Explaining mental accounting with tax attitudes regarding smartening the tax system

Seyyed Shojauddin Hosseini Rad, Reza Fallah*, Mehdi Maranjuri, Marzieh Ali Khani Kashkak

Department of Accounting, Chalus Branch, Islamic Azad University, Chalus, Iran

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Abstract

This study aimed to explain mental accounting with tax attitudes in smartening the tax system in 2022. This qualitative and survey study used the Delphi method to identify the optimal situation, examine the current situation and then explain the mental accounting model with tax attitudes in smartening the tax system by a cross-sample questionnaire. In this research, the chain sampling method was used in the Delphi section. In the first round of Delphi, 20 experts were identified, and finally, 13 declared their readiness to cooperate in providing expert opinions. The size of the statistical sample was calculated using Cochran's formula, which includes the employees of the Tax Affairs Department of Tehran in the field of accounting, and 285 people were selected as a statistical sample. After distributing the questionnaire to the statistical sample, the collected data was analyzed using PLS software. The results showed a significant relationship between income tax and tax knowledge, religiosity, patriotism, and the perception of the transparency of tax reports in smartening the tax system. In addition, there was a significant relationship between value-added tax and tax knowledge, religiosity, patriotism, and perception of the transparency of tax reports in smartening the tax system. There was a significant relationship between tax thinking and tax knowledge, religiosity, patriotism, and the perception of the transparency of tax reports in smartening the tax system. The results will help planners and policymakers make Iran's tax system more intelligent.

1 Introduction

Tax plays an important role in the economy of any country as a part of government revenues. Knowing the amount of tax revenue collection is essential for predicting the government budget and its distribution and consumption plans. Today, the role of tax systems in every country in providing income from the source of tax resources is not hidden from anyone. The increasing progress in science and new communication and information tools has made computers and the Internet necessary [13]. The evolutionary process of tax recognition at the level of advanced countries of the world shows the significant reduction of traditional tools for tax recognition and the use of tax smartening or electronic taxation. Undoubtedly, taxes and the tax system can effectively affect the country's development. Applying appropriate tax policies and even the necessary tax incentives can help the country's economic prosperity by creating

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*Corresponding author

Email addresses: hoseini.rad66@gmail.com (Seyyed Shojauddin Hosseini Rad), rezafallah@iauc.ac.ir (Reza Fallah), mehdi_maranjory@iauc.ac.ir (Mehdi Maranjuri), alikhani_r2@yahoo.com (Marzieh Ali Khani Kashkak)

a balance of production, distribution, and export. Tax, one of the government's indirect guidance tools for influencing economic enterprises' activities, can play a key role in industrial development policies [17]. The government can influence the achievement of development goals by formulating a suitable tax system. The current age has been called the information age and the digital age. Even the United Nations has called on countries to use the great potential of the digital revolution in life, sustainable development, and continuous peace [3]. The undeniable influence of new web technologies, especially information and communication technology, in humans' personal and social lives covers developing areas. The economic system of human society has been heavily influenced by the new conditions resulting from the communication revolution and information explosion. This flow has affected all the economic system components, such as products, consumers, sellers, intermediaries, support services, the market, and its processes [29]. Carrizosa et al. [6] believe that introducing new information intelligence, especially in information presentation and exchange, saves time and money. Studies have shown that some countries, such as the United States of America, Australia, Canada, and England, have adjusted resource allocation in recent years to increase their tax revenue [19]. Tax is presented as a regular and logical expression of the expected results of a plan with a strategy. The level of transparency in the tax system differs in different countries, and higher transparency means high accountability. Concepts and values such as transparency and accountability as the basis and requirement of public trust have been increasingly raised in various world assemblies and caused fundamental changes in tax system reforms. The indicators mentioned above are considered one of the basic components of good governance [20]. This issue significantly impacted the economic development of the country as well as the role of the government. The transformation of the tax system to increase the government's tax revenues requires establishing the necessary infrastructure in the field [32]. Therefore, smartening the tax system requires accounting knowledge and a leap in financial reporting whose effect increases financial events in the government body [31]. Many believe [14, 15, 18, 27, 31] that accounting knowledge played a key role in the evolution of the tax system. Accounting plays an important role in the economy of governments because the organization's financial statements summarize the economic consequences of the business activities of that organization as a very comprehensive source of available information. An organization's accounting system provides a similar mechanism for identifying and measuring these economic activities, collects them inside the financial statements, and exchanges them with users of financial information. Mental accounting has been one of the favorite topics of researchers in recent years [26]. Thaler first proposed mental accounting [30] and stated that mental accounting tries to explain how people code, classify, and evaluate economic consequences. Based on most economic theories, people act rationally when faced with economic events, and all available information is considered in their decision-making process. This hypothesis is the main basis of the labor market hypothesis. However, some researchers' findings [11, 21] doubted this fundamental hypothesis and discovered evidence that rational behavior is not common in people's decision-making. A part of mental accounting literature is defined as a set of cognitive operations to maintain chains of financial activities and a strategy to manage money and overcome problems of government control in spending by using mental accounting by the government in taxation [27]. Few types of research [16, 21, 25] have been conducted, indicating that the government's tax system is different in the use of mental accounting, and mental accounting is related to the tax system. Olsen et al. [25] believe that mental accounting often facilitates money management, which has a positive relationship with education, financial knowledge, and money management at the government level, leading to increased tax revenue. Nkwagu et al. [24] showed that the focus on changes in the public sector leads to accounting, which is the cornerstone of these developments. Applying new tax system techniques using mental accounting at the government level leads to an increase in sustainable income for the government. Vokshi [31] believes that mental accounting theory has been used to understand taxpayers' compliance decisions, and Alm (2019) also believes that mental accounting is related to income tax compliance. Olsen [25] stated that non-compliance is not necessarily the result of poor tax ethics but may sometimes stem from the inability to manage and fulfill personal tax obligations. Ayers et al. [5] showed that money from tax refunds is more likely to be used for serious expenses such as paying invoices and overdue bills. Alm et al. [2] found that mental accounting may explain taxpayers' attitudes toward their tax attitude. Francis [12] showed that mental separation (a more favorable mental accounting method) has a positive relationship with respondents' age, positive attitude about taxation, and (self-reported) tax compliance. Sauter et al. [28] concluded that individual attitudes such as religiosity, tax information, justice, patriotism, transparency of tax reporting, and political views play a role in tax compliance and evasion. Dhami [9] expressed that differences in interpersonal attitudes and tax knowledge impact tax evasion. Previous studies have focused more on the factors affecting the tax system and psychological factors. Therefore, this study can lead to the expansion of knowledge in the field of tax smartening. Further, Accountants' knowledge of how they do tax smartening in their minds can be useful in their decision-making in tax consulting and also in helping the government to improve the tax system. Therefore, this study tries to answer the question, how is the explanation of the mental accounting model with tax attitudes in smartening the tax system?

