THE INFLUENCE OF EFFECTIVE TAX RATE ON THE DISCLOSURE OF FINANCIAL STATEMENTS OF ACCEPTED COMPANIES IN TEHRAN STOCK EXCHANGE

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Abstract:
Tax is one of the most major political tools of governments and the most important source of their incomes and costs supplement. The dependency to the oil incomes can be reduced to zero by prevention of tax evasion. For decreasing the dependency to the oil incomes, we are needful to increase the levies in country. The optimized levies and actual taxes not only increase the government’s tax incomes but lead to a tax justice. The disclosure of accounting information was notified as one of the most important subjects for researchers from long time ago and the final product is considered as an accounting system. Actually, the final purpose of accounting system is providing information for benefited persons in the form of in and out-organization reports and the complete information disclosure can be an underlie of fiscal justice. This study surveys the relationship between the influences of effective tax rate and the level of financial statements disclosure of accepted companies in Tehran Stock Exchange. In this research, the multi variable regression analysis according to the panel data in order to survey the relationship of effective tax rate with the level of financial statements disclosure during the years of 2011 to 2015. The study sample is included of 94 listed companies in Tehran Stock Exchange for a temporal duration of 5 years. The results show that there is a reverse meaningful relationship between the effective tax rate and the level of mandatory financial statements disclosure; means, as effective tax rate gets higher, the level of mandatory disclosure gets lower and also there isn't any meaningful
relationship between effective tax rate and the level of voluntary financial statements disclosure.

**JEL:** G15, E44, O16, H25

**Keywords:** voluntary disclosure, mandatory disclosure, effective tax rate, financial statements

### 1. Introduction

The disclosure of accounting information was notified as one of the most important subjects for researchers from long time ago and the final product is considered as an accounting system. Actually, the final purpose of accounting system is providing information for benefited persons in the form of in and out-organization reports. The term disclosure a various collection of essential and voluntary information include of financial statements and concomitant notes. Also, the disclosure information is used for governments to assess the tax. The document of twenty-year vision of Islamic Republic of Iran in unit 42 of economic sector has emphasized on the movement to transform the oil and gas income into productive assets in order to stabilize the development process and optimized allocation and utilization of resources that this matter highlights the planners’ notification toward the non-oil income resources of government that tax located at top as a trustful income resource.

The effective tax rate on income (or revenue) is considered as a part of important determinant factors for financial statements disclosure. The relationship of effective tax rate and disclosure of financial statements may cause that companies which decrease the tax by its prevention or attempt to tax evasion make hostile decisions in their financial statements and report in a selective way that leads to tax decrement to the actual status. According to the companies’ management, the tax decrement (reduction) can be a powerful motive for managers to meet their financial statements goals affordably (Taylor, 2010: 10).

In fact, in Iranian fiscal (or tax) system, the tax is introduced to the legal persons and basically to the companies which it shows an image of impure tax per income. In the recent decades, the tax appliance on the companies was always encountered with issues. These issues were mainly in determining the tax (or fiscal) coefficients and tax collection. As situation is practically taken place due to the diversity and problem of income identification and companies’ profits that leads to a lack of enough accuracy and focus on tax coefficient determinant and as a result, achieving the desirable tax revenue stays in a halo of ambiguity and uncertainty (Moghiminia, 2008: 10).
2. Research literature

2.1 Tax

As Caston, the classic economist said, tax is a kind of payment and financial remittance that conducted as result of legal requirement in the terms of providing the direct costs of government by people. The French scientist, Abliu has said that tax is a payment for services that are conducted or will be by government. According to the Caos viewpoint, tax is a payment which the governance committee demands for providing the government officials costs and paying general debts from the tax payer due to the principle of National Cooperation.

According to the principle of National Cooperation and law, each one of country’s people is obligated to provide the general costs of nation and pay a part of its income government treasury to keep the economic, political and social resources based on his ability and affordability. Each person's tax payment should be suited with his revenue and wealth and people who have more income, shows that use more the available social possibilities. Therefore, people who have the more facilities should provide a greater part of society financial matters which in this way, a purpose that is emphasized by Islamic system about social justice will be meet. So a person who has more revenue should pay more taxes that in this subject the appliance of predicted increasing rate in unit 131 of direct taxes law is considered.

