



## Designing a Model of Factors Affecting in Tax Avoidance Using the Interpretive Structural Modeling (ISM)

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### ABSTRACT

Taxes are the most important revenue of governments that have been collected for a long time. In most countries, the most of government revenue comes from taxes. The purpose of this paper is to examine the factors influencing tax avoidance in order to provide a suitable model based on the interpretive structural modeling. The present paper is a practical research in terms of purpose and in terms of the nature and procedure; it falls into descriptive-survey research category. The initial research questionnaire identified 28 factors related to the purpose of the research. Finally, according to the factor of exploratory factor analysis and consultation with experts and specialists in the field, 7 factors were finally examined. Therefore, the population of the study consists of university professors, tax experts and experts who are members of the Society of Certified Public Accountants which have been selected by targeted sampling method. The results showed that the factors of tax calculation transparency, financial reporting quality, managerial uncertainty, organizational commitment and employee attitude criterion are more effective in relation to the subject of the article.

### Keywords:

Taxation, Tax avoidance, Economics, Interpretive Structural Modeling.

## 1. Introduction

Expanding government commitments in the economic and social spheres and trying to achieve goals such as economic growth, price stability, increasing employment and a fair distribution of income raises government spending. Taxation is one of the important tools by which governments influence economic variables such as economic growth, inflation and unemployment, and resource allocation (Kovermann, 2019: 2). Financing such expenses requires sufficient revenue sources (Al-dhamari & Ismail, 2015: 217). In general, government revenues can be divided into two main groups: tax and non-tax revenues. In the budget of oil-exporting countries, revenues from oil exports and their products are considered as the largest source of non-tax income (Mehrabanpour et al., 2017: 69). In contrast, tax revenues are the most economically viable. In many countries, tax revenues are more important than other important sources of income (Asiri, 2020: 4). Taxation is also an effective tool for implementing economic policies, including distribution, finance and even economic guidance in the direction of macroeconomic goals such as economic stabilization, job creation, economic growth and improving social welfare (Thomsen, 2018: 51). In other words, comparing this important resource with other sources suggests that the higher the share of taxes in government funding, the significantly less adverse economic effects (Kubick et al., 2014: 41). For this reason, in developed countries, unlike developing countries, taxes play an important role in financing government spending and roughly the major spending of the government is financed this way. In addition to financing, the government can use tax leverage to achieve its three goals of resource allocation, income distribution, and economic stability (Rezaee & Sherafati, 2015: 58). Despite all the advantages mentioned for tax revenues compared to non-tax revenues, the collection of such revenues has always face with some problems. Tax avoidance stems from legal loopholes in the tax law (Leung, 2019: 109). In this way, the person is looking for ways to escape in order to reduce the ability to pay taxes. For example, it shows labor income in the form of capital income, which has a lower rate of taxation (Hanlon and Heitzman, 2010: 50). In tax evasion, the taxpayer has no reason to worry about the possibility of disclosure, as he or she must record all of his or her transactions in detail, albeit unrealistically. In fact,

economic agents are using tax loopholes and reviewing their economic decisions to reduce their tax debt. In other words, tax evasion is a form of formal abuse of tax laws. Therefore, tax evasion is legal and to reduce a person's tax liabilities by circumventing the law or taking full advantage of legal gains. So, adopting a tax reduction approach can be influenced by various factors (Mehrani and Seyyedi, 2014: 20). Investors generally consider tax avoidance activities to be a value-added activity. Tax avoidance has been defined as a reduction in the tax amount from pre-tax accounting profit (from taxable profit) (Foroughi, 2015: 182). Recently, tax evasion has attracted the attention of many academic and practical researches due to its many economic consequences, and many studies have been conducted on intra-organizational and extra-organizational factors affecting tax avoidance (Ross et al., 2017: 501). Identifying the components that affect tax avoidance can help policymakers and legislators to formulate appropriate tax laws. Examining this issue can also clarify how tax laws are enforced (Hong, 2019: 3). In addition, according to the research, the profits announced by the companies have high information content. Taxes imposed by companies are significant amounts of money that ultimately lead to a change in net profit. Therefore, the study of factors affecting the cost of taxation is important. On the other hand, companies are always looking to pay lower taxes (Huang et al., 2016: 189). Tax avoidance is one of the methods that taxpayers can use to reduce the amount of tax (McClure, 2018: 498). Several studies have been conducted on tax avoidance and variables such as auditor and auditing (Khajavi and Kiamehr, 2016: 81); auditor's specialty (Khani et al., 2014: 50); managerial overconfidence (Chyz et al., 2014: 35); financial reporting (Abbaszadeh et al., 2016: 52), etc., are among the factors whose effect on tax avoidance or, conversely, the effect of tax avoidance on them have been studied.

