The Relationship between the Financial Ratios and Information Disclosure Level in Companies

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Abstract: Introduction: The purpose of this study is to evaluate the relationship between financial ratios with the transparency of financial reporting in the companies listed on Tehran Stock Exchange.

Method: The method of study is descriptive-correlation, to test the first hypothesis, the panel data method, and for the second and third hypothesis, logistic regression was used. In this study, all of the companies listed in the Tehran Stock Exchange, over a period of five years, from 2007 to 2011 are the statistical community and the sample of study using elimination method, after applying assumptions is selected. For data analysis and hypothesis testing, information needed through the audited financial statements of companies under examination for a period of five years (1386-1390) was collected. After gathering the necessary information for the companies under examination, research hypotheses using correlation and regression analysis, were examined.

Findings: The results of the first sub-hypothesis test for disclosure quality variable showed that the variables of Quick Ratio, operating margin, earnings per share, fixed asset turnover ratio and size of the company, have a significant and positive relationship with the quality variable of disclosure.

Conclusion: Based on the results can be stated that companies with high quick ratio, operating margin and earnings per share and large size, provide their reports to the Securities and Exchange Organization timely and more reliable and they comply with the disclosure requirements.

Keywords: Content of financial ratios, transparency of financial reporting, Information disclosure.

1. Introduction

Introduction to the content of financial ratios and financial reports, which have increasingly importance with the advent of organizations and financial institutions, is necessary for investors and financial analysts. A balance between the benefits and costs is considered as the basic principles of economics. Choosing high quality and transparency for financial reporting by the administrators has future benefits and expenses for the company. In addition to the potential costs, such as increased entry of new competitors, increasing competition between existing competitors, increasing the bargaining power of buyers and suppliers and ... It is expected that we have the economic interests of financial reporting with transparency, and if, perceived benefits of transparent and high quality financial reporting does not exceed the costs, any economic unit will not be willing to do this (Kosh Tinat, 1998). Information asymmetry between the company and shareholders leads that shareholders are demanding more and valid information. The companies' financial statements can reduce information asymmetry, if they are transparent. Financial statements are transparent when they have features such as availability, reliability of comprehensive, relevance and timeliness. In other words, financial statements have Informative when that is transparent (Salimi, 2004). In this study, according to the subject of study, at first, pointing to the importance of financial reporting, the importance of financial statements and ratios, and their role in economic decision making is studied, and the theories which use information of these same financial statements, are mentioned. Then, some of the most important and the most widely used relative valuation ratios (as one of the approaches of evaluation) have been investigated, and the advantages and disadvantages of each of these ratios are mentioned. Also, in addition of a review of strategies for financial reporting transparency, effective and theoretical discussion on the relationship
between informative of financial ratios and transparency of financial reporting information is discussed, and at the end, research conducted in this regard will be referred (Bix and Brown, 2005).

2. Literature
The result of financial reports analysis is an information system that provides information to its users. But because of the variety of information needs which is among different groups of users, such as investors, banks, creditors, governments, etc., creating a uniform information system for all groups will be in vain. The analysis of financial reports in the past has been without a framework for considering the needs of the users. Difference of methods of analysis is determined according to the needs of users, and based on it, a proper method is used, and required data using financial reports information, and other non-accounting information is provided (Jahankhani and Parsaeian, 2001). One of the methods to analyze financial reports, which by using that the high volume of information in the financial reports can be summarized, and different aspects of the company's activities can be studied at the same time, is preparing financial ratios of financial reports. Financial ratios that can be extracted from the reports, are very high, but not all ratios are useful to users (Hu et al., 2005). Over time users, according to their information needs, have created different ratios, so that they can meet their needs in this way. Thus, today, the numbers of financial ratios contained in the texts are too high (Dastgir et al., 2005). Financial ratios suggest the relationship between two or more varieties of financial statements as a result of the accounting system and it is expressed as part of the whole, or a percentage of it. When a ratio is calculated, it can be said that the number obtained is a new formula, and statistical correlation between two or more variables are at a certain time. So, we can find important facts relating to anticipated future realized variables by studying the behavior of variables with each other (the ratios) (Bix and Brown, 2005). Therefore, ratios calculate, should represent an important and significant relationship between the variables. Also, how to classify ratios and the number of them, which in each of the main categories ratios is calculated, depends on the specific concepts of each class and certain decisions which will be made by studying that class. Also, the correlation between the ratios in each class should be considered. Financial ratios are one class of the most common types of accounting data, which have been tested. Financial ratios, can be applied as representative of raw data of accounting in various studies to predict failure, delete, merge or profitability (Hu and Yang, 2001). In the context of financial ratios in relation to the interpretation of them, there is a framework and principles that can be named as follows:

