Designing a tax evasion model with an emphasis on production problems

Mohammadjavad Charkhkar, Hamid Tabaiezadeh Fosharaki*, Tahmoures Sohrabi

Department of Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran

(Communicated by Ehsan Kozegar)

Abstract

Tax evasion is considered a fundamental problem for countries and is common in some jobs. The aim of this research is designing the tax break model with an emphasis on manufacturing problems in clothing and clothing industry. The research method is mixed and applied. The statistical population is the qualitative sector of 10 university professors and managers in the garment manufacturing industry and 310 in the quantitative sector of the garment industry. The sampling method is simple. Qualitative data were analyzed using theme analysis and for quantitative phase structural equation method. 5 main and 15 sub-themes of the model were identified in the qualitative phase. The model had good fitness and the combined reliability was 0.781 which was acceptable. After testing the hypotheses, it was all confirmed and according to the results of the interpretive structural modeling, complex and multiple tax laws were placed at the fifth level, which indicates that it has the greatest impact on tax evasion of producers.Thus, the relevant authorities in manufacturing apparel and clothing industry are proposed to consider the most important tax evasion factors including increased inflation rate, and to provide strategies to reduce this factor.

Keywords: Tax, Tax Avoidance, Production Problems, Garment, Clothing Manufacturing Industry
2020 MSC: 91B64

1 Introduction

Tax evasion is today seen as one of the main challenges for countries around the world because it reduces legal revenue and has negative effects on the performance of government duties and functions. This has led to the failure to realize the projected targets of tax revenues and the implementation of government programs and the failure of tax justice and social justice. It is also the most important problem of tax systems that our country is not exempt from. Sometimes, there is a process of tax evasion that disrupts the process and causes slow collection of government-paid taxes or stops collection. One of these is tax evasion. Since political instability and economic security have had a negative impact on the business environment, including vulnerable trade, the garment industry is a major problem and challenges of production. There are obstacles to the production boom, such as high inflation, exchange rate fluctuations, sanctions, negative GDP, which has caused many garment and clothing manufacturers to close.

Today, producers face many problems including providing liquidity, deferred debt of production units to the banking system, drawbacks of VAT, Rules and regulations, drawbacks of the country's transportation system and overload

---

*Corresponding author
Email addresses: entdepx@yahoo.com (Mohammadjavad Charkhkar), managementdepx@yahoo.com (Hamid Tabaiezadeh Fosharaki), mentdepx@yahoo.com (Tahmoures Sohrabi)

costs, significant increases in the prices of domestic and foreign raw materials, constant exchange rate changes, market stagnation and reduced production capacity of many units that increase the overhead costs of the manufacturer. One of the essential resources for a government to achieve its objectives is tax revenue. Some companies, however, refuse to pay real taxes, legal or illegal means, which will have a major impact on state tax revenues. In this regard, the government and tax authorities are forced to bear the costs of discovery and tax evasion. Because of this, it has always been a major and challenging issue to find ways and methods to detect tax evasion. If the government fails to discover tax evasion, public investments will be adversely affected by the reduction of taxes and the subsequent reduction in government revenues [27].

These problems and challenges are addressed in this study because they are the grounds for tax evasion of clothing and clothing class manufacturers and after the review, solutions can be proposed to solve the problems and improve the business environment.

Therefore, the researcher looks for the factors affecting the tax evasion of manufacturers and the main research question is how model effective tax evasion factors of manufacturers with emphasis on production problems is? The main objective of the research is designing tax evasion model of producers with emphasis on manufacturing problems. The research sub-purposes include determining factors affecting tax evasion of producers with emphasis on production problems, determining the effect of factors on tax evasion of producers, with an emphasis on manufacturing problems. These factors were identified by theme technique in the qualitative phase and the final model was designed. Then, using structural equation modeling, factor analysis was carried out in quantitative phase and for grading the variables obtained from interpretive structural modeling was done.

2 Theoretical foundations of research and research background

2.1 Theoretical foundations

2.1.1 Tax

As the most important source of income, tax plays a particular role in financing governments in developed countries, so that the share of taxes in the combination of government income sources in some developed countries is more than 90% [17]. The tax is a fund or benefit that the governing system of the individual or individual is charged to support their expenses, to continue to exist and to provide services to the individual or individuals in return, so that the existence of both parties is subject to each other [9]. Nowadays, tax reaction has been a necessity for governments. Taxes are the main sources of income of the state, and government tax collection and taxes paid by Modian are only a cooperation and assistance to provide for public expenses and social needs [24]. Mousavi Jahromi and his colleagues [17] tax on goods and services is in fact a tax on consumption. In this type of tax, buyer or client of goods or services, subject to a certain rate tax on a percentage of the value of the goods or services purchased or the number of goods. The value-added tax in Iran's economy and the taxes levied on the consumption of goods and services are taxes of this type. Makian and his colleagues [13] are divided into direct and indirect categories.

2.1.2 Tax evasion

Tax evasion is a crime applicable both in practice and non-abandonment, where the elements of secrecy, fraud and violation of the law are seen [9]. In tax evasion, the perpetrators attempt to not pay taxes [14] by spreading or cheating or by unlawful acts. Izadi et al. [8] maintain that tax evasion has negative effects on communities that policymakers and legislators need to recognize and prevent tax evasion before these effects are created.

