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## IMPACT OF MANAGEMENT ABILITY ON RELATIONSHIP BETWEEN TAX AVOIDANCE AND FIRM VALUE IN COMPANIES LISTED IN TEHRAN STOCK EXCHANGE

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**Resumen:** El aumento de la importancia de los sistemas tributarios para que los gobiernos alcancen sus objetivos macroeconómicos ha provocado que los gestores públicos busquen la manera de evitar la evasión fiscal, así como incentivos para que los contribuyentes paguen impuestos y reduzcan la evasión fiscal. Por otro lado, la creación de valor para los inversores es una de sus principales prioridades para la elección de las acciones. Actualmente, el principal criterio para lograr un mayor valor de la empresa es la selección de gerentes de alta capacidad. La investigación actual tiene por objeto investigar el efecto de la capacidad de gestión sobre la relación entre la evasión fiscal y el valor de las empresas listadas en la Bolsa de Teherán. En esta investigación, todas las empresas que figuran en la Bolsa de Teherán se utilizaron como la población estadística. Período de investigación cubierto 2009 - 2015. La investigación actual se aplica en términos de objetivo y es la investigación posterior al evento en términos de método de recolección de datos. El tamaño de la muestra se seleccionó como 158 empresas de acuerdo con las limitaciones aplicadas para su selección. Los resultados de la prueba de hipótesis mediante la regla de mínimos cuadrados ordinarios y las pruebas de Chow y Hausman indican que existe una relación positiva significativa entre la capacidad de gestión y la evasión fiscal. También existe una relación significativa positiva entre la evasión fiscal y el valor de la empresa. La capacidad de gestión influye en la relación entre la evasión fiscal y el valor de la empresa.

**Palabras clave:** Capacidad de gestión, evasión fiscal, valor de la empresa

**Abstract:** Increasing significance of tax systems for the governments for realization of their macro goals has caused that public managers seek for finding the ways in order to avoid tax evasion, as well as incentives for taxpayers to pay tax and reduce tax evasion. On the other hand, value creation for investors is one of their major priorities for choosing the stocks. Today the main criterion to achieve increased firm value is selection of high-ability managers. Current research aims at investigating effect of management ability on relationship between tax avoidance and firm value in companies listed in Tehran Stock Exchange. In this research, all companies listed in Tehran Stock Exchange were used as the statistical population. Research time period covered 2009 - 2015. Current research is applied in terms of objective and it is post-event research in terms of data collection method. Sample size was selected as 158 firms according to the limitations applied for their selection. Results of testing hypotheses using ordinary least squares regression and Chow and Hausman tests indicate that there is positive significant relationship between management ability and tax avoidance. There is also positive significant relationship between tax avoidance and firm value. Management ability influences relationship between tax avoidance and firm value.

**Keywords:** Management ability, tax avoidance, firm value

## 1. INTRODUCTION

Managers in the firms are responsible for making important operational and strategic decisions for the whole company, especially today based on rapid changes and severe competition among companies in the business environment, various strategies selected by the managers for the company's future play considerable role in determining future firm value (Park ET AL., 2015). Tax avoidance is one of these decisions. Unlike other management activities, regarding tax avoidance, managers can create sources for the company through return and reduction of tax. However, tax avoidance activities require non-tax costs including direct costs for tax strategies, financial reporting costs, agency costs, political costs, and costs associated with defamation. Thus, investigating the fact that how managers act for maximizing wealth of stockholders, as their first priority, is an important question (Park et al., 2015). Most of previous studies indicated that characteristics of managers influence economic outcomes of the companies (Bertrand and Schoar, 2003; Gabaix et al., 2008). However, experimental analysis of managers' activities in relation with their abilities is highly difficult, and it is due to separation of firm characteristics from managers' abilities (Chang et al., 2010).

In past research, the rate of return on assets or stock returns as well as the rating of the company in terms of disclosure have been used as indicators for measuring managers' ability (Chang et al., 2010). These criteria used for measuring ability of managers in the past research suggests major firm characteristics, which are out of managers' control. For example, large companies are more exposed to public opinion than small firms in terms of disclosure, or the return on assets and stock returns of larger companies are influenced by many other factors than those affected by the ability of managers (Ko et al., 2013). In addition,

in many past research works, relationship between tax avoidance and managers' characteristics was investigated. Dyreng et al. (2010) investigated that if ratio of tax avoidance, which is not explained by the firm characteristics, can be explained by managers' characteristics.