1. The objectives of financial analysis
2. The type and form of financial ratios

For the purposes of financial ratios, the main purpose of the use of ratios in the analysis is to facilitate and interpret financial reports, which this practice is carried out by reducing the numbers in items of financial reports, in the form of limited financial ratios. Financial ratios, usually are used as an indicator to identify companies’ shortcomings, such as inadequate liquidity, low profitability etc. That is why bad and negative mode for it always is considered, and the favorable position will be less considered. (Sandep et al., 2002). But it should be noted that, financial ratios are associated with the answers of questions raised by the users. This means that if users need to have a thorough understanding of the company's financial condition, financial ratios can contain good or bad news for consumers. Therefore, both of aspects must be considered (ALA, 2000). In connection with the financial ratios, often in the literature, a logical connection between the items in the numerator and denominator is considered. The three groups of logical connections in this regard are:

1. Ratios must be made related and compatible with each other components, Such as income and investment related.
2. Ratios must be prepared by the items with the same value, for example, in the preparation of inventory turnover period, the numerator and denominator are both based on total value (Fatemi, 2006).
3. Ratios are calculated in the event that in terms of functions, they are related to each other. This means that, in some important terms are different. For example, to calculate the ratio of net income to sales, there are these relationships in terms of net profit calculated that is a function of net sales.

After preparation of financial ratios by accounting information system, the next step will be the use and interpretation of these ratios. Interpretation and the use of ratios may vary between different groups of users, and this is due to the differences in their information needs. Potential investors also need to understand the performance and profitability (Aksu and Kosedag, 2006), while creditors show interest to
repayment power of debts of the companies. However, the use of a financial ratio alone does not help to
the users. They need to examine various financial ratios to gain an overall perspective of the companies.
Users, after reviewing the financial position of the company and the use of ratios to predict the future of
the company, take appropriate decisions in relation to the company. The decisions of the users can directly
affect the position of the company (Aras and Krouser, 2008). Thus, the demand for the companies’ shares
on the stock market is subject to fluctuations by potential investors, according to information released by
the company, and analysis of the situation of the company by them. By increasing and decreasing the
demand for the stock, its price will increase or decrease and the stock price volatility can be due to the
analysis of users. Financial ratios as one of the public information which is available to users, has an
impact on their decision directly, and the volatility of stock price indirectly. But, the significant point here
is, the influence of the information on the price of securities of companies that are active in markets
without efficiency. In these markets, the price of the securities is affected by public information released,
but this influence occurs due to lack of efficacy of the market with a time period (Danaei Fard, 2007). The
Price of the stock, as one kind of securities in market will be influenced by the information released that
whatever the level of performance of the market is close to strong level, the effect of stock price also will be
faster. Since, financial reports, as well as financial ratios derived from these statements is considered as a
kind of general information available to users, it is expected that the price of shares in the market is
influenced by the financial ratios (Dias and Hayes, 2005 ). According to the Sadka, the purpose of
publishing financial statements is help shareholders in the decision-making process for investment. But
according to the researchers in accounting, such as Hugh et al, Hu and Yang, each accounting data not
only should be assessed in the decision process to invest, but in each the decision-making process by
means of predicting it should be assessed. According to them, the experience shows that some of the ratios
are more significant for the analysis, which is usually divided into five categories (Khosh Tinat, 1998):

2.1. Liquidity ratios
Liquidity ratios measure the ability of the institutions to pay short-term debts. Financial analyst by using
liquidity ratios indicates that, whether the institutions will be able to pay its short term debts on time or
not? (Sadka, 2004).

2.2. Activity ratios
These ratios measure the degree of efficiency of the institutions in the use of resources under the
authority, and compare the relationship between sales volume and investment in various assets, such as
debtors, inventories and fixed assets, etc (Rahimi, 1995).

2.3. Leverage ratios
Ratios in this section are divided into two categories. One group is related to the debt and equity, and
thereby, the amount of resources that a company provide by using the loan, is calculated. Second group
shows the ability of the company to generate enough profit to pay (Fatemi, 2006).

