

# The Impact of The Board of Directors' Structure on Tax Avoidance in The Companies Listed in Tehran Stock Exchange

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**ABSTRACT:** The aim of the present study is to examine the impact of board of directors' structure on firm tax avoidance. For tax avoidance, the existence of an audit provision regarding tax status in an independent audit report was investigated which is called aggressive tax policies. For Board of Directors structure, the ratio of executive members of the Board of Directors (BD) and the ratio of their change and their independence were studied. The population of the survey was all the firms listed on the Stock Market of Tehran during the period of 2010 to 2012 (three years). Testing of principal hypotheses was performed by logistic regression method in order to evaluate the effect of a number of factors on the possibility of applying aggressive tax policies by companies. This model included 3 principal independent variables and 3 control variables. First, the research variables were examined one by one and from among the three principal independent variables, the independence of the BD had a significant relation with the aggressive tax policies. However, the ratio of non-executive members of the BD did not show a positive and significant relation with tax avoidance policies. Moreover, BD change cannot formulate the tax avoidance policies. Next, all three principal independent variables were incorporated in the model. The complete model included all principal predictors which were statistically significant, showing that this model has almost been able to identify the firms applying the aggressive policies. The model formulated the status of these policies before entering control variables of  $R^2 = .391$ . In general, 80.6% of cases were correctly classified. After entering the control variables of  $R^2 = .391$ , the variance of aggressive tax policies were explained. Next, based on forward method, and after entering the control variables, 82.1% of cases were correctly predictable. According to coefficient tables, before entering the control variables, two independent variables had a significant statistical relation with the model. In total, the principal independent variable explained the dual role of the Board of Directors – Chairman with a significant relation. The ratio of non-executive members and their changes showed a control variable of the financial lever and the aggressive tax policies with no significant relation.

**Keywords:** Tax Avoidance, Board of Directors, Structure

## INTRODUCTION

Income tax costs are the most important costs in firms which consider them as non-payable and trying to reduce them. They also try to identify the firms' costs and incomes in order to pay less tax to the State and to remove less liquidity. Most of these decisions are made by senior managers and the BD. So, the relation and the impact of these two policies and the responsibilities of the BD will be examined. As we know, the BD thinks to its own interests and to their improvement; the interests of shareholders and State are not necessarily significant for the BD. As a result, it may create certain costs for the shareholders in the tax area by making a particular decision (aggressive or conservative). Also, the study of the factors affecting the type of decisions made by firms is of high importance for the shareholders and the State. On the other hand, given that the role of the BD in Commercial Law, as well as the emphasis of the corporate governance rules issued by the Iran Exchange Organization, the study of the impact of BD on the decisions made by firms as well as tax firms can be helpful in stating their exact place. Considering that very limited efforts have been already made, especially

in Iran, in order to investigate the impact of the BD structure on aggressive tax policies, so, we decided to review this issue in the present paper.

### **Research literature**

Mohammad Babaei (2004): He has gathered information on foreign companies working in the general office of grand tax payers in a research called "The study of causes of the conflict between express taxable interest and definitive taxable income of foreign companies in Iran". After distributing questionnaires, he tried to gather the opinions of the experts on the research subject-matter. Using statistical methods, he showed that: "There is a significant difference between the express taxable interest of foreign companies in Iran and their definite taxable income.

ShamshiJamkhaneh (2009): By evaluating the causes of difference between the express taxable income of commercial firms and the cognitive taxable income of tax units and by using the information contained in tax files relating to years 2005 and 2006 of the companies active in the general office of tax affairs and the methods and statistical software thereof, she concluded that there is a significant difference between the express taxable income of commercial firms and the cognitive taxable income of taxing units. Moreover, each of the factors behind this difference is significant for the expected reliability level.

Lanis and Richardson (2011): In their research, they investigated the effects of merging the Boards of Directors on aggressive tax policies and tax reducers. The results of the Logit regression for a typical sample of 32 firms, 16 with tax aggressive behaviors and 16 without tax aggressive behaviors, show that the existence of a large share of foreign members of the BD will reduce the possibility of tax aggressive behaviors and tax reducers. The least square regression states the cross-analysis sensitivity of 401 firms and confirms the main results concerning the merger of BDs and the tax aggressive behaviors.

