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Impacts of Firms' Internal Information Environment on Tax Avoidance (Case Study: Companies Listed In Tehran's Stock Exchange)

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Abstract: The main purpose of this study is to investigate the impacts of firms' internal information environment on tax avoidance. The research method includes a data panel and is generally of semi-experimental fashion. The population of research is consisted of the entire companies and firms listed in Tehran's stock exchange as 496 firms from the beginning of 2007 until the end of financial year of 2014. Among the population, a number of 86 firms were selected as the sample through systematic omitting method. For the purpose of data analysis, the tests of T and multivariate linear regression were incorporated into the study. Results indicate that impact of quality of internal information on tax avoidance is higher in those companies in which information play a more important role. Firms which operate under geographic dispersion make more use of the quality of their internal information, because this information helps them towards reduced tax avoidance. High quality of internal information and commercial dispersion force these firms towards avoiding larger taxes. In addition, quality of internal information is not effective on firms which are under reconstruction status.

Keywords: Quality of Internal Information, Tax Avoidance, Geographic Dispersion, Commercial Dispersion.

Introduction

For governments, tax is the central instrument of obtaining income for realization of economic and social objectives. Deployment and variability of economic activities and the rising role of governments in establishment and development of public services, social support and improved deployment of government's commitments in social and economic contexts have turned paying and receiving taxes into an effective and crucially important issue. In every country, as a main apparatus of the government in terms of economy, tax plays a crucially important role in a way that nowadays, a great importance is given to improvement and development of efficiency of tax returns provided by payers as well as development and improvement of manner of collection of the former by tax affairs experts (Pajooyan, 2002). Tax evasion is an officially illegal act but tax avoidance is somehow using the gaps in law for reduction of tax payments. Therefore, since tax avoidance seems like a legal act; it seems that it has gained more attentions than tax evasion. Also since tax avoidance in a limited area is defined as taking advantage of tax benefits and there are no generally restricting laws in the context

of controlling tax avoidance (Jam, 2001). Income tax imposes a great expense on the company and its stakeholders. Especially in traditional ways of tax collection under which, a significant amount of resources of firms and companies are handed to the government. In order to reduce this transfer of resources, managers undertake actions such as tax avoidance. Tax avoidance programs occur in shapes of regulation of financial accounts, creative arrangement of accounts or providing the entire information (Moosavi J. et al. 2010). Avoiding paying taxes is not related to those illegal activities which lead to reduction of government's income which is spent on infrastructural affairs and social welfare services. Since a cost like tax can effectively reduce the gained benefits of a company, many companies undertake tax avoidance activities with the aim of reduction of their taxable income (Noor et al. 2001). As a result, avoiding paying tax is becoming a main concern for governments (Gravel, 2009). Imagining the unavoidable consequences of tax avoidance can be the hottest debate in researches regarding this subject. One of the reasons that firms undertake tax avoidance activities is its characteristic of being an alternative to debt (Graham and Tucker, 2006).

The importance of firms' internal information impact their capability in tax avoidance and also planning for tax related decision makings are based on the latter. In absence of adequate sound information, one may lose chances of having tax cuts. Coordination of tax related planning with other sections of the company is a difficult task. In fact, tax risks may be so high and also the documentations of your company might also seem invalid to the tax organization. However, the environment of internal information is banned from avoidance of taxes. In fact, existing evidence convey that importance of internal information of firms effect their ability in tax avoidance.

In this research, we have tries to recognize the consequences of tax avoidance by companies. We declare that role analysis of quality of environment of internal information of a company in supporting such phenomena is necessary. We have defined the internal information quality in terms of expressions of accessibility, benefaction, credit, validity, quantity and ratio of signal to entire information and knowledge that is collected, produced and or consumed. The theory of decision making has proved that quality of the information sets that are sources of decision makings are effective on the quality of those decisions and their consequences. Evidence shows that quality of internal information play an important role in terms of consequences of task avoidance. Theories in this context show that companies with higher IIQ may be more capable in terms of recognition and application of strategies for cutting taxes. We experimentally test this theory in our research. In fact, we have used 86 companies as representatives of IIQ in order to investigate the effects of IIQ on tax avoidance during 2007 to 2014. First we anticipate and conclude that in companies which perform more dispersed activities in terms of geography, IIQ is more important than in other companies. A higher IIQ reduces lack of symmetry of information and improves the coordination of information between different commercial units.

Second, we anticipate and learn that companies with higher commercial dispersion make more uses of a high IIQ. Finally, the effect of IIQ is investigated on reconstruction. We define it as lack of certainty of the firm about its tax credit. We expect companies with higher IIQ to be able to pursue desirable and risk-free tax avoidance consequences. This is because a higher and better IIQ can provide more support for documentation and static tax planning which in turn reduce the possibility of rejection of special tax solutions. In this research we are trying to investigate whether the internal information environment of companies is effective on tax avoidance among companies listed in Tehran's stock exchange or not.

