A Study of Effective Factors on the Decrease of Tax Assertiveness and Tax Diagnostic Difference in Tehran Stock Exchange

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ABSTRACT: The purpose of this research is to study the relation of the effective factors on decreasing tax assertiveness and tax diagnostic difference. The study is based on the analysis of samples include 123 companies listed in Tehran Stock Exchange for the period of 2008 to 2012. The samples are selected through the Systematic Elimination Method. The applied statistical methods for analyzing the hypotheses include the multivariate regression test and F statistics as well as step by step method. In this research , among factors which could be effective on tax assertiveness and tax diagnostic difference, the Own Concentration, Outside directors ratio, income smoothing, independent auditor reporting tax paragraph, prior years adjustments have been studied. The results indicate that the only effectual factor on the tax assertiveness and tax diagnostic difference, among the others, is the adjustments of prior years. In fact there is a meaningful relationship between the prior period adjustments and tax assertiveness and tax diagnostic difference in the companies.
Keywords: Tax Assertiveness and Tax Diagnostic Difference, Tehran, Stock Exchange

ORIGINAL ARTICLE

INTRODUCTION

Income tax expense is one of the most important expenses of the firms. Firms usually make an effort to reduce it to pay less tax to the government and to discharge less liquidity. Mostly, these decisions are taken by the Senior Management and Board of Directors (Khastoo, 2012). According to the Agency theory, Board of Directors always follow their personal benefits that is not necessarily corresponding to all beneficiaries' interests(including, shareholders and government) and they may have tax policies which could lead to imposing some expenses on the shareholders and government. For example they can manipulate the amount of computable income and expense for the tax determination in different years in order to transfer tax expense to future periods. Through accounting policy selection the earning is managed and estimated by executives. They also affect the decisions which are related to the resources allocation (Linck et al., 2006) .The main justification of Board of Directors for making use of Prior years' Adjustments is the better reflection of Changes in the operating environment and investment (Azad et al. 2010), (Specialized Research Centre of Accounting and Auditing, Auditing Organization for Islamic Republic of Iran, 1991). The Adjustments of Prior years' reduce Consistency in financial reporting and the ability of users of financial Statements in precise evaluation of firm Performance (Holthausen et al., 1983).

Board of Directors applies Personal judgment in financial reporting and they make Changes in financial structure. These changes mislead Beneficiaries about firm Performances (Healy et al., 1999).

Literature review

Tax is one of the influential factors in financial information which was common in human societies from long ago, and different forms of its collection was inevitable for the government. Tax issues are the most effective tools in the hands of any government, since they are responsible for their crucial duties (Molaee, 2003). The main sources of income tax are legal entities and corporate income tax (Poor Zamani et al., 2009) .It is expected that calculated accounting income be in agreement with taxable income, because financial information required to calculate the tax is provided by the prepared legal and financial statements which are in accordance with accepted accounting standards, but in practice there is a difference between accounting income by the taxpayer and diagnostic taxable income by auditors of tax. Policies of the reduction of taxable income arose in the financial reporting from late 1990 to early 2000. By manipulating the balance, managers try to reduce the amount of tax payable. Consequently, there will be a gap between declared income (book income) and taxable income. Cross sectional analysis shows that tax policies arose for distortion of financial reporting and the results of empirical research also proves this topic. (Lennox et al., 2012).

Pour-Heydari et al. (2007) in their paper investigated managers' incentives for income

Smoothing using the discretionary accruals (items). Results indicated that the main motivations for income smoothing using the discretionary accruals (items) are incentives such as income tax and deviation in operating activities.

Freise et al. (2008) have studied relation of the taxation and corporate governance. The main result on intended effects of tax provisions is that they are in most cases not suit-able for influencing corporate governance as it is difficult to link the tax measures to specific fact patterns that allow a differentiation between beneficial and harmful behavior.

Sartori (2008) has studied the issue of effects of strategic tax behaviors on corporate governance .He showed that strategic tax policies have a negative impact on corporate governance, because they tend to increase agency costs, transaction costs and they have a negative impact on transparency. Therefore, inevitable plans seem to have a positive impact (on tax compliance, but also) on corporate governance.