Findings of this research in addition to investigation of effect of managers on tax avoidance, helps for investigating the way of its influence on the firm value. There are two views regarding effect of tax avoidance on the firm value. Traditional view considers increasing firm value as increasing resources inside the company. The other view on tax avoidance seems to be mostly related to the companies with ownership separation, because real people are less involved in tax avoidance and evasion because of the possibility of detection and fines and risk aversion or intrinsic motives such as social duty, but in companies, typically, shareholders expect that managers seek for their personal interests, and as long as the additional benefits resulting from possible debt reduction are higher than the expected additional costs for them, seek to reduce tax liabilities and avoid tax. Therefore, tax avoidance can be a reflection of agency theory, and may lead to tax decisions which result in the manager's personal interests. It is expected that managers use plans for meeting expectations of investors (or their interest) in order to manage the tax, which leads to increase (reduce) the firm value. Also, given the fact that managers in the companies listed in the stock exchange have different expertise and abilities, the question is that how the managers' abilities are related to tax avoidance. In general, this question is addressed in this research: does management ability influence relationship between tax avoidance and firm value in the companies listed in Tehran Stock Exchange?

## **2. THEORETICAL FOUNDATIONS AND REVIEW OF LITERATURE**

### **2.1. Relationship between Management Ability and Tax Avoidance**

Managers' abilities means their ability in increasing firm value using managerial skills for efficient utilization of limited resources in the company's operational activities (Dimirjian and Liu, 2012). Managers with higher ability and knowledge have more information regarding the industry and business environment. Given the traditional view, between tax avoidance and firm value, the former leads to increased firm value through reduction of transferring benefits to the tax administration. According to this view it can be stated that managers with high levels of ability and knowledge seek for finding ways to reduce transfer of benefits to outside of the company, which leads to increased cash holdings, and thus this cash can be invested on the projects with net current positive value, and subsequently it leads to increasing firm value.

### **2.2. Relationship between Tax Avoidance and Firm Value**

Available literature investigates relationship between tax avoidance and firm value from two views; traditional view, and agency theory view. Desai and Dharmapala (2009) believe that tax avoidance is a value creation activity because reduces wealth transfer from stockholders to the government. An emerging current in the literature investigates tax avoidance in agency theory framework (Chen et al., 2009). This view emphasizes separation of ownership and management, and maintains that complicated and oblique nature of tax avoidance activities provides the opportunity for the management to take step on achievement of their opportunistic goals by hiding bad news. According to the current literature, corporate mechanisms should be able to direct tax avoidance activities in line with maximization of wealth of the capital market actors. Considering that, on the one hand, the focus of corporate governance is on the board and the board's task is to maximize stockholders' wealth and, on the other hand, there is a view that tax avoidance can be a tool to increase stockholders' wealth, it is expected that whatever corporate governance mechanisms are stronger, avoiding more taxes. On the other hand, if agency theory is taken into account, since the corporate governance emphasizes information transparency and elimination of information asymmetry, it is expected that the good corporate governance can reduce tax avoidance using supervisory and governance mechanisms.

### **2.3. Effect of Management Ability on Relationship between Tax Avoidance and Firm Value**

Nowadays high complexity and variety of business environments necessitates expertise and quick decisions. Role of company managers as the ultimate responsible authority in decisions have become more prominent. Specific criteria should be used for evaluating managers and their performance outcomes, so that their evaluation is done in such a way that the created benefits for stockholders is considered. The company managers are responsible for ongoing planning in the company and implement their specific strategies in the company, thus their attempt for increasing the firm value and decision making regarding tax plans are among their major decisions. High-ability managers have higher knowledge regarding the company's environment, industry, and business operations, thus they want to increase value of the company's outputs through optimal use of the resources (Park et al., 2015).

## 2.4. Review of Literature

Armstrong et al. (2015) conducted a research entitled "Corporate governance, incentives, and tax avoidance". Research time period covered 2007 - 2011. Their research findings indicated that there is no significant relationship between corporate governance criteria including managers' financial skills, ratio of non-task managers and number of the board members with tax avoidance.