Osemek (2011): He studied the relation between the characteristics of the BD including its size and diversity and the social responsibility of Nigerian firms of which 147 were selected between 2003 and 2009. The evaluating random impact was used to test the particular impacts of merging the BDs, their size and diversity between the selected firms. The results of experimental analysis show that the BD's size and diversity are positive and are significantly in relation with firm social responsibility. However, the executive directors showed a negative diversity with insignificant relation with the social responsibility of the organization. In this research, organizations were inclined toward the firm authority. Directors shall know and become aware by concentrating on the interests of the shareholders that disorder in the firm rules and regulations will bring about disorder in taxing mechanism and increase the costs of the agency; and the directors may be under pressure in establishing coordination with the interests of different shareholders.

Hanlon and Slemrod (2009): They studied the reaction of the stock price to the news relating to aggressive tax policies. The results imply that on average the firm share price is reduced when the news concerning tax franchises is released. But this reaction is less related to those concerning other fraudulent and illegal acts of the firm. In their research, they came into a few evidences about the cross-sectional diversions in these reactions. For example, the reduction of stock price in the firms which lack of proper strategic principles happens rarely. In other words, in such firms, news as a tool for aggressive tax policies and acts beneficial for investors is hardly ever used. Also, using current, effective tax rate as an evidence for the market beliefs and viewpoints, we studied and tested this subject that if such reactions are different in various market viewpoints concerning the quality of aggressive tax policies and acts. Finally, we received mixed results.

Freise, Link and Mayer (2008): They studied the different ways that tax and firms strategic principles are mutually interrelated. The tax law affects these principles by providing tax concessions and imposing penalties. In other words, the real structure of the firm governance affects in practice the firms tax management method.

Armstrong and Blouin (2010): They studied the tax planning motivations using a set of hierarchical data along with executive compensation and incentive information. They also investigated the relations between tax managers' incentives and accepted accounting principles and the cash effects of tax rates and the difference of tax book value as well as gauging criterion of tax aggressive avoidance. Finally, they achieved the result that compensative and incentive motivations of tax managers have a negative relation with the effective tax rates and the accounting accepted principles, while holding a quantitative relation with other tax tendencies and behaviors. These results were interpreted as an index, in a way that the provided motivations were used by managers to reduce tax costs in financial statements.

Yermak (1996): He studied the relationship between the size of a small BD and the market value, and he pointed out that there was a negative (reverse) relation between the size of BD and the firm performance. He also concluded that there is a positive relation between the dual role of the BD and the firm performance.

### **Research method**

The present research tries to verify this question: Can we predict the possibility of aggressive tax policies of the firms listed in Tehran Stock Exchange market considering the characteristics of the firms' BD structure? So, this paper is applicative as to its aim and descriptive and correlative as to its method.

1. Study population, sampling method and samples

The study population of this research was all the firms accepted and listed on Stock Exchange market during 2010 and 2012 (a period of three years).

To select the statistical sample from this population, we used the systematic removing method. These firms were selected based on the following conditions:

1. The firm's realized profit in the years 2009 till 2011 must be clear.
2. In terms of increased comparability, their financial period must be the end of March each year.
3. During these fiscal years, they must have not changed any fiscal year.
4. Financial and management information they need (especially if the explanatory notes accompanying the financial statements) is available.
5. Some of the listed companies in the Stock exchange market, including banks and financial institutions (investing companies, financial intermediates, holding companies, banks and leasing companies) with different financial disclosures and firm governance structure, are not included in the research population.

According to the restrictions imposed, a number of 85 firms were selected whose information was gathered from Tehran Stock Exchange Organization's website.

**Research hypotheses**

According to theoretical foundations, this research includes the three following hypotheses:

1. The ratio of non-executive members of the BD impacts significantly the tax aggressive policy.
2. The ratio of changes of the BD impacts significantly the tax aggressive policy.
3. The dual role of the BD impacts significantly the tax aggressive policy.