Theoretical Foundations

Tax Avoidance

The tax of a company's revenues imposes a great deal of expense on the firm itself and on stakeholders as well. Under the current existing tax regulations, commercial companies should hand over a great portion of their assets to the government. This issue results in benefits for the owners and in fact, it reduces the general tendencies towards investment. For reduction of transfer of assets of owners to the government and adjustment of the cost of taxes, managers tend to perform tax avoidance activities. This issue seems to be more evident with companies with separate ownerships. Because individuals have less tendencies for being engaged in tax evasion and avoidance activities as a result of high risks and or internal incentives such as social responsibility (Lingam and Sandmo, 1972). However, in companies usually the stakeholders expect managers to seek their personal interests and look for avoidance of taxes until extra benefits resulted from reduction of debts grow more than their expected extra expenses. In addition, Desay et al. also believe that managers who seek their own personal interests make the structure of the company more complicated and also they undertake exchanges which result in reduction of taxes. In this regard, managers use the assets of the firm for maintenance of their own personal interests and assets. They believe that presence of strong tax agents increases monitoring of managers' activities and reduction of misuses of firms' assets. Another point that was mentioned by Desay et al. was that the manner of management and leadership of companies is effective on the level of a company's tax avoidance. Weak organizational leadership increases tax avoidance. Graham, (2006) believes that tax avoidance reduces the ultimate benefits of tax shield nd may also affect decisions related to the structure of capital. On the other hand, if tax authorities detect tax avoidance then the company will be charged which results in reduced benefits and income for the company and stakeholders.

By the help of tax circles, auditors can have a better evaluation of logics and appropriateness of the numbers incorporated into estimation of taxes. This is because a tax expert auditor possesses adequate knowledge and information regarding companies' manners of using tax costs for

avoidance of paying taxes. On this basis, the expertise of the auditor can be an effective element in determination of level of tax avoidance (Holly wall et al. 2004).

Internal Information Quality

High quality managerial accounting systems such as business systems can have a positive effect on the quality of internal information environment through providing the management with real-time information regarding the financial status of the company and through removal of barriers between accounting cycles. This leads to a unique access to information for managers. Information can be improved through processing of centralized businesses, reduction of reporting intervals and integration of access to data regarding business units and locations. This entire activity leads to a better access to information and improved internal transparency.in this regard, both acquisition of information and integration of information are developed. While financial accounting systems are forced to have a positive impact on managerial decision making, in here our focus has been on quality of internal information environment towards improvement of quality of tax related decisions in addition to tax avoidance as a desirable outcome. Documentation and collection of information from separate systems for supporting tax avoidance can be unbelievably time-consuming. As tax counselors have quoted, some companies issue a series of tax separations aimed at reduction of costs related to documentation. Similarly, Mills, Erickson and Meadow (1998) claimed that companies have time for making tax planning with respect to assets and etc. However the costs of doing so are too high. Therefore, tax avoidance processes in high quality internal information environments can be discussed effectively and rapidly. On this basis, the assets of the tax department are freed and the possibility would be provided for pursuing opportunities of tax planning.

Coordination Requirements

Decentralization is usually defined as having more special information at uncentralized levels. However, this information is not necessarily exposed to the manager and therefore one might be caught up with lack of symmetry of basic and fundamental information. This is while active business units are forced to have more interactions (Bushman et al. 1995). On this basis, they may only expose the special information to their own units. Tax affairs are included among bureaucratic affairs with responsibilities which penetrate through the entire company. Despite the manner of decentralization of companies, the tax department's activities are in organizational level for most companies. High dispersion of business and commerce units creates some coordination problems for tax planning because each of these commercial units may provide the returns of taxes in several different domains.

There is evidence for research regarding benefaction which has comprehended financial information in terms of decentralization. Chantal and Morris (1986) have provided a document regarding deployed benefaction and density and integration of information in extended time periods in which levels of decentralization and mutual organizational dependence are higher.

Chapman and Kihen (2009) indicated that perceptions of managers from success of commercial systems are created in terms of an act of organizational integrity through execution of such systems and management's trust in results of their internal awareness systems are improved.

In addition, dispersion of commerce and locations of some firms with many opportunities for tax planning are recognized. However, still the costs of tax are high. Dispersion of commercial industry may increase the chances for tax planning through pricing opportunities for transferring in supply chain. In this regard, documentation against tax privileges has been maintained through the entire sections of this process. Improved information coordination is possibly able to mark opportunities for avoidance of paying taxes.