A. Profitability Ratios
Profitability is the result of the implementation of policies and decisions of the managers. On the other
hand, the long-term existence of organizations directly depends on the ability to earn sufficient income to
payment obligations and as well as providing sufficient profits to shareholders. Profitability ratios indicate
that to what extent an institution is managed ideally (Dastgir et al., 2005).

B. Market value ratios
The last group of the ratios is related to the criteria that establish relationship between the market price
and book value per share and profit. This group includes ratios are related to dividends. A decision can’t
be adopted, unless it is combined with the forecast, whether implicitly or explicitly.

3. Method
This study is conducted in the context of deductive - inductive reasoning, meaning that, theoretical
foundations and literature of the study by using Library Studies, articles and Web sites are in the
inductive context and information collection to verify or reject hypotheses is in the deductive form. In each
study, providing factual information regarding the research goals is essential. In this study, to study
theoretical foundations and review the literature, the library method by using Persian and Latin books
and scholarly articles and theses are used. Since information about the variables in this study contains
many accounting items contained in the audited financial statement of the companies, data needed is extracted manually from financial statements of the sites of Research, Development and Islamic Studies Management affiliated with the Securities and Exchange Organization, comprehensive information systems for publishers, financial data processing center in Iran, and CDs of the Securities and Exchange Organization, it seems that, compared to other sources, of credit is more valid. Also, other required information related to the financial statements of the companies (such as the market value of the common stock of the companies at the end of year which is required to calculate the Tobin Q ratio) is collected in the database of Stock Exchange, and from the Rah Avard Novin software, in the fame of Pdf and Excel. The information includes profit and loss, balance sheet and prediction of profit and so on.

4. The definition of variables and how to calculate them
The variables of this study can be classified into three groups:

1. The dependent variables
   - Disclosure Quality Score of firm i in year t.
   - The quality of profit of the firm i in the year t.
   - The quality of the independent auditor's statement of firm i in year t.

2. Independent variables
   - Current ratio of firm i in year t.
   - Quick Ratio of firm i in year t.
   - Liquidity Ratio of firm i in year t.
   - Gross profit and loss margin of firm i in year t.
   - Net profit and loss margin of firm i in year t.
   - Operating margin of firm i in year t.
   - Return on investment\(^1\) for the company i in year t.
   - Return on assets\(^2\) firm i in year t.
   - Total debt ratio of the firm i in year t.
   - Current debt ratio of firm i in year t.
   - Non-Current debt ratio of firm i in year t.
   - Tangible fixed assets turnover ratio of firm i in year t.
   - The financial ability to pay for the firm i in year t.
   - Earnings per share of firm i in year t.

The control variables
   - Size of firm i in year t.

4.1. Dependent variables
The score of disclosures quality (\(DQ_{it}\))

Disclosure quality
The concept of disclosure refers to financial information in the text and with basic financial statements, including the methods used in preparing the financial statements. Disclosure Quality reflects voluntary disclosure of information by each profit-making unit, and on this basis, several factors will be determined as the criteria for voluntary disclosure, and then in the corporate level, disclosure or non-disclosure has been evaluated and has rated. Annual scores related to the disclosure quality for listed companies in the

\(^1\) Return on investment (ROI) is the benefit to the investor resulting from an investment of some resource. A high ROI means the investment gains compare favorably to investment cost. As a performance measure, ROI is used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. In purely economic terms, it is one way of considering profits in relation to capital invested.

\(^2\) The return on assets (ROA) shows the percentage of how profitable a company's assets are in generating revenue. ROA can be computed as: ROA = Net Income / Average Total Assets. This number tells you what the company can do with what it has, i.e. how many dollars of earnings they derive from each dollar of assets they control. It's a useful number for comparing competing companies in the same industry. The number will vary widely across different industries. Return on assets gives an indication of the capital intensity of the company, which will depend on the industry; companies that require large initial investments will generally have lower return on assets. ROAs over 5% are generally considered good.
stock exchange since 2007 by the Tehran Stock Exchange, for a period of 3, 6, 9 months and based on annual period is calculated. The scores reflect evaluation of exchange about rate the awareness of corporate disclosure. These scores, based on the weighted average of the criteria of timeliness and reliability of disclosed information is calculated (Noroush and Hosseini, 2009). In this study, to evaluate the quality of disclosure of the sample companies, the annual bonuses given to these companies by the Tehran Stock Exchange, are used. In this way, first, the companies in terms of the criteria of transparency (disclosure Quality Score) are classified into three groups (H / M / L), and the companies which were in a high level of disclosure quality will be considered as 1, otherwise, they will be considered as zero.