Chan et al. (2010) investigate whether departure from a tax-based accounting system towards IFRS convergence in China encourages tax noncompliance and whether weakened book-tax conformity affects the in formativeness of book-tax differences for tax noncompliance. They find that as book-tax conformity decreases, tax noncompliance increases and that the in formativeness of book-tax differences on tax noncompliance attenuates as book-tax conformity weakens. This is an excellent study that utilizes regime changes in taxation and financial reporting.

Balakrishnan et al. (2011) investigated in their research whether aggressive tax planning firms have less transparent information environments .They found that managers increase the volume of disclosure in an attempt to mitigate these transparency problems. Overall, their results suggested that firms face a trade-off between financial transparency and aggressive tax planning thereby potentially explaining why some firms appear to engage in more conservative tax planning than would otherwise be optimal.

Steijver et al. (2011) examined the tax aggressiveness of private family firms, relative to their non-family counterparts. They found that private family firms appear to be less tax aggressive than private non family firms. Results showed that firms with a higher CEO ownership stake are less eager to engage in tax aggressive behavior, while CEOs with a lower ownership share are more eager to engage in tax aggressive behavior. Their results show that the presence of an outside director in the board improves the monitoring effectiveness thereby limiting possible rent extraction behavior by the CEO.

Babajani et al. (2011) in their research have found out that there is no significant difference between average of difference percentage taxable income assertiveness and conclusive in companies that have criteria of corporate governance in comparison with companies that have not criteria of corporate governance, whereas in both groups there is a significant difference between average of difference percentage of taxable income assertiveness and conclusive.

Khastoo (2012) indicated that there is significant relationship between dual chairman-CEO role and out director's ration tax aggressive behavior. Abdoli et al. (2012) investigated effect of corporate governance on the corporate financial leverage. The results indicated that the board independence has an inverse relationship with the ratio of debt (financial leverage).

The presence of internal auditor has a significant and direct relationship with the financial leverage. The number of responsible board members has a significant and direct relationship with the financial leverage ratio. The institutional share has a significant and direct relationship with the financial leverage ratio. (Abdoli et al., 2012).

Zemzem et al. (2013) studied the effects of Board of Directors' Characteristics on tax aggressiveness. Results indicated that the board size and the percentage of women in the board affect the activity of tax aggressiveness. Return on assets and size of the firm are significantly and positively associated.

MATERIALS AND METHODS
Importance of Subject

In this study, the impact of the effective factors on the difference between tax assertiveness and tax diagnostic in the Iranian companies is discussed and up to now, no similar research in this subject has been conducted in Iran. In general, the study of influential factors on income tax and tax difference are the most important subjects for the tax affairs Organization and governments. This study is presented to provide a better understanding of the concept of taxes on income and improve the quality of tax assertiveness as well as to decrease tax assertiveness and diagnostic difference, more and more.

Statement of Problem

Tax expense and tax payable is considered by executive directors and board of directors, because the tax expense is one of the most important corporate costs and it leads to discharging liquidity from the firms and decreasing shareholders dividends. On the other hand, the board of directors, as one of the basic elements for the corporation, makes decisions with regard to the types of financial

and tax events. Therefore, they may affect the activity of tax decrease.

Research Objectives

The main objective of this study is to examine and define the impact of the effective factors on the decrease of Tax assertiveness and Tax diagnostic difference.

Research Hypotheses

1- There is a significant relationship between the own concentration and the decrease of Tax assertiveness and Tax diagnostic difference in the companies.

2- There is a significant relationship between the out board ratio and the decrease of Tax assertiveness and Tax diagnostic difference in the companies.

3- There is a significant relationship between the income smoothing and the decrease of Tax assertiveness and Tax diagnostic difference in the companies.

4- There is a significant relationship between the auditor reporting tax paragraph and the decrease of Tax assertiveness and Tax diagnostic difference in the companies.

5- There is a significant relationship between the prior period adjustments and the decrease of Tax assertiveness and Tax diagnostic difference in the companies.

MATERIALS AND METHODS

This study is an applied research in terms of the objectives and is an analytical-descriptive research in terms of approach (operation). This study is also a causal research because it applies precedent data.

Statistical Population

The statistical population of this research includes the companies listed in Tehran Stock Exchange which are adjusted according to the following limitations:

- Due to different nature, they should not be included among the financial investment and brokering companies
- They should be listed in stock exchange during the period of 2008-2012
- The end of their fiscal year is Mid of March

Variables Measurement

Variables of this study are quantitative and according to their role, three types of dependent, independent, and controlling variables have been used. The corresponding values for these variables have been prepared from the financial statements, board reports, and audit reports of company. The variables of this study are as follows by the separation of their types.

