



Tax Avoidance and Institutional Ownership: Active vs. Passive Ownership

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ABSTRACT

Income tax is one of the most important costs of companies and it is usually considered as a cost that should not be paid. One of the most noticeable and influential factors in tax avoidance is corporate ownership structure. With an emphasis on institutional ownership and its types in this paper, it is attempted to measure the effect of this ownership and its types on corporate tax avoidance. For this end, institutional ownership was divided into two active and passive groups and the effect of each type on tax avoidance (book tax avoidance and cash tax avoidance) was examined by a sample of firms listed in Tehran Stock Exchange during the years 2014 to 2018.

The findings illustrated that institutional ownership generally had a positive effect on tax avoidance. Having divided total institutional ownership into active and passive, it became clear that active institutional owners also had a positive effect on tax avoidance and inspired firms to avoid paying taxes but the effect of passive owners on tax avoidance was negative. Moreover, lead-lag tests of the direction of causality suggest that institutional ownership leads to more tax avoidance and not the reverse.

Keywords:

Institutional Ownership, Active Institutional Ownership, Passive Institutional Ownership, Tax Avoidance.



1. Introduction

In most countries, a major part of government's revenue sources is financed through taxes. Tax is expenses that are imposed by the government on all profit-making business entities. If corporations and legal entities are considered as entities operating for profit and business, it can be expected to seek some solutions to reduce their paid taxes (Pourheidari, Fadavi and Amininia, 2013). Income tax is one of the most important costs of companies and it is usually considered as a cost that should not be paid. Therefore, companies undertake tax avoidance to reduce their tax expenses to the desired level. So, tax avoidance in countries makes the countries' tax revenues always less than it is estimated. One of the most significant issues currently being considered in most studies is the issue of tax avoidance and effective factors and achieved results. Theoretically, the objective of tax avoidance is to attempt to reduce paid tax (Hanlon et al., 2010). Indeed, tax avoidance is making use of legal gaps in tax laws in order to reduce tax. Tax avoidance is obviously a legal activity and located in definitive extent for using tax benefits and there is generally no restrictive law to control them. Therefore, many companies seem to be involved in tax avoidance. For this reason, it is important to determine the factors influencing the level of corporate tax avoidance (Jam, 2000).

One of the most noticeable and influential factors in tax avoidance is corporate ownership structure. With an emphasis on institutional ownership and its types in this paper, it is attempted to measure the effect of this ownership and its types on corporate tax avoidance.

With the division of ownership from management, the managers run the company as an agent of the owners (shareholders). With the formation of agency relationship, a conflict of interest between managers and shareholders will be created. It means that managers may take opportunistic behaviors and make decisions that are in their own interests and against the interests of shareholders. The need for corporate governance arises from the conflict of potential interests among the current people within the corporate structure. Berle and Means (1932) stated that the absence of corporate governance mechanisms allows managers to move in the direction of their own interests rather than shareholders' interests.

One of the mechanisms of external control affecting corporate governance, which has an increasing importance, is the emergence of institutional investors. This group of shareholders has considerable influence in these companies with respect to ownership of a significant portion of the companies' stock and can affect their procedures (including accounting procedures and financial reporting). Also, since institutional owners constitute the largest group of shareholders, their role in monitoring the procedures taken by managers is of paramount importance and their presence in the shareholder's incorporation is expected to be effective for corporate procedures (including tax avoidance).

But what remains is: "Do all institutional owners have the same incentive to monitor accounting procedures?" Previous studies (Nevissi and Naiker, 2006; Cornett and Syrin, 2007; ...) indicated that institutional investors are not the same and have no equal incentives to monitor the procedures taken by corporates. Similar to the conducted studies, this study investigated the relationship between types of institutional ownership and corporate tax avoidance procedure by dividing institutional shareholders into passive shareholders and active shareholders.