Park et al. (2015) conducted a research entitled "Managerial ability and tax avoidance: evidence from Korea, Asia-Pacific". Research time period covered 1991 - 2011, and the number of observations was 7,349 year - company. Their findings showed that there is negative relationship between tax avoidance and firm value, and there is negative relationship between management ability and tax avoidance. Also, management ability adjusts relationship between tax avoidance and firm value.

Lev et al. (2013) studied relationship between managers' ability and quality of earnings. Research time period covered -1989 - 2009, and the number of observations was 78423 year - company. Research findings suggested positive significant relationship between managers' ability and quality of earnings.

Chang et al. (2013) conducted a research entitled "Earnings, institutional investors, tax avoidance, and firm value: Evidence from Taiwan". Their findings showed there is positive significant relationship between earnings and firm value. Also there is positive significant relationship between institutional investors and firm value, and entering tax avoidance in the model leads to adjustment of relationship between independent variables and firm value.

Hoi et al. (2013) conducted a research entitled "Is Corporate Social Responsibility (CSR) Associated with Tax Avoidance?" Their findings showed there is relationship between social responsibilities and tax avoidance. The companies without corporate social responsibility are more probable to have differences in tax revenue and use optional accruals.

Mashayekhi and Sabri (2015) conducted a research entitled "Effect of corporate governance on relationship between tax avoidance and firm value". For this research, data from 96 companies listed in Tehran Stock Exchange were used as the research sample. Research findings suggested positive relationship, or in other words, supporting value creation theory in relationship between tax avoidance activities and firm value. Then, after classification of the sample companies into good

and bad corporate governance groups, corporate governance effect on the relationship between tax avoidance and firm value was studied using partial regression. Results indicate that positive effect of tax avoidance activities on the firm value is increased by improvement of corporate governance structure quality.

Didar et al. (2014) conducted a research entitled "Effect of corporate governance mechanisms on tax gap in companies listed in Tehran Stock Exchange". This evaluation was conducted through investigation of relationship between some corporate governance mechanisms including board independence, double role of CEO, institutional investors, state ownership, internal audit, auditor's opinion, auditor's change and deal with taxpayer related entities. In addition, for better conclusion, two control variables, firm size and financial leverage, entered the research model. To this end, 110 sample companies were investigated for a six-year period during 2006 - 2011. Research hypotheses were tested using multivariate regression based on the combined data. Research findings suggested that relationship between independence of the board of directors, state ownership, auditor's opinion, auditor's change and financial leverage with the tax gap is negative, and the internal audit and firm size variables have a positive relationship with the tax gap. Also variables of double role of CEO, institutional investors and deal with affiliated entities does not have a significant relationship with the tax gap.

Bahri Sales et al. (2014) conducted a research work entitled "Characteristics of board of directors and aggressive tax strategy". To this end, research data were collected from 71 companies listed in stock exchange during 2003 - 2011, and they were studied. In this research, multi-variate linear regression model in least square method was used for testing the hypotheses. Research findings showed that there is significant relationship between some characteristics of the board of directors and aggressive tax strategy, and there is no significant relationship with others. So that characteristics of board of directors (independence of board of directors and knowledge of board of directors) have significant relationship with aggressive tax strategy. Also there is no significant relationship between characteristics of board of directors (size of board of directors and session number of board of directors) with aggressive tax strategy. Finally findings of this research indicate that there is significant relationship between control variables (financial leverage) and aggressive tax strategy and there is no significant relationship between control variable (firm size) and aggressive tax strategy.

Khani et al. (2013) conducted a research entitled "Courageous financial reporting and its relationship with courageous tax reporting". Statistical population of this study included 67 companies listed in Tehran Stock Exchange during 2004 - 2009. In this research Jones's adjusted residuals were used in order to measure courageous financial reporting, book-tax differences were calculated for measuring courageous financial reporting. Research findings suggested positive significant correlation between courageous financial reporting and courageous tax reporting.

### 3. RESEARCH HYPOTHESES

Considering above theoretical foundations, research hypotheses are described as follows:

1. There is positive significant relationship between management ability and tax avoidance.
2. There is positive significant relationship between tax avoidance and firm value.
3. Management ability affects relationship between tax avoidance and firm value.