Dependent Variable:

Tax assertiveness and Tax diagnostic difference: The difference between tax assertiveness by firms in the declaration and tax diagnostic by the tax affairs organization for firm i in year t. In the explanatory notes of the financial statements (balance sheet, tax reserve), these two numbers are disclosed and the difference between the two can easily be calculated.

Independent variables:

Independent variables in this research include:

Ownership Concentration: Ownership concentration means a certain number of stockholders controlling management and all company policies including financial and operational policies. According to Iran trade law, board of directors in each company is selected by General Assembly stockholders and the number of votes of each stockholder is obtained through multiplying the number of suffrages for the number of shares by the number of directors .Thus, the stockholders with more shares will be able to select board of directors, including executive and nonexecutive board. In Iran, shares of most companies are mainly possessed by investment firms, banks, pension funds and insurance. Therefore, small stockholders do not play a major role. In this study, "Herfindahl -Hirschman" Index (HHI) has been used in order to calculate the ownership concentration. The mentioned index is obtained from the total squared percentage of shares owned by stockholders of the companies. The index flagship increases along with increase in the ownership concentration and when all shares are owned by one person, it reaches to the maximum value calculated by 10,000 units. If the ownership structure is dispersed and all stockholders have equal ratios, HHI index reaches to the minimum value calculated by N/10000

$$HHI = \Sigma (pi /p *100)^2$$

Outside Directors

Based on the Commercial Law of Iran *outside* director is any member of a company's board of directors who is not an employee or stockholder in the companies. According to this law, they aren't full-time in the Company and they are paid to get in return attend meetings of Board. Outside Directors ratio is deliberated by dividing the number of Outside Directors on the total number of the board of directors. This information shall be disclosed in companies' reports.

Income Smoothing

In order to measure this variable for each company, the variations in coefficients model (Ikal model) is used. In this model, the variance of income changes ratio to the variance of sales changes is calculated.

The income smoothing index calculation method is as follows:

$$CY= CV \text{ income}_{i, t} / CV \text{ sales}_{i, t}$$

Where, CV income$_{i,t}$= the Coefficient of Variation of income variations in company i during the t period, and CV sales$_{i,t}$= the Coefficient of Variation of sales variations in company i during the t period.

If CY ≥1, Corporate is not income smoothing. Otherwise, the company is earnings smoothing.

Independent auditor reporting tax paragraph

In the financial audit report any kind of significant tax issues including materiality insufficient of tax reserves and probable tax debt are disclosed. The distribution of dividends and the related decisions are reported, as well. These items are known as the independent auditor reporting tax paragraph. If the independent auditor in his audit report or other reports brings tax section, the company will be given 1 otherwise zero.

Prior period adjustments

Prior period adjustments is the alteration to accounts of previous years or an adjustment made to accounts for previous years, because of changes in accounting policies or because of errors. A prior period adjustment can be one of the following two items:

1) The correction of an error in the financial statements that were reported for a prior period; or

2) Adjustments caused by the realization of the income tax benefits arising from the operating losses of purchased subsidiaries before they were acquired (Sartori and Nicola,2008).

This variable is obtained from the average of absolute value of the difference of the topic in the time period considered. In fact, the absolute value of the changes of every year must be calculated initially, and then they can be averaged out.

Controlling variables

ROA ratio: The ratio of corporate net profits to the total assets of company.

Financial Leverage: is the ratio of total debt of company to total assets of company.

RESULTS

The results of descriptive statistics of variables at table 1 indicate that the mean of the tax paragraph is 0.77 and the mean of the Income Smoothing is 0.32. Therefore, most of the surveyed companies have tax paragraph and they are not income smoothing. Since the coefficient of skewness of the dependent variable is 4.102, the distribution is almost symmetric and Skewness has the right.

The results of the statistical summary at table 2 show that multiple correlation between the dependent variable is the linear combination of all independent variables and the coefficient of determination (R^2) is 0.265. The digit of Durbin-Watson is obtained 2.107

(since the Numbers between 1/5 till 2/5 is accepted) Data independence is so appropriate.