In some of these studies, tax avoidance has been considered as a dependent variable and in some as an independent variable. Also, tax avoidance as a way to reduce the amount of tax levied on profits from the operation of business units is a completely legal and progressive strategic activity and program in obtaining tax exemptions that leads to the creation of a gray space in the provision of information and Financial and tax returns to outsiders. As a result, tax evasion is

becoming a major concern for governments (Abbaszadeh et al., 2016: 48). Now the question arises as to which of these approaches is preferred over another in various studies? What is the relationship between these variables? Is it possible to provide a suitable model in this field?

## **2. Literature Review**

Tax avoidance is considered to be a maximizing value activity that transfers wealth from the state to the company's shareholders from its traditional and conventional point of view (Xia, 2017: 382). Recent research suggests that tax avoidance activities could allow management to engage in opportunistic behaviors. Different definitions of tax avoidance have been proposed by researchers. Tax avoidance has been defined as a reduction in overt taxation from any interest before tax (Hanlon and Heitzman, 2010: 50). Tax avoidance activities are commonly referred to as tax-saving tools that transfer resources from government to shareholders and increase value corporate post-taxation (Zheng, 2017: 50). Pasternak & Rico (2008) have defined tax avoidance as the legal use of the tax system for personal interest in order to reduce the amount of tax payable by the instruments contained in the law itself (Tien et al., 2018: 247).

Some studies show that in recent years, the notion that large corporations do not pay their actual taxes has intensified. This notion has been reinforced by recent scandals. Issues such as the transparency of financial reporting and the importance that has become more apparent in recent years, following the unfortunate events and crises in world stock exchanges, especially the Black September 1997 and subsequent September 11, 2000 events, the disclosure of the WorldCom, Enron story, Xerox and then Parmalat in the world and the fall of Tehran Stock Exchange indicators in 2004, made more important the issue of transparency of financial statements as an important and necessary phenomenon in the stock market (Arab Mazar et al., 2011 : 24). Financial reporting is one of the most important sources of information that aims to provide the information needed for economic decisions and it provides most of the information needed for the capital market. Currently, research is being done on the quality of financial reporting and its measurement, as well as the impact of accounting guidelines and standards on the quality of financial reporting. But despite the same oversight mechanisms for corporate

financial reporting, the quality of their financial reporting does not seem to be the same. This indicates that there are probably other factors that cause differences in the quality of companies' financial reporting (Ebrahimi et al., 2017: 154). Also, tax culture means people's beliefs and knowledge about taxes and the necessary to pay them.

It can be argued that the premise of a good tax culture is to pay taxes by the general public when people believe that the government spends taxes on improving society and social development and the well-being of citizens (Sidney et al. 2019: 111)

On the other hand, in companies, overconfidence of the CEO is defined as the ability of the CEO to predict very positive results (Malmendier & Tate, 2005: 665). An overconfident manager systematically overestimates future returns on investment projects. In other words, he/she overestimates the likelihood of the desired effects and events on the company's cash flows, and underestimates the likelihood of adverse events affecting the company's cash flows. Therefore, managers who are overconfident are expected to spend more capital and invest heavily in investment projects (Ben-David et al., 2010: 1550). Due to this increase of investment in capital expenditures (fixed assets), depreciation costs increase- costs that lead to lower profits and lower tax costs. Also, an increase in investment leads to higher operating costs. This increase in operating costs will reduce the taxable income of the company and ultimately reduce the cost of the company's tax. Managerial overconfidence leads to an overestimation of the net return on current value of cash flows from investment in tax planning (Watson, 2015: 4). In fact, managerial over-assurance increases the investment rates in the investment plan, by overestimating tax savings in tax planning and underestimating the cost of investing in tax planning or a combination of the two and lead to an increase in tax avoidance (Chyz et al., 2014: 36). Information transparency also reduces the negative impact of corporate tax avoidance. Various studies such as Chen et al. (2014) and Abedi & Safari Grayley (2016) show that by improving information transparency, investor supervision on managers' behavior is facilitated and their concerns about agency issues related to corporate tax avoidance are reduced. Thus, information transparency can moderate the negative impact of corporate tax avoidance.