2.2 The effective tax rate

According direct taxes law in Iran, the tax legal rate per income is 25 percent. In this regard, the unit 105 of mentioned law indicates that the collection of companies' revenue and income resulted profitable activities of other legal persons that educate from different Iran or abroad resources after measuring the resulted loss of unidentified resources and eliminating the chosen selections except from the cases that based on this law have different rates will include the tax rate of 25 percent.

2.3 The methods of measuring effective tax rate

There are different methods to measure the effective tax rate that is classified into various categories based on the statistical data. In the simplest method, the effective tax rate is achieved through dividing the amount of collected taxes of each year by the estimated basis tax of each resource. Therefore, the basis of effective tax rate will be different from the legal rate. The reason of this matter is the existence of different tax exemptions and incomplete submission of tax (due to tax prevention and evasion) from tax payers. There are two general methods for measuring the effective rate: 1. Micro-economic approach: for measuring the effective tax rate or in the other hands, the tax load of payers, balance sheet information and prayers and companies’ profits and losses
are used. 2. Macro-economic approach: for measurement, the available statistics and information in resource level (tax bases) and data of national accounts are used (Husseini and Shafie, 2010: 133).

In this study, the macro-economic approach is used so in this regard, at first, the tax bases of each resource are measured which here is the pure profit before tax deduction and then through dividing collected taxed (tax cost per pure profit) by that resource, the effective tax rate will be measured.

2.4 Disclosure
Disclosure is one of the basic principles of accounting that has affection on all dimensions of financial statements. According to this basis, all of important financial events related to the companies should be completely and appropriately disclosed. This principle forces the company to provide the required information for investors and creditors. Generally, any information that has affection on users’ decisions about the financial statements should be disclosed; unless the costs of this information providing and reporting may be more than the resulted profits of their utilization (Journal 76 of accounting organization, 1993).

2.5 Voluntary disclosure of information
The voluntary disclosure of information means the information that can be voluntarily disclosed. The Voluntary disclosure theory explains that managers in the case which the profit of disclosure is greater than its costs will disclose some information about the part of company they manage (Hitzman et al, 2010). Hence, in the voluntary disclosure, the manager always faces with the matter of disclosing the information or not.

2.6 Mandatory disclosure of information
The mandatory disclosure of information means information which must be disclosed. Also in the process of mandatory disclosure, the managers have to disclose all of their information in the financial statements and appendix notes according to the principles and laws related to the Stock Exchange and commercial and listed accounting standard laws.

3. Research history

3.1 Foreign history
Cheong et al (2010) in their study, survey the relationship between voluntary and mandatory disclosure of company’s value. In this research, two variables of market value ratio to the value of stockholders’ official salary in separated models were used to measure the company’s value. They used multi variable linear regression in their study.
using monitoring variables. Their results showed that there is a positive and meaningful (or significant) relationship between voluntary disclosure and company's value but there isn't any relationship between mandatory disclosure and company's value.

Henrique (2009) in his article as "the matter of tax evasion and trust importance" analyzed the conception of tax evasion in the terms of ten various types of tax and notified the changes in how to pay taxes. He indicates that instead of discoursing about the tax evasion as an ordinary phenomenon, we should separately survey different taxes. As in the following, he declares that those who don't trust in their citizens may probably believe that they avoid from paying taxes but the politicians’ distrustfulness has even deeper effects especially for taxes that will be distributed again or will be paid financially. Therefore, it’s important for politicians to trust people so that they able to collect taxes for people's welfare.

Chang and Cretni (2006) in a research as "the law-making regime of board of directors and voluntary" tested the relationship between board of directors and disclosure. Also, they notified the effect of different law-making regimes in board of directors' role in supporting and running the voluntary disclosure. They found out that the presence of a governmental mechanism, legal environment and the powerful relationship between independent managers and board of directors can increase the voluntary disclosure. This relationship can be two or three times more powerful under the law-making regime based on the disclosure than law-making regime based on the competency.