2. Literature Review

Different definitions of tax avoidance have been proposed by researchers. Hanlon and Heitzman (2010) defined tax avoidance as tax cuts for dollar from pre-tax profits. Agrawal (2007) introduced tax avoidance as a tax aversion activity without transgressing laws which is in the form of tax laws. Some researchers, like Wang (2010), believe that tax avoidance is indicated as a set of tax strategies and tax avoidance activities include a range of corporate tax planning which involve both purely legal activities and aggressive transaction and activities (such as aggressive tax shields).

In general, common point in some tax avoidance definitions is tax cuts (Dyreg, et al., 2008). The European Court of Justice (UCJ) defined tax avoidance as artificial intervention with the purpose of circumventing the tax law and described tax avoidance activities in the following four basic techniques:

- Deferring payments related to tax debt
- Identifying an income which is subjected to lower rates

- Permanent removal of tax debt
- Transferring income from a person with a high tax rate to a person who has to pay lower tax.

One of the influencing factors on tax avoidance is institutional ownership (Hassan et al., 2016). In accordance with Bushee's (1998) definition, institutional investors are large investors such as banks, insurance companies, investment companies, and so on. It is generally assumed that the presence of institutional investors may lead to a change of the behavior and procedures of companies. This comes from monitoring activities carried out by these investors (Velury and Jenkins, 2006). The relationship between these two variables is discussed in the following.

2.1. Institutional Ownership and Tax Avoidance

Sitinjak et al, (2019) showed that that corporate social responsibility further motivates controlling shareholders to practice tax avoidance in manufacturing companies in Indonesia. Slemord (2004), Crocker and Slemord (2005) and Chen and Chu (2005) addressed the problem of representation in tax avoidance and stated that managers' and shareholders' preferences may not be equal to the tax avoidance' and the managers do not act in the interest of shareholders. Kovermann and Velte (2019) found that various aspects of corporate governance, such as incentive alignment between management and shareholders, ownership structure and capital market monitoring and other stakeholders' pressure have a strong influence on corporate tax avoidance.

Bradshaw, Liah and Ma (2016) indicated that ownership structure affects tax avoidance so that the tax avoidance procedure is biased toward the demands of the controlled shareholders of the company. Mahentarian and Casipila (2012) and Anwar, Salihu, and Obaid (2014) achieved a positive relation between the state ownership variable and tax avoidance.

Khan, Srinivasan and Tan (2016) found that institutional ownership increased corporates tax avoidance. In examining the relation between these two variables in Malaysian corporates, Kholbadalov (2012) found that there was no significant relation between these two variables. Hassan et al., (2016)

achieved a negative relationship between foreign institutional owners and tax avoidance.

As a result, the first two hypotheses are:

- ✓ *Hypothesis 1: Ceteris paribus, there is a significant relationship between institutional ownership and corporate tax avoidance.*
- ✓ *Hypothesis 2: Ceteris paribus, there is a significant relationship between institutional ownership and corporate cash tax avoidance.*

2.2. Types of Institutional Ownership and Tax Avoidance

On the basis of evidences from previous researches (Nevissi and Naiker, 2006; Cornett and Syrin, 2007,) the effects of institutional investors on the taken procedures of company are not the same and they do not have the same incentives to monitor these procedures. Consequently, institutional investors can be divided into passive and active groups.

Passive institutional investors have a high portfolio turnover and a momentary trading strategy. For example, they buy stocks with good news and sell stocks with bad news. For these owners, the current stock price is very important and has a short-term and transient view and prefers the current performance to the long-term performance of the company. Therefore, there is not much incentive to monitor management and have a representative on the board of directors of the investee company, since it is impossible to have benefits of this monitoring in short-term (Potter, 1992). Excessive focus of these shareholders on current performance and profits may provide incentives for management optimism in delivering accounting profits in order to achieve short-term goals. The owners, therefore, seem to be more willing to tax avoidance.