**Profit Quality \( QTCA_{i,t} \)**

To calculate profit quality, and Decho and Dicho formula, or modified Jones, is used.

\[
TCA_i = \theta_0 + CFO_{i-1} + \theta_2 CFO_i + \theta_3 CFO_{i+1} + V_i \\
\Delta CA \cdot \Delta CL \cdot \Delta CASH + \Delta STDEBT
\]

\( TCA \): Total current accruals which is calculated as follows.
\( \Delta CA \): Changes in current assets
\( \Delta CL \): Change in current liabilities
\( \Delta CASH \): Change in cash
\( \Delta STDEBT \): Changes in the current portion of financial facilities received

\( CFO \): Cash flow from operations
\( DEPN \): Betterment

We have:

\[
ACCBS=\Delta CA \cdot \Delta CL \cdot \Delta CASH + \Delta STDEBT \cdot DEPN
\]

Index \( i, t \) are the firm and time, respectively.

In this model, all variables including the intercept are divided by average assets. According to the above equation, the high quality of accruals, suggests that, accruals more records fluctuations in current, past and future cash flow, and as a result, the net remaining of the firm (\( Vit \)), forms a basis of profit quality indicator.

**The quality of the independent auditor's statement \( QInAuOption_{i,t} \)**

According to research conducted by Aras et al. (2008), The quality of the independent auditor's statement of the companies in terms of the criteria of transparency are classified into three groups (H / M / L), and the companies in which independent auditor during the year under review, has presented the acceptable comment about with the financial statements, will be considered as 1, otherwise, they will be considered as zero.

4.2. Independent variables:

**Financial Ratios \( X_{i,t} \)**

In this section, we calculate financial ratios \( X_1 \ldots X_{14} \) for portfolio H, L, in order to specify the usefulness of financial ratios, we take the correlation between the 14 financial ratios of portfolios H with the market value of the same companies, also, it is done for 14 financial ratios of portfolios L, based on the

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3 Betterment, making better, is a general term used particularly in connection with the increased value given to real property by causes for which a tenant or the public, but not the owner, is responsible; it is thus of the nature of an earned increment. When, for instance, some public improvement results in raising the value of a piece of private land, and the owner is thereby bettered through no merit of his own, he gains by the betterment, and many economists and politicians have sought to arrange, by taxation or otherwise, that the increased value shall come into the pocket of the public rather than into the owner's. A betterment tax would be assessed in order to divert from the owner of the property the profit thus accruing unearned to him. The whole problem is one of the incidence of taxation and the question of land values, and various applications of the principle of betterment have been tried in the United States and in England, raising considerable controversy from time to time.

32
hypothesis of the study, the companies included in the portfolio H have a higher correlation coefficient than the companies included in the portfolio L. Financial ratios in this study, according to research Vardan and Adel Oghloo (2012), are calculated as follows.

<table>
<thead>
<tr>
<th>Variable symbol</th>
<th>How to Calculate</th>
<th>Financial Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>Current liabilities / current assets</td>
<td>Current ratio</td>
</tr>
<tr>
<td>X2</td>
<td>The current debt / asset inventory-current assets</td>
<td>Quick ratio</td>
</tr>
<tr>
<td>X3</td>
<td>The current debt / cash</td>
<td>Liquidity ratio</td>
</tr>
<tr>
<td>X4</td>
<td>Sales / gross profit or loss</td>
<td>Gross profit or loss margin</td>
</tr>
<tr>
<td>X5</td>
<td>Sales / net profit or loss</td>
<td>Net profit or loss margin</td>
</tr>
<tr>
<td>X6</td>
<td>Sales / profit before interest and taxes</td>
<td>Operating margin</td>
</tr>
<tr>
<td>X7</td>
<td>Capital / net profit or loss</td>
<td>Return on investment</td>
</tr>
<tr>
<td>X8</td>
<td>Total assets / net profit</td>
<td>Return on assets</td>
</tr>
<tr>
<td>X9</td>
<td>Total Assets / Total Liabilities</td>
<td>The ratio of total debt</td>
</tr>
<tr>
<td>X10</td>
<td>Total assets / non-current liabilities</td>
<td>Non-Current debt ratio</td>
</tr>
<tr>
<td>X11</td>
<td>Total assets / Non-Current liabilities</td>
<td>Non-Current debt ratio</td>
</tr>
<tr>
<td>X12</td>
<td>Tangible fixed assets / net sales</td>
<td>Fixed asset turnover ratio</td>
</tr>
<tr>
<td>X13</td>
<td>Financial expenses / Cash from operating activities</td>
<td>Ability to pay financial expenses</td>
</tr>
<tr>
<td>X14</td>
<td>The number of common stock / net profit or loss</td>
<td>Earnings per share</td>
</tr>
</tbody>
</table>

