Examining the Relationship between Several Effective Factors and Corporate Tax Status

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ABSTRACT: According to direct tax code, financial statements should be prepared based on Generally Accepted Accounting Standards since the needed information to calculate the tax is provided from legal offices and audited financial statements. It is expected that the tax calculated by taxpayer be the same as the one diagnosed by auditors. However, a difference is observed between these two in practice. Many factors can affect the amount of taxes expressed by taxpayers. This in turn affects corporate tax differences. Then, it is essential to examine these factors since they provide a better understanding of the concept of income tax, a smaller difference between diagnostic tax and expressed tax, improvement of quality of expressed tax. The present study aimed to investigate factors influencing the reduction in difference between diagnostic tax and expressed tax. For this purpose, a sample composed of 130 companies listed in Tehran Stock Exchange for the 5-year period from 2008 to 2013 was examined. Student's t-test was used to test the research hypotheses. The results showed a significant difference between companies in terms of ownership concentration, the ratio of our board and existence of tax article in the independent auditor's auditing report in terms of the difference between expressed tax and diagnostic tax. However, there was no significant difference between companies with earnings smoothing and companies with nonearning smoothing and companies with annual earnings adjustments in terms of differences between expressed tax and diagnostic tax.
Keywords: Expressed Tax, Diagnostic Taxes, Corporate Governance, Earnings Smoothing, Annual Adjustments

INTRODUCTION

Statement of the problem

Income tax expense is considered as the most important costs within the companies, which companies usually consider as one cost that should not be paid. Then, they try to reduce this cost (Abdoli and Khastoo, 2011). They also extremely emphasize on identification of corporate costs and earningsin order to pay less tax to the government as well as bringing less liquidity out of the companies (Clemens et al., 2006)

Most of these decisions are made by senior managers and the board. Therefore, the relevance and impact of these two policies and responsibility of the board are investigated to explain position of the board on this issue. This can also be interpreted in terms of representation theory. In this regard, the board of directors is always searching for and maximizing their interests. They may not be necessarily in favor of benefits of shareholders and the government. It is possible that they adopt a specific tax policy (bold or conservative), which make shareholders responsible for several expenses (Graham et al., 2012).

In this paper, it is attempted to examine corporate governance role in relation with tax evasion. In addition, annual adjustments variable, observed frequently in the companies, and earnings smoothing variable were entered into the research models to be examined with other main research variables.

Research hypotheses

The difference between diagnostic tax and expressed tax is smaller in companies with lower ownership concentration.

1. The difference between diagnostic tax and expressed tax is smaller in companies with greater board out ratio.

2. The difference between diagnostic tax and expressed tax is smaller in companies with less earnings smoothing.

3. The difference between diagnostic tax and expressed tax is smaller in companies in which tax auditing article is 4.not included in independent auditor's auditing report.

5. The difference between diagnostic tax and expressed tax is smaller in companies with lower annual adjustments.

MATERIAL AND METHODS

Research variables (definition and measurement)

In this study, the dependent variable was considered as the difference between expressed tax

and diagnostic tax by the Department of Finance. These values were disclosed in explanatory notes to financial statements (balance sheet notes - financial reserves). The difference between these two values can be easily calculated. The independent variables in this research are as follows

Ownership concentration rank

Ownership concentration is equal to sum of shareholders' ownership who at least own five percent of the company. Herfindahl - Hirschman index was used to calculate institutional ownership concentration. Ownership concentration rank is equal to sum of squares of ownership of more than 5% of each company, which is calculated based on following equation (Guenther et al., 1977):

$$(OCON) = \sum_{(Pi\,/p\,*\,100)} 2$$

In this equation, P represents the percentage of total shares while P_i represents the sum of shares percentages higher than 3 percent owned by shareholders (percentage shares of each institutional ownership are squared and sum of them is calculated).A figure between 0 and 1 is obtained. If the result was much closer to 1, the ownership concentrations was higher. In fact, the higher this ratio, the greater concentration of ownership within the company.