In contrast, active institutional investors have a long-term view and consider the long-term performance of the company. So there is a strong incentive to have a representative on the board of directors of the investee company. Low turnover of strong investors' portfolio reflects the motivation of these shareholders to maintain stocks and encourage managers to improve operations and increase shareholder wealth. These shareholders provide incentives for greater management responsibility by actively monitoring management and its decisions. Almazan et al., (2005) found that the more active

institutional ownership level, the more the level of monitoring on the manager and taken procedures by him. As a result, these owners with long-term view are less likely to avoid tax.

Hassan et al. (2016) found a negative relationship between foreign institutional owners and tax avoidance. Moreover, they indicate that this negative relationship is more pronounced when institutional ownership is long-term and active. Cheng et al. (2012) also showed that passive and short-term institutional owners lead corporates to more tax avoidance. Khurana and Moser (2013) also showed that longer-term institutional owners are less likely to cope with corporate tax avoidance.

In Iran, little research has been conducted on active and passive institutional owners, some of which are as follows:

In investigating the relation between owners and conservatism, Mehrani, Moradi, and Alexander (2010) found that there was a positive relationship between institutional ownership and conservatism of earnings. In other words, by increasing the level of institutional ownership, corporates tend to use more conservatism procedures. Consequently, it can be claimed that these shareholders are active monitors who encourage managers to report higher quality earnings (through the use of more conservative accounting procedures). After separation of institutional owners to active and passive based on representation of the board of directions, there was also a positive and significant relationship between passive institutional ownership and earnings conservatism. However, no reliable results were obtained in relation with active institutional ownership. In another article in 2017, they figured out that institutional ownership has a positive effect on earnings quality. But, after separating institutional ownership types, they found that only active institutional owners improve earnings quality and passive owners have no effect on earnings quality. Aligholi and Jalilian (2012) found that in companies in which profits are not managed effectively, long-term institutional investors are associated with the level of increasing discretionary accrual. Moreover, in companies in which profits are managed effectively, they are negatively in line with increasing discretionary accrual.

According to theoretical background and literature review of the research, other hypotheses are proposed:

- ✓ **Hypothesis 3:** *Ceteris paribus, there is a significant relationship between active institutional ownership and corporate book tax avoidance.*
- ✓ **Hypothesis 4:** *Ceteris paribus, there is a significant relationship between active institutional ownership and corporate cash tax avoidance.*
- ✓ **Hypothesis 5:** *Ceteris paribus, there is a significant relationship between passive institutional ownership and corporate book tax avoidance.*
- ✓ **Hypothesis 6:** *Ceteris paribus, there is a significant relationship between passive institutional ownership and corporate cash tax avoidance.*

3. Methodology

In the field of accounting research, the topic of this research is evidence-based, is retrospective in terms of nature and is applicable in terms of purpose. The regression models for testing the hypotheses are derived from the research of Hassan et al., (2016). The first hypothesis of the research is tested with the following model (Hassan et al., 2016):

$$BTA = \alpha + \beta_1 INST + \beta_2 SIZE + \beta_3 LEV + \varepsilon \quad (1)$$

Where:

BTA: Corporate book tax avoidance.

INST: Percentage of common shares held by institution owners at the beginning of year.

SIZE: Size (Natural Logarithm of Assets).

LEV: Leverage.

The second hypothesis of the research is tested with the following model (Hassan et al., 2016):

$$CTA = \alpha + \beta_1 INST + \beta_2 SIZE + \beta_3 LEV + \varepsilon \quad (2)$$

CTA: Corporate cash tax avoidance.

The third and fifth hypotheses of the research are tested with the following model (Cheng et al., 2012; Khurana & Moser, 1013):

$$BTA = \alpha + \beta_1 AC + \beta_2 PASS + \beta_3 SIZE + \beta_4 LEV + \varepsilon \quad (3)$$

Where:

AC: percentage of common shares held by active institution owners (institutions with representation on board of directors).

PASS: percentage of common shares held by passive institution owners (institutions without representation on board of directors).

In this research, the size of active and passive institutional ownership was done in accordance with the research of Nevissi and Naiker (2006), and Mehrani, Moradi and Alexander (2010 and 2017). In spite of many conceptual definitions provided in the theoretical background and literature review operational definitions of active and passive institutional owners are limited, and the division based on having a representative on the board of directors is one of the most common ways to size active or passive institutional ownership (Nevissi and Naiker, 2006).