### 4.3. Control variables

**The Size of Company** \((Size_{i,t})\)

To calculate the size of the company, different criteria, such as the natural logarithm of the equity market value, the natural logarithm of total assets, log of total sales, and book value of assets are used. In this study, the variable of size \((Size_{i,t})\) to reduce economies of scale in the calculation of financial ratios has been used (Halle et al., 2001). Thus, according to capital market conditions, and the effect of inflation on companies in our country, the natural logarithm of book value of total assets, which better reflects the situation of the company, has been used. Whatever this index calculated is greater, the desired company will be larger.

\[
Size_{i,t} = LN(Size_{i,t})
\]

Where, \(Size_{i,t}\): The book value of total assets of firm i at the end of the year t.

### 5. Describing data

Descriptive statistics of the variables of study, which have been measured by using data from 101 companies listed in the Tehran Stock Exchange during the period between the years 2007 to 2011, include the number of observations, mean, standard deviation, skewness, elongation factor, the minimum and the maximum, which are presented in Table 4.1. According to the results in Table 4.1, the profit quality with skewness -0.78 indicates that the data are skewed to the right, though it is not in the acceptable range and data are not symmetrical, but the data does not have a large dispersion. In addition, the minimum shows that, in this sample, there is a company that has low profit quality equal to -2.35, and in turn, the
maximum of this value, 1.61, shows that there is a company which its profit quality 61% is more than the quality of profit in the market.

Current ratio averaging 1.282 shows that, during the year, on average, the proportion of current assets to current liabilities is 29%, as well as the existence of skewness 1.83, shows that samples has kurtosis to the left, 6.55, which suggests the lack of symmetry of the data. The minimum value shows that, in the sample there is a company in which the ratio of current asset to liabilities is about 24%, by contrast, the maximum value indicates that, there is a company in which current ratio of assets to liabilities is 4 times.

Quick ratio, with an average of 0.811 shows that, during the year, on average, the ratio of current assets minus inventory to current liabilities is 81%, and positive skewness 2.24 in the samples indicates asymmetry in the sample and kurtosis to the left in the samples. The minimum value shows that, in the sample there is a company in which the quick ratio is about 7%, by contrast, the maximum value indicates that, there is a company in which the ratio of current assets minus inventory to current liabilities is 4 times.

Liquidity ratio with an average of 0.155 shows that, during the year, on average, the ratio of cash to current liabilities of companies, is about 15%. The standard deviation of this variable, compared with Quick ratio, indicates there is no dispersal between the two ratios. Positive skewness of 2.77 in the samples indicates that the distribution values are not perfectly symmetrical, and compared to a normal distribution, a greater volume of data observed for these data is less than average. The minimum value shows that, in the sample there is a company in which the cash to current debt ratio is about 0.001, by contrast, n the sample there is a company in which the cash to current debt ratio is about 17%. The average profit and loss margin shows that, during the year, on average, the gross profit and loss margin ratio has been 21%, and the gross loss and profit margin has been 21%. In addition, the minimum value of -1.05 and -0.91 in the two variables shows that there is a company which has 100% negative gross loss and profit margin and 91% net negative loss and profit margin, and in contrast, the maximum amount that there is a company which has has 100% gross and net profit and loss margin. Average profit per share show that, on average, in a year, each share has profit equal to 0.1818 of its market, as well as the minimum value shows that there is a company which has a loss equal to -0.0909 of stock market price, and in turn, the maximum value indicates that there is a company, which has profit equal to 0.2381 rials of market price of that profit.