As shown at table 3, Since the F is significant in the error level of 5%, with a confidence level of 95%, assumption of linear regression model is confirmed. The results show that independent variables are able to explain the changes and the variance in the dependent variable, very well. In other words, the regression model is a good model to study.

According to the table 4, the following equation is to predict the dependent variable :

$\Delta T_{i,t=}3827.284 + 0.203\ OWN\ CONC + 1505.36OUT\ DIR - 3443.411\ CY + 726.168Tax\ paragraph + 0.297.\ PPA$

As regards the slope of lines are numbers of far away, therefore to understand the relative importance of these Predictors cannot be used. For better interpretation of model is used the standard regression model (without writing a).

$\Delta T_{i,t}= 0.025\ OWN\ CONC + 0.013\ OUT\ DIR - 0.091\ CY + 0.017Tax\ paragraph + 0.500\ PPA$

Reviews of assumptions of the model indicate that only variable of prior period adjustments has a significant relationship with the tax assertiveness and tax diagnostic difference. In order to identify the most influential independent variables on the dependent variable, we use the following method. In this method, all variables including both the independent and control variables are entered in the regression model and the variable which is the most effective one will be selected. Then other variables are removed. So that only effective variables remain in the model. After that, model will be ceased.

According to the table 4 among the variables which have remained, the table results show prior adjustments and financial leverage. Considering that significance levels less than 5 percent in both models, linearity assumption of regression model is confirmed.

As shown in the above Table:

1. The relationship between own concentration and tax assertiveness and Tax diagnostic difference is not confirmed at 95% of confidence level.

2. The relationship between out board ratio and tax assertiveness and Tax diagnostic difference is not confirmed at 95% of confidence level.

3. The relationship between income smoothing and tax assertiveness and Tax diagnostic difference is not confirmed at 95% of confidence level.

4. The relationship between auditor reporting tax paragraph and tax assertiveness and Tax diagnostic difference is not confirmed at 95% of confidence level.

5. The relationship between Prior Period Adjustments and tax assertiveness and tax diagnostic difference is confirmed at 95% of confidence level.

In fact, the prior period adjustments variable is the only factor which has a significant relationship with the dependent variable.Because of the significance level of beta coefficient, its F testis less than 5 percent. Most changes of variance in the dependent variable are affected by the prior period adjustments.

Table 1. Descriptive Statistics

Items	Y:$\Delta T_{i,t}$	X$_1$: OWN CONC	X$_2$: OUT DIR	X$_3$:CY	X$_4$: Tax paragraph	X$_5$: PPA
Valid	123	123	123	123	123	123
Missing	0	0	0	0	0	0
Mean	9403.23	3553.1449	0.7079	0.32	0.77	14560.10
Median	3253.00	3269.4783	0.7200	0.00	1.00	4298.00
Std. Deviation	17733.779	2146.65957	0.14747	0.467	0.421	29912.31
Variance	314486909.030	4608147.312	0.022	0.218	0.177	894746483.150
Skewness	4.102	0.743	-0.493	0.796	-1.315	4.216
Std. Error of Skewness	0.218	0.218	0.218	0.218	0.218	0.218

Table 2. Model Summary[b]

Model	R	R^2	R^{2}adj	St. error	Durbin-Watson
1	0.515[a]	0.265	0.234	15524.332	2.107

a. Predictors: (Constant), X$_1$. Own conc, X$_2$. Out dir, X$_3$. CY, X$_4$. Tax paragraph, X$_5$. PPA   b. Dependent Variable: Y:$\Delta T_{i,t}$

Table 3. ANOVA[b]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	10169832725.986	5	2033966545.197	8.440	0.000[a]
Residual	28197570175.640	117	241004873.296		
Total	38367402901.626	122			

a. Predictors: (Constant), X$_1$. Own conc, X$_2$. Out dir, X$_3$. CY, X$_4$. Tax paragraph, X$_5$. PPAb. Dependent Variable: Y:$\Delta T_{i,t}$

Table 4. Coefficients'