Out Board Ratio

According to Commercial Code, out board refers to a member of the board who has no formal executive responsibility within the company. He is not present at the company all the time and is only present at board meetings in exchange for a certain fee.

Income smoothing

It is a conscious action performed by management using certain tools in accounting to reduce earnings volatility. In this study, Eikle index was used to determine corporate earnings smoothing (Jenkins et al., 2006).

Eikle index is equal to:

(Eikle index = ratio of coefficient of variation of changes in earnings to coefficient of variation of changes in sales).

Eikle index = $CV\Delta I / CV\Delta S$

ΔI is changes in earnings, which is equal to earnings in this year minus earnings in previous years.

ΔS is changes in sales, which is equal to sales in this year minus sales in previous years.

CV is coefficient of variation, which is equals to standard deviation divided by the mean.

If $CV\Delta I / CV\Delta S \geq 1$, the firm will have earnings smoothing firms; otherwise, the company will have earnings smoothing.

Tax Article in the Report of Independent Auditor:

If the independent auditor included tax article in his audit report or other reports, (including Article 138 or Article 132 or … or tax debt and inadequate saving tax measures, etc.), score 1would be given to that company; otherwise, score zero would be given to the company.

Financial leverage

Financial leverage is the ratio of mean of total book value of debts to mean of book value of total corporate assets during the research period (Penman, 2001).

$$\text{Financial leverage} = \frac{\text{mean of total book value of debts}}{\text{mean of book value of total corporate assets}}$$

Profit Ratio

Asset efficiency index is used to measure corporate profitability, which is equal to the mean net income divided by mean total assets of the company in the period under investigation.

Statistical population, sample, and the period under investigation

Statistical population included all companies listed in Tehran Stock Exchange since the beginning of 2008 until the end of 2013. The sample was selected using systematic elimination method as 130 companies.

RESULTS

According to contents of the following table, since Leuven test value F = 0.249 in 5% level of error is not significant (sig = 0.573), first row of t-test was used in further investigation-test results showed that since t-value t = 0.639 is less than 2 (t<2) and the level of significance (sig = 0.524) is greater than 5%, H_1 (hypothesis of inequality of means) is rejected, which implies that the difference between expressed tax and diagnostic tax is smaller in companies with higher ownership concentration. Then, H_0 is accepted, which implies that the difference between expressed tax and diagnostic taxing not smaller in companies with higher ownership concentration.

The second hypothesis

Investigating the results of following table shows that since Leuven test statistic F = 0.249 at 5% level of error is greater than 5% and is not significant (sig = 0.573), the first row of t-test was used for further investigation.

T-test results showed that since t statistics value (t = 0.639) is less than 2, and the level of significance (sig = 0.524) is greater than 5%, H_0 (hypothesis of equality of means) is accepted, which implies that the difference between expressed tax and diagnostic tax is smaller in companies with lower ratio of our board of directors. Thus, $H_1$is rejected, which implies inequality of companies in terms of the difference between expressed tax and diagnostic tax.

Table 1. Test of mean of two population

t-test (equality of means)								LeuvenT			
Confidence interval		Standard error difference	Mean difference	Sig.	Degree of freedom	t	Sig.	F			
Upper bound	Lower bound										
8408.745	-4305.257	3210.990	2051.744	0.524	121	0.639	0.249	1.341	Equality of variance		Tax difference
8601.792	-4498.303	3297.766	2051.744	0.535	91.580	0.622			Inequality of variance		

Table 2. Two Average test

Test t								Leven test			
Confidence interval 95%		Standard error of the difference	Differences in Average	Sig.	df	T	Sig.	F			
Upper limit	Lower limit										
9229.306	-3463.784	3205.708	2882.761	0.370	121	0.899	0.148	2.119	Equality of variance		Tax differences
9328.567	-3563.045	3251.611	2882.761	0.377	107.195	0.887			Unequal variances		

The Third Hypothesis

Investigating the results of following table shows that since Leuven test value F = 8.544 at 5% level of error is less than 5% (sig = 0.004), the second row of t-test was used for further investigation.