3.2 Domestic history
Hassan et al (2009) in an article tried to "survey the relationship between voluntary and mandatory disclosures and company's value in Egypt". In this article, the ration of market value to the official value of stockholders' salary was used to measure the company's value. Also, for measuring the mandatory disclosure index, an inventory includes of 11 mandatory disclosure cases was used and for measuring the voluntary disclosure index, an inventory includes of 21 voluntary disclosure cases was also used. The results of this research which was conducted using panel data showed that there isn't any relationship between the mandatory disclosure and company’s value but there is a negative and meaningful relationship between the voluntary disclosure and company’s value.

Khodarahmipoor, Hoshmand Za’faranieh and Deldar (2013) in a research tried to "survey the influence of effective tax rate on profit division policy". The results indicated that there is a negative and meaningful relationship between profit division policy and effective tax rate. In the other words, increment in effective tax rate, the companies significantly decrease the divisional profits and vise-versa. Perceiving the effective factors on divisional profits policy leads to the growth and development of companies and their profitability as well as stockholders’ advantages maintenance.
Talebnia and Rostami (2013) in a research attempted to survey the relationship between tax (or fiscal) coefficients and financial statements disclosure of listed companies in Tehran Stock Exchange. In this article, the tax coefficients of each company regarding to the product types and their services were measured and determined. In this study, in this research, the multi variable regression analysis according to the panel data in order to survey the relationship of effective tax rate with the level of financial statements disclosure during the years of 2011 to 2015. The study sample is included of 94 listed companies in Tehran Stock Exchange for a temporal duration of 5 years. The results show that there is a reverse meaningful relationship between the effective tax rate and the level of mandatory financial statements disclosure; means, as effective tax rate gets higher, the level of mandatory disclosure gets lower.

Etemadi et al (2011) tried to survey the relationship between mandatory disclosure and current return and future profits of listed companies in Tehran Stock Exchange. In the study, they considered the quality index and Tehran Stock Exchange noticing as mandatory disclosure index. The results of their study showed that information disclosure by companies is effective on future profits and Stock returns.

4. Research assumptions

A. First primary assumption
There is a meaningful (or significant) relationship between the effective tax rate and the level of voluntary disclosure of financial statements of listed companies in Tehran Stock Exchange.

B. Second primary assumption
There is a meaningful (or significant) relationship between the effective tax rate and the level of mandatory disclosure of financial statements of listed companies in Tehran Stock Exchange.

5. Research method

The current study is classified as practical research in the terms of research categorization based on the purpose. The practical researches are those use opinions, principles and techniques that are composited in the basic researches to solve the actual and executive matters (Khaki, 2008: 202). The research method is correlative because in this study, the relationship between variables is considered. The current study surveys the relationship between variables and pursues the existence of relationship in the current conditions according to the historical data. Therefore, it can be categorized as so-event types. In this type of studies, the researcher surveys the cause and effect
(dependent variable and independent variable) after event happened. In these studies, there is a statistical relationship that is the purpose of surveying this relationship.

5.1 Information collecting method
Library method: using library resources such as books, magazines, articles and internet. This method is used for conducting primary studies, editing the chapter of research literature and research theoretical framework. In this research, the library method is used regarding to its nature.

Field method: For collecting the relevant data to the research assumptions, the financial statements of listed companies in Tehran Stock Exchange were used.

5.2 Research statistical society
All listed companies in Tehran Stock Exchange during 2011 to 2015 make the statistical society of the current research, and the considered assumptions will be studied and tested regarded to this statistical society. The following conditions were provided for selecting the statistic society due to the extensity of statistic society mass and existence of inconsistency between the society members and so, the statistic samples were purposefully selected by systematic elimination method, the mentioned conditions are as follows:

- The companies must be in the stock exchange before 2011 and their stocks remains in exchange until the end of 2015.
- The operational break of companies should not be significant from "2011 to 2015".
- The companies should not change their financial year and required information should be available for extracting data. Also, they must be profitable.

The sampling of the research is purposeful so that from available companies those that don’t have the above conditions are eliminated and finally the remained companies will be select for conducting the test. Therefore, the sampling method of current study is judging (Screening or systematic elimination). Among the listed companies in Tehran Stock Exchange, 94 of those that were permitted were chosen as required samples for conducting the study which were separated into 75 productive companies and 19 service companies.