Table 2: Descriptive statistics for the variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>The mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurto</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit Quality</td>
<td>505</td>
<td>0.0001</td>
<td>0.44</td>
<td>-0.78</td>
<td>1.36</td>
<td>-2.35</td>
<td>1.61</td>
</tr>
<tr>
<td>Current ratio</td>
<td>505</td>
<td>1.282</td>
<td>0.63</td>
<td>1.83</td>
<td>6.55</td>
<td>0.24</td>
<td>4.97</td>
</tr>
<tr>
<td>Quick ratio</td>
<td>505</td>
<td>0.811</td>
<td>0.47</td>
<td>2.24</td>
<td>10.41</td>
<td>0.07</td>
<td>4.15</td>
</tr>
<tr>
<td>Liquidity ratio</td>
<td>505</td>
<td>0.151</td>
<td>0.19</td>
<td>2.77</td>
<td>9.46</td>
<td>0.001</td>
<td>1.16</td>
</tr>
<tr>
<td>Gross profit and loss margin</td>
<td>505</td>
<td>0.209</td>
<td>0.27</td>
<td>-0.74</td>
<td>4.82</td>
<td>-1.05</td>
<td>1.00</td>
</tr>
<tr>
<td>The net profit and loss margin</td>
<td>505</td>
<td>0.185</td>
<td>0.24</td>
<td>-0.12</td>
<td>3.98</td>
<td>-0.91</td>
<td>1.00</td>
</tr>
<tr>
<td>Operating margin</td>
<td>505</td>
<td>0.301</td>
<td>0.18</td>
<td>0.14</td>
<td>0.59</td>
<td>-0.26</td>
<td>0.94</td>
</tr>
<tr>
<td>Return on investment</td>
<td>505</td>
<td>0.306</td>
<td>0.30</td>
<td>-0.56</td>
<td>6.23</td>
<td>-1.09</td>
<td>1.65</td>
</tr>
<tr>
<td>Return On Asset</td>
<td>505</td>
<td>0.117</td>
<td>0.12</td>
<td>-0.06</td>
<td>1.56</td>
<td>-0.31</td>
<td>0.57</td>
</tr>
<tr>
<td>Ratio of total debt</td>
<td>505</td>
<td>0.613</td>
<td>0.22</td>
<td>0.49</td>
<td>1.06</td>
<td>0.04</td>
<td>1.42</td>
</tr>
<tr>
<td>Current debt ratio</td>
<td>505</td>
<td>0.524</td>
<td>0.22</td>
<td>0.75</td>
<td>1.65</td>
<td>0.04</td>
<td>1.57</td>
</tr>
<tr>
<td>Non-current debt ratio</td>
<td>505</td>
<td>0.085</td>
<td>0.09</td>
<td>2.27</td>
<td>6.01</td>
<td>0.001</td>
<td>0.56</td>
</tr>
<tr>
<td>Fixed asset turnover ratio</td>
<td>505</td>
<td>5.142</td>
<td>5.28</td>
<td>2.39</td>
<td>7.33</td>
<td>0.07</td>
<td>34.11</td>
</tr>
</tbody>
</table>
In some cases, there is skew to the left, and distribution of any of the variables is not skewed to the left, and when, the mean and median values of variables are close to each other, distribution of variables is symmetrical, this feature is important, because symmetry is one of the characteristics of normal distribution, which will be discussed in the next section. In some cases, there is skew to the left, and distribution of any of the variables not skewed to the left, and when, the mean and median values of variables are equal, symmetrical distribution of variables, this feature is important, because symmetry is one of the characteristics of normal distribution, which will be discussed in the next section. (kurtosis rate and skewness of normal distribution is zero), the skewness and Kurtosis for a variable of profit quality, respectively is equal to -0.78 and 1.36, which in this respect, the distribution of these variables is similar to the normal distribution, also distribution of other variables are almost symmetrical.

Table 3: the results of Commenting on the audit and Disclosure Score

<table>
<thead>
<tr>
<th>Value</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>271</td>
<td>53.7%</td>
</tr>
<tr>
<td>234</td>
<td>46.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disclosure Score</th>
<th>Disclosure rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>157</td>
<td>Rank higher than 53</td>
</tr>
<tr>
<td>348</td>
<td>Rank less than 23</td>
</tr>
</tbody>
</table>

For variable of the disclosure score, 69% have the amount of 1 and 31% have the amount of zero, and for the variable of quality of the auditor's report, 46% had the amount of one, and 54% had the amount of zero in the whole year.