2.2 Production problems

The high cost of Iranian products, high bank interest rates, heavy taxes, high prices for rent, lack of high quality raw materials, lack of technology and machinery, problems caused by labor law are the problems of production.

2.2.1 Clothing and clothing manufacturing industry

Production is any activity (energy-only) that brings an element or element of nature close to human consumption [26]. And the manufacturer is the person who provides goods or services to the consumer. The garment industry as one of the most relevant industries to the concept of global value chain has been always desired. This strategic commodity, which is known as mankind's main need after food, has a huge, diverse, specialized, tasteful and complex market [4].

2.3 Research literature

The study of internal and external research on tax evasion suggests that this has been a matter of interest to researchers. The results of the research close to the subject are as follows:

Ahmadi and Colleagues [1] have concluded in a study aimed at evaluating models of tax evasion from neoclassical economics to behavioral economics, that rational behavior, behavior compatibility, dependence on reference, instability of preferences and loss, ambiguity, internal factors and social norms, network tendencies and bounded rationality are the main factors of tax evasion and the main criteria of tax evasion, which are inconsistency of preferences, loss aversion, ambiguity, and ambiguity of main factors influencing tax evasion. Sanaipour [23] identified factors influencing the tax collection of small businesses, the most important of which were the comprehensive information system, skilled manpower, tax law, trust, administrative corruption and the improvement of the tax culture. According to Izadi and colleagues [8] high tax rates, the size of the state and the unemployment rate have a significant impact on tax evasion. The results of research by Motalebi et al. [16] showed that the tax spirit and the burden of taxes on imports are the main causes of shadow economy. Thus, in contrast to developed countries, the tax spirit variable increases the shadow economy and causes tax evasion, which is indicative of non-compliance in Iran. In their research, Khalilzadeh et al. [12] identified 5 major factors and minor factors affecting tax evasion. economic factors (economic factors such as economic instability, economic recession, inflation, underground economy), tax laws (lack of comprehensive tax laws, number and complexity of tax laws, inefficient internal policies of the government), political factors (government inappropriate policies, government's foreign policies, lack of culture and tax evasion on tax charges), socio-cultural factors (low level of education and awareness of taxpayers about tax use, weak social values and beliefs, lack of taxpayers' commitment to tax laws), system-executive factors (bureaucracies and inefficient organizational structure, lack of strong tax evasion, and poor communication, lack of robust information resources, All right. Omidipour and Pajouyan [19] achieved that the estimated tax evasion volume on the basis of income tax on legal entities was increasing during the period studied. Piraei and Rajaei [20] are tax evasion effects including; Real GDP growth, demand for money in circulation, energy consumption. Mohammadi Shir Kolaei et al. [15] achieved that the most important structural factors in the case of effective factors in government tax collection can be categorized in the form of appropriate tax laws, the number of taxes in the country's tax system, the level of tax rates, and the executive costs of tax collection. Tavakoli [25] is the most common area of tax evasion including non-expansion of tax culture in the community, lack of a full exchange of information and a lack of monitoring and follow-up system in the collection of Alaras tax, poor enforcement safeguards, delays in tax collection, non-recognition of the Moadites and non-documentation of their income, and the existence of large and varied exemptions. Piraei and Rajaei [20] have concluded that tax evasion has a negative impact on the economy, which can be pointed to its impact on GDP growth. The results of Hamidi and Mohammadi's [7] research show that the most important factors in explaining tax evasion are identified. The high statistics and records of each unit are the weakness of the tax information system, the lack of skilled manpower, the level of tax culture, the weakness of the electronic system and the lack of trust between the firm and the organization. Rousta and Haydariyeh [21] conducted a study on the ranking causes of tax evasion. The most important reasons for tax evasion were structural and administrative, social and cultural factors, tax ethics, tax system efficiency, tax status of law and self-health of employees of the Tax Agency. Alizadeh and Ghaffari [2] also found that tax evasion was a factor affecting energy consumption. Since the increase or decrease of production of goods and services in the whole economy (formal and informal), according to the need of production factors (including energy inputs), affect the consumption of factors and are reflected in their information. The reason that this index is used as a index of the increase or decrease of the underground economy and tax evasion is that manufacturing and service enterprises use raw materials and production factors to produce goods and provide services. Social norms and practices (1392), tax justice, tax administration corruption, non-expansion of tax culture in the society, lack of exchange of complete information, lack of monitoring and follow-up systems in collection of taxes, lack of acceptance of tax returns and poor enforcement guarantees in this case, delay in tax collection, problems identifying tax collection, numerous and complex laws, non-identification of the taxpayers and documentation of their income, wide discontinuity and variety of factors influencing tax evasion were taken into consideration.

In his research, Kassa [11] introduced the factors affecting tax evasion, including moral commitment, tax justice, tax knowledge, mental norms, attitude towards behavior. Del Anoa et al. [5] found in their research that trans-fiscals contribute to the GDP. Oduro et al. [18] also consider the factors affecting tax evasion to be traditional, institutional, and socio-cultural factors. Ameyaw and Dzaka [3] found that the amount of tax, financial factors, demographic factors, administrative factors and economic factors are the main factors affecting tax evasion.