Necessary data, research variables and their calculation method

In this research, library method was first used to get necessary data. In this section, theoretical fundamentals of research were collected from Persian and Latin special books and magazines. Then, research data were processed through selected firms' data, audited financial statements, annual report of the BD to the Assembly, company activity reports, Stock market monthly, and by using the relevant software of the companies such as Dena Sahn, Sahra and Tadbir Pardaz.

Table 1 . Research data

Source	Data	Variable
Profit & loss statement	Tax cost total	Tax aggressive policy
	Profit before tax deduction	
Attachment and cover of the financial statements	Ratio of non-executive BD members	Independent variables
	Ratio of BD members change	
	Dual role of the BD	
Profit & loss statement and balance-sheet	Tax status of firms	Control variables
	Auditor's observation	
	Firms earning leverage ratio	

In order to test hypotheses, the variables of this research were split into three independent, dependant and control groups.

**Dependant variable**

The dependant variable of the research is TAG (tax aggressive policy). According to direct tax laws, approved by the Iranian Parliament, and the reports of firms' legal auditor and inspector, the tax aggressive policy has been measured in accordance with the auditing provision concerning tax in auditing report. This provision in the auditor's report means the agreement between the independent auditor (who is also the firm's tax auditor) and the employer regarding the firm's tax status. If this issue is indicated in the firm audit, number 1, otherwise, number 0 shall be given. Firms which are given number 1 are called firms with tax aggressive policy; because they have not properly respected the tax law and their tax status is objected. Moreover, heir tax files are referred for inspection in tax arbitration boards.

EXE board ratio: The measurement criterion of EXE board is determined by following relation: the number of the EXE board of the firm is divided on the total number of BD members in a period of four years. According to the commercial law, this number of members is determined by the general assembly. It is also possible that all the BD members be non-executive members except for the chairman. These data have been obtained from the annual reports of the BD to the General Assembly.

Board change ratio: This ratio is equal to the division of the changed number of BD members in every firm to the total number of the same firm's BD during a period of three years. These data have been obtained by verifying the annual reports of the BD to the General Assembly.

Dual role of the Board – Chairman: If the BD chairman is the same as the managing director, the firm shall be given number 1, otherwise, it shall be given number 0. This variable shows the independence of the Board.

These data have been obtained and measured by verifying the annual reports of the Board to the general Assembly.

Control variables: Control variables for this research are as follows:

Based on a theoretical basis, the control variables can be effective on the dependent variable. So they enter in the model as a separate variable and then, changes are considered to be a result of the impact of these variables.

Type of the independent auditor's opinion: If the auditor's opinion is acceptable, it is given number 1, otherwise, it is given number 0.

Earning leverage: For its measurement, total debt of the company is divided by its total assets in an average of 4 years.

Firm tax status: If the company has not protested against the tax assessment sheet of the Finance Department in these four years, it will be given number 1; otherwise, it will be given number 0.

## SUMMARY AND CONCLUSIONS

### **Hypothesis test results and presenting findings**

The effect of Board structure on aggressive tax policies was the objective of the present study, and research hypotheses were formulated on this basis. According to statistical analysis, the analysis of results of the test of hypotheses is presented as follows.

Table 2 . Statistical results

Description	Reliability	Significance level	Chi-square	Wald statistic	B	Number	Independent variable	Hypothesis status
Hypothesis 1	95%	0.719	$2x=17.33$	16.13	2.449	85	Board non-executive members	Not confirmed
Hypothesis 2	95%	0.973	$2x=16.13$	17.33	4.514	85	Board change	Not confirmed
Hypothesis 3	95%	0	$2x=0.001$	0.001	-	85	Board dual role	Confirmed

Board non-executive members' ratio affects significantly the aggressive tax policies: Based on the test results, the relationship between the chi-square ( $\chi^2=17.33$ ) indicates that the ratio of Board non-executive members is effective on the dependant variable of aggressive tax policies. Considering that the significance coefficient is (sig=0.7190) and greater than 5% with 95% reliability, it can be said that there is no significant correlation between the two variables. That's to say the results indicate that this hypothesis is not confirmed; in other words, the increase of Board non-executive members is not an incentive to apply aggressive tax policies. Accordingly, it can be said that the firms with higher number of non-executive members apply less the aggressive tax policies. The first hypothesis states that the ratio of the Board non-executive members affects significantly the aggressive tax policies. The results indicate that this hypothesis is not confirmed, or in other words, the increase of the number of non-executive members of the Board does not imply the application of aggressive tax policies. The results of this hypothesis comply with the research of Lenis and Richardson (2001), but they are inconsistent with that of Nig and Lang (1999), Aderal (2006) and Kajul and Sandy (2008).