### 4. METHODOLOGY

Current research is applied in terms of objective, and it is post-event and semi-experimental research since data belong to the past periods and were collected without the author's intervention. It is of correlation type considering analysis of relationship between dependent and independent variables. Library method was used for data collection in this research. In the library section, research theoretical foundations were collected from specialized books and journals, and then data of selected companies were extracted with reference to financial statements, explanatory notes using Rahavard Novin software. Panel data regression and Eviews8 software was used for data analysis and testing hypotheses. Research temporal scope included 2009- 2015 in a seven-year period. The sampling method in this research was based on the systematic elimination method, so that all statistical population companies that had the following conditions were selected as the sample and other companies were excluded:

- 1- The company's fiscal year end is March 29, in order to enhance the matching and alignment of selection conditions of companies.
- 2- Due to different economic nature of some companies (such as holding companies, financial intermediation, holding, banks, and leasing) from other companies, these companies were eliminated from the sample.

- 3- They should not have activity change or fiscal year change during research period.
- 4- Data needed by the research variables (financial statements and explanatory notes) should be available.

Considering above limitations, 158 companies equivalent to 1,106 company- year were selected as the research sample.

### 5. RESEARCH VARIABLE AND MODELS

Current research has two main models for testing hypothesis, which are introduced in the following in details.

#### 5.1. H1 Testing Model

Following model investigates management ability effect on tax avoidance.

##### Equation 1:

$$\text{Taxvoid}_{i,t} = \beta_0 + \beta_1 \text{MA}_{i,t} + \beta_2 \text{ROA}_{i,t} + \beta_3 \text{LEV}_{i,t} + \beta_4 \text{NOL}_{i,t} + \beta_5 \text{PPE}_{i,t} + \beta_6 \text{INTAL}_{i,t} + \beta_7 \text{SIZE}_{i,t} + \beta_8 \text{MTB}_{i,t} + \beta_9 \text{AGE}_{i,t} + \epsilon_{i,t} \quad (1)$$

#### 5.2. Dependent Variable

Research dependent variable is tax avoidance. Various methods which are mainly based on effective tax rate are used for tax avoidance calculation. In order to investigate tax avoidance, such a model should be used considering the environmental conditions so that tax avoidance activities can be better measured. The model proposed by Park et al. (2006) and Kang and Ko (2014) was used for calculating tax avoidance in this research:

##### Equation 2.

$$\text{BTD}/\text{ASSET}_{t-1} = \alpha_0 + \beta_1 \text{TA}/\text{ASSET}_{t-1} + \epsilon_t \quad (1)$$

Where,

Description	Abbreviation
Difference in the profit declared in statement and actual taxable income subject to consideration of tax officers	BTD
Total assets of company at the beginning of year	ASSET
Total accruals of company at time t equal to the net profit of the company at time t, minus the company's operating cash flow at time t	TA

### 5.3. Independent Variable

Management ability; following model is used for calculation of this variable:

#### Equation 3.

$$MAX = \theta \frac{SALE_{i,t}}{v1COGS_{i,t} + v2SGNA_{i,t} + v3PPE_{i,t} + v4INTAN_{i,t}} \quad (3)$$

Description	Abbreviation
Sum of company's sale	SALE
Total cost of goods sold	COGS
Book value of fixed assets	PPE
Sale costs	SGNA
Book value of intangible assets	INTAN

Then in order to obtain management ability, the efficiency obtained in Model 1 is placed in the following model as dependent variable

#### Equation 4.

$$Firmefficiency_{i,t} = \beta_0 + \beta_1 LOGSize_{i,t} + \beta_2 MS_{i,t} + \beta_3 DFCF_{i,t} + \beta_4 AGE_{i,t} + \epsilon_{i,t} \quad (4)$$

Description	Abbreviation
Efficiency which is calculated from Equation 4.	FIRMEFFICIENCY
Firm size, which equals to logarithm of sum of company's assets book value	LOGSIZE
Company's sale divided by company's industry sale	MS
Company's age	AGE
It is 1 if the free cash flow of the company is greater than zero, otherwise it is zero	FCF

Following equation is used for calculating free cash flow:

#### Equation 5.

$$FCF_{i,t} = NI_{i,t} + DEP_{i,t} - \Delta CAP_{i,t} - \Delta OC_{i,t} \quad (5)$$

Free cash flow equals to net income (NI) plus depreciation cost (DEP) minus changes in capital expenditures ( $\Delta CAP$ ) minus changes in operational capital ( $\Delta OC$ )

Following estimation of model, deviation model is recognized as management ability, and then absolute value and then average is taken.