The fourth and sixth hypotheses of the research are tested with the following model (Cheng et al., 2012; Khurana & Moser, 1013):

$$CTA = \alpha + \beta_1 ACINST + \beta_2 INACINST + \beta_3 SIZE + \beta_4 LEV + \varepsilon \quad (4)$$

Two effective rates of book tax avoidance (BTA) and cash tax avoidance (CTA) was used in order to investigate corporate tax avoidance (TA) (Hanlon & Heitzman, (2010) ; Dyreng et al., (2010) and Khani and Imani and Molla, (2013)).

The effective rate of book tax avoidance is the ratio of the total cost of profit tax before tax:

$$GAAP ETR_{i,t} = (Tax\ expense_{i,t} / PreTax\ Income_{i,t})$$

Previous studies showed that the effective rate of the lower book tax avoidance reflects greater tax avoidance (Rego, 2003).

The effective rate of cash tax avoidance is the ratio of payable income tax on pre-tax profits:

$$CETR_{i,t} = (CashTaxesPaid_{i,t+1} / PreTaxIncome_{i,t})$$

$CETR_{i,t}$: The effective rate of corporate cash tax avoidance: i period: t

$CashTaxesPaid_{i,t+1}$: Corporate payable cash tax i in period t+1

$PreTaxIncome_{i,t}$: Pre-tax profits i in period t

The effective rate of book tax will not change through tax policies which postpone the payment of tax. Moreover, where policy and tax planning are not considered, such as a change in the deductible account or a change in the tax precautionary reserve, they can affect this measure. However, effective rate of cash tax are affected by delayed policies (postponing the tax payment) and a change in accounting obligations and estimates (such as probable tax reserves) does not affect it.

The statistical population of this research is the companies listed in Tehran Stock Exchange for the years 2014 to 2018.

All companies in the statistical population that have the following criteria are selected in the sample:

- They should be listed in Tehran Stock Exchange during 2014 - 2018.
- Financial year end of the company should be the end of Isfand.
- In the expected period, companies should not change their financial year.
- Due to the conditions for estimating the effective tax rates and since the effective tax rates of corporations are unprofitable and distorted and hard to interpret, corporates which their pre-tax profits are positive during the study period placed in the sample.
- Companies should not be part of the financial group companies including banks, investment companies, holding companies and leasing companies, since disclosure of financial information and company decision varies.

According to the above mentioned conditions, the number of samples consists of 102 companies.

4. Results

4.1. Descriptive Statistics

A summary of descriptive statistics status related to model variables after screening and deletion of outliers is provided in the following table.

Based on the above table, the mean of book tax avoidance and cash tax avoidance of samples are 0/2534 and 0/0662 respectively. The mean of the percentage of common stocks held by passive institutional owners and active ones is 0/1824 and 0/6233 and 0/1824 respectively. This illustrates that the majority of institutional ownership of the samples is active and a small percentage of them are passive.

The mean of leverage and size are 4/4344 and 0/5767 respectively.

Table1. Descriptive Statistics of Research Variables

Kurtosis	Skewness	Standard Deviation	Minimum	Maximum	Mean	Variable
60/444	6/713	0/1540	0/0087	0/7441	0/0662	CTA
0/689	1/134	0/2162	0/065	0/9042	0/2534	BTA
2/663	1/645	0/1862	0/0032	0/6504	0/8057	INST
0/479	0/744	0/5632	0/3463	0/6867	0/6233	AC
2/417	1/008	0/0647	0/0301	0/5125	0/1824	PASS
0/609	0/744	0/4581	3/5821	6/0055	4/4344	Size
0/122	0/444	0/0327	0/1293	0/7769	0/5767	LEV

