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**THE EFFECT OF TAX-AVOIDING ON THE INVENTORY EXPENSES OF  
COMPANIES ACCEPTED IN TEHRAN STOCK EXCHANGE MARKET**

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**ABSTRACT**

This study aimed to investigate the effect of tax-avoiding on the inventory expenses of companies accepted in Tehran Stock Exchange Market (TSEM). The researcher attempted to find if there is a relationship between tax-avoiding and inventory expenses of these companies. The correspondents of the study included seventy three (73) companies who were randomly selected from all companies accepted in (TSEM), since 2005 till 2014.

Effective Tax-Rate Scales (ETRS) and Tax-Logbooks Difference were used to measure the tax-avoiding rates. Linear Regression Multiple Variable Analysis (LRMVA) and Variance Analysis (VA) were used to analyze the gathered data statistically. The findings of the study showed that: There was a positive significant relationship between tax-avoiding and inventory expenses of active companies with respect to effective tax rate and tax logbook difference components. furthermore, type of industry has a great effect on tax-avoiding and inventory expenses.

**Keywords:** Tax-avoiding, Inventory expenses, Effective tax rate, tax logbook difference

**INTRODUCTION**

Many recent studies have attempted to analyze the relationship among the gain quality component with tax-avoiding aspect, Hanlon and et al. (2012). This study intended to investigate the relationship between tax-avoiding with the inventory expenses of some companies

accepted by Tehran Stock Exchange Market. There are little evidences showing the effect of tax-avoiding on inventory expenses. Inventors and customers rely on the honest inventors' financial reports that yields to the success and development of the company, Bel and et al. (2003). Many believe the gain quality and manipulating

the financial information increase inventory expenses. On the other hand inventory expenses reflect the accounting information quality of the companies, Heribar and et al. (2010). Some accounting experts cite that manipulating the financial report inventories leads to gain mismanagement and thus increases the danger of inventors, Heninger (2001). It seems that managers' decisions in tax-avoiding play important roles in the inventors' inventories and their reactions to these decisions increases the inventories expenses, Manry and et al. (2007). Of course, inventory expenses increase encourage them to do their job better. This satisfaction yields to the improvement of social, economical and political status of the country.

### RESEARCH METHODOLOGY

This research was a quantitative, scientific, and semi-experience type of study. This type of research is used because the measuring scales are quantitative, Nemazi (2003). The correspondents of the study included seventy three (73) companies accepted by Tehran Stock Exchange Market (TSEM). These companies were randomly selected from all companies related to (TSEM). The research information were library collection and through available memorandum in (TSEM).

### Research Instruments:

Effective Tax-Rate Scales (ETRS) and tax logbooks difference were used to measure the tax-avoiding rates. Linear Regression Multiple Variable Analyzis (LRMVA) and Variable Analyzis (VA) were used to analyze the gathered data statistically. SPSS and Excel software were used to further analyze the gathered data. The financial activities of the companies were under analyzis for the time period since 2002 to 2012.

### DISCUSSION AND FINDINGS

In order to investigate the effect of tax-avoiding on the inventory expenses of companies accepted in Tehran Stock Exchange Market, the researcher hypothesized the following hypothesis: 1) There are positive significant differences among the tax-avoiding of productive companies with different industries: 2) There are positive significant differences among the inventory expenses of productive companies with various industries. 3) There are positive significant differences among the tax-avoiding and inventory expenses of productive companies with respect to effective tax rate and tax logbooks difference components.

To verify the research hypothesis the researcher gathered the finding through library research and analyzing the

companies financial reports and dealing with Tehran Stock Exchange Market. The descriptive information about the productive companies with various industries are presented in Table I. these

information includes computed means, standard deviation, minimum and maximum scales of tax effective rate, tax logbooks difference and inventory expenses.

**Table-I: Descriptive Information of Productive Companies Accepted by (TSEM)**

Components	Mean $\bar{X}$	Standard Deviation (SD)	Minimum Scale	Maximum Scale
Tax Effective Rate	0.031	0.028	0.0	0.371
Tax Logbook Difference	0.046	0.111	-0.697	1.333
Inventory Expense	5.741	0.672	3.254	8.294
Total Obligated Items	10.509	1.850	1.386	16.527
Size of Inventory Unit	0.13	0.337	0.0	1
Size of Company	5.661	0.652	3.435	8.031
Reliability Rate	0.730	0.224	0.008	2.829

Based of the descriptive information, it was found out that thirteen (13) percent of the companies are under the inventory of Government Bureau of Inventory (GBI). As it is shown in Table-I, two components of obliged items and tax effective rate have the maximum and minimum vast distribution respectively. Further the assets of more than half of the companies depend

on their reliabilities allocation. This indicates their dependents to external means of income.

To analyze the first hypothesis single factor variance analysis was used. The analytical findings of the first hypothesis with respect to tax effective rate is presented in table-II.