Test results showed that since t = 2.005 (t<2) and the level of significance (sig = 0.047) is smaller than 5%, H_0 (hypothesis of equality of means) is rejected, which implies that the difference between expressed tax and diagnostic tax is higher in earnings smoothing companies compared to non-smoothing companies. Then, H_1 (hypothesis of inequality of two companies) is accepted, which implies that that the difference between expressed tax and diagnostic tax is smaller in earnings smoothing companies compared to non-smoothing companies.

Table 3. Two Average test

		Leven test			Test t						
			F	Sig.	T-statistics	df	Sig.	Differences in Average	Standard error of the difference	Confidence interval 95%	
										Lower limit	
Tax differences	Equality of variance	Tax differences	8.544	0.004	1.485	121	0.140	5059.121	3406.905	-1685.745	11803.987
	Unequal variances				2.005	114.102	0.047	5059.121	2523.429	60.276	10057.966

The fourth hypothesis

Results of the following table shows that Leuven test value is equal to 3.317 and the level of significant is higher than 5% (sig = 0.071). Then, first row of t-test was used for further investigation.

T-test results showed that there is no significant difference between companies, which have audit article and the ones, which do not have audit article at 5% level of error (sig = 0.260). Therefore, H_0 is accepted with 95% confidence, which implies that the difference between diagnostic tax and expressed tax is higher in companies with less tax audit article. Then, H_1 is rejected.

Table 4. Two Average test

		Leven test			Test t						
			F	f sig.	T	df	Sign.	Differences in Average	Standard error of the difference	Confidence interval 95%	
										Lower limit	
Tax differences	Equality of variance	Tax differences	3.317	.071	-1.132	121	.260	-4310.797	3809.025	-11851.766	3230.171
	Unequal variances				-1.614	94.936	0.110	-4310.797	2670.688	-9612.829	991.235

The fifth hypothesis

Investigating the results of following table shows that since Leuven test statistics F = 22.533 at 5% level of error is less than 5% (sig = 0.000), the second row in t-test table was used for further investigation. T-test results showed that since t = -3.878 (t>2) and level of significance of the test (sig = 0.000) is smaller than 5%, H_0 (hypothesis of equality of means) is rejected, which implies that the difference between diagnostic tax and expressed tax is smaller in companies with more annual adjustment. Then, H_1 (hypothesis of inequality of these two types of companies) is accepted.

Table 5. Two Average test

		Leven test		Test t					Confidence interval 95%	
		F	Sig.	T	df	Sig.	Differences in Average	Standard error of the difference	Lower limit	Upper limit
Tax differences	Equality of variance	22.533	0	-4.017	121	0	-12126.268	3018.865	-18102.908	-6149.628
	Unequal variances			-3.878	66.002	0	-12126.268	3127.321	-18370.163	-5882.373

DISCUSSION

In this paper, several important criteria for corporate governance including out board members in composition of board of directors and ownership concentration as well as other factors such as income smoothing, tax article of of the independent auditor and annual adjustments with the difference between expressed tax and diagnostic tax were examined.

The hypotheses in relation to corporate governance factors (ratio of our board members in composition of board of directors and ownership concentration) were not confirmed in mean comparison tests of two population and regression analysis. This means that based on findings and empirical evidence, it can be concluded that there is no significant difference between presence and absence of these factors with the difference between expressed tax and diagnostic tax. However, the relationship between annual rate adjustment and income smoothing with the difference between expressed tax and diagnostic tax was confirmed. Thus, the tax auditors should be sensitive to possibility of tax evasion in companies in which more adjustments are observed in their accumulated profits and losses. They should also increase the samples in significance investigation. As a result of this research, the research of scholars like, Lanis et al. (2011), Mary Margaret (2009) Corresponded.

Recommendation

Tax Affairs Agency should be more sensitive in addressing and identifying corporate tax issue, earnings manipulation (discretionary accruals) and annual adjustments rate in corporate financial statements of companies. They should consider higher possibility for tax evasion. They should also consider analytical methods in investigating those companies.

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