4.2. Analytical Statistics

In this study, ordinary least squares method is used in order to estimate the model's parameters. This method is based on the assumption that the dependent variable of the research has a normal distribution, so that the abnormal distribution of the dependent variable leads to violation from the assumptions of this method and failed to provide accurate results. Hence, it is necessary to test normalization of the distribution of this variable. The normality of the residuals of the regression model is one of the regression assumptions which indicate the validity of the regression tests. So, the normalization of the variables depends on the normalization of the model residuals (the difference between the estimated values and the actual values). It is required to control the normality of the dependent variable before estimation of the parameters. If this is not the case, a suitable solution (like converting) should be adopted to normalize them. This issue is examined through Kolmogorov-Smirnov test (K-S

test) in this study. The results of the K-S test for book tax avoidance and cash tax avoidance variables of sample companies are presented in table2.

Since the significant level K-S statistic of book tax avoidance and cash tax avoidance variables is more than 0/05, the normality of distribution of these variables is accepted at 95% confidence level.

In the following, the relationship between research variables and their correlation will be investigated with the use of Pearson correlation coefficient. The correlation coefficients matrix between the research variables is presented in Table 3.

According to the results of Pearson's statistic, corporate cash tax avoidance shows a significant negative correlation with their size. The percentage of common stocks held by active institutional owners also has a positive and significant correlation with size and leverage. Size also showed a positive and significant correlation with leverage.

Table2. The Results of the Test of Normality of the Dependent Variables

Significant Level	(K-S) statistic	Variable
0/798	0/646	BTA
0/528	0/810	CTA

Table3. Pearson correlation coefficients matrix between research variables

	BTA	CTA	INST	AC	PASS	Size	LEV
BTA	1						
CTA	-0/012 (0/765)	1					
INST	0/021 (0/597)	-0/066 (0/102)	1				
AC	0/001 (0/972)	0/001 (0/975)	0/006 (0/888)	1			

	BTA	CTA	INST	AC	PASS	Size	LEV
PASS	0/032 0.432)	0/001)0.980(0/067)0.098(0/040)0.317(1		
Size	0/050 (0/214)	-/133 (0/001)	0/033 (0/415)	0/150 (0/000)	0/030 (0/454)	1	
LEV	0/001 (0/977)	0/040 (0/323)	0/009 (0/818)	0/129 (0/001)	-0/035 (0/392)	0/142 (0/000)	1

At first, the necessary pattern for estimating the model is determined for each of the research hypotheses, and then the research model is estimated and the results are interpreted. In order to determine whether the panel data method would be effective in estimating the model in question, Limer test are used. Also, in case of panel data approval, Hausman test is

used with the purpose of determining which method (fixed effects or random effects) is more appropriate to estimate (the recognition of fixed or random cross-sectional differences).

With regard to the test results presented in Table 4, the first model is estimated using the panel data method of fixed effects.

Table4. Test Results of the First Model (BTA and Institutional Ownership)

Prob.	t-Statistic	Coefficient	Variable's name
0/3180	0.9996	0.1502	Fixed
0/0448*	2.4605	0.0565	INST
0.0074*	3.1037	0.0019	Size
0.0005*	-4.7011	-0.1734	LEV
0.4884		R ²	
2.45		Durbin-Watson	
1.7691 (0.6578)		Jarque-Bera statistic)Prob. (Significant level	
12.9187 (0.0000)		F-statistic)Prob.(Significant level	
3.9294 (0.0286)		F Limer-statistic)Prob.(Significant level	
1.0906 (0.0193)		Hausman statistic)Prob.(Significant level	

T-statistics are shown in parentheses. * denotes significance at 0.01level.

Since the probability value of F-statistic is less than 0/05 (0.0000), 95% of the significance of the whole model will be admitted. Determination coefficient of the model also suggests that 48/84% of corporate book tax avoidance is described by the variables included in the model. Since the probability of t-statistic for the coefficient of the percentage of common stocks held by institutional owners is less than 0/05 (0/0448), the existence of significant relationship between institutional ownership and book tax avoidance will be admitted at the 95% confidence level. So the first research hypothesis is supported and it can be stated that there is a significant relationship between institutional ownership and corporate book tax avoidance with 95% confidence. The positive coefficient of this variable (0/0565) exhibits a direct relationship between institutional ownership and corporate book tax avoidance, so that institutional

ownership and corporate book tax avoidance increased by one unit to 0/0565. With respect to analysis of the first hypothesis, it can be concluded that there is a significant relationship between institutional ownership and corporate book tax avoidance.