**Table-II: Analytical Information of the First Hypothesis with Respect**

Source of change	Sum squares	Degree of freedom	Mean squares	F-Test	Sig	Size of effect	Statistics potential
Test	0.124	4	0.031	47.230	0.000	0.207	1
Effect (main) of groups	0.474	725	0.001				
Remaining Error	0.598	729					
Loon's Test	Hypothesis	F-Test	DF-1	DF-2	significance		
	First	5.771	4	725	0.000		
Kelmogrof-Esmirnof's test			Z-test	0.602	significance		0.272

As it is shown in table-II, based on the Loon's level of significance ( $0.000 < 0.05$ ) there is a positive significant difference between tax avoiding of productive companies with various industries, with

respect to tax effective rate. The analytical findings of the first hypothesis with respect to tax logbook difference of productive companies are presented in table-III.

**Table-III: Analytical Information of the First Hypothesis based on tax logbook difference**

Source of change	Sum of squares	Degree of freedom	Mean squares	F-Test	Sig	Size of effect	Statistics potential
Test	0.153	4	0.038	3.128	0.014	0.017	0.818
Main Effect of	8.883	725	0.012				

groups							
Remaining Error	9.036	729					
Loon's Test	Hypothesis	F-Test	DF-1	DF-2	significance		
	First	4.635	4	725	0.001		
Kelmogrof-Esmirnof's Test		Z-test	0.138	Significance	0.458		

As it is shown in table-III, based on the Loon's test significance  $0.001 < 0.05$ , there is a positive significant difference between tax-avoiding of productive companies with

respect to tax logbook difference. The analytical findings of second hypothesis are presented in table-IV.

Table-IV: Analytical information of tax inventory of companies

Source of change	Sum of squares	Degree of freedom	Mean squares	F-Test	Sig	Size of effect	Statistics potential
Test	17.411	4	4.353	10.097	0.000	0.053	1
Main Effects of groups	312.524	725	0.431				
Remaining Error	329.955	729					
Loon's Test	Hypothesis	F-Test	DF-1	DF-2	significance		
	second	0.181	4	725	0.948		
Kelmogrof-Esmirnof's Test		Z-test	1.232	significance	0.096		

As it is shown in table-IV, based on the Kelmogrof's significance,  $0.096 < 0.05$ . There is a significant difference between the inventory expenses of productive companies accepted by TESM.

The analytical information of third hypothesis with respect to tax effect rate is presented in table-V.

Table-V: The Regression Analyzis of Tax-avoiding and Inventory Expenses with respect to tax effective rate.

Variables	Coefficient	Standard Error	T-test	Level of significance
Constant value	4.9821	0.2331	21.3691	0.0000
Tax effective rate	-3.2669	0.9131	-3.5780	0.0004
Total obliged items	-0.0266	0.0183	-1.4480	0.1481
Size of inventory unit	-0.0722	0.0711	-1.0152	0.3103
Size of company	0.1544	0.0518	3.0012	0.0028
Reliability rate	0.3715	0.1171	3.1714	0.0016
R <sup>2</sup>	R <sup>2</sup> <sub>adi</sub>	Watson-test	F-test	Significance
0.1093	0.0919	1.6767	6.2703	0.0000
Chaw-test		35.217053	significance	0.0001
Hasman-test		3.841505	significance	0.5725

As it is shown in table-V, there is a negative relationship between tax-avoiding and inventory expenses. Furthermore there are positive relationship among variables, size of company, reliability rate and negative relationship among variables, tax

effective rate and total obliged items. The regression analyzis of tax-avoiding and inventory expenses with respect to tax logbooks difference are presented in table-VI.

Table VI: the regression analysis of tax avoiding and inventory expenses with respect to tax logbooks difference

Variables	Coefficients	Standard Error	T-value	Level of significance
Constant value	4.7240	0.2220	21.2719	0.0000
Tax-logbook difference	0.5994	0.2404	2.4929	0.0129
Total obliged items	-0.0264	0.0184	-1.4328	0.1523
Size of inventory unit	-0.0764	0.0714	-1.0696	0.2851

Size of company	0.1421	0.0525	2.7063	0.0070
Reliability rate	0.6460	0.1175	5.4967	0.0000
R <sup>2</sup>	R <sup>2</sup> <sub>adj</sub>	Watson-value	F-value	Level of significance
0.1012	0.0836	1.6680	5.7513	0.0000
Chaw-test		31.9773	Level of significance	0.0002
Hasman-test		2.9932	Level of significance	0.7010

As it shown in table-VI, there is positive significant relationship between tax-avoiding and inventory expense with respect to tax logbooks difference. Furthermore, this relationship between size of company and reliability rate is positive significant but between total obliged items and size of inventory unit is negative significant.

## CONCLUSION

The findings of the first hypothesis indicated that there was a positive significant difference among tax-avoiding of companies with respect to tax effective rate. There was also a significant difference among tax-avoiding of productive companies with respect to tax logbooks difference. The findings of second hypothesis showed that there was a significant difference between the inventory expense of productive companies. Finally, the findings of the third hypothesis showed that there was a negative significant relationship of tax-avoiding and inventory expenses of companies with respect to tax effective rate but negative relationship with respected to tax logbooks difference. Finally the researcher concluded that tax-

avoiding increases the danger of inventory expenses this is cited with the research findings of Heltzer and Shelton (2011). In this relations the findings of Joos and et al. (2000) showed that interest coefficient response (ICR) of companies with greater risk of tax-avoiding is less than the others. In a similar findings, Ayers and et al. (2009) cited that companies with greater risk of inventories have less gains.

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