### 3. Methodology

The present study is a practical research in terms of purpose and in terms of the nature and procedure; it falls into the category of descriptive-survey research. Descriptive research examines and describes the existing facts and in survey research, the researcher uses questionnaires and interviews to discover the opinions, thoughts, perceptions and experiences of the concerned people. In this research, library method has been used to collect data according to the research literature and backgrounds. The data collection tool is also a researcher-made questionnaire with the aim of investigating the financial and non-financial factors affecting tax avoidance. In the initial research questionnaire, 28 factors related to the purpose of the research were identified, and finally, according to the exploratory factor analysis and consultation with experts and specialists in the field, 7 factors were finally examined. The statistical population of the study consisted of university professors, tax experts and experts who are members of the Society of Certified Public Accountants, who have been selected through targeted sampling. To evaluate the validity of tool, content validity was used and the questionnaire was provided to professors and experts to verify the accuracy of the questions. In the targeted sampling of

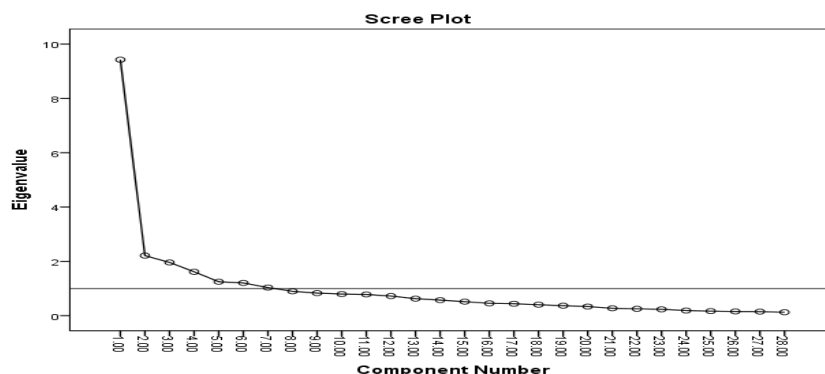
the present study, targeted judgmental sampling has been used. This means that a limited number of people have the right information to answer the research questions. Finally, 14 university professors, tax experts and experts from the Society of Certified Public Accountants answered the questions. Experts in this study were also people who have at least 10 years of experience working in the field of tax affairs or teaching in the field of finance or taxation. Sampling continued until the theoretical saturation stage. To determine the reliability of the instrument, the measurement of ICC coefficient in terms of Consistency and absolute agreement was confirmed.

#### 3.1. Exploratory factor analysis

KMO index and Bartlett test were used in exploratory factor analysis. Based on these two tests, the data are suitable for factor analysis when the KMO index is more than 0.6 and close to one and the significance level of the Bartlett test is less than 0.05. In fact, the results of this test showed that the items are factorizable. In the next step, after ensuring the reliability of the items, the gravel diagram is examined.

**Table 1- the results of exploratory factor analysis to determine the adequacy of the sample and the factorize of the primary factors**

test KMO		.834
Bartlett test	value $\chi^2$	1724.223
	df	378
	(Sig)	0.000



**Figure 1- changes in special values**

The chart of specific values changes in relation to factors was examined. This diagram is used to determine the optimal number of components. According to Figure (1), changes in specific values decrease from the seventh factor onwards. So, seven factors can be extracted as the most important factors that play a role in explaining data variance.

### 3.2. Interpretative structural modeling (ISM)

Interpretive structural modeling is a tool that shows the interaction between different variables and shows the relationships between variables as hierarchical relationships (Warfield, 1974). This method is used to identify and show the relationships between different factors that can have complex relationships (Attri et al., 2013). The steps of the interpretive structural modeling method (Singh & Kant, 2011) have the following steps:

First, the variables that can affect the system are identified. These variables can include individuals, goals, and tasks. At this stage, the Interactive Matrix (SSIM) is created. In this matrix, symbols are used that show accessibility.

V: If element *i* affects element *j*

A: If element *j* affects the element *i*

X: The interaction of elements *i* and *j*

O: If there is no connection between elements *i* and *j*

To form the Initial reachability matrix, the symbols mentioned in the previous step must be converted to zero and one symbols. This results in an initial reachability matrix. After accessing the initial reachability matrix, considering the transferability in the obtained relationships, the final reachability matrix is obtained. This matrix shows the degree of

dependence and influence of each factor. The power of penetration is obtained from the sum of the numbers in each row and the degree of dependence from the sum of the numbers in each column is obtained.

At this stage, using the final reachability matrix, the output and input sets for each factor are obtained. The output set for each factor includes the factor itself and those factors that affect them. After determining the output and input sets the sharing between the two outputs and input sets for each obstacle is determined. Factors whose output and common sets are perfectly coordinated and have the least penetration power are at the lowest level of the interpretive structural hierarchy. Once the highest levels have been identified in the first iteration, these factors must be removed from the other factors. This process continues until the level of all factors is determined.