### 5.4. H2 and H3 Testing Model

Following model is used in order to investigate tax avoidance effect on firm value and management ability effect on their relationship:

### Equation 6:

$$Firmvalue_{i,t} = \beta_0 + \beta_1 Taxvoid_{i,t} + \beta_2 MA_{i,t} + \beta_3 Taxvoid_{i,t} * MA_{high_{i,t}} + \beta_4 ROA_{i,t} + \beta_5 LEV_{i,t} + \beta_6 NOL_{i,t} + \beta_7 PPE_{i,t} + \beta_8 INTAL_{i,t} + \beta_9 SIZE_{i,t} + \beta_{10} Growth_{i,t} + \beta_{11} AGE_{i,t} + \beta_{12} OCF_{i,t} + \epsilon_{i,t} \quad (6)$$

### 5.5. Model Dependent Variable

Firm value ( $Firmvalue_{i,t}$ ), is Tobin's Q ratio, equal to company's Tobin's Q ratio minus industry's Tobin's Q ratio; Tobin's Q ratio equals to sum of total equity market value and book value of debt divided by the book value of assets

Calculation of Control Variables

- Firm size ( $SIZE_{i,t}$ ): Logarithm of equity market value of company i at year t

- Leverage ( $LEV_{i,t}$ ): Sum of long-term debts of company i at year t divided by sum of company i's assets at year t

- Return On Assets ( $ROA_{i,t}$ ): Net profit of company i at year t divided by total assets of company i at year t

- Operating profit ( $NOL_{i,t}$ ): It is a qualitative variable; of the company's operating profit is negative, it is 1, otherwise, it is zero.

- Fixed assets book value ( $PPE_{i,t}$ ): Book value of fixed assets of company i at year t divided by sum of assets of company i at year t

- Ratio of book value of intangible assets ( $INTAN_{i,t}$ ): Book value of intangible assets of company i at year t divided by sum of assets of company i at year t

- Sale growth ( $GROWTH_{i,t}$ ): Ratio of current year sale growth to the previous year

- Company's age ( $AGE_{i,t}$ ): Company's age t divided by sale of company i at year t

- Operational cash flow ratio ( $OCF_{i,t}$ ): Operational cash flow of company i at year t divided by total assets of company i at year t

- Ratio of market value to book value ( $MTB_{i,t}$ ): Ratio of equity market value to book value at the end of year in company i at year t

### 5.6. Moderator variable

In order to test the third hypothesis, management ability variable was used as moderator variable.

Management Ability ( $MA_{i,t}$ ): It is a qualitative variable; following calculation of management ability through Equation 2 and 3, this value is averaged for total observations. In the companies with calculated management ability larger than

total average observations take value 1, and other companies take value zero.

## 6. DATA ANALYSIS

### 6.1. Descriptive Statistics of Variables

Table 1 gives descriptive statistics of variables. Descriptive statistics include average, mean, maximum, minimum and standard deviations of variables. The results show that the tax avoidance average for all observations has an average value of 0.422 and a standard deviation of 0.494, which indicates the high tax evasion dispersion. Also, management ability has an average value of 19% and return on assets with an average value of about 10% and according to its positive value it can be stated that the companies generally had positive performance. Ratio of debts also suggests that about 9% of total assets of companies is supplied by long-term debts. The average operating profit also indicates that about 11% of all observations of this study have been operating loss-making. Also, 25% of the total assets of the company are fixed asset share with a dispersion of about 18%. Also, about 5,000th of the total assets

are the share of intangible assets and the growth rate of sales among all sample companies during the research period is about 18%. Operating cash flows also account for 11% of total assets of the companies.