3 The importance of the subject

Taxation is a major source of income for governments and a policy tool in development policies [1]. Existence of tax evasion, the non-identification and discovery of it not only disrupt the country's tax system, but also reduces the incentive of other believers and the weakness of tax culture. Finally, it will decrease the compliance rate of taxpayers and, consequently, reduce tax revenue [10]. On the other hand, the most important issues regarding the effective enforcement of the tax system, identifying ways of tax evasion and ways of preventing them, however, the provision of criminal laws in this regard is very important for the prohibition. One of the main reasons for the gap between the established tax revenues and the country's tax capabilities is the tax evasion phenomenon. In fact, the existence of a large underground economy, smuggling, lack of economic transparency and so on has led to a significant tax evasion within the country. The defective VAT cycle is a factor in making payments to producers who are facing production declines and sales stagnation in the market each day. Manufacturers are facing several problems in their business environment that cause their tax evasion. This study investigated the most important manufacturing problems that affect tax evasion.

4 Research hypotheses

1. High tax rate on tax evasion of manufacturers emphasizing production problems has a significant effect.
2. Various complex tax laws have a significant effect on tax evasion of producers, with emphasis on manufacturing problems.
3. Social capital has a significant effect on tax evasion of producers with emphasis on production problems.
4. Rising inflation rate has a significant effect on tax evasion of manufacturers with emphasis on manufacturing problems.
5. Tax evasion laws have a significant effect on tax evasion of producers, with emphasis on manufacturing problems.

5 Research variables

Research variables include tax avoidance and factors influencing tax return (high tax rate, complex and multiple tax laws, social capital, inflation rate increase, tax evasion rules).

6 Statistical and sampling society

The statistical population of this study was 10 qualitative students including 3 university professors and 7 experienced managers in garment and clothes manufacturing. Also the statistical population of the quantitative part consisted of 197 producers in 12 provinces of Tehran since population is limited and the sample size is 130 producers by sampling. Research data collection methods are libraries and fields. In the library method, the systematic studies of books, scientific articles and previous research and interview in qualitative phase and the preparation of questionnaires in quantitative phase were used.

7 Research method

The method of research is mixed (qualitative and quantitative) and applied. This research is based on finding a solution.

Urgent problems are focused on the practical nature and therefore this research has practical aspects and usually researchers themselves are involved in the application of the results. This type of research is used to apply a new approach to better life in society. CVR was used for validation. Formula (7.1) was used in this research. Expert and expert was given research questions. For evaluation, there were 15 persons in this research. They were asked to categorize each of the questions based on the Likert (Likert) Guye three-part range, Guye is useful, but not necessary, Guye is not necessary. 13 of these evaluators considered the items essential.

$$CVR = \frac{\left(ne - \frac{N}{2}\right)}{\frac{N}{2}} \tag{7.1}$$

N: total number of evaluators

Table 1: The minimum acceptable CVR based on the number of evaluators

Number of evaluators	Least accepted CVR	Number of evaluators	Least accepted CVR
5	99.0	13	54.0
6	99.0	14	51.0
7	99.0	15	49.0
8	75.0	20	42.0
9	78.0	25	37.0
10	62.0	30	33.0
11	59.0	35	31.0
12	56.0	40	29.0

ne: the number of evaluators who agree with the items

According to the minimum acceptable standard values of CVR in table 1 for 15 people is 0.49 and the obtained CVR value is 0.73 and is greater than the minimum value, as a result the validity of the qualitative content is established. To check the reliability of the qualitative content, the reliability method or retesting was used. 3 interviews were chosen as desired and in two intervals of 15 days with the help of two production and operations students, all three interviews were coded twice, and after checking in the following formula, if the retest reliability percentage is more than 60%, it can be He said that quality content has reliability.

$$\text{Retest reliability percentage} = \frac{\text{Number of agreements} \times 2}{\text{Number of total codes}} \times 100\% \tag{7.2}$$

Based on the number of codes 150, the number of agreements reached 72, the number of disagreements 61, and the total final score is 0.96, the results show that the percent of tests of all three interviews are more than 60 percent and as a result the reliability of the quality content is satisfied. At the first step, in order to check the validity of the questionnaire, it was submitted to experts, experts and experts in this field and after reviewing the questionnaire, it was approved. And to evaluate the reliability of the questionnaire, Cronbach's alpha coefficient was used. According to table 2, Cronbach's alpha coefficient yielding 0.7 for all dimensions in this study that showed good reliability of research instrument (questionnaire).

Table 2: Calculation of Cronbach's alpha

Dimensions	Cronbach's alpha
High tax rate	0.805
Complex and numerous tax laws	0.715
Social capital	0.842
Increase in inflation rate	0.849
Tax evasion laws	0.746

The analysis method in the qualitative stage is theme analysis. In this method, after coding the data, the effective factors of producers' tax evasion can be identified with an emphasis on production problems. And MAXQDA software was used for qualitative data analysis, which is widely used in the fields of social sciences and humanities. In order to analyze the quantitative stage, confirmatory factor analysis (structural equations) and SMARTPLS software were used.