### 4. Research findings

In this study, first by examining the literature of the subject, the factors affecting tax avoidance have been identified. Then, a questionnaire was designed to identify the relationship between the extracted factors and to provide an interpretive structural model of these factors and was distributed among 14 university professors, tax experts and members of the Society of Certified Public Accountants. The final factors obtained from the study of the existing literature after applying the opinions of experts and exploratory analysis are listed in Table (2).

To do this research, a self-interacting matrix is first created. This matrix uses the VOXA symbols described in the previous section which has been used by experts for the extraction of structural self-interacting matrices, which can be seen in Table (3).

**Table 2- Identified factors for performing Interpretative structural modeling**

Raw	Symbols	factors	References
1	V1	Tax calculations transparency Criteria	Abbaszadeh (2016)
2	V2	Financial Reporting Quality Criteria	Ebrahimi (2017)
3	V3	Tax culture criteria	Emani Khoshkhou (2017)
4	V4	Management Overconfidence Criteria	Arab Salehi (2015)
5	V5	Electronic tax collection criteria	Behrad (2015)
6	V6	Organizational Commitment Criteria	Salehi (2014)
7	V7	Employee Attitude Criteria	Najari (2014)

**Table 3- Structural Self-Interactive Matrix (SSIM)**

Raw	Factoes	V7	V6	V5	V4	V3	V2	V1
1	V1	V	A	A	V	A	A	
2	V2	V	A	A	V	O		
3	V3	V	V	O	O			
4	V4	X	V	O				
5	V5	V	V					
6	V6	V						
7	V7							

In order to achieve the initial reachability matrix, the symbols mentioned in Table (3) must be converted to zero and one symbols. Thus, the initial reachability matrix is obtained according to Table (4) and the following rules:

- If the input (i, j) in the structural self-interaction matrix is a symbol of V, in the initial reachability matrix (i, j) is one and the input (j, i) will be zero.
- If the input (i, j) in the structural self-interacting matrix is symbol A, in the initial reachability matrix (i, j) is zero and the input (j, i) is the number one.
- If the input (i, j) in the structural self-interacting matrix is an X symbol, in the initial reachability matrix (i, j) is one and the input (j, i) will be the one.
- If the input (i, j) in the structural self-interacting matrix is an O symbol, in the initial reachability matrix (i, j) is zero and the input (j, i) will be zero.

After the initial reachability matrix was obtained, the secondary relationships of the indicators were controlled. The secondary relationship is such that if i index leads to the j index and the j index also leads to the k index, then i index will also lead to the k index. If this is not the case in the initial reachability matrix, the modified matrix and the relationships that have been lost must be replaced; this is called adapting the initial reachability matrix. In this step, all secondary relationships between the variables were examined and the final reachability matrix was obtained according to Table (5).

Cells marked with 1\* mark indicate that the initial reachability matrix was zero and after compatibility, they get the number one (using MATLAB programming). This matrix also shows the power of influence and the degree of dependence each variable.

The penetration power of a variable is obtained from the sum of the variables affected by it and the variable itself. The degree of dependence of a variable is also obtained from the sum of the variables that are affected by it and the variable itself. MATLAB software has been used to calculate the final reachability matrix.

In the next step, after determining the input and output sets, the sharing of these sets is obtained for each of the factors using the reachability matrix.

The output set of a factor includes the factor itself and the factors that affect it, which can be identified by the "1s" in the corresponding row. The input set of a factor includes the factor itself and the factors that are affected by it, which can be identified by the "1s" in the corresponding column.

After determining the input and output sets, their share is determined for each factor. Factors whose output and common sets are quite similar are at the highest level of the hierarchy of interpretive structural models. In order to find the components of the next level of the system, the components of its highest level in the mathematical calculations of the relevant table are removed. And the operations related to determining the components of the next level, such as the method of determining the components of the highest level, are performed. This operation is repeated until the components of all system levels are identified.

After determining the levels of each factor and also considering the final reachability matrix, the model of interpretive structure is drawn. The final model obtained consists of 2 levels. Factors that are high in the hierarchy are less effective. Tax calculations transparency, financial reporting quality, management overconfidence, organizational commitment, and employee attitudes criteria are more effective in relation to the research topic (Figure 2).