Lack of Certainty

The main impact of lack of certainty is that managers' ability for having pre-designs is diminished. Since tax opportunities might be invisible, and then there might be basic doubts regarding results of opportunities of avoidance of tax. In addition, anticipation of vast range of potential tax results might be difficult. The model provided by Escotchmer and Esemroud (1989) anticipates that in an environment with a high level of lack of certainty regarding tax responsibility, companies will tend to pay more in order to reduce the possibility of investigation of compensation. Mc. Gory and Webid (2012), according to the idea which reduce lack of certainty about tax avoidance, have experimentally found out that companies working in designated environments are prone to be engaged in tax supports through lack of high operational certainty. There is some old economic information in this context. It has been shown that lack of certainty could be solved through acquisition of information. Chantal and Morris (1986) have provided an experimental document and shown that lack of certainty hardens planning and also the level of comprehended data in ambiguous environments is high.

This is while, from the economic point of view there are clear information citing that information play a greater role in ambiguous environments. Researches regarding tax accounting have extensively discussed lack of certainty as a main issue for benefaction (Meadow, 2001).

Tax Risk

Hanlound and Hitezman (2010) in their review study regarding difficulty have talked about tax avoidance. We have also reminded that injection of the assumed risk ideas to the planning process is crucial in this context. For having a better understanding of this issue lets imagine two companies which both have obtained a tax avoidance level of less than 15%. The A company can rely on high quality information and obtain such a value in terms of tax avoidance in order to support its decision. This is while the B Company is only able to obtain such a value only through pursuing real and risky opportunities of tax avoidance. Since this company does not have access to suitable information, its ability for convincing documentation of these strategies diminishes as well. The risks for the b Company are high in terms of being detected by the tax related department. On this basis, the B Company's tax risks are high. Therefore, we concluded that company B is much braver than the company B. companies with internal information environments with higher qualities are provided with better information for supporting their tax planning decisions, higher trust in terms of their informing efforts and better documentation against tax issuance privileges. All these counts affect the level of tax avoidance and assumed risks and tax avoidance opportunities.

Research Literature

Jafari Amine Isfahani (2014) carried out a research and elaborated on effects of companies' social responsibility on tax avoidance. In his research, he investigated 92 firms and his results indicated that social responsibility has no effects on tax avoidance. In this regard, a high level of social responsibility had no relation with reduced tax avoidance or vice versa.

Roostaei (2014) carried out a study and investigated the relation between smoothing tax included income and tax avoidance and related information content. The purpose of this research was to investigate the effect of smoothing tax included income on tax avoidance and its related information content. For this purpose, he investigated 92 of the firms listed in Tehran's exchange center. The applied criterion for evaluation of tax avoidance was effective rate of paid taxes. Results indicated that there exists a significant and negative relation between smoothing tax included income and tax avoidance. In this regard, smoothing the tax included income reduces lack of certainty of future tax advantages and provides firms and companies with the ability for implementation of more successful tax avoidance strategies. In addition, the results of this study have shown that there exists another significantly negative relation between smoothing the tax included income and its related information content. In this regard, smoothing the tax included income reduces its related information content.

Mibery et al. (2012) carried out a research and elaborated on smoothing the tax included income, tax avoidance and information

content of tax included income. This research investigated that whether there is a relation between smoothing the tax included income and future tax avoidance or not. In addition, this research has investigated the effects of smoothing the tax included income on its related information content. This research has considered the effective rate of paid taxes as the criterion for evaluation of tax avoidance. The research is performed between 1993 and 2009. Results have indicated that there exists a significantly negative relation between smoothing the tax included income and future tax avoidance. In addition, it was concluded that there exists a significant and negative relation between smoothing the tax included income and its related information content. In other words, smoothing the tax included income leads to reduction of its related information content.

Dirang et al. (2010) carried out a research titled as determination of effective incentives on tax planning. Findings of this study revealed that there existed a significant and negative relation between encouraging programs for tax managers and the tax rate calculated according to accounting standards. However, there was a weak relation discovered between the aforementioned programs and other applied criteria. As explanation of this result, researchers believed that active managers in tax affairs are faced with encouragements and incentives which would be reflected in financial statements if the reported taxes are reduced.

Material and Methods

This research includes a data panel and is considered as a review study. It means that this research is an experimental study and uses historical data. Since this research can be incorporated into the process of making use of information, it is considered as an applied research. The population includes the entire companies listed in Tehran's stock exchange during 2007-2014. Sampling was done through a systematic elimination method. The selected companies of each industry were conditioned at the following terms:

1) Their financial period must have had ended in 2014.

2) Each company should have had sufficient information for years 2007 to 2014. In other words the company had to be active in Tehran's stock exchange during the entire 2007-2014.