For analyzing data, firstly, the collected data were transmitted into the Excel panel for organization and conducting required calculations and then for information analysis, the statistic software of Eviews 7 was used.
6. The conceptual definition of research variables

6.1 Research variables
In this research, to survey the influence of effective tax rate on financial statements disclosure (voluntary-mandatory) of listed companies in Tehran Stock Exchange, the following variables are used:

6.2 Dependent variable of research
6.2.1 Information disclosure
In this research, information disclosure is considered as dependent variable. For measuring the dependent variable (mandatory disclosure of information= MFIDIIjt), the disclosed information ratio to the information that should be disclosed; (voluntary disclosure of information= VFIDIjt), the disclosed information ratio to the information that should be disclosed will be used.

For measuring the disclosure index, the check list of mandatory disclosure index of accounting organization and for measuring the disclosure index, the check list of voluntary disclosure index of Jensen Model were used.

6.2.2 Independent variable of research
A. Effective tax rate
The effective tax rate is a united rate which based on, the activity includes tax, the tax collection. There are two general methods for measuring the effective rate: 1. Micro-economic approach: for measuring the effective tax rate or in the other hands, the tax load of payers, balance sheet information and prayers and companies’ profits and losses are used. 2. Macro-economic approach: for measurement, the available statistics and information in resource level (tax bases) and data of national accounts are used.

B. Monitoring variables of research
Size of company: the size of company is obtained from the natural logarithm of all assets.

Financial leverage: according to the most of previous studies, the influence power of company or debt division estimation of participators is measured as the total ratio of all debts to all assets.

Company’s employment: presence in the productive group is used as a monitoring variable for defending the possibility of differences existence in financial statements disclosure in productive and service sections. In this study, the active companies have score number 1 and despite have score number 0.
Table 1: The measurement method of research operational variables

<table>
<thead>
<tr>
<th>Variable type</th>
<th>Operational variables definition</th>
<th>Symbol</th>
<th>Way of research variables measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>The effective tax rate for company</td>
<td>$ERT_{jt}$</td>
<td>Ratio of tax cost per income to net profit before tax deduction</td>
</tr>
<tr>
<td>Dependent</td>
<td>The mandatory disclosure index of financial statements</td>
<td>$MFIDI_{jt}$</td>
<td>Ratio of disclosed information to information that should be disclosed</td>
</tr>
<tr>
<td></td>
<td>The voluntary disclosure index of financial statements</td>
<td>$VFIDI_{jt}$</td>
<td>Ratio of disclosed information to information that can be disclosed</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Company’s employment</td>
<td>$SubIn_{jt}$</td>
<td>Company with employment in productive or service section in year ($1=$yes, $0=$no)</td>
</tr>
<tr>
<td></td>
<td>Size of company</td>
<td>$Size$</td>
<td>Asset logarithm</td>
</tr>
<tr>
<td></td>
<td>Financial leverage</td>
<td>$LEV$</td>
<td>$LEV = \frac{\sum_{t}^{liability_{lt}}}{\sum_{t}^{asset_{lt}}}$ The financial leverage is ratio of debt (liabilities) to all assets</td>
</tr>
</tbody>
</table>

6.3 Statistical methods
For the statistical analysis of data and test assumptions in the current research, two kinds of statistical methods were used.

- **Descriptive Statistics:** the variable describing direction and data distribution type were determined using central indexes such as mean (average), median and distribution indexes such as standard deviation, skewness and kurtosis.

- **Inferential statistics: in two parts:**
  - A. The default test of regression model: includes of statistic society distribution normality test (Kolmogorov-Smirnov test) and self-correlation test of data (Futuristic-Watson test).
  - Main test: includes of multi variable linear regression test, Pearson correlation test. For analyzing and surveying the relationship between variables, the regression (correlation) was used. In order to test the study assumptions, the linear regression method and for the meaningfulness of correlation between the study variables, the P-Value (sig.) test; Pearson correlation test was also used.