The ratio of Board change impacts significantly the tax aggressive policy: Based on the test results, the relationship of the chi-square ( $\chi^2=16.13$ ) indicates that the ratio of Board change is effective on the dependant variable of aggressive tax policies. Considering that the significance coefficient is (sig=0.973) and greater than 5% with 95% reliability, it can be said that there is no significant correlation between the variables of the hypothesis. That's to say the results indicate that this hypothesis is not confirmed; in other words, the Board change is not an incentive to apply aggressive tax policies. The second hypothesis is so rejected. The second hypothesis states that the ratio of the Board change affects significantly the aggressive tax policies. The results indicate that this hypothesis is not confirmed.

The results of this hypothesis do not comply with the research of Kajul and Sandy (2008), Nig Lang (1999) and Aderal (2006).

Dual role of the Board impacts significantly the aggressive tax policies: Based on the test results, the relationship of the chi-square ( $\chi^2=0.001$ ) indicates that the ratio of Board dual role is effective on the dependant variable of aggressive tax policies. Considering that the significance coefficient is (sig=0.000) and less than 5% with 95% reliability, it can be said that there is a significant correlation between the two variables. That's to say the results confirm this hypothesis. In other words, the dual role of Board-Chairman is a cause to apply aggressive tax policies. Those firms whose chairman plays a dual role apply also the aggressive tax policies. Accordingly, the more the role of a chairman is dual, the more is possibility to apply aggressive tax policies. Considering that we measure the effect of the Board structure (ratio of executive board members, ration of Board change, dual role of Board) on aggressive tax policies, there are so three hypotheses. Here the results of

the present research are compared with those of similar national and international researches. The third hypothesis states that the dual role of the Board impacts the application of aggressive tax policies. Considering that the significance coefficient is ( $\text{sig}=0.001$ ) and less than 5%, with a reliability of 95%, it can be said that there is a significant and positive correlation between the two variables. That's to say the obtained results confirm this hypothesis. In other words, the more the role of the chairman is dual, and the more will be the possibility of applying the aggressive tax policies.

The results of this research are consistent with the research on sensitivity conducted by Yeganeh and Bagoomian (2006), Frizer, Link and Mayer (2008), but they are inconsistent with that of Ahmada and Sanda (2008).