3) Each company should have had contracts for at least six months a year

4) The company shouldn't have had been included among investment, financial intervening, banks and holding companies.

According to the above mentioned criterions, 86 companies were selected. Afterwards the entire information required for this research were gathered from information banks of Tehran's stock exchange centers, the software of Rahavard Novin and Tadbir Pardaz and stocks related journals. It is worth mentioning that in this research, the sample is the same as population.

Research variables

Cash ETR: avoiding paying tax in cash (paid cash tax divided by income before paying taxes)

Independent variables

IIQ

Earning announcement speed: the amount of days between end of financial year and announced income of the company divided by 365 and multiplied by minus one.

Management forecast accuracy: absolute value (last forecast of the management about EPS before end of year minus actual EPS) multiplied by minus one and divided by the end-year price.

Moderator variables

Geographic dispersion: sum of squares of sales of the firm in each geographic section divided by total sales of the firm. Minus one and multiplied by -1.

Business dispersion: sum of squares of sales of the firm in each commerce section divided by total sales. Minus one and multiplied by -1.

Restructure: if the firm's report about restructuring costs in the current financial year has a variable index, then its equal to one. Otherwise, it is zero.

Control Variables

Size: natural logarithm of total assets

PPE: average of assets, machineries and equipment divided by average assets

Leverage: dividing debts by assets

ROA: operational income prior to exhaustion divided by average assets

Sales growth: sales in year t minus the sales in year t-1, divided by sales in year t-1

Cash flow volatility: standard deviation of flow of operational cash during the past five years prior to year t.

Stock return volatility: monthly deviation of share revenues during the past five years prior to year t.

Sales volatility: standard deviation of sales during the past five years prior to year t.

Asset growth: assets in year t minus assets in year t-1, divided by assets in year t-1.

Unqualified audit opinion: if the opinion of the auditor in year t was acceptable, the index of this variable is then equal to 1, otherwise its zero.

Research Hypotheses and Models

Main hypothesis: firms' internal information quality is effective on tax avoidance

Subsidiary hypotheses:

1- Internal information environments with higher quality are effective on higher tax avoidance under geographic dispersion.

Cash ETRit = α0 + β1 IIQit + β2 GDit + β3 MFCit + β4 Sizeit + β5 PPEit + β6 Levit + β7 ROAi+ β9 SGit + β10 CFVit + β11 SRVit+ β8 SVit + β12 AGit + β13 UAOit + β14 IIQit * GDit + β15 MFCit * GDit + β16 Sizeit * GDit + β17 PPEit * GDit + β18 Levit * GDit + β19ROAit * GDit+ β21 SGit * GDit + β22 CFVit * GDit + β23SRVit * GDit + β20 SVit * GDit+ β24 AGit * GDit+ β25 UAOit GDit .

2- Internal information environments with higher quality are effective on higher tax avoidance under business dispersion.

Cash ETRit = α0 + β1 IIQit + β2 BDit + β3 MFCit + β4 Sizeit + β5 PPEit + β6 Levit + β7 ROAit +β9 SGit + β10 CFVit + β11 SRVit + β8 SVit + β12 AGit + β13 UAOit + β14 IIQit * BDit + β15 MFCit * BDit + β16 Sizeit * BDit + β17 PPEit * BDit + β18 Levit * BDit + β19 ROAit * BDit +β21SGit * BDit + β22 CFVit * BDit + β23 SRVit * BDit + β20 SVit * BDit +β24 AGit * BDit + β25 UAO25 * BDit .

3- Internal information environments with higher quality are effective on higher tax avoidance under restructuring condition.

Cash ETRit = α0 + β1 IIQit + β2 restit + β3 MFCit + β4 Sizeit + β5 PPEit + β6 Levit + β7 ROAit +β9 SGit + β10 CFVit + β11 SRVit + β8 SVit +β12 AGit + β13 UAOit + β14 IIQit * rest it + β15 MFCit * rest it + β16 Sizeit * rest it + β17 PPEit * rest it + β18 Levit * rest it + β19 ROAit * rest it + β21 SGit * rest it + β22 CFVit * rest it + β23 SRVit * rest it + β20 SVit* rest it +β24AGit * rest it + β25 UAOit rest it .

Findings

Subsidiary hypotheses testing

First subsidiary hypothesis:

1- Internal information environments with higher quality are effective on higher tax avoidance under geographic dispersion.

Prior to testing the first subsidiary hypothesis, we try to select a suitable model for our regression model. First, by the use of the F test, we try to select an integrated data model instead of combined data model. The probability value of the F value in this test, as it is shown in table (1) is less than the significance level of 5%. Therefore, it seems unreasonable to apply integrated data method for testing the first subsidiary hypothesis.