6.4 Pearson correlation coefficient
The Pearson correlation coefficient which is also known under the names of moment correlation coefficient or zero-order correlation coefficient was introduced by Sarkarl Pearson. This coefficient is used for determining the relationship level, kinds and the orientation of a relationship between two interval or relative variables, or an interval and a relative variable. Several equivalent calculation methods can be defined for measuring this coefficient.
• The calculation method using the raw numbers:

\[ r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt[n]{(\Sigma x)^2 - (\Sigma x)^2} [n(\Sigma y)^2 - (\Sigma y)^2]} \]

• The method of calculation through the standardized scores:

\[ r = \frac{\sum x y}{n} \]

The Pearson correlation coefficient varies between -1 to 1. If \( r = 1 \) indicates that there is a complete direct relationship between two variables; the direct or positive relationship means that if one of the variable decreases, the other will decrease too if \( r = -1 \) indicates that there is a complete reverse relationship between two variables; the reverse relationship means that if one of the variable increases, the other will decrease and vise-versa. When the correlation coefficient is zero, it means that there isn’t any linear relationship between two variables.

### 6.5 F Limer statistics

The example of model that can be made for describing variables in these types of data is as follows:

\[ Y_{it} = \alpha_{i} + \beta' X_{it} + u_{it} \]

Where \( \beta \) is a \( k \times 1 \) vector of parameters, \( X_{it} \) is a \( k \times 1 \) vector of relevant observations to descriptive variables, and \( t= 1, 2, \ldots \) and \( i= 1, 2, \ldots \).

The direction of panel and Pulinc being should be identified which in this regard, the Limer test will be used. Before all, the types of data should be determined that here we have two statuses, the data are Pulinc that the statistics of common effects should be estimated using T method; or they are panel which should be estimated using one of these two methods of permanent effects and variable effects (Azat-o-allah Lotfi, 2012).

### 7. Mathematical models of research

1. MFIDIIjt = \( \alpha + \beta 1 \text{ERT}jt + \beta 2 \text{Size}jt + \beta 3 \text{Lev}jt+ + \beta 4 \text{SubInd}jt + \varepsilon \)
2. VFIDIIjt = \( \alpha + \beta 1 \text{ERT}jt + \beta 2 \text{Size}jt + \beta 3 \text{Lev}jt+ + \beta 4 \text{SubInd}jt + \varepsilon \)
In research model, the dependent variables are as follows:

\[ MFIDI_{jt} = \text{the mandatory disclosure index of financial statement for company } j \text{ in year } t \]

\[ VFIDI_{jt} = \text{the voluntary disclosure index of financial statement for company } j \text{ in year } t \]

The dependent variable is a condition or feature that researcher edits them to prove their relationships with observational phenomenon.

\[ ERT_{jt} = \text{the effective tax rate for company } j \text{ in year } t \]

\[ \text{Size}_{jt} = \text{the natural logarithm of all assets} \]

\[ \text{Lev}_{jt} = \text{the ration of all debts (liabilities) to all assets} \]

\[ \text{SubInd}_{jt} = \text{the company with employment in production or service sections in year } t \text{ (1= yes, 0= no)} \]

\[ \alpha = \text{pausing} \]

\[ \beta = \text{the estimated effective rate for each item or classification} \]

\[ \epsilon = \text{Error amount} \]

8. Assumptions testing

8.1 First assumption

There is a meaningful (or significant) relationship between the effective tax rate and the level of voluntary disclosure of financial statements of listed companies in Tehran Stock Exchange.

A. F Limer model test of first primary assumption- the voluntary disclosure of productive companies

\[ VFIDI = \alpha + \beta_6 ERT_{jt} + \beta_0 \text{FSIZE}_{jt} + \beta_9 \text{Lev}_{jt} + \epsilon \]

<table>
<thead>
<tr>
<th>The amount of possibility value (PV)</th>
<th>Freedom degree</th>
<th>The amount of F statistic test</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000</td>
<td>(74 and 297)</td>
<td>3.70</td>
</tr>
</tbody>
</table>

Therefore, in this section, the second assumption with the above model will be tested using regression with panel method. The self-evaluated model with panel method has two consistent and random effects. For selecting one of these types, the Hasman test was used as follows:
Table 3: The results of Hasman test for selecting method with consistent or random effects (dependent variable: voluntary disclosure)

<table>
<thead>
<tr>
<th>The amount of possibility value (PV)</th>
<th>Freedom degree</th>
<th>The amount of $X^2$ statistic test</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.85</td>
<td>3</td>
<td>0.76</td>
</tr>
</tbody>
</table>

As it was seen, the results of Hasman test indicate that the most suitable method for estimating model in panel data is random effects method. The results of research model estimation with random effects are provided in following table for testing the second assumption.