5.1. Evaluation of the Normality of the distribution of the dependent variable
The normality of remaining regression model is one of the assumptions of regression, which represents regression tests credit. Then, by using Kolmogorov-Smirnov test, normality of distribution of the dependent variables, was investigated, because the normality of the variables depends on the normality of the remainders of the model (The difference between the estimated value and the real value). So it is necessary that the normality of the dependent variable before estimation of parameters be estimated, and if this condition is not satisfied, the proper solution for normality of them (including conversion of it) would be taken. Null hypothesis and the opposite hypothesis in this case are written as follows.

\[ H_0: \text{Data for the dependent variable follows a normal distribution} \]

\[ H_1: \text{Data for the dependent variable does not follow the normal distribution} \]

Significant probability values for the dependent variable in different years is more than 0.05, so, the Null hypothesis (normality of the variable) for these variables can’t be rejected, that means distribution of this variable for different years according to the prediction (skewness and kurtosis parameters close zero) is normal.

Table 4: Kolmogorov-Smirnov test to examine the normality of the dependent variable

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Normal values</th>
<th>The maximum difference</th>
<th>Z values of Kolmogorov - Smirnov</th>
<th>Confidence level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>Standard deviation</td>
<td>Absolute value</td>
<td>Positive</td>
</tr>
<tr>
<td>2016</td>
<td>505</td>
<td>21.507</td>
<td>71.53</td>
<td>5.95</td>
<td>37.56</td>
</tr>
<tr>
<td></td>
<td>505</td>
<td>0.1818</td>
<td>0.1851</td>
<td>0.231</td>
<td>2.356</td>
</tr>
<tr>
<td></td>
<td>505</td>
<td>8.845</td>
<td>0.61</td>
<td>1.22</td>
<td>2.01</td>
</tr>
</tbody>
</table>
Probability values for the profit quality in the years 2007 until 2011, respectively are 0.06, 0.12, 0.11, 0.12 and 0.097, which is not less than 0.05. Then, the null hypothesis is not rejected for any year. Distribution of variable mentioned in different years is normal.

Table 5: Correlation matrix

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Current ratio</th>
<th>Quick ratio</th>
<th>Liquidity ratio</th>
<th>Gross profit and loss margin</th>
<th>Net profit and loss margin</th>
<th>Operating margin</th>
<th>Return on investment</th>
<th>Return On Asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ratio</td>
<td>1</td>
<td>0.800</td>
<td>0.517</td>
<td>0.409</td>
<td>0.243</td>
<td>0.378</td>
<td>0.106</td>
<td>0.511</td>
</tr>
<tr>
<td>Quick ratio</td>
<td>0.800</td>
<td>1</td>
<td>0.463</td>
<td>0.401</td>
<td>0.436</td>
<td>0.362</td>
<td>0.125</td>
<td>0.457</td>
</tr>
<tr>
<td>Liquidity ratio</td>
<td>0.517</td>
<td>0.463</td>
<td>1</td>
<td>0.353</td>
<td>0.353</td>
<td>0.330</td>
<td>0.114</td>
<td>0.459</td>
</tr>
<tr>
<td>Gross profit and loss margin</td>
<td>0.409</td>
<td>0.401</td>
<td>0.353</td>
<td>1</td>
<td>0.980</td>
<td>0.831</td>
<td>0.213</td>
<td>0.783</td>
</tr>
<tr>
<td>Net profit and loss margin</td>
<td>0.433</td>
<td>0.436</td>
<td>0.353</td>
<td>0.980</td>
<td>1</td>
<td>0.842</td>
<td>0.191</td>
<td>0.753</td>
</tr>
<tr>
<td>Operating margin</td>
<td>0.378</td>
<td>0.362</td>
<td>0.330</td>
<td>0.831</td>
<td>0.842</td>
<td>1</td>
<td>0.221</td>
<td>0.708</td>
</tr>
<tr>
<td>Return On investment</td>
<td>0.106</td>
<td>0.125</td>
<td>0.114</td>
<td>0.213</td>
<td>0.191</td>
<td>0.221</td>
<td>1</td>
<td>0.372</td>
</tr>
<tr>
<td>Return On Asset</td>
<td>0.511</td>
<td>0.457</td>
<td>0.459</td>
<td>0.783</td>
<td>0.753</td>
<td>0.708</td>
<td>0.372</td>
<td>1</td>
</tr>
<tr>
<td>Ratio of total debt</td>
<td>-0.645</td>
<td>-0.535</td>
<td>-0.485</td>
<td>-0.731</td>
<td>-0.746</td>
<td>-0.645</td>
<td>-0.049</td>
<td>-0.740</td>
</tr>
<tr>
<td>Current debt ratio</td>
<td>-0.484</td>
<td>-0.368</td>
<td>-0.449</td>
<td>-0.724</td>
<td>-0.735</td>
<td>-0.668</td>
<td>0.013</td>
<td>-0.646</td>
</tr>
<tr>
<td>Non-current debt ratio</td>
<td>-0.385</td>
<td>-0.374</td>
<td>-0.071</td>
<td>-0.079</td>
<td>-0.084</td>
<td>0.047</td>
<td>-0.124</td>
<td>-0.221</td>
</tr>
<tr>
<td>Fixed asset turnover ratio</td>
<td>0.270</td>
<td>0.331</td>
<td>-0.015</td>
<td>0.040</td>
<td>0.052</td>
<td>-0.051</td>
<td>0.068</td>
<td>-0.001</td>
</tr>
<tr>
<td>Ability to financial payment</td>
<td>0.367</td>
<td>0.466</td>
<td>0.388</td>
<td>0.364</td>
<td>0.387</td>
<td>0.354</td>
<td>0.088</td>
<td>0.323</td>
</tr>
<tr>
<td>Earnings per share</td>
<td>0.119</td>
<td>0.267</td>
<td>0.209</td>
<td>0.436</td>
<td>0.388</td>
<td>0.493</td>
<td>0.511</td>
<td>0.643</td>
</tr>
<tr>
<td>Company size</td>
<td>-0.150</td>
<td>-0.004</td>
<td>-0.026</td>
<td>0.184</td>
<td>0.207</td>
<td>0.223</td>
<td>-0.023</td>
<td>0.086</td>
</tr>
</tbody>
</table>