8 Findings of the research

In the current research, a mixed qualitative and quantitative method was used, and the data analysis was presented in two parts, qualitative and quantitative. The analysis of the qualitative part of the research has been done using the theme analysis method. This method has 6 steps and for each of the qualitative questions of the research, these 6 steps have been done as follows.

The first research question: What are the factors affecting the high tax rate in the garment manufacturing industry with an emphasis on production problems?

The first step: taking notes and marking the meanings that will be needed in the next steps has started. The second stage of generating primary codes (extracting concepts from semantic expressions): the data of the factors affecting

the high tax rate in the clothing industry with an emphasis on production problems were read and familiarized with them. This step includes creating primary codes from the data of the present question. In the second stage, the data are coded, which are theoretically consistent with the points of interest of the research, i.e., the factors affecting the high tax rate in the clothing industry, emphasizing the production problems at different levels of analysis. Table 3 shows a part of the interview with experts:

Table 3: Interviews of experts on the factors affecting the high tax rate in the garment industry with an emphasis on production problems.

No.	The text of the interview	Primary codes
Interview 1	Lack of detailed inspection and lack of sufficient information about clothing production, government interference and supervision in the affairs of guilds	1. Lack of detailed inspection, 2. Lack of sufficient information about production, 3. Government interference and supervision in the affairs of guilds

The third stage: searching for themes: this stage includes categorizing different codes in the form of potential themes, and sorting all the coded data summaries in the form of specified themes. And clothing is emphasized on production problems. 38 primary codes and 3 sub-themes were identified.

Fourth stage: Review of themes: In this stage, 42 primary codes, 3 sub-themes and 1 main theme were identified.

The fifth stage. Defining and naming themes: In this stage, the themes that were presented for analysis were defined and reviewed again, then the data inside them was analyzed. By defining and reviewing, the nature of what a theme is discussing has been determined and it has been determined which aspects of data each theme contains. By using the results of semi-structured interviews during the coding stage and also inspired by the theoretical and empirical literature of the subject, the identified codes, in this research, a definition of the factors affecting the high tax rate in the garment industry can be presented with an emphasis on production problems. which includes 3 items obtained from qualitative data analysis, including; High price. The lack of financial transparency is the policies of the government and parliament.

The second question of the research: What are the complex and numerous tax laws in the garment industry with an emphasis on production problems?

In order to answer this question, theme analysis steps were carried out, in which notes were taken and reviewed in the first stage of the interview. In the second stage, when primary codes should be generated, 52 primary codes were extracted. In the third stage, which is the theme search stage, the primary code and 2 sub-themes were identified. In the 4th stage, which means reviewing the themes, 2 sub-themes and 1 main theme were identified from the 28 primary codes. In the 5th step, the themes were defined and named, using the results of semi-structured interviews during the coding stage, as well as being inspired by the theoretical and empirical literature of the subject, codes were identified. In the clothing industry, emphasizing the production problems, it can be presented that it includes 2 items that were obtained from qualitative data analysis, which include bureaucracy and tax strictures, continuous increase in value added tax.

The third question of the research: What are the effective social capitals for the clothing industry with an emphasis on production problems?

In the first stage of theme analysis, note-taking and marking of meanings that will be needed in the next stages have started. In the second stage, 57 initial codes were identified. In the third stage, after searching for themes, 49 primary codes and 4 sub-themes were identified. In the 4th stage, i.e. reviewing the themes, 4 sub-themes and 1 main theme were identified. In the 5th stage, a definition of effective social capital for the garment manufacturing industry can be presented with an emphasis on production problems, which includes 4 items obtained from qualitative data analysis, including; Group and social relations. social trust. Public trust. Cooperation and empathy.

The fourth question of the research: What are the factors influencing the increase in the inflation rate in the clothing industry with an emphasis on production problems?

In the first stage of theme analysis, like previous times, notes were taken and meanings were marked. In the second stage, which is the generation of primary codes, 41 primary codes were extracted from the interview text. In the third step, 3 sub-themes were identified. In the fourth stage, 3 sub-themes and 1 main theme were identified from 21 primary codes. In step 5, themes were defined and named. Therefore, the definition that can be given of the factors affecting the increase in the inflation rate in the garment manufacturing industry with emphasis on production problems is that it includes 3 items that were obtained from qualitative data analysis and 3 items include; Constantly increasing prices. The existence of an underground economy. Lack of raw materials.

Fifth question: What are the legal factors affecting tax evasion for the clothing industry?

In the first stage, the meanings were noted and marked. In the second stage, which is the generation of primary codes, 51 primary codes related to legal factors were identified. In the third section, which is the search for themes, 3 sub-themes were extracted from 37 primary codes. And in step 4, 3 sub-themes and 1 main theme were identified out of 40 codes. In the fifth stage, the themes were defined and named, which can be defined as the legal factors affecting tax evasion for the garment industry, which includes 3 items that were obtained from qualitative data analysis and include; Continuous monitoring of taxes. Promotion of administrative health. It is promoting tax culture.