## REFERENCES

- Andreoni J, Erard B, Feinstein J.1998. Tax compliance. *Journal of Economic Literature* 36 (2), 818–860.
- Armstrong CS, Blouin JL, LarckerDF.2010) The Incentives for Tax Planning, Working Paper, SSRN: <http://ssrn.com/abstract=1416422>.
- Beasley MS.1996. An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review* 71 (4), 443–465.
- Benjamin C. Ayers, Stacie K. Laplante, Sean T. McGuire.2007. "Credit Ratings and Taxes: The Effect of Book/Tax Differences on Ratings Changes " , The University of Georgia.
- Berle AA Jr,Means G .1932.The Modern Corporate and Property .NewYORK:MacMillan.
- Boyed BK.1995.CEO Duality and Firm Performance :A Contingency model .*Strategic Management journal*, 16(4),301-312.
- Byrd JW, hickman KA.1992. "do outside directors monitor managers ?"*journaloffinancial economics* ,No 32.
- Cadbury, A Report of the Committee on the Financil Aspect of Corporate Governance .London :GeePublishing.
- Carlsson RH.2001.Ownership & Value Creation :StrategicCorporateGovernance in the New Economy.Chichester, England :John Wiley & Sons.
- Chen KP, Chu CYC.2005. Internal control vs. external manipulation: a model of corporate income tax evasion. *RAND Journal of Economics* 36 (1), 151–164.
- Chen S, Chen X, Cheng Q, Shevlin T.2010. Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics* 95: 41-61.
- Crocker KJ, Slemrod J.2005.Corporate tax evasion with agency costs. *Journal of Public Economics* 89, 1593–1610.
- Davies A.1999.A Strategic Approach to Corporate Governance .London :Gower.
- Desai MA, Dharmapala D.2006. Corporate tax avoidance and high-powered incentives.*Journal of Financial Economics* 79,145–179.
- Donaldson L, Davis JH.1994.Boards and Company Performance–ResearchChallenges the Conventional Wisdom .*Corporate Governance :An International R65-91*.
- Dyreng SD, Hanlon M, Maydew EL.2008.Long-run corporate tax avoidance. *The Accounting Review* 83 (1), 61–82.
- Eisenhardt KM, Zbarcki MJ.1992.Strategic Decision Making .*Strategic Management*.
- Elsom CM.1996.Director Compensation and the Management-Captured Board :the History of Symptom and a
- Erle B.2008.Tax risk management and board responsibility. In: Schön, W. (Ed.), *Tax and Corporate Governance*. Springer-Verlag, Berlin, Heidelberg, pp. 205–220.
- Fama EF, Jensen MC.1983.Separation of Ownership and Control *Jornalof Law and Economics*, 26(2),301-325.
- Fama EF.1980.Agency problems and Theory of the Firm .*Journal of Polic al Economy*, 88(2),288-307.
- Financial report g council .july.2003.the combined code on corporate governance.p8-13.
- Freeman RE, Wicks AC, Parmar B.2004.Stakeholder Theory and TheCorporatObjective Revisited .*Organizao n Science*,15(3),364-369.
- Freise A, Link S, Mayer S.2008. Taxation and corporate governance – the state of the art. In: Schön, W. (Ed.), *Tax and Corporate Governance*. Springer-Verlag, Berlin, Heidelberg, pp. 357–425.
- Garbarino C.2008.AGGRESSIVE TAX STRATEGIES AND CORPORATE TAX GOVERNANCE : AN INSTITUTIONAL APPROACH. ,BocconiUniversity,Grafton 26-Building,Via Roentgen Dec (2008)<http://ssrn.com/abstract=1428772>.
- Gilders F, Taylor J, Richardson G, Walpole M.2004. Understanding Taxation Law: An Interactive Approach, second ed.LexisNexisButterworths, Sydney, NSW.
- GOERKE L.2008. "TAX OVERPAYMENTS, TAX EVASION, AND BOOK-TAX DIFFERENCES" , CESIFO WORKING PAPER NO. 2212 , CATEGORY 1: PUBLIC FINANCE , [www.SSRN.com](http://www.SSRN.com)
- Graham JR, Tucker AL.2006. Tax shelters and corporate debt policy. *Journal of Financial Economics* 81, 563–594.
- Gupta S, Newberry K.1997. Determinants of the variability on corporate effective taxrates: evidence from longitudinal data.*Journal of Accounting and Public Policy* 16 (1), 1–34.
- Hair JF, Black WC, Babin BJ, Anderson RE, Tatham RL.2006. *Multivariate Data Analysis*, sixth ed. Pearson Prentice-Hall,Upper Saddle River, NJ.
- Hanlon M, Slemrod J.2009. What does tax aggressiveness signal? Evidence from stock price reactions to news about taxaggressiveness. *Journal of Public Economics* 93, 126–141.
- Hartnett D.2008. The link between taxation and corporate governance. In: Schön, W. (Ed.), *Tax and Corporate Governance*.Springer-Verlag, Berlin, Heidelberg, pp. 3–8.
- Henderson Global Investors.2005.Responsible Tax.Henderson Global Investors, London, UK.
- Her Majesty's Revenue and Customs (HMRC).2006. Tax on the Boardroom Agenda: The Views of Business, HMRC, London, UK.
- Hillman AJ, Dalziel T.2003.Boards of Directors and Firm Performance :Integrating Agency and Resource Dependency Percepceves .*Academy of Management Review*,383-396 .
- Ibrahim N, Howard D, Angelidis J.2003. Board members in the service industry: an empirical examination of the relationshipbetween corporate social responsibility orientation and director type. *Journal of Business Ethics* 47, 393–401.
- Jensen MC.1976.Theory of the firm :Managerialbehavior,agency costs and Ownership structur*Journal of Financia Economics*, (4),305-360.
- Jensen MC.1993. The modern industrial revolution, exit, and the failure of internal control systems.*Journal of Finance* 48,831–880.
- Jonson JL, Daily CM, Ellstrand AE.1996. Boards of Directions :A Review and Research Agenda *Journal of Management*, 22(3),409-438.
- Kaplan SN, Milton BA.1994.Appointments Outsiders to Japanese Boards :Determinants and Implicao ns for Managers *Journal of Financial Economic*,
- Landolf U. 2006.Tax and corporate responsibility. *International Tax Review* 29, 6–9.