B. The evaluation of first assumption model – the voluntary disclosure of productive companies

The results of model estimation with panel regression model (dependent variable: the voluntary disclosure index of productive company) show that: the increment or decrement in ERT, SIZE and LEV variables do not have any effect on the voluntary disclosure of productive companies because the meaningfulness level for these variables with t statistics is greater than 0.05. The first assumption is not confirmed in general sense.

Table 4: The results of model estimation with panel model with random effects (dependent variable: the voluntary disclosure index of productive companies)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Variable coefficients</th>
<th>Standard deviation</th>
<th>T statistics</th>
<th>Sig</th>
<th>Compare with 0.05</th>
<th>Result of model</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERT</td>
<td>0.002694</td>
<td>0.014990</td>
<td>0.179746</td>
<td>0.8575</td>
<td>Greater</td>
<td>Not-Effective</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.000321</td>
<td>0.002336</td>
<td>0.137289</td>
<td>0.8909</td>
<td>Greater</td>
<td>Not-Effective</td>
</tr>
<tr>
<td>LEV</td>
<td>-3.41 E -0.6</td>
<td>2.73 E -0.6</td>
<td>-1.247929</td>
<td>0.2128</td>
<td>Greater</td>
<td>Not-Effective</td>
</tr>
<tr>
<td>C</td>
<td>0.764494</td>
<td>0.010949</td>
<td>69.82108</td>
<td>0.0000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>futuristic Watson Statistics</td>
<td>1.24</td>
<td>Errors are not in the correlative model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coefficient of model determination</td>
<td>0.0048</td>
<td>40 percent of return on sales changes are indicated as meaningful by independent variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher statistic</td>
<td>0.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The meaningfulness (significance) level of model</td>
<td>0.61</td>
<td>The linearity of model is not confirmed. In other words, the assumption is rejected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8.2 Second assumption
There is a meaningful (or significant) relationship between the effective tax rate and the level of mandatory disclosure of financial statements of listed companies in Tehran Stock Exchange.

A. F Limer model test of second primary assumption- the mandatory disclosure of productive companies:

\[ MFIDt = \alpha + \beta_1 ERTt + \beta_2 FSizejt + \beta_3 Levjt + \varepsilon \]

<table>
<thead>
<tr>
<th>The amount of possibility value (PV)</th>
<th>Freedom degree</th>
<th>The amount of F statistic test</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000</td>
<td>(49 and 195)</td>
<td>2.38</td>
</tr>
</tbody>
</table>

Therefore, in this section, the forth assumption with the above model will be tested using regression with panel method. The self-evaluated model with panel method has two consistent and random effects. For selecting one of these types, the Hasman test was used as follows:

<table>
<thead>
<tr>
<th>The amount of possibility value (PV)</th>
<th>Freedom degree</th>
<th>The amount of X² statistic test</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.63</td>
<td>3</td>
<td>1.68</td>
</tr>
</tbody>
</table>

As it was seen, the results of Hasman test indicate that the most suitable method for estimating model in panel data is random effects method. The results of research model estimation with random effects are provided in following table for testing the second assumption.

B. The evaluation of second assumption model – the mandatory disclosure of productive companies
The results of model estimation with panel regression model (dependent variable: the mandatory disclosure index of productive company) show that: the increment or decrement in ERT variable has effect on the mandatory disclosure of productive companies because the meaningfulness level for these variables with t statistics is than -0.24 and 0.007 which is lower than 0.5. So, as a unit increment in this variable, the mandatory disclosure index will decrease 0.04. The increment or decrement in SIZE variable has effect on the mandatory disclosure of productive companies because the meaningfulness level for these variables with t statistics is than 1.17 and 0.04 which is
lower than 0.5. So, as a unit increment in this variable, the mandatory disclosure index will decrease 0.4. the increment or decrement in ERT, SIZE and LEV variables do not have any effect on the voluntary disclosure of productive companies because the meaningfulness level for these variables with t statistics is 0.62 and 0.53 which is greater than 0.05. The first assumption is confirmed in general sense.