The sixth stage: writing and final analysis (qualitative research model): this stage includes final analysis and report writing. After going through the mentioned steps, the final analysis was done. Now that the themes have been defined and the thematic map has been drawn, the researcher proceeded to present his final report and during it, he examined the themes and the relationship between them in the general pattern of the dimensions and design components of the model of the effective factors of producers' tax evasion with an emphasis on production problems. became. For this purpose, the target sample was first introduced using identification themes. The dimensions of the model of the effective factors of producers' tax increase with emphasis on production problems are; High tax rate, complex and numerous tax laws, social capital, inflation rate increase, tax evasion laws. And the components of the effective factors of producers' tax increase with emphasis on production problems are; High cost price, lack of financial transparency, government and parliament policies, bureaucracy and tax strictures, continuous increase in value added tax, group and social relations, social trust, public trust, cooperation and empathy, continuous increase in prices, existence of economy Underground, lack of raw materials, continuous monitoring of tax, promotion of administrative health, promotion of tax culture, which is shown in the form of the final research model in Figure 1:
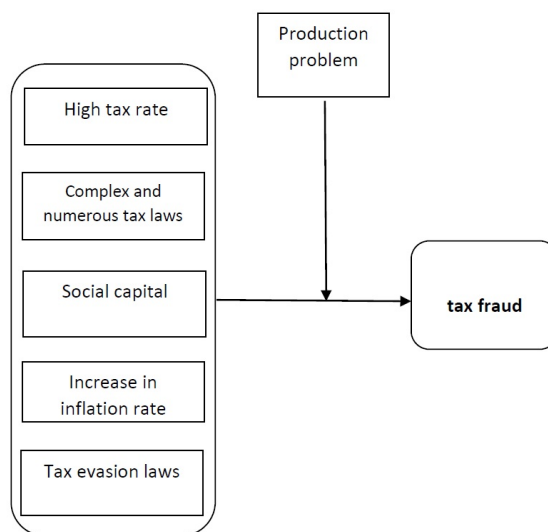

Figure 1: The final model of the research, the tax evasion model with an emphasis on production problems

Table 4: The dimensions and components of the model of the effective factors of producers' tax avoidance with an emphasis on production problems.

Dimensions	Components
High tax rate	High price
Complex and numerous tax laws	Lack of financial transparency
Social capital	Government and parliament policies
Increase in inflation rate	Bureaucracy and tax strictures
	Continuous increase in value added tax
High tax rate	Group and social relations
Complex and numerous tax laws	Social trust
Social capital	Public trust
Increase in inflation rate	Cooperation and empathy

In the quantitative analysis, the research model was examined in three stages. In the first stage, the external model of the research was examined, in the second stage, the internal model was examined, and in the third stage, the general

Tax evasion laws	Constantly increasing prices
High tax rate	The existence of an underground economy
Complex and numerous tax laws	Lack of raw materials
	Continuous monitoring of taxes
Social capital	Promotion of administrative health
	Promotion of tax culture

model of the research was examined. In the examination of the external model of the research, first the reliability and then the validity of the internal model were examined. Cronbach's alpha coefficient and combined reliability criteria were used to check the reliability of the external model. In Table 5, the value of this coefficient is estimated for each of the factors.

Table 5: Cronbach's alpha coefficient

Variables	Cronbach's alpha
High tax rate	0.805
Complex and numerous tax laws	0.715
Social capital	0.843
Increase in inflation rate	0.849
Tax evasion laws	0.746

According to Tables 6, the criteria for the desired structure is higher than 0.7, which indicates the appropriate reliability of the model.

Table 6: Composite reliability

Variables	Composite reliability
High tax rate	0.793
Complex and numerous tax laws	1.000
Social capital	0.856
Increase in inflation rate	0.751
Tax evasion laws	0.843

Considering the higher combined reliability coefficient of the variables in Table 6, it shows the appropriateness and acceptable fit of the measurement models.

In order to check the validity of the external model, two criteria have been used. The first criterion is convergent validity and the second criterion is divergent validity. In Table 7, considering that the AVE values for all variables are greater than 0.5, therefore, the convergent validity of the constructs is acceptable.

Table 7: Composite reliability

Variables	values AVE
High tax rate	0.662
Complex and numerous tax laws	1.000
Social capital	0.684
Increase in inflation rate	0.799
Tax evasion laws	0.734

Divergent validity is the third criterion for checking the fit of measurement models, which covers two issues, and Fornell and Locker's method was also used to check the fit in this research.

As it is known from Table 8 taken from the method of Fornell and Locker [6], the root value of the AVE of the variables in the current research that are placed in the main diameter of the matrix, from the correlation value between them that is in the lower and left houses of the diameter The main ones are arranged more. Therefore, it can be stated that the variables in the model interact more with their indicators than with other constructs and the divergent validity of the model is at a reasonable level. In the figure 2 the standard coefficients of the external model have been estimated.