- Lanis R, Richardson G.2011) The effect of board of director composition on corporate tax aggressiveness. *Journal of Accounting and Public Policy* 30 (1): 50-70.
- LennoxTy RE, Clive, Lisowsky, Pittman.2012. Tax Aggressiveness and Accounting Fraud.available at: <http://ssrn.com/abstract=2016166>: 1-53.
- Mills L, Erickson M, Maydew E.1998. Investments in tax planning. *Journal of the American Tax Association* 20 (1), 1–20.
- Mohammad Babaii R.2004. "Study of causes of the conflict between express taxable income and definitive taxable income of foreign companies in Iran", Islamic Azad University, Department of Science and Research, Tehran
- Morck R, Shleifer A, Vishny RW.1988. Management ownership and market valuation: an empirical analysis. *Journal of Financial Economics* 20, 293–315.
- osemeke L.2011.The Study of the Effect of Role of Board of Director Characteristics on Corporate Social Responsibility of Public Listed Company in Nigeria, Working, Paper, SSRN <http://ssrn.com/abstract=1972954>.
- Pearce II, JA, Zahra SA.1992. Board Composition StrategiContingencyPerpective. *Journal of Management Studies*,29(4),411-438.
- Phillips J.2003. Corporate tax planning effectiveness: the role of compensation-based incentives. *The Accounting Review* 78(3), 847–874.
- Ramsay IM.1999. Directors' duties in Australia: recent developments and enforcement issues. *Company, Financial andInsolvency Law Review* 3, 260–285.
- Rego SO.2003. Tax-avoidance activities of US multinational corporations. *Contemporary Accounting Research* 20 (4), 805–833.
- Richardson G, Lanis R.2007. Determinants of the variability in corporate effective tax rates and tax reform: evidence fromAustralia. *Journal of Accounting and Public Policy* 26 (6), 689–704.
- Robinson JR, Sikes SA, Weaver CD.2010.Performance measurement of corporate tax departments. *The Accounting Review*85 (3), 1035–1064.
- Rose JM.2007. Corporate directors and social responsibility: ethics versus shareholder value. *Journal of Business Ethics* 73,319–331.
- Scholes MS, Wolfson MA, Erickson M, Maydew EL, Shevlin T.2005. *Taxes and Business Strategy: A Planning Approach*,third ed. Prentice-Hall, Upper Saddle River, NJ.
- Schön W.2008. Tax and corporate governance: a legal approach. In: Schön, W. (Ed.), *Tax and Corporate Governance*. Springer-Verlag, Berlin, Heidelberg, pp. 31–61.
- ShamsiJamkhaneh A, Pourzamani Z.2009. "Study of causes of the difference between express taxable income of commercial firms and cognitive taxable income by tax unit"s; *Tax Quarterly*, No. 5
- Shleifer A, Vishny RW.1986. Large shareholders and corporate control. *Journal of Political Economy* 95, 461–488.
- Shleifer A, Vishny RW.1997. June . A Survey of Corporate Governance ,*rnal of Finance*,52,(2),737-783.