**Table 4- Initial reachability matrix**

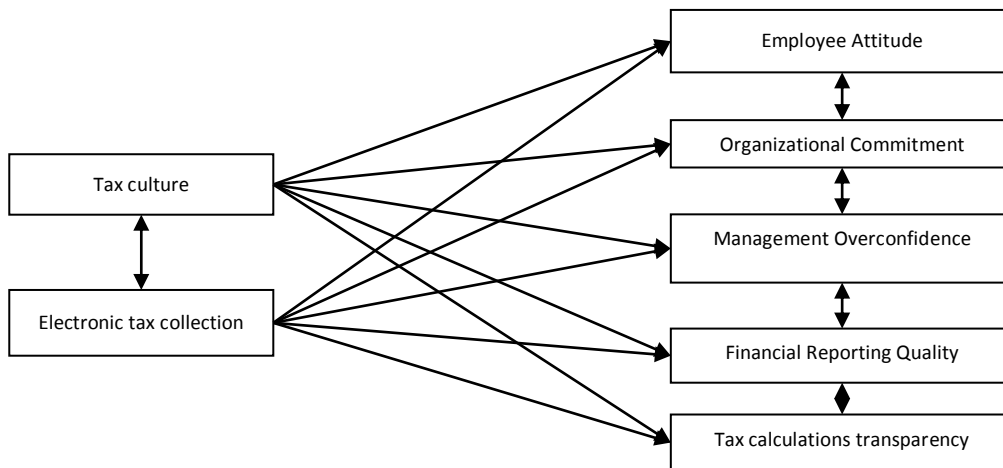
Raw	Factors	V7	V6	V5	V4	V3	V2	V1
1	V1	1	0	0	1	0	0	0
2	V2	1	0	0	1	0	0	1
3	V3	1	1	0	0	0	0	1
4	V4	1	1	0	0	0	0	0
5	V5	1	1	0	0	0	1	1
6	V6	1	0	0	0	0	1	1
7	V7	0	0	0	1	0	0	0

**Table5. Modified final reachability Matrix**

Raw	Factors	V7	V6	V5	V4	V3	V2	V1	power of influence
1	V1	1	1*	0	1	0	1*	1*	5
2	V2	1	1*	0	1	0	1*	1	5
3	V3	1	1	1*	1*	1*	1*	1	7
4	V4	1	1	0	1*	0	1*	1*	5
5	V5	1	1	1*	1*	1*	1	1	7
6	V6	1	1*	0	1*	0	1	1	5
7	V7	1*	1*	0	1	0	1*	1*	5
Dependence power		7	7	2	7	2	7	7	

**Table5. Factor leveling**

Raw	Factors	Output set	Input set	Common Set	Level
1	V1	7-6-4-2-1	7-6-5-4-3-2-1	7-6-4-2-1	1
2	V2	7-6-4-2-1	7-6-5-4-3-2-1	7-6-4-2-1	1
3	V3	7-6-5-4-3-2-1	5-3	5-3	2
4	V4	7-6-4-2-1	7-6-5-4-3-2-1	7-6-4-2-1	1
5	V5	7-6-5-4-3-2-1	5-3	5-3	2
6	V6	7-6-4-2-1	7-6-5-4-3-2-1	7-6-4-2-1	1
7	V7	7-6-4-2-1	7-6-5-4-3-2-1	7-6-4-2-1	1



**Figure2. Structural modeling of research**

Table 6 - Mic Mac analysis

High		3-5	Influential					Link
								7-6-4-2-1
Influential								
			Autonomous					Dependent
Low								

Dependence power High

#### 4. Discussion and Conclusions

Based on the findings of the present study, several factors such as tax calculations transparency, financial reporting quality criterion, tax culture, managerial overconfidence and electronic tax collection were identified as the most influential factors affecting tax avoidance. These 5 factors were identified as co-level factors so that they are bond variables and have high penetration and dependency power. In addition to these factors, the two factors of organizational commitment and employee attitude were also important. These two factors are influential and independent variables. They have high influence but low dependence.

Investors generally consider tax evasion to be a valuable activity. Managers face discrepancies between financial reporting and tax planning, while wanting to report high levels of revenue to shareholders, and simultaneously wanting to report lower levels of revenue to tax authorities. In many countries, including Iran (Azadpour and Mohammadzadeh Saleta, 2017), financial reporting laws are different from tax reporting laws and it allows managers to report different levels of income to tax authorities and investors. However, many economic transactions are similarly recorded on both systems.

One of the potentially oversupply costs of tax planning is the impact of tax planning on the transparency of corporate financial reporting. Therefore, as the quality of financial reporting is low,

information asymmetry and information uncertainty increase (Liu et al., 2014). Although tax collection in Iran is not new and it has been about a century since the introduction of taxation through the quasi-systemic system, it cannot be claimed that the taxation system in Iran is even similar to that in developing countries. In any case, adherence to modern human principles and methods in the implementation of development policies should be the top priority of the relevant officials to achieve the desired goals in obtaining the maximum tax. It seems that considering the changes and developments in the Iranian tax system, it is possible to look hopefully at the desired tax system. Another factor influencing tax evasion in Iran, which is related to the weak discussion of laws and regulations, is the misuse of business cards and economic codes by opportunists. However, some official and unofficial reports indicate a very high tax evasion only in the area of economic code abuse. Thus, it seems that the authorities should take fundamental steps in the faster implementation of the comprehensive tax plan or the value-added tax system.