Table 8: Fornell and Locker method

Variable	High tax rate	Complex and numerous tax laws	Social capital	Increase in inflation rate	Tax evasion laws
High tax rate	0.814				
Complex and numerous tax laws	0.444	1.000			
Social capital	0.483	0.089	0.27		
Increase in inflation rate	0.490	0.230	0.592	0.706	
Tax evasion laws	0.189	0.109	0.412	0.298	0.857
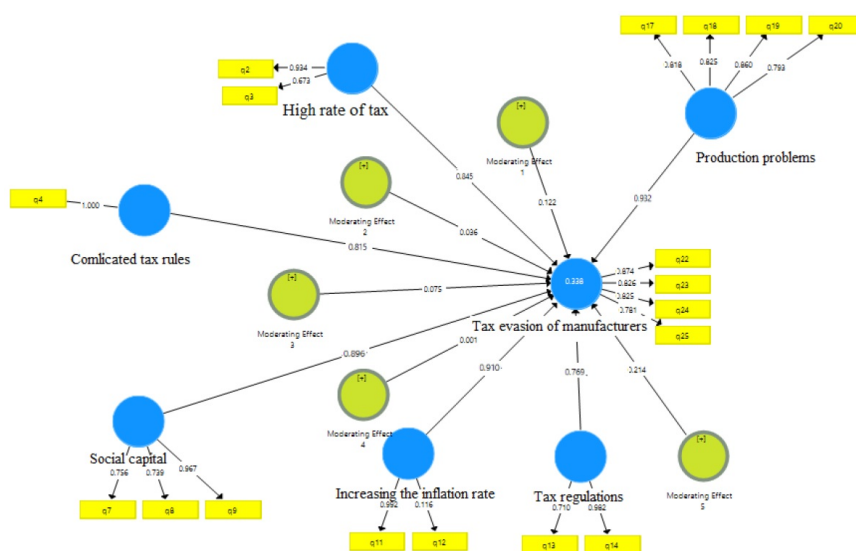
Figure 2: The external model in the mode of estimating the standard coefficients of the effective factors of producers' tax increase with an emphasis on production problems

In Figure 3, the significant coefficients of the factors affecting the tax evasion of producers are estimated with an emphasis on the problems.
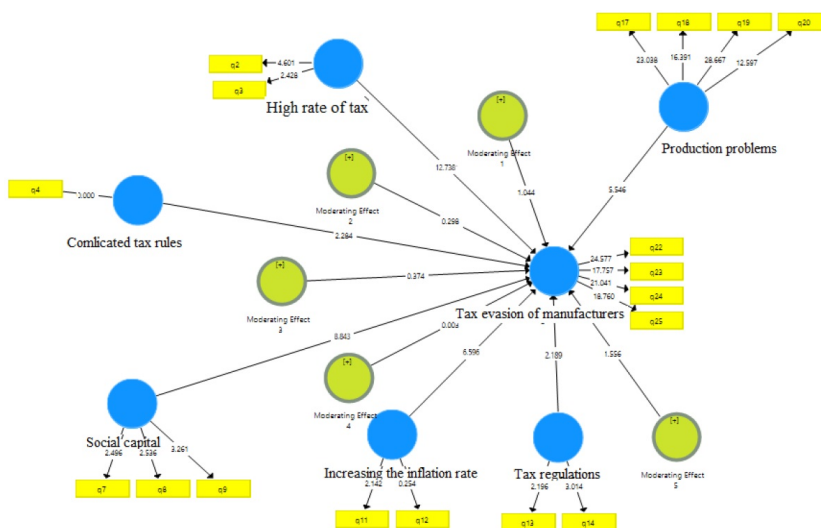

Figure 3: Internal model in the state of significant coefficients of the effective factors of producers' tax avoidance with emphasis on production problems

After estimating the significant coefficients, the hypotheses were tested. The result of the investigation is shown in Table 9.

Table 9: Significance test, intensity and direction of hypotheses

Hypothesis	β	T.value	Sig	Result
H1	247.0	6.835	0.003	It is significant and confirmed
H2	168.0	918.5	0.000	It is significant and confirmed
H3	235.0	957.15	0.000	It is significant and confirmed
H4	271.0	269.15	0.001	It is significant and confirmed
H5	236.0	062.6	0.000	It is significant and confirmed

In order to stratify the variables, interpretive structural modeling method has been used and according to the obtained results, the variables of inflation rate increase are the first level, high tax rate is the second level, social capital is the third level, tax evasion laws are the fourth level and finally complex and numerous laws. Tax was placed at the fifth level, so it can be said that the variable of complex and numerous tax laws (C5) has the greatest impact on the tax evasion of producers, and the leveling is shown in Figure 4.