Table 1.
Choosing integrated data over combined data

Test statistic	Test value	F.D	Test type
0.0063	5.19	88-688	F

As a result of not choosing the integrated data model over the combined data model, we try to perform the Hussmann test in order to choose the model of constant effects instead of random effect model. The probability value of this test is less than the significance value of 5%. Therefore the evidence for rejection of constant effects model seem insufficient and the former is used for testing the first subsidiary hypothesis.

Table 2
Choosing the constant effects model instead of the random effects model

Test statistic	Test value	F.D	Test type
0.0011	21.56	8.17	Hussmann

The combined regression model of constant effects of impact of high IIQ on tax avoidance under geographic dispersion is positive (0.087); and with respect to probability of t (0.028), it is statistically significant. This issue reveals that high IIQ under geographic dispersion results in tax avoidance. The effect of high IIQ despite the effect of geographic condition (0.126) and with respect to probability of t (0.122) is statistically insignificant on tax avoidance. In addition, validity of forecasts of management with respect to geographic conditions, has a significant (0.133) effect on tax avoidance considering the t value (0.019). Without the effects of geographic condition, this effect is still significant (0.058) with a t value of (0.011).

Regarding the effects of control variables, without considering for geographic condition the effects of firm size, stock returns, sales growth and type of statements do not result in tax avoidance. However, in contrast to these, fluctuations of cash flow and fluctuations of stock returns, sales fluctuations and leverage do result in tax avoidance. Effects of control variables with considering for environmental conditions, shows that firm size, financial leverage, stock returns, sales growth, assets growth and type of financial statement will not result in tax avoidance. However cash flow fluctuations, stock returns fluctuations, sales fluctuations and average assets' standard do result in tax avoidance.

Results attributed to the F statistic manifest that the model is generally significant and also with respect to the Durbin-Watson statistic (1.98), the model lacks any correlation related problem. In addition, results related to the adjusted determination coefficient show that during the entire research period, almost 55% of changes imposed on tax avoidance were found to be anticipated by independent and control variables of the study under the effects of geographic and environmental conditions. With respect to significance of the effects of high IIQ under geographic dispersion on tax avoidance, the first subsidiary hypothesis is approved.

Table 3

Combined regression model of random effects of high II under geographic dispersion on tax avoidance

Cash ETRit = α0 + β1 IIQit + β2 GDit + β3 MFCit + β4 Sizeit + β5 PPEit + β6 Levit + β7 ROAi+ β9 SGit + β10 CFVit + β11 SRVit+ β8 SVit + β12 AGit + β13 UAOit + β14 IIQit * GDit + β15 MFCit * GDit + β16 Sizeit * GDit + β17 PPEit * GDit + β18 Levit * GDit + β19ROAit * GDit+ β21 SGit * GDit + β22 CFVit * GDit + β23SRVit * GDit + β20 SVit * GDit+ β24 AGit * GDit+ β25 UAOit GDit .

T probability	Regression coefficients	T value	Variables
0.049	0.119	2.14	constant
0.122	0.126	1.41	IIQ
0.011	0.058	2.51	Validity of revenue management forecasts
0.015	0.047	2.61	Geographic dispersion
0.038	0.136	2.41	Firm size
0.016	0.062	2.59	Financial leverage
0.019	0.074	2.43	Stock returns
0.006	0.045	2.89	Sales growth
0.109	0.049	1.81	Cash flow fluctuations
0.073	0.108	1.89	Stock return fluctuations
0.101	0.114	1.75	Sales fluctuations
0.137	0.287	1.39	Asset growth
0.028	0.104	2.48	Statement type
0.0095	-0.104	-2.68	Assets average standard
0.028	0.087	2.42	IIQ x dispersion (geographic)
0.019	0.133	2.36	Validity of revenue management forecast x dispersion (geographic)
0.011	-0.061	-2.48	Firm size x dispersion (geographic)
0.015	0.039	2.49	Financial leverage x dispersion (geographic)
0.6222	1.35	0.54	Asset returns x dispersion (geographic)
0.158	0.176	1.56	Sales growth x v
0.0215	0.092	2.42	Fluctuations of cash flow x dispersion (geographic)
0.0281	-0.041	-2.17	Stock return fluctuations x dispersion (geographic)
0.0317	-0.045	-2.14	Sales fluctuations x dispersion (geographic)
0.0187	-0.043	-2.47	Asset growth x dispersion (geographic)
0.0076	-0.049	2.42	Statement type x dispersion (geographic)
0.0291	-0.041	-2.54	Assets and equipment average standard dispersion (geographic)
Durbin-Watson statistic	Adjusted determination coefficient	F statistic probability	Determination coefficient
1.98	0.55	0.003	0.61

Second Subsidiary hypothesis:

2- Internal information environments with higher quality are effective on higher tax avoidance under business dispersion.

