2. Debt Ratio (Total Debt to Total Asset)
3. Current Ratio (current assets to current debt)
4. Asset Turnover (Net sales to Total assets)
5. Total Assets

The dependent variable in this research is beta (β) which means systematic risk (market). This index can be defined as the volatility of the return on an asset in comparison with the total market risk assets. To calculate the beta, the stock returns of sample firms (R_i) and market portfolio returns (R_m) have been used.

$$\beta = \frac{cov(R_i, R_m)}{\partial^2 R_m}$$

$$\beta = f\,(CAOCL,\ NIOTA,\ SOTA,\ TLOTA,\ TA)$$

which the return rate of stock (R_i) is calculated according to the formula:

$$R_i = \left(\frac{(P_t - P_{t-1}) + (D_t) + \frac{(P_t - P_n) \times N_c}{N_t} + \frac{N_e \times P_t}{N_t}}{P_{t-1}}\right)$$

in which: R_i: stock monthly total return rate compared to the price of the first period; P_{t-1}: the price of the stock at the beginning of the month; P_t: the price of the stock at the end of each month; P_n: nominal value of each share; D_t: cash profit of each share; N_c: the number of increased stock from the cash deposit; N_e: the number of increased stock of reserves or retained earnings; N_t: the number of stock before increasing the capital.

To calculate the rate of return on the market portfolio, the following formula will be used:

$$R_m = \frac{I_t - I_{t-1}}{I_{t-1}}$$

in which: R_m: monthly rate returns of the market portfolio; I_{t-1}: stock price index at the beginning of each month in the TSE; I_t: stock price index at the end of each month in the TSE.

To determine the relationship between independent variables and dependent variables, regression analysis, and correlation analysis have been used.

$$\beta = \alpha + bx + \epsilon$$

VII. RESULTS

The statistical results of the hypothesis test are presented in Table I.

TABLE I
THE RESULTS OF HYPOTHESES*

Hypothesis	First	Second	Third	Forth	Fifth
Independent variable	CAOCL	NIOTA	SOTA	TLOTA	TA
Reg. equ	β = 0.179 − 0.216 CAOCL	β = 0.191 + 0.119NIOTA	β = 0.166+ 0.134 SOTA	β = −0.128− 0.147TLOTA	β = −0.114 + 0.148 TA
correlation coefficient	0.23	0.12	0.32	0.17	0.27
T	-0.236	0.225	0.32	-0.605	0.215
T table	1.96	1.96	1.96	1.96	1.96

* Confidence level of α = 95%

According to Regression Analysis, the effect of independent variables on the dependent variable (β) under the multivariate analysis is investigated. Thus, the regression equation developed in this study takes the following form:

$$\beta = \alpha + b1x1 + b2x2 + b3x3 + b4x4 + b5x5 + \epsilon$$
$$\beta = 0.288 - 0.297\,CAOCL + 0.188\,NIOTA + 0.002\,SOTA - 0.116\,TLOTA + 0.0001\,TA + \epsilon$$

- H: there is an association between the accounting variables and β

Since the F-value is in the rejection region, hence, the hypothesis is not accepted and it indicates that none of the independent variables in this model with 95% confidence has a significant relationship with systematic risk.

TABLE II
COEFFICIENTS

		Unstandardized coefficients		Standardized coefficient	T	Sig.
		B	Std. Error	Beta		
CONSTANT		0.288	0.667		0.418	0.667
CAOCL	x1	-0.297	0.387	-0.670	0.447	0.447
NIOTA	x2	0.188	0.368	0.510	0.599	0.599
SOTA	x3	0.002	0.144	0.201	0.839	0.839
TLOTA	x4	-0.116	0.109	-1.015	0.331	0.331
TA	x5	0.0001	0.001	1.161	0.259	0.259

Note. Dependent Variable: Beta (systematic risk)

TABLE III
THE RESULT OF THE MAIN HYPOTHESIS

	R	F value	F table	P-value	Result
Main hypothesis	0.449	189.2	0.227	0.1	Reject H

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To explain the estimated values for the parameters, for example, one per cent growth in the value of the net income to total assets ratio (NIOTA) can cause the market risk to change by 0.188 times. This result is also seen for the rest of the variables.

VIII. Discussion

A. The first hypothesis

In the first hypothesis, the current ratio (current asset to current debt), an indicator that assesses the ability of an entity to pay off current liabilities from operating assets, is not related to stock market risk. Reviewing the behaviour of current items in financial statements is one of the most significant reasons for sustainable investment in corporate stocks [62]. These items, insofar as they relate to obligations and ability to cover obligations, provide investors with an appropriate understanding of the company's financial condition. Investigating the results of the first hypothesis of this study shows that investors in Iran do not show a reasonable response to the effects of the company's current ratio on market risk, and in other words, there is no significant relationship between current ratio and risk. It can be concluded that most investors do not have the required acquaintance with financial statements, including balance sheets, and therefore do not pay attention to financial ratios.