According to the results of Figure 4, complex and multiple tax laws (C5), tax evasion laws (C4), social capital (C3) were placed in the independent area, which have strong influence but weak dependence. And high tax rate (C2), inflation rate (C1) were placed in the dependent area, which have low penetration power but high dependence.
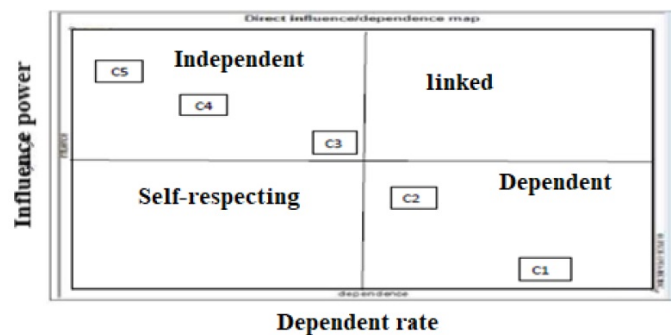

Figure 4: The diagram of penetration power-dependency

9 Discussion and conclusion

According to the results of the theme analysis in the qualitative stage, 5 main themes and 15 sub-themes were identified for the final research model, which include; The main theme of high tax rate has 3 sub-themes of high-cost price, lack of financial transparency, government and parliament policies. The main theme of complex and numerous tax laws has 2 sub-themes of bureaucracy and tax strictures, continuous increase of value added tax. And the main theme of social capital has 4 sub-themes of group and social relations, social trust, public trust, cooperation and empathy. The main theme of inflation rate increase has 3 sub-themes of continuous increase in prices, existence of underground economy, lack of raw materials and the main theme of tax evasion laws has 3 sub-themes of continuous monitoring of taxes, promotion of administrative health, promotion of tax culture.

And the results of the analysis resulting from the structural equations of the quantitative stage in response to the question of the impact of the tax avoidance factors of the producers with emphasis on the production problems, and the examination of the hypotheses showed that the significance of the hypotheses were all confirmed, therefore the results of the first hypothesis of the current research with the results of the researches [1, 11, 20, 23], are in the same line. The results of the second hypothesis of the present research are in line with the results of the researches of [8, 16]. The results of the third hypothesis of the present research are in line with the results of the researches of Shirkalai et al [15]. The results of the fourth hypothesis of the research are consistent with the results of [2, 18, 20]. The results of the fifth hypothesis are in line with the research results of [5, 21, 22], and according to the results of structural modeling, the variable of complex and numerous tax laws was placed at the fifth level. which shows that it has the greatest impact on the tax evasion of producers.

10 Proposal

Therefore, the practical suggestions for the managers regarding the first hypothesis is to check and control the high cost of raw materials and goods offered in the market with regard to the side costs. 2- The tax system should prevent the lack of transparency in financial reports by creating an efficient and fair image. 3- The policies of the government and parliament regarding tax laws and regulations should be in a way that encourages businesses to pay taxes and to develop their business. The practical suggestions for managers in connection with the second hypothesis are that 1- Bureaucracy and tax strictures from the government should be reduced. 2- The continuous increase of value added tax is one of the causes of tax evasion, so it is suggested that the tax Added value should be done at longer intervals. The practical suggestions to the managers regarding the third hypothesis are that 1- Planning for group and social communication between the taxpayer and the tax organization. 2- The tax system by eliminating discriminations and by dealing with tax and administrative violations. Create social trust. 3- The tax system should gain public trust by increasing the amount and quality of public services to pay taxes. 4- Due to the existing unfavorable economic conditions, the tax system should have more cooperation and empathy with taxpayers. And the practical suggestions to the managers based on the result of the fourth hypothesis is that 1- Considering that the increase in the inflation rate causes a continuous increase in the finished prices of the production of goods and services, it is suggested that a smaller part of business income be considered as tax. 2- In recent years, due to inflation, some businesses have turned to underground activities to avoid paying taxes by hiding, it is suggested to impose fair tax rates. 3- The tax system should approve the tax rate by separating the type of activity and the required raw materials due to the sanctions and the lack of raw materials in some businesses. At the end of the practical suggestions to the managers based on the result of the fifth hypothesis is that 1- continuous monitoring of the tax rate should be done according to the economic conditions of the society. 2- Importance should be given to the promotion of administrative health in the tax system and reduction of administrative violations. 3- The tax system should promote tax culture by specifying how to spend taxes in the society and informing people about the importance of paying taxes.

Suggestions for future researchers:

1- Future researchers are suggested to study the factors affecting tax evasion in other industries. 2- It is suggested to use mediating variables to investigate the factors affecting tax evasion.

11 Limitations

One of the limitations of the research is the personal perceptions and mentalities of the respondents to the questions, and what is perceived from the external realities may not be in accordance with what is real. When answering questions and not telling the whole truth.

References

[1] V. Ahmadi, R. Shahnazi, K. Islamloviyan and A. Sadraei Javaheri, *Evaluation of tax evasion measurement models from neoclassical economics to behavioral economics: hierarchical analysis approach in Iranian economy*, Plann. Budget. **26** (2021), no. 1, 115–141.

[2] H. Alizadeh and F. Ghaffari, *Estimating the size of underground sediments in Iran and investigating factors affecting it*, Financ. Econ. **7** (2012), no. 25, 31–69.

[3] B. Ameyaw and D. Dzaka, *Determinants of tax evasion: Empirical evidence from Ghana*, Modern Econ. **7** (2016), no. 14, 1653–1664.

[4] R. Bagherzadeh, *The global value chain of clothing, perspective and presentation of sustainable action plans for the industrial development of the country's clothing*, https://iranmode.farhang.gov.ir/ershad_content/media/image/2021/10/1110389_orig.pdf, (2019).