Prior to testing the second subsidiary hypothesis, we try to select a suitable model for our regression model. First, by the use of the F test, we

try to select an integrated data model instead of combined data model. The probability value of the F value in this test, as it is shown in table (4) is less than the significance level of 5%. Therefore, it seems unreasonable to apply integrated data method for testing the first subsidiary hypothesis.

Table 4
Choosing integrated data over combined data

Test statistic	Test value	F.D	Test type
0.0023	8.42	86-618	F

As a result of not choosing the integrated data model over the combined data model, we try to perform the Hussmann test in order to choose the model of constant effects instead of random effect model. The probability value of this test is less than the significance value of 5%. Therefore the evidence for rejection of constant effects model seem insufficient and the former is used for testing the first subsidiary hypothesis.

Table 5
Choosing the constant effects model instead of the random effects model

Test statistic	Test value	F.D	Test type
0.0016	27.41	9.28	Hussmann

The combined regression model of constant effects of impact of high IIQ on tax avoidance under business dispersion is positive (0.064); and with respect to probability of t (0.019), it is statistically significant. This issue reveals that high IIQ under business dispersion results in tax avoidance. The effect of high IIQ despite the effect of business condition (0.067) and with respect to probability of t (0.037) is statistically significant on tax avoidance. In addition, validity of forecasts of management with respect to geographic conditions, has a significant (0.034) effect on tax avoidance considering the t value (0.029). Without the effects of geographic condition, this effect is still significant (0.076) with a t value of (0.0136).

Regarding the effects of control variables, without considering for business condition the effects of firm size, stock returns, sales growth and type of statements do not result in tax avoidance. However, in contrast to these, fluctuations of cash flow and fluctuations of stock returns, sales fluctuations and leverage do result in tax avoidance. Effects of control variables with considering for environmental conditions, shows that firm size, financial leverage, stock returns, sales growth, assets growth and type of financial statement will not result in tax avoidance. However cash flow fluctuations, stock returns fluctuations, sales fluctuations and average assets' standard do result in tax avoidance.

Results attributed to the F statistic manifest that the model is generally significant and also with respect to the Durbin-Watson statistic (1.89), the model lacks any correlation related problem. In addition, results

related to the adjusted determination coefficient show that during the entire research period, almost 47% of changes imposed on tax avoidance were found to be anticipated by independent and control variables of the study under the effects of business and environmental conditions. With respect to significance of the effects of high IIQ under geographic dispersion on tax avoidance, the second subsidiary hypothesis is approved.

Table 6

Combined regression model of random effects of high II under business dispersion on tax avoidance

Cash ETRit = α0 + β1 IIQit + β2 BDit + β3 MFCit + β4 Sizeit + β5 PPEit + β6 Levit + β7 ROAit +β9 SGit + β10 CFVit + β11 SRVit + β8 SVit + β12 AGit + β13 UAOit + β14 IIQit * BDit + β15 MFCit * BDit + β16 Sizeit * BDit + β17 PPEit * BDit + β18 Levit * BDit + β19 ROAit * BDit +β21SGit * BDit + β22 CFVit * BDit + β23 SRVit * BDit + β20 SVit * BDit +β24 AGit * BDit + β25 UAO25 * BDit .

T probability	Regression coefficients	T value	Variables
0.182	1.29	1.58	constant
0.037	0.067	2.51	IIQ
0.036	0.076	2.48	Validity of revenue management forecasts
0.037	0.108	2.41	Geographic dispersion
0.008	0.083	2.78	Firm size
0.039	0.138	2.28	Financial leverage
0.043	0.096	2.38	Stock returns
0.023	0.105	2.54	Sales growth
0.069	0.109	1.65	Cash flow fluctuations
0.017	0.054	2.46	Stock return fluctuations
0.009	0.047	2.62	Sales fluctuations
0.0391	0.019	2.19	Asset growth
0.344	0.043	1.28	Statement type
0.038	0.021	2.54	Assets average standard
0.019	0.064	2.28	IIQ x dispersion (geographic)
0.029	0.034	2.24	Validity of revenue management forecast x dispersion (geographic)
0.026	0.041	2.57	Firm size x dispersion (geographic)
0.012	0.034	2.69	Financial leverage x dispersion (geographic)
0.032	0.059	2.43	Asset returns x dispersion (geographic)
0.0013	0.046	2.24	Sales growth x v
0.247	0.0298	3.07	Fluctuations of cash flow x dispersion (geographic)
0.095	0.058	2.92	Stock return fluctuations x dispersion (geographic)
0.022	0.044	2.36	Sales fluctuations x dispersion (geographic)
0.034	0.047	2.18	Asset growth x dispersion (geographic)
0.018	0.039	2.23	Statement type x dispersion (geographic)
0.089	0.069	1.51	Assets and equipment average standard dispersion (geographic)
Durbin-Watson statistic	Adjusted determination coefficient	F statistical probability	Determination coefficient
1.89	0.47	0.006	0.52

Third Subsidiary Hypothesis:

3- Internal information environments with higher quality are effective on higher tax avoidance under restructuring condition.