Table 1. Descriptive Statistics of Variables

Variable Symbol	SD	Min.	Max.	Mean	Average
BTD <sub>i,t</sub>	0.494	0.000	1.000	0.000	0.422
MA <sub>i,t</sub>	0.172	0.001	1.188	0.142	0.194
Firmvalue <sub>i,t</sub>	0.941	0.380	7.665	1.416	1.727
ROA <sub>i,t</sub>	0.137	-0.789	0.643	0.084	0.096
LEV <sub>i,t</sub>	0.108	0.000	1.371	0.049	0.088
NOL <sub>i,t</sub>	0.310	0.000	1.000	0.000	0.107
PPE <sub>i,t</sub>	0.177	0.008	0.849	0.208	0.253
INTAN <sub>i,t</sub>	0.009	0.000	0.096	0.001	0.005
SIZE <sub>i,t</sub>	0.660	4.381	8.051	5.842	5.873
MTB <sub>i,t</sub>	2.136	-34.277	12.976	1.944	2.246
AGE <sub>i,t</sub>	0.0002	0.00004	0.004	0.0002	0.0006
GROWTH <sub>i,t</sub>	0.118	-0.176	0.737	0.133	0.176
OCE <sub>i,t</sub>	0.128	-0.429	0.651	0.0995	0.112
OBS	1106	1106	1106	1106	1106

### 6.2. Heterogeneity of Variance Test

Breusch-Pagan test was used in this work in order to investigate heterogeneity of variance. Since the first research model has qualitative dependent variable, heterogeneity of variance test is run only for the second model. Test results show that there is no heterogeneity in the second research model,

Table 2. Heterogeneity of Variance Test

Description	Sig. Level	Statistics	Result
Second Model	0.0000	5.402	Homogeneity of variance of model is not accepted

for the second model suggest that there are individual effects or group effects and fixed effects data method (panel data) should be used for model estimate.

Table 3. Chow Test

Description	Sig. Level	Degree of freedom	Statistics	Result
Second Model	0.000	157	7.106	Fixed effects data is accepted

### 6.4. Results of Hausman Test

Table 4 indicates Hausman test results. Given results of this test and statistics value and its

in Tehran Stock Exchange at error level 0.05, because calculated P-Value for coefficient of this

and GLS method should be used in the final model estimate.

### 6.3. Results of F-Limer Test

Table 3 indicates F-Limer test results. This test is used for selecting type of combined data model (fixed effects and common effects). Results of this test for F-Limer statistics and its significance level

Table 4. Hausman Test

Description	Sig. Level	Degree of freedom	Statistics	Result
Second Model	0.000	12	295.285	Fixed effects data is accepted

significance level, fixed effects method should be used for the second model.

### 6.5. Testing First Hypothesis

As observed in Table 5, statistics value and significance level LR suggest lack of problem in model estimate, thus results of estimated model are not false and can be relied upon for testing hypothesis. Estimated coefficient of management ability as the independent variable in the table indicates positive significant relationship with tax avoidance in the companies listed independent variable is obtained smaller than 0.05. Thus it can be stated that there is positive

significant relationship between management

Table 5. Summary of statistical results for testing H1

Sig. Level	Z Test	Coefficient	Variable
0.0003	-3.651	-1.392	Y-Intercept
0.000	4.037	0.253	MA
0.1763	-1.352	-0.483	ROA
0.000	5.551	0.586	LEV
0.1691	-1.375	-0.208	NOL
0.3531	0.928	0.215	PPE
0.0002	3.781	16.75	NTAN
0.0121	2.507	0.165	SIZE
0.8622	0.173	0.002	MTB
0.0591	1.887	0.92	AGE
0.422	Variance Average of Dependent Variable	36.358 0.000 0.241	Statistics and Sig. Level R McFadden Coefficient

### 6.6. Testing H2 and H3

Model 2 with panel data approach was used for testing second and third hypotheses. Results of estimating Model 2 with this method are given in

Table 6. Summary of statistical results for testing H2 and H3

Variable	VIF	Sig. Level	T Test	Coefficient
Y-Intercept	-	0.0000	-5.667	-0.793
BTD	2.018	0.0019	-3.559	-0.026
MA	2.168	0.0000	5.352	0.042
Taxvoid *MA	2.025	0.0000	4.827	0.138
ROA	1.015	0.0000	8.448	1.391
LEV	1.152	0.0051	2.805	0.352
NOL	1.025	0.0000	7.010	0.331
PPE	1.036	0.0053	-2.792	-0.205
NTAN	1.025	0.3328	0.987	1.482
SIZE	1.036	0.0000	13.788	0.351
GROWTH	1.121	0.0000	6.644	0.649
AGE	1.152	0.0000	6.827	0.259
OCF	1.362	0.0000	4.550	0.535
F Statistics and Sig. Level	1.949	Durbin- Watson Test	96.805	0.000
Coefficient of Determination	0.532	Adjusted Coefficient of Determination		0.539

As observed in Table 6, in second research hypothesis, estimated coefficient of tax avoidance variable suggest positive significant relationship with firm value in the companies listed in Tehran Stock Exchange, because calculated P-Value for coefficient of this independent variable is obtained smaller than 0.05. Therefore, it can be stated that there is positive significant relationship between tax avoidance and firm value.