At present, most processes are designed from the perspective of the tax authority and are less easily considered by taxpayers. This discourages taxpayers and their little incentive to comply with tax regulations. Lack of training for taxpayers about the proper allocation of government tax resources lead to greater dissatisfaction and unwillingness to pay taxes (Chen et al., 2014). In other words, work rules and complex tax regulations prevent the improvement of



processes. In general, tax officials have little understanding of the type of activity and the existence philosophy of processes that are carried out according to regulations or are the result of the long-term habits of others. In general, there is no mention of how to separate processes for different types of tax bases in the law of direct taxes. Most tax regulations have ambiguities that are interpreted by tax officials and there is no comprehensive management and a collective understanding of them. Limited information creates a lack of information about taxpayers (Crabtree & Kubick, 2014). Distribution and transfer of limited information between the tax authority and other stakeholders (ministries, tax registries and taxpayers) leads to inaccurate tax detection and loss of tax revenue. Poor information limits the tax authority's ability to conduct a case study. Due to the fact that all companies and businesses (all tax files) are currently being considered, the workload of taxpayers is unbearable. Inefficient executive methods cause inaccuracy and high volume of litigation. Sometimes taxpayers and auditors establish relationships (Robinson & Schmidt, 2013) which affect the observance of fairness and justice of the auditors. The lack of control mechanisms in the tax executive system gives tax auditors a great deal of flexibility in guidance. This increases carelessness and fraud. Due to the lack of strong tax enforcement procedures, a large number of tax lawsuits are filed against the tax authority (Yukun Sun, 2014).

On the other hand, in order to create a tax culture, it is necessary to create and expand public acceptance of the taxation concept, that is, public belief in taxation. Then, people will have a positive view of the government and the political conditions of society. In other words, the mechanisms of government must be accepted by the people. That is, there should be a mutual trust between the government and the people. It can be said that one of the most important things that can be done in the Iranian tax organization to achieve a relatively appropriate tax culture is: including the issue of taxation in some textbooks in the country's schools, proper and continuous information and public support, training and consulting of taxpayers, simplification of laws, introduction of exemplary taxpayers at the level of provincial general offices, expansion of research culture in the field of failures of the Iranian tax system, training and obliging tax officials to deal appropriately

and with respect for all taxpayers and close communication with trade unions.

On the other hand, we can refer the weakness, change and incomprehensibility of the laws and defects in tax laws as a characteristic of a significant part of the tax laws, in a way that has led to the complexity and constant change of these laws. Lack of public confidence in tax purposes, collusion of taxpayers with tax officials, guidance of tax officials and even writing a petition to reduce taxpayers' taxes by the officials themselves, etc., reduces people's trust in the tax system and causes tax evasion. Weakness of the information system in developed countries, due to the advancement of technology and banking, information about wealth, income and transactions of individuals and legal entities is relatively accurate and they do not have much problem in this regard. However, in developing countries such as the Islamic Republic of Iran, the overdevelopment of the service sector, the weakness of the banking system and the lack of accurate registration of transactions and transfers have prevented the relevant authorities from obtaining accurate information on people's income and wealth. This problem in developing countries and the weak belief of the people in the tax system has led to the lack of proper declaration of income or real wealth of individuals, which has resulted in the expansion of the tax evasion context. Based on the findings of the present study, it is recommended to investors and capital market participants to pay attention to the level of information transparency and tax avoidance of the company when making investment decisions along with other financial variables and include them as factors influencing the value of participation in their decision-making models.

It can also be concluded that the tax system will not be effective without the promotion of tax culture and its acceptance by taxpayers. Therefore, it is necessary to take a big step in creating welfare and ensuring the economic justice of the society by expanding the tax culture in the society and recognizing its importance in the distribution of income and eliminating the class gap. When people see the effects of paying taxes in all areas of their social life, from education to health care, production and job creation and public education, to civil works such as road construction and reconstruction, dam construction, construction and development of power plants, water networks and infrastructure development

and various construction projects in deprived and underdeveloped areas, etc., will undoubtedly pay their taxes with full satisfaction. By informing the public through newspapers and books, brochures and bulletins, audio and video media, new electronic devices, the use of Internet sites and other information tools, the government must make it clear to the people and to expand the tax culture in the society. In addition, taxpayers are required to regulate companies by disclosing their tax activities and procedures in a more transparent manner and to raise and expand other known and effective factors.