Prior to testing the third subsidiary hypothesis, we try to select a suitable model for our regression model. First, by the use of the F test, we try to select an integrated data model instead of combined data model. The probability value of the F value in this test, as it is shown in table (7) is less than the significance level of 5%. Therefore, it seems unreasonable to apply integrated data method for testing the first subsidiary hypothesis.

Table 7
Choosing integrated data over combined data

Test statistic	Test value	F.D	Test type
0.0014	5.12	86-688	F

As a result of not choosing the integrated data model over the combined data model, we try to perform the Hussmann test in order to choose the model of constant effects instead of random effect model. The probability value of this test is less than the significance value of 5%. Therefore the evidence for rejection of constant effects model seem insufficient and the former is used for testing the first subsidiary hypothesis.

Table 8
Choosing the constant effects model instead of the random effects model

Test statistic	Test value	F.D	Test type
0.0856	22.59	11.27	Hussmann

The combined regression model of constant effects of impact of high IIQ on tax avoidance under restructuring condition is positive (0.127); and with respect to probability of t (0.062), it is statistically insignificant. This issue reveals that high IIQ under restructuring condition doesn't result in tax avoidance. The effect of high IIQ despite the effect of restructuring condition (0.0157) and with respect to probability of t (0.134) is statistically insignificant on tax avoidance. In addition, validity of forecasts of management with respect to restructuring condition, has a significant (0.152) effect on tax avoidance considering the t value (0.0113). Without the effects of restructuring condition, this effect is no longer significant (0.093) with a t value of (0.0068).

Regarding the effects of control variables, without considering for restructuring condition the effects of firm size, stock returns, sales growth and type of statements do not result in tax avoidance. However, in contrast to these, fluctuations of cash flow and fluctuations of stock returns, sales fluctuations and leverage do result in tax avoidance. Effects of control variables with considering for environmental conditions, shows that firm size, financial leverage, stock returns, sales growth, assets growth and type of financial statement will not result in tax avoidance. However cash flow fluctuations, stock returns fluctuations, sales fluctuations and average assets' standard do result in tax avoidance.

Results attributed to the F statistic manifest that the model is generally significant and also with respect to the Durbin-Watson statistic (1.96), the model lacks any correlation related problem. In addition, results related to the adjusted determination coefficient show that during the entire research period, almost 29% of changes imposed on tax avoidance were found to be anticipated by independent and control variables of the study. With respect to insignificance of the effects of high IIQ under restructuring condition on tax avoidance, the third subsidiary hypothesis is rejected.

Table 9

Combined regression model of random effects of high II under business dispersion on tax avoidance

Cash ETRit = α0 + β1 IIQit + β2 restit + β3 MFCit + β4 Sizeit + β5 PPEit + β6 Levit + β7 ROAit +β9 SGit + β10 CFVit + β11 SRVit + β8 SVit +β12 AGit + β13 UAOit + β14 IIQit * rest it + β15 MFCit * rest it + β16 Sizeit * rest it + β17 PPEit * rest it + β18 Levit * rest it + β19 ROAit * rest it + β21 SGit * rest it + β22 CFVit * rest it + β23 SRVit * rest it + β20 SVit* rest it +β24AGit * rest it + β25 UAOit rest it .

T probability	Regression coefficients	T value	Variables
0.138	0.56	1.61	constant
0.134	0.157	1.49	IIQ
0.068	0.093	2.87	Validity of revenue management forecasts
0.018	0.098	2.89	Geographic dispersion
0.036	0.106	2.46	Firm size
0.042	0.135	2.38	Financial leverage
0.029	0.075	2.45	Stock returns
0.044	0.163	2.31	Sales growth
0.137	0384	1.45	Cash flow fluctuations
0.108	0.131	1.51	Stock return fluctuations
0.008	0.051	2.67	Sales fluctuations
0.017	0.056	1.57	Asset growth
0.065	-0.142	-2.01	Statement type
0.0131	0.031	2.66	Assets average standard
0.062	0.127	1.86	IIQ x dispersion (geographic)
0.113	0.152	1.47	Validity of revenue management forecast x dispersion (geographic)
0.0215	0.092	2.42	Firm size x dispersion (geographic)
0.0281	-0.041	-2.61	Financial leverage x dispersion (geographic)
0.032	0.048	2.63	Asset returns x dispersion (geographic)
0.037	0.017	2.53	Sales growth x v
0.0776	0.041	1.46	Fluctuations of cash flow x dispersion (geographic)
0.0187	0.043	2.47	Stock return fluctuations x dispersion (geographic)
0.037	0.051	2.41	Sales fluctuations x dispersion (geographic)
0.139	0.135	1.41	Asset growth x dispersion (geographic)
0.067	0.078	2.21	Statement type x dispersion (geographic)
0.086	0.141	1.57	Assets and equipment average standard dispersion (geographic)
Durbin-Watson statistic	Adjusted determination coefficient	F statistical probability	Determination coefficient
1.96	0.29	0.004	0.34