Table 7: The results of model estimation with panel model with random effects (dependent variable: the mandatory disclosure index of productive companies)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Variable coefficients</th>
<th>Standard deviation</th>
<th>T statistics</th>
<th>Sig</th>
<th>Compare with 0.05</th>
<th>Result of model</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERT</td>
<td>-0.04054</td>
<td>0.016577</td>
<td>-0.244542</td>
<td>0.0070</td>
<td>Lower</td>
<td>Effective</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.04209</td>
<td>0.003584</td>
<td>1.174349</td>
<td>0.0414</td>
<td>Lower</td>
<td>Effective</td>
</tr>
<tr>
<td>LEV</td>
<td>1.14 O -0.5</td>
<td>1.82 O 0.5</td>
<td>0.625310</td>
<td>0.5324</td>
<td>Greater</td>
<td>Not-Effective</td>
</tr>
<tr>
<td>C</td>
<td>0.215831</td>
<td>0.016923</td>
<td>12.75360</td>
<td>0.0000</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Futuristic Watson Statistics

<table>
<thead>
<tr>
<th>Coefficient of model determination</th>
<th>0.57</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisher statistic</td>
<td>0.47</td>
</tr>
</tbody>
</table>

The meaningfulness (significance) level of model

| 0.61 | The linearity of model is confirmed. In other words, the assumption is not rejected |

9. Functional recommendations

9.1 According to the research results, the following recommendations are provided:

- Making policy by relevant officials about determining the effective tax rate regarding to the results of conducted research in order to country’s economic development; and fairly measuring the effective tax rate leads to prevention from tax evasion and tax pressure decrement on producers and increment in economic units activity mass.

- The government can mainly lead to a mechanism creation so that can determine the justice and actual taxes from disclosed financial statements in Stock Exchange by decreasing the effective tax rate of listed companies in Stock Exchange through the tax affairs organization of country.

- Using its results in planning and policy-making for country's tax affairs organization to provide scores (decreasing the effective tax rate) for listed companies in Stock Exchange to encourage other companies to register in the Stock which is used for collecting the tax revenues and optimizing the identification methods.
• The research results are usable for optimizing the controlling policies and guiding companies to voluntary disclosure as well as investors, analysts and creditors for Stock Exchange, because Stock Exchange basically provides the more and clearer information and such information can help the resources allocation and their function increment and also financial information disclosure helps the investors to better evaluate the company and ease their consciously decision-making process which its result is increasing the investments toward the producers and finally functional allocation in the market.
• The special notification of Iranian Standard tax composition institution on the listed companies’ performance in Stock Exchange.

9.2 Research recommendations:

• Survey the effects of other tax (or fiscal) law articles on the disclosure level of financial statements.
• Survey the effective tax rate with industry type separation (Pharmaceutical and automotive industries) in financial statements discourse.
• Survey the effective tax rate and comparison between two societies (Productive and service companies)
• Survey the relationship effective tax rate on disclosure quality.

10. Research limitations:

• Some of disclosing companies do not actively use a special financial document or pattern, so the functional capability of this information will be problematic. Although some companies do not use special financial document but they disclosed the reasons of these document lack of functionality, hence they provide information related to the special financial documents and patterns. The problem of functional capability was solved focusing on extractive companies that were participated in supplying commerce and faced with different financial risks.
• Some of financial documents are functional for the statistical society companies but they are not disclosed or partially introduced based on the visibility of trades and relevant events to financial documents.
• Lack of existence of a comprehensive criterion for measuring the disclosure index from Tehran Stock Exchange Organization.
• Lack of accessibility to the information about how to measure the companies’ ranking from Tehran Stock Exchange Organization.
References

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