Model	Unset.Coefficients		St.Coefficients	t	Sig.	Collinearity Statistics	
	B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
(Constant)	3827.284	8722.215		0.439	0.662		
X$_1$. OWN CONC	0.203	0.673	0.025	0.302	0.763	0.946	1.057
X$_2$. OUT DIR	1505.360	10161.216	0.013	0.148	0.882	0.880	1.137
X$_3$. CY	-3443.411	3018.342	-0.091	-1.141	0.256	0.993	1.007
X$_4$. Tax paragraph	726.168	3409.124	0.017	0.213	0.832	0.959	1.043
X$_5$. PPA	0.297	0.050	0.500	5.965	0.000	0.893	1.120

Dependent Variable: Y:$\Delta T_{i,t}$

Table 5. Model Summary

Model	R	R^2	R2adj	St. Error	Durbin-Watson
1	0.506[a]	0.256	0.250	15359.391	2.157
2	0.537[b]	0.288	0.276	15085.119	

a. Predictors: (Constant), X5:PPA ;   b. Predictors: (Constant), X5:PPA, C1:FL

Table 6. ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	9822184458.199	1	9822184458.199	41.635	0.000[a]
	Residual	28545218443.427	121	235910896.227		
	Total	38367402901.626	122			
2	**Regression**	11060104155.371	2	5530052077.686	24.301	0.000[b]
	Residual	27307298746.255	120	227560822.885		
	Total	38367402901.626	122			

a. Predictors: X5:PpA   b. Predictors: X5:PPA, C1.FL   c. Dependent Variable: Y: $\Delta T_{i,t}$
Ultimately, regression model equation will be formulated by using remaining variables in the model as follows: $\Delta T_{i,t}$ = 0/526 PPA - 0/181 FL

Table 7. Statistical Results

Results	Beta	sig	F	R^2	St. Deviation	Mean	Variable	Hypotheses
Not confirm	0.024	0.792	0.07	0.001	17733/779	9403/23	$\Delta T_{i,t}$	
					2146/659	3553/145	OWN CONC	1
Not confirm	-0.140	0.122	2.426	0.02	17733/779	9403/23	$\Delta T_{i,t}$	2
					0/147	0/708	OUT DIR	
Not confirm	-0.125	0.169	1.914	0.016	17733/779	9403/23	$\Delta T_{i,t}$	3
					0/467	0/32	CY	
Not confirm	0.102	0.260	1.281	0.01	17733/779	9403/23	$\Delta T_{i,t}$	4
					0/421	0/77	Tax paragraph	
confirm	0.506	0.000	41.635	0.256	17733/779	9403/23	$\Delta T_{i,t}$	5
					29912/313	14560/1	PPA	

DISCUSSION

The results indicated that assumptions in relation to the own concentration, out board ratio, income smoothing, and auditor reporting tax paragraph have failed to explain the Tax assertiveness and Tax diagnostic difference in the multivariate regression. Consequently, there is no significant difference between the presence and absence of these factors on the Tax assertiveness and Tax diagnostic difference. The hypothesis relative to prior period adjustments was accepted .In fact the prior period adjustments has been effective on the tax assertiveness and tax diagnostic.

The findings show that there is a direct positive relationship between the prior period adjustments and the tax assertiveness and tax diagnostic. The less the prior period adjustments are the more decrease in the tax assertiveness and Tax diagnostic will be. This means that if the changes in the income and expenditure figures decrease for the previous years, in this year, it is expected that tax assertiveness and Tax diagnostic difference be less effective. As the items of prior period adjustments have the effect of tax, they lead to displacement of distributable income. Therefore it should be considered as a sign of tax assertiveness and Tax diagnostic difference.

Recommendations

1. Most of the items of prior period adjustments have the effect of tax, therefore they are extremely important and our recommendation is that corporate managers and tax auditors analyze and audit items of prior period adjustments with greater sensitivity. Since in such firms there is more possibility of tax evasion, therefore the investigations should be more.

2. If there are discrepancies between the tax assertiveness and tax diagnostic in the firms, Tax Auditors must pay more attention to the quantity of the samples which are reviewed and the nature of the differences, and they should consider it as a sign.

3. Regardless of the composition and dispersion of the stock, Tax Auditors and Tax Affairs Organization should consider the areas where there is tax risk.

Suggestions for Future Research

1. Study of the relationship between financing policies and tax policies in the firms.

2. Investigation of the role and impact of audit committees on tax assertiveness and tax diagnostic difference in the firms.

3. Consideration of the role of family ownership structure on tax assertiveness and tax diagnostic difference in the firms.

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