Main Hypothesis Analysis

Main hypothesis: firms' internal information quality is effective on tax avoidance

With respect to previous analyses regarding geographic dispersion, business dispersion and restructuring condition; we try to elaborate on main hypothesis of the study.

The combined regression model of constant effects of impact of high IIQ on tax avoidance under geographic dispersion is positive (0.087); and with respect to probability of t (0.028), it is statistically significant. This issue reveals that high IIQ under geographic dispersion results in tax avoidance. The combined regression model of constant effects of impact of high IIQ on tax avoidance under business dispersion is positive (0.064); and with respect to probability of t (0.019), it is statistically significant. This issue reveals that high IIQ under business dispersion results in tax avoidance. The combined regression model of constant effects of impact of high IIQ on tax avoidance under restructuring condition is positive (0.127); and with respect to probability of t (0.062), it is statistically insignificant. This issue reveals that high IIQ under restructuring condition doesn't result in tax avoidance.

With respect to significant effects of two sections of the entire three sections effective on tax avoidance, the main hypothesis of the study is approved.

Discussion and Conclusion

Avoiding paying the real taxes is a major challenge for many countries and especially for developing countries. This issue results in reduced tax income and reduced transparency in economy. Tax indices including ratio between tax and gross national production reveal that what is paid as tax is far distant from potential capacities. In other words, in Iran we are witnessing a great deal of tax avoidance and evasion. In contrast to tax evasive actions, tax avoidance technics make use of gaps in regulations and laws. In this process, the companies try to identify pores of law and use them in order to avoid paying taxes. Theoretical basics and experimental evidence reveal that companies are motivated for saving in their tax expenses. In this regard, companies can act pervasively and delay their taxes or even perform tax avoidance maneuvers and evade paying tax.

In this research, the effects of IIQ are investigated on tax avoidance. In support of better tax consequences, we have studied the role of IIQ and have taken a great step towards having a better recognition of tax avoidance. Results indicate that higher IIQ is correlated to higher tax avoidance. In addition, for companies with geographic dispersion and business dispersion, this effect becomes stronger. Finally, we concluded that higher IIQ is correlated to lower taxes. Results of the regression model in main hypothesis revealed that IIQ has a direct impact on tax avoidance under geographic dispersion. This result is consistent with the results obtained by Dorant (2013), Gong (2009) and Gove and Kim (2013).

Results of regression model in this hypothesis have shown that geographic dispersion has the highest effect on tax avoidance under high IIQ. This result is consistent with the results obtained by Chantal and

Morris (1986); Chapman and Kin (2009) and Kin (2009). Chantal and Morris provide evidence (1986) that shows that efficiency of domain and density and integrity of information is more when the organization's operations become more expanded and deployed. Chapman and Kin have also shown that (2009) the confidence of management in II of a company is a function of organizational information integrity among dispersed business units. In fact, as a result issues such as lack of consistency of information between those dispersed business units are removed and additionally, the same issue reduces between tax department and entire business units.

Results of regression model of this hypothesis indicated that internal information environment is least affected by business dispersion and still results in tax avoidance.

This result is consistence with the results obtained by Galbrite (1974), Chantal and Morris (1986). Galbrite (1974) has shown that when lack of certainty is increased, decision makers must process a higher amount of information in order to achieve a certain level of efficiency. A method for companies to confront lack of certainty is to improve your information processing capacity through researching about internal information systems. Chantal and Morris (1986) provided evidence revealing that information is more efficient in uncertain environments.

Results of the regression model have also shown that under reconstruction conditions, a firm's probability for performing tax avoidance does not improve.

Freshman, Reego and Wilson (2010) referred to Mills' model of offensive tax report as being engaged in important tax related conditions which are supported by relatively weak facts. However none of the aforementioned researchers have controlled for the effects of IIQ. Therefore results indicate that firms with higher IIQ are more confident in their information and are provided with better information for tax related decision makings. They also have a better ability in terms of documentation of mutual privileges related to tax. These results are also consistent with the results obtained by hanlon and Hitezman (2010) and Mills (2010).

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