Estimated coefficient of management ability as independent variable suggest positive significant

ability and tax avoidance.

Table 6. Durbin- Watson statistics following coefficient estimation indicates value of 1.949, which means lack of serial correlation in error term. Thus, serial auto-correlation is not observed in this hypothesis. Given obtained significance values for F statistics as 0.000 it can be claimed that fit regression model is significant. Considering determination coefficient of fit model it is claimed that about 85 percent of changes in dependent variable of model is explained by dependent variable.

relationship with firm value in the companies listed in Tehran Stock Exchange, because calculated P-Value for coefficient of this independent variable is obtained smaller than 0.05. Therefore, it can be stated that there is positive significant relationship between management ability and firm value.

In order to test the third hypothesis, management ability was used as moderator variable for relationship between tax avoidance and firm value (tax avoidance \* management ability). Estimated coefficient of above variable in Table 6 indicates positive significant relationship with firm value in the companies listed in Tehran Stock Exchange at error level 0.05, because calculated P-Value for coefficient of this independent variable is obtained smaller than 0.05. Therefore it can be stated that management ability affects relationship between tax avoidance and firm value.

## 7. CONCLUSION AND RECOMMENDATIONS

This research was conducted aiming at development of research in area of management ability effects on increasing firm value through reduction of tax using legal mechanisms. To this



end, the model suggested by Park (2006) and Kong and Ko (2014) was used for measuring tax avoidance. The model proposed by Ko, Park et al. (2013) was used for calculating managers' efficiency. Research findings indicate there is positive significant relationship between management ability and tax avoidance. Results suggest that the stronger are corporate governance mechanisms, tax avoidance is higher. Findings regarding second hypothesis show that there is positive significant relationship between tax avoidance and firm value. Results strengthen this relationship. Tax avoidance leads to reduction of wealth transfer from stockholders to the government, thus it is a value creation activity, and influences firm value. Also, management ability affects relationship between tax avoidance and firm value. According to the current literature, corporate mechanisms should be able to direct tax avoidance activities in line with maximization of wealth of the capital market actors. Obtained results are not consistent with findings by Park et al. (2015) in South Korean market. As mentioned in the literature, there is double outcome of tax avoidance on firm value. Some previous studies referred to adverse impact of tax avoidance on firm value. Argument of these work is based on separation of ownership and control, or in other words, agency theory. According to this theory, actors of capital market are pessimistic to tax avoidance activities due to their nontransparent and complicated nature, and consider them as a tool for opportunistic behaviors of management. Thus their reaction to such activities is manifested as devaluation of the company's stock. Findings by other research report positive relationship between tax avoidance activities and firm value. Their argument is based on value creation theory, which believes that sine tax avoidance activities reduce transfer of wealth from stockholders to the government, thus actors of capital market have positive view to these activities, and react to it in the form of increased stock price.

### 7.1. Recommendations

According to the hypothesis testing it is suggested that the stock exchange managers declare policies to the companies in order to clarify tax plans to reduce tax avoidance activities, and the companies are ranked based on tax plans' transparency, and are informed to the investors, if possible. Also based on relationship between management ability and firm value, it is suggested that managers' abilities are more considered in the companies, and high-ability managers are absorbed. Considering the fact that capital market reacts positively to this action, it is suggested that abilities of managers are evaluated during their service period.

### 7.2. Recommendations for Future Works

- Conducting similar research with considerations of specific industry companies
- Investigating relationship between corporate social responsibilities and tax avoidance
- Investigating relationship between corporate governance variables including ownership focus and institutional ownership with tax avoidance
- Investigating factors affecting motivation of managers companies listed in Tehran Stock Exchange
- Investigating the relationship between structure of the board of directors including variables of double duty of the CEO with tax avoidance
- Investigating relationship between audit quality and tax avoidance

### 8. RESEARCH LIMITATIONS

Limitation on the generalization of results to non-exchange-traded entities because of their different characteristics.

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