## References

- 1) Abbaszadeh, M R, (2016). The relationship between financial transparency and tax avoidance according to the institutional ownership of companies (Case study of Tehran Stock Exchange companies). *Financial Economics (Financial Economics and Development)*, 10 (35), 45-74.
- 2) Al-dhamari, R, Ku Ismail, K. N. (2015). Cash holdings, political connections, and earnings quality. *International Journal of Managerial Finance*, 11(2), 215- 231.
- 3) Arabmazar, A.A., Talebnia, Gh., Vakili Fard, H.R., Samadi Lordegani, M..(2011). Explaining the Relationship between Transparency of Financial Reporting and Tax Reporting in Iran. *Accounting and Auditing Research*, 3 (9), 22-37.
- 4) Arab Salehi, M. (2015). The effect of excessive managerial confidence on tax avoidance. *Accounting and Auditing Reviews*, 22 (1), 85-104.
- 5) Asiri, A., Al-Hadi, A., Taylor, G. (2020). Is corporate tax avoidance associated with investment efficiency? *North American Journal of Economics & Finance*, 1-46, doi: <https://doi.org/10.1016/j.najef.2020.101143>.
- 6) Attri, R., Dev, N., Sharma, v. (2013). Interpretive Structural Modeling (ISM) approach: An Overview. *Research Journal of Management Sciences*, 2(2), 6.
- 7) Azar, A., Khosrovani, F.J.R. (2013). *Research in Soft Operations, Industrial Management Organization Publications*.
- 8) Azadpour, M., Mohammadzadeh Salteh, H. (2017). The effect of confidentiality factors on the quality of financial reporting with emphasis on tax avoidance. *Tax Research Journal*, 35 (83), 179-201.
- 9) Behrad, A. (2015). Factors Affecting Electronic Tax Acceptance Based on the Integration of Acceptance Theory Model and Planned Behavior Theory in the General Department of Taxation of Shahrekord. *Journal of Taxation*, 27 (75), 168-193.
- 10) Ben-David, I, Graham, J. R., Harvey, C. R. (2010). Managerial miscalibration, Working paper, Duke University, 1547-1584.
- 11) Chen, X., Hu, N., Wang, X., Tang, X. (2014). Tax Avoidance & firm value: Evidence from China, *Nankai Business Review International*, 5(1), 25-42.
- 12) Chyz, J., Gaertner, F., Kausar, A., & Watson, L. (2014). Overconfidence and Aggressive Corporate Tax Policy. Available at SSRN 2408236, 30-43.
- 13) Crabtree, A. D., Kubick, T. R. (2014). Corporate tax avoidance and the timeliness of annual earnings announcements. *Review of Quantitative Finance and Accounting*, 42, 51–67.
- 14) Ebrahimi, S. K., Bahraminasab, A., Hasanzadeh, M. (2017). Analysis of Financial Reporting Quality and Tax Avoidance in the Light of Government Ownership and Political Communication. *Scientific-Research Quarterly Journal of Public Organization Management*, 5 (2), 151-166.
- 15) Emani Khoshkhou, M.H. (2017). Promoting the tax culture and its effect on the development of tax umbrellas and identifying new taxpayers. *Tax Journal*, 37 (85), 118-145.
- 16) Foroughi, D., Fadavi, M. H., Hajian Nejad, A. (2015). the effect of tax avoidance policies on the type of auditor's report in companies listed on the Tehran Stock Exchange. *Journal of Taxation*, 25 (73), 181-199.
- 17) Hanlon, M., Heitzman, S. (2010). A Review of Tax Research. *Journal of Accounting and Economics*, 50.
- 18) Hong, H.A., Lobo, G.J., Ryou, J.W. (2019). Financial market development and firm investment in tax avoidance: Evidence from credit default swap market. *Journal of Banking and Finance* 107 (2019) 105608, 1-20. <https://doi.org/10.1016/j.jbankfin.2019.105608>.
- 19) Huang, H. H., Lobo, G. J., Wang, C., & Xie, H. (2016). Customer concentration and corporate tax avoidance. *Journal of Banking & Finance*, 72, 184-200.