Table 6: the results of
In the correlation matrix, factor analysis can be reviewed at three levels, load factors, which are larger than +0.3 are considered as significant load factors, load factors greater than +0.4 are considered as load factors with high significance level, and greater than +0.5 are considered very significant. Given the above table, it is observed that the relationship between the current ratio and the quick ratio, liquidity ratio, and return on assets is significant with very high level, and the relationship between the current ratio and profit margin ratios and gross and net and loss profit margin is significant with high level, the relationship between the current ratio and operating margin ratios and ability to financial payment is significant and the relationship between the current ratio and the other ratios is not significant. So, on this basis, the level of significance for other variables can be examined.

6. Research findings

The results of the first sub-hypothesis test for disclosure quality variable showed that the variables of quick ratio, operating profit margin, earnings per share, fixed asset turnover ratio, and the size of the company have a significant and positive relationship with the variable of disclosure quality, namely with the increase of these variables, the probability of event of 1 is more than zero for this variable, other variables have no significant relationship with the dependent variable. In other words, companies that have high quick ratio, operating margin and earnings per share and a large size, provide their reports to the Securities and Exchange Organization in a timely and more reliable manner, and comply with disclosure requirements. The results of these assumptions are consistent with the results of Verdan and Adel Oghlou (2012), which showed there is a significant difference between the level of transparency and financial ratios and corporate governance, and the results of the Bani Mahd and Sharif (2010), which showed that there is a positive and significant relationship between the size of the company and kind of industry with disclosure rank.
7. Conclusion

According to the result of the first sub-hypothesis, based on the direct relationship between the quick ratios, operating and profit margin, earnings per share with disclosure quality of the companies, it is recommended that capital market participants, decision-makers, financial analysts and potential and actual investors of stock exchange pay special attention to the impact of the financial ratios on the disclosure quality of the companies in the analysis of investment projects in financial assets and securities, and on this basis, try to invest in companies which have high disclosure quality, because, considering these main factors leads to the selection of the optimal portfolio with minimum risk and the highest return.

References
7. Bani Mahd, Mohseni Sharif (2010), the study of the main factors influencing the ranking of companies Tehran Stock Exchange in terms of disclosure quality and timeliness. Journal of Management Accounting, the third year. Number Seven. P 51-63