B. The Second Hypothesis

From a simple point of view, both professional and non-professional (amateur) investors have a strong focus on corporate performance and profitability. Therefore, companies' profits and losses are a topic of interest to many investors. This is because when a profitability procedure in the company is growing, it can expand its operations, improve its financial position, receive more cash flows, and pay higher dividends. Also, due to the relationship between accounting information and the price of common shares in the market and based on efficient market hypotheses, many types of research support the idea that accounting profits and EPS have high information content [63]-[65]. However, in the second hypothesis of the study, it was found that the ratio of net profit to total assets (ROA) does not have a significant relationship with the beta.

C. The Third Hypothesis

In the third hypothesis of the study, the relationship between the ratio of sales to total assets and beta has been examined. This ratio shows the effectiveness of the performance of managers in using financial resources. It was found that this ratio has no significant relationship with the beta.

D. The Fourth Hypothesis

As a financial ratio, the debt ratio is one of the most important indicators for determining the risk of investing in companies that measure the extent of a company's leverage. The debt ratio is defined as the ratio of total debt to total assets [36]. It can be interpreted as the proportion of a company's assets that are financed by debt. In this study, there was an insignificant relationship between linear regression and beta. The dissimilarity of the result obtained in this research with the same research can be interpreted in the difference of debt structure [66]. The bulk of debt in Iranian companies relates to accounts for the provision of staff termination benefits, tax payable and other provisions and reserves, which their maturity is uncertain and not paid once. In this regard, these debts have a lower risk profile, compared to other liabilities. Besides, in Iran, debt to banks is more secured by collateral. Hence, banks rarely put firms at risk of bankruptcy. For this reason, this ratio does not play a similar role in risk measurement.

E. The Fifth Hypothesis

In our study total assets in a company reflect its size. As evidence of capital markets, companies with larger assets and size are less volatile; therefore, their risk is less than that of smaller companies [59]. However, the results of the fifth hypothesis test indicate that there is no important relationship between the total assets of the market and the market.

Based on the theory of the Efficient Market, in the Weak-Form Efficiently, it is assumed that all historical information is fully reflected in the price and risk of the stocks. However, the results of this research show that the selected independent variables, which are indicators for assessing the risk of companies, are irrelevant to the market risk of companies. In other words, historical accounting information is not completely disclosed in the price and risk of securities.

IX. Conclusion

Investing is one of the key issues in the process of economic growth and development. Investors are seeking opportunities where their sources of finance have the least risk and the highest returns. In this regard, capital markets such as the TSE play a vital role. To create an efficient financial market, financial information should be relevant and reliable. The financial information must be provided equally and without charge to the investors and the creditors. To improve the efficiency of the capital market and according to the results obtained in this research, the following suggestions are provided: The risk is one of the main obstacles to investing. Proper risk management makes investment more successful. This management requires financial knowledge, extensive information, and processing of this information, but, given the current situation, it is not possible for all investors. The efficiency of the capital market in terms of disseminating and informing investors enables the users of information it finances a more secure investment. The TSE can, by establishing adequate and necessary rules, oblige companies to provide the appropriate financial information required by the investor. Therefore, the proposal to emphasize the availability of accounting information can reduce the risk of investment and ensure the calm of the capital market.

- Concerning the beta as an indicator of risk assessment, the TSE can increase its monitoring of companies by announcing this index and, on the other hand, inform users about the risk of companies.

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- The diversification of stock exchange bonds reduces the risk of corporate stocks. Based on the competition between the securities, companies with higher risk are less attractive to investors. By making a variation in supply, investors can have more selections based on their level of risk appetite and companies may have other methods to access financial resources.

- It can be provided with a more complete guide to enhance investors' acquaintance with financial statements and analysis methods (before trading shares). The Stock Exchange or stockbrokers can handle this guideline. Experts (outsider's financial analysts) can also take on the role of guidance in novice investors. Textbooks, media outlets, etc., are the other best devices for a broad range of training on how to choose stocks, familiarity with financial statements and analysis methods.

- It is suggested that more research should be done between the accounting beta and the beta of the stock market or the relationship between a set of financial ratios and the Beta ratio.

The main limitations of the present research, which can affect the generalizability of the results of the research, are:

- Due to the limited statistical population of the companies listed on the TSE, whose fiscal year is according to Iran's official calendar, the results of other companies should be carefully monitored.

- The general economic and politic conditions of Iran and the inefficiency in the stock exchange can have a significant effect on how the information is reflected and the findings are mentioned.

- Also, the results may be restricted by stock prices fluctuation.

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