[5] R. Dell'Annoa, A. AnaMaria and D. Alexandrub, *Estimating shadow economy and tax evasion in Romania. A comparison by different estimation approaches*, Econ. Anal. Policy **63** (2019), 130–149.

[6] C. Fornell and D. Larcker, *Structural equation models with unobservable variables and measurement error*, Market. Res. **18** (1981), no. 2, 39–50.

[7] N. Hamidi and F. Mohammadi, *Identifying and prioritizing factors affecting real estate income tax evasion (case study of Qazvin province)*, Tax Res. **23** (2014), no. 25, 231–251.

[8] A. Izadi, M. Sameti and N. Akbari, *Estimation of tax evasion rate in Iran using MICMIC method during the period (1976-2015)*, Tax Res. **48** (2020), no. 96, 7–31.

[9] H. Jafari Talarposhti, A.A. Yazidi Fard and M. Mohseni Dehkalati, *Jurisprudential investigation of government tax evasion*, Islamic Econ. Bank. **9** (2020), no. 32, 31–51.

[10] B. Jamshidi Navid, D. Naserabadi, A.A. Taherabadi and M. Ghanbari, *Tax evasion of legal entities, comparison of multivariate linear regression and artificial neural networks efficiency*, Tax Res. J. **26** (2018), no. 40, 157–184.

[11] E.T. Kassa, *Factors influencing taxpayers to engage in tax evasion: evidence from Woldia City administration micro, small, and large enterprise taxpayers*, Innov. Entrepr. **10** (2021), no. 1, 1–16.

[12] M. Khalilzadeh, D. Sadiqizadeh, M. Vasei, M.R. Pashapour and H. Shakri, *Examining the cause and effect relationships and ranking the effective critical factors of tax evasion in Iran using the combination of ANP and Dematel fuzzy group methods*, Dev. Transform. Manag. **9** (2016), 141–157.

[13] S.N. Makian, H. Tavaklian and S.M.S. Najafi Farshah, *Investigating the effect of direct taxes shock on GDP and inflation in the framework of a stochastic dynamic general equilibrium model*, Financ. Econ. **13** (2018), no. 49, 1–45.

[14] M. Mohammad Bagheri and A. Jahanshad, *Identifying and prioritizing factors affecting tax evasion and choosing the best strategy to reduce it*, Strategic Macro Polic. **7** (2018), 119–136.

[15] M.Z. Mohammadi Shir Kolaei, A. Jafari Samimi, S. Karimi Patanlar and A.M. Tehranchian, *Studying the effect of globalization on tax capacity and effort in selected countries with the threshold panel data regression (PSTR) approach*, Macroeconomics **11** (2016), no. 22, 159–183.

[16] M. Motalebi, M. Alizadeh and S. Faraji Dizji, *Estimation of shadow economy and metal flight by considering behavioral factors*, Iran. Appl. Econ. Stud. **7** (2017), no. 27, 141–167.

[17] Y. Mousavi Jahromi, M. Mehrara and S. Totunchi Maleki, *Evaluation of factors affecting tax revenues in Iran's economy with dynamic averaging models (TVPDMA) approach*, Tax Res. **44** (2019), no. 92, 69–98.

[18] R. Oduro, M.A. Asiedu and G. Tackie, *Determinants of tax evasion in the developing economies: A structural equation model approach of the case of Ghana*, Account. Tax. **10** (2018), no. 4, 37–47.

[19] R. Omidipour and J. Pajouyan, *Tax evasion on the basis of income tax of legal entities in Iran (annual estimates 1973-2013)*, Financ. Econ. Quart. **39** (2017), no. 11, 27–56.

[20] K. Piraei and H.A. Rajaei, *Measuring the underground economy in Iran and examining its causes and effects*, Quart. J. Strategic Macro Polic. **9** (2015), no. 3, 21–42.

[21] M. Rousta and S.A. Heydarieh, *Ranking the causes of tax evasion by AHP method*, Tax Res. **22** (2013), no. 24, 157–173.

[22] A.H. Samadi and R. Tabandeh, *Tax evasion in Iran (investigation of causes and effects and estimation of its amount)*, Tax Res. **21** (2012), no. 19, 77–106.

[23] H. Sanaipour, *Identifying and prioritizing the factors affecting tax evasion of small and medium businesses according to the employees of the country's tax affairs organization: A mixed study*, Tax Res. **28** (2020), no. 47, 7–30.

[24] S. Shahswaripur and M. Sarchemi, *The importance and role of taxes*, Fourth Nat. Res. Conf. Account. Manag., Tehran, 2019.

[25] M.R. Tavakoli, *Tax evasion and strategies to deal with it*, Second Int. Conf. New Res. Manag. Econ. Humanities, 2015.

[26] H. Tavanaei Fard, *Descriptive culture of economy*, Jahan Rayaneh, Tehran, 2006.

[27] R.S. Wu, C.S. Ou, H.Y. Lin, S.I. Chang and D.C. Yen, *Using data mining technique to enhance tax evasion detection performance*, Expert Syst. Appl. **39** (2012), no. 10, 8769–8777.