- 20) Khani, A., Emani, K., Molaee, M. (2014). the relationship between auditor's expertise in industry and tax avoidance of companies listed on the Tehran Stock Exchange. *Auditing Knowledge*, 13 (51), 43-68.
- 21) Khajavi, Sh., Kiyamehr, M. (2016). Tax avoidance modeling using accounting information, Evidence from Tehran Stock Exchange. *Journal of Knowledge Accounting*, 22 (25), 79-100.
- 22) Kovermann, J., Velte, P. (2019). The impact of corporate governance on corporate tax avoidance - A literature review. *Journal of International Accounting, Auditing and Taxation* , 36 (2019) 100270 ,1-29, <https://doi.org/10.1016/j.intaccudtax.2019.100270>
- 23) Kubick, R. Lynch, D. Mayberry, M. (2014). The Effects of Increased Financial Statement Disclosure Quality on Tax Avoidance: An Examination of SEC Comment Letters. *Journal of the American Taxation Association*, 33(2), 35-65.
- 24) Liu, X., Saidi, R., Bazaz, M. (2014). Institutional Incentives and Earnings Quality: The Influence of Government Ownership in China. *Journal of Contemporary Accounting and Economics*, 10, 248-261.
- 25) Malmendier, U., Tate, G. (2005). CEO Overconfidence and Corporate Investment. *Journal of Finance*, 60 (6): 661-700
- 26) Mehrabanpour, M. R., Ahangari, M., Vaghfi, S. H., Mam Salehi, P. (2017). Factors Affecting Tax Avoidance and Its Impact on Performance Evaluation Criteria Using Structural Equations. *Journal of Financial Accounting Knowledge*, 4 (3/14), 65-86.
- 27) Mehrani, S., Seyedi, S. J. (2014). The effect of income tax and conservative accounting on corporate tax avoidance. *Management Accounting and Auditing Knowledge*, 3 (10), 13-34.
- 28) Najari, R. (2016). the Effect of Employees' Attitudes on the Use of Electronic Government in the Tax Affairs Organization. *Public Management Research*, 9 (32), 25-45.
- 29) Rezaee, F., & Sherafati, F. (2015). Impact of tax avoidance co-determinant on relationship between future and current profitability. *Iranian journal of business and economics*. 2(I3), 43-70.
- 30) Robinson, L., Schmidt, A. (2013). Firm and Investor Responses to Uncertain Tax Benefit Disclosure Requirements. *The Journal of the American Taxation Association*, 35(2), 85-120.
- 31) Ross, M., Roman, L., Peter, W., Brett, G. (2017). The impact of dividend imputation on corporate tax avoidance: the case of shareholder value. *Journal of corporate finance*, volume, 48, 492-514
- 32) Salehi, Mehdi. (2014). The effect of tax culture factors among taxpayers. *Tax Research Journal*, 23 (71), 186-214.
- 33) Safari Grayli, Mehdi, Poudineh, Shiva. (2016). Tax avoidance and timely declaration of profit: Experimental test from Tehran Stock Exchange. *Tax Research Journal*, 31 (79), 101-118.
- 34) Sidney, C., Leng, M., Grant, R., & Grantly, T. (2019). The effect of the general anti-avoidance rule on corporate tax avoidance in china. *Journal of contemporary accounting and economic*, 15, 105-117
- 35) Singh, M. D., Kant, R. (2011). Knowledge management barriers: An interpretive structural modeling approach. *International Journal of Management Science and Engineering Management*, 3(2), 10
- 36) Tayefeh, S., Dastgir, M., Rezaee, F., Ali Ahmadi, S. (2019). Ranking of Factors Affecting Corporate Tax Avoidance. *Journal of Valuable and Behavioral Accounting*, 4 (7), 309-341.
- 37) Thomsen, M., Watrin, C. (2018). Tax avoidance over time: A comparison of European and U.S. firms. *Journal of International Accounting, Auditing and Taxation*, 33(2018),40-63, <https://doi.org/10.1016/j.intaccudtax.2018.11.002>
- 38) Tien, S., Zhihong, W., Sebahattin, D. (2018). Overconfidence and tax avoidance: the role of CEO and CFO interaction. *Journal of accounting and public policy*, 37(3), 241-253.
- 39) Warfield, J.N. (1974). Developing interconnected matrices in structural modeling. *IEEE, Transactions on Systems, Man and Cybernetics*, 4(1), 51-81.
- 40) Watson, L. (2015). Corporate Social Responsibility, Tax Avoidance and Earnings Performance. *The journal of the American Taxation Association*, 37(2), 1-21.
- 41) Yukun, S. (2014). Corporate Tax Avoidance and Government Corruption: Evidence from Chinese Firms, 12, 120-150
- 42) Xia, C., Cao, C., Chan, K. C. (2017). Social trust environment and firm tax avoidance: Evidence

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from China. *The North American Journal of Economics and Finance*, 42(2017), 374-392,  
<https://doi.org/10.1016/j.najef.2017.07.013>