The results of Jarque-Bera test indicated that the residuals obtained from the estimation of the research model have normal distribution at the 95% confidence level, so that the probability corresponding to this test (0/6578) is larger than 0/05. Durbin-Watson statistic is 2/45 and it can be concluded that the residuals are independent since it is between 1/5 and 2/5.

In the following, the results related to second model will be provided. According to the test results obtained in Table5, the second model is estimated by using the panel data method of fixed effects.

Table5. Test Results of the Second Model (CTA and Institutional Ownership)

Prob.	t-Statistic	Coefficient	Variable's name
0.0003	3/6423	0/1120	Fixed
0/0000*	4/9259	0/0367	INST
0/0000*	-9/2768	-0/0335	Size
0/0000*	4/0930	0/1919	LEV
0/7511		Determination coefficient	
2/28		Durbin-Watson	
1/5782 (0/4895)		Jarque-Bera statistic)Prob. (Significant level	
20/103 (0/0000)		F-statistic)Prob.(Significant level	
1/1777 (0/326)		F Limer-statistic)Prob.(Significant level	
2/7569 (0/0006)		Hausman statistic)Prob.(Significant level	

T-statistics are shown in parentheses. * denotes significance at 0.01level.

Considering the significance of coefficient, since the probability of t-statistic for the percentage of common stocks held by institutional is smaller than 0/05 (0/000), it can be supported that there is a significant relationship between institutional ownership and cash tax avoidance at the 95% confidence level. Therefore, the second hypothesis is accepted and it can be mentioned that there is a significant relationship between institutional ownership and cash tax avoidance with 95% confidence. The positive coefficient of this variable (0/0367) infers a direct relationship between

institutional ownership and cash tax avoidance, so that institutional ownership and corporates cash tax avoidance increased by one unit to 0/0367. With respect to analysis of the second hypothesis, it can be concluded that there is a significant relationship between institutional ownership and corporate cash tax avoidance.

In the following, the results related to third model will be provided. According to the test results obtained in Table6, the third model is estimated by using the panel data method of fixed effects.

Table6. Test Results of the Third Model (BTA and Institutional Ownership Types)

Prob.	t-Statistic	Coefficient	Variable's name
0/2078	1/2612	0/2366	Fixed
0/0010*	3/7543	0/0164	AC
0/0187*	-2/5122	-0/0596	PASS
0/9567	-0/0543	-0/0010	Size
0/0006*	4/6093	0/1515	LEV
0/4471		Determination coefficient	
2/24		Durbin-Watson	
1/3211 (0/2478)		Jarque-Bera statistic)Prob. (Significant level	
14/8317 (0/0000)		F-statistic)Prob.(Significant level	
4/8374 (0/0027)		F Limer-statistic)Prob.(Significant level	
2/9226 (0/0008)		Hausman statistic)Prob.(Significant level	

T-statistics are shown in parentheses. * denotes significance at 0.01level.

Since the probability of t-statistic for the percentage of common stocks held by active institutional owners is smaller than 0/05 (0/0010), it can be supported that there is a significant relationship between active institutional ownership and book tax avoidance at the 95% confidence level. Therefore, the third hypothesis is accepted and it can be mentioned that there is a significant relationship between active institutional ownership and book tax avoidance with 95% confidence. The positive coefficient of this variable (0/0164) infers a direct relationship between active institutional ownership and book tax avoidance, so that active institutional ownership and corporate book tax avoidance increased by one unit to 0/0164. With respect to analysis of the third hypothesis, it can be concluded that there is a significant relationship between active institutional ownership and corporate book tax avoidance.

Since the probability of t-statistic for the percentage of common stocks held by passive

institutional owners is smaller than 0/05 (0/0187), it can be supported that there is a significant relationship between passive institutional ownership and book tax avoidance at the 95% confidence level. Therefore, the fifth hypothesis is accepted and it can be mentioned that there is a significant relationship between passive institutional ownership and book tax avoidance with 95% confidence. The negative coefficient of this variable (-0.0596) infers a converse relationship between passive institutional ownership and book tax avoidance, so that passive institutional ownership and corporate book tax avoidance decreased by one unit to 0/0596. With respect to analysis of the fifth hypothesis, it can be concluded that there is a significant relationship between passive institutional ownership and corporate book tax avoidance.

In the following, the results related to fourth model will be provided. According to the test results obtained in Table7, the fourth model is estimated by using the panel data method of fixed effects.

Table7. Test Results of the Fourth Model (CTA and Institutional Ownership Types)

Prob.	t-Statistic	Coefficient	Variable's name
0/0032	2/9574	0/1101	Fixed
0/0044*	2/0572	0/0002	AC
0/0005*	-3/3108	-0/0315	PASS
0/0000*	-7/9180	-0/0307	Size
0/0002*	3/7066	0/1784	LEV
0/9654		Determination coefficient	
2/28		Durbin-Watson	
1/8689 (0/7458)		Jarque-Bera statistic)Prob. (Significant level	
11/6457 (0/0000)		F-statistic)Prob.(Significant level	
2/0857 (0/0036)		F Lemmer-statistic)Prob.(Significant level	
2/8754 (0/0189)		Hausman statistic)Prob.(Significant level	

T-statistics are shown in parentheses. * denotes significance at 0.01level.

Since the probability of t-statistic for the percentage of common stocks held by active institutional owners is smaller than 0/05 (0/0044), it can be supported that there is a significant relationship between active institutional ownership and cash tax avoidance at the 95% confidence level. Therefore, the fourth hypothesis is accepted and it can be mentioned that there is a significant relationship between active

institutional ownership and cash tax avoidance with 95% confidence. The positive coefficient of this variable (0.0002) infers a direct relationship between active institutional ownership and cash tax avoidance, so that active institutional ownership and corporate cash tax avoidance increased by one unit to 0/0002. With respect to conducted analysis related to the fourth hypothesis, it can be concluded that there is a

significant relationship between active institutional ownership and corporate cash tax avoidance.

Since the probability of t-statistic for the percentage of common stocks held by passive institutional owners is smaller than 0/05 (0/0005), it can be supported that there is a significant relationship between passive institutional ownership and cash tax avoidance at the 95% confidence level. Therefore, the sixth hypothesis is accepted and it can be mentioned that there is a significant relationship between passive institutional ownership and cash tax avoidance with 95% confidence. The negative coefficient of this variable (0.0315) infers a converse relationship between passive institutional ownership and cash tax avoidance, so that passive institutional ownership and corporate cash tax avoidance decreased by one unit to 0/0315. With respect to conducted analysis related to the sixth hypothesis, it can be concluded that there is a significant relationship between passive institutional ownership and corporate cash tax avoidance.

4.3. Casualty Tests

The above results point to a positive relationship between tax avoidance and institutional ownership in general and active one in particular. However, there is a negative correlation between passive one and tax avoidance. These findings are consistent with monitoring active institutions demanding high tax avoidance.

It is notable that, although the literature has traditionally assumed that tax avoidance level is an outcome of ownership, few studies have proposed that ownership can be the consequence of tax procedures as well (Goh et, al. 2016). Firms with higher tax avoidance can attract investment by institutions as a result of decreasing in cost of equity. The cost of equity is lower for tax-avoiding firms. Tax-avoiding firms can save more money in comparison with those who pay more tax. Therefore, owners are likely to select firms which avoid paying tax, because they benefits from tax savings. Therefore, higher tax avoidance can lead to higher institutional stock holdings. This possible relationship could undermine the claim that institutional ownership acts as a monitoring device that influences companies to avoid paying tax. Therefore, our regression equations are susceptible to having reverse causality problems. This “reverse causality” explanation is plausible because institutional ownership might prefer firms with higher tax avoidance to reduce their own monitoring costs. In addition, tax avoidance and institutions’ monitoring could arise simultaneously, driven by some unknown underlying factor (the “simultaneity” explanation). Therefore, the following tests are performed to provide evidence for the direction of causality between monitoring institutions and tax avoidance:

Table 8. Casualty Tests of Institutional Ownership

Tax Avoidance	INST		
	Lagged (t-1)	Lagged (t-1)	Lagged (t-1)
BTA	2.94 (3.04)*	1.44 (1.51)	2.13 (1.67)
CTA	2.35 (2.99)*	1.39 (1.00)	1.47 (1.13)

Table 9. Casualty Tests of Institutional Ownership Types

Tax Avoidance	AC			PASS		
	Lagged (t-1)	Current (t)	Lagged (t-1)	Current (t)	Lagged (t-1)	Current (t)
BTA	2.28 (3.28)*	0.67 (0.08)	2.18 (0.88)	-4.17 (-3.68)*	-1.90 (-1.05)	-0.55 (-0.77)
CTA	2.43 (3.33)*	0.31 (0.09)	1.22 (0.79)	-5.00 (-3.01)*	-0.88 (-0.84)	-1.03 (-0.81)

T-statistics are shown in parentheses. * denotes significance at 0.01 level, based on t-tests (two-tailed).

A positive correlation was found between tax avoidance and lagged institutional ownership. Moreover, no significant relationships are found between tax avoidance and both lead and current institutional ownership. Although, the results of active ownership are similar to total ownership, passive one is negatively correlated to tax avoidance.

These findings indicate that changes in tax avoidance do not lead to increases in institutional ownership. To sum up, the causality flows from changes in institutional ownership to tax avoidance changes.

5. Discussion and Conclusions

Income tax is one of the most important costs of companies and it is usually considered as a cost that should not be paid. One of the noticeable and influential factors in tax avoidance is corporate ownership structure. With an emphasis on institutional ownership and its types in this paper, it is attempted to measure the effect of this ownership and its types on corporate tax avoidance.

Institutional investors are large investors such as banks, insurance companies, investment companies, and so on. It is generally assumed that the presence of institutional investors may lead to a change of the behavior and procedures of companies. This comes from monitoring activities carried out by these investors. But what remains is: "Do all institutional owners have the same incentive to monitor accounting procedures?" In this study, by dividing the institutional shareholders into two groups of passive shareholders (no representative on the board of directors) and active shareholders (with representative on the board of directors), the relationship between different types of institutional ownership and corporate tax avoidance procedure is also investigated.

The findings illustrated that institutional ownership had a positive effect on tax avoidance. It means that firms which institutional owners are their owners are highly likely to avoid form paying tax. They may have motivation to use their cash in investment projects instead of paying tax. This finding is in line with the results of Hassan et al. (2016) and Khurana and Moser (2013) and contradicts the results of Khan, Srinivasan and Tan (2016), Mahentarian, and Casipila (2012).

Having dividing total institutional ownership into active and passive, it became clear that active institutional owners also had a positive effect on tax avoidance and inspired corporates to avoid paying

taxes but the effect of passive owners on tax avoidance was negative. According to these findings firms whose institutional owners are active, are highly likely to avoid paying tax. In spite of such firms, those ones whose institutional owners are more passive, are highly likely to pay tax because their owners may not place particular emphasis on profitable projects and better future performance. These results are also in line with the results of Khurana and Moser (2013), Hassan et al. (2016). With regard to obtained results, investors and tax authorities in the country can observe institutional ownership and active institutional ownership as a signal of the company's willingness to further tax avoidance.

At last, causality tests indicate that changes in tax avoidance do not lead to increases in institutional ownership. The causality flows from changes in institutional ownership to tax avoidance changes.

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