2 Theoretical literature and research background

2.1 Mental accounting

Thaler [30] showed that most people keep accounts of different activities separately in their minds and only mentally create a combination of all accounts due to complexity. In this way, the term mental accounting was added to the behavioral finance literature. Anilola [4] indicated that mental accounting provides a framework for decision-makers to prepare a set of reference points for each account and determine its profit and loss. Then, they observe the difference between the types of accounts and decide using choice theory [8]. Mental accounting implies that people tend to make decisions about various financial issues in separate mental accounts. It is better to make all these decisions in one portfolio; mental accounting practically ignores the interaction between different decisions. For example, some people do not seek to optimize their portfolios when investing but buy stocks individually without considering their relationship with each other [10].

2.2 Tax attitude and tax smartening

Governments need financial facilities to run the country to perform their tasks on behalf of the people in an optimal way. Today, economic experts in all countries consider taxes the best government spending source. The tax reduces the government's reliance on God-given resources such as oil, which is a national wealth and belongs to future generations and encourages the creation of national enthusiasm for participation in the country's affairs among members of the society. In this way, their cooperation with the tax organization is guaranteed, improving tax compliance [1]. Today, as an emerging phenomenon and a powerful tool, information technology, directly and indirectly, affects daily human life, including business. Information technology is significantly growing electronic services as one of the applications of information technology, it offers speed, productivity, flexibility, and innovation to its users. Therefore, investing in electronic services is essential to improving the quality of life in today's dynamic society. According to statistics, Iran's rank in the e-government index has dropped from 95 in 2005 to 100 in 2012 and 105 in 2014. Users' acceptance of information technology and electronic services increases their effectiveness and usefulness. Therefore, it is essential to identify the factors affecting acceptance, strengthen the positive factors, and reduce or eliminate the inhibiting factors [23]. Various factors, including human factors such as user attitudes and acceptance or non-acceptance, influence information technology. The growth of technologies, especially information technology, and its ever-increasing expansion in human societies created extensive changes in various areas of human life.

The technologies mentioned above have affected multiple phenomena, including the government and government institutions. The provision of electronic services is seriously on the agenda of governments with an understanding of the necessity of establishing an electronic government. Therefore, the concept of electronic government has been widely investigated in recent decades. Almost all countries, from the poorest to the most advanced, have used e-government to some extent [22]. Self-employed taxpayers are of great importance from both policy and research perspectives. These types of companies are usually less compliant than wage earners because they have more opportunities for tax evasion. Tax evasion makes them more willing to take financial risks, but small business owners differ from wage earners in another way. First, they are usually subject to several taxes and must also collect indirect taxes such as value-added tax. Second, they are required to manage the financial activities of the business and organize their incomes and expenses, issue and maintain invoices and receipts, and prepare their tax returns with or without the help of a tax professional, to meet their requirements and obligations to the tax authority. Self-management requires bookkeeping skills, knowledge of tax laws, and a degree of self-control [25].

2.3 Mental accounting and tax attitude and tax smartening

Attitudinal-mental accounting theory of behavioral finance literature describes people's cognitive processes to track their incomes and expenses, mainly by classifying financial activities and assigning them to specific budgets. A considerable amount of literature on the subject has been investigated, the effects of mental accounting, especially on consumer choice, and the theory of mental accounting has been used to understand taxpayers' compliance decisions. Preliminary evidence has shown that self-employed taxpayers differ from other professions in their use of mental accounting and that mental accounting is related to the income tax effect [34]. In new studies, special attention has been paid to the relationship between the theory of mental accounting and the understanding of tax decisions in self-employed individuals. For example, Yalcin et al. [33] found evidence of the relationship between mental accounting and tax compliance when interviewing self-employed individuals. This research initially had a different field, but the statements of some participants led the researchers to conclude that differences in the use of mental accounting can

explain taxpayers' attitudes regarding VAT and their tax compliance. Many respondents stated that VAT is not an expense for their business. Money is kept for the government, and there is no worry about payment. In their minds, these people separated the value added tax from the profit and declared voluntary tax compliance. In other words, this group keeps a separate mental account for future tax payments (mental segregation). Yang et al. [34] interviewed Austrian self-employed about money management and tax administration. Most of the people tested separated the payable tax from the income in their minds. For example, based on the previous year, most stated that they know roughly how much money I should set aside for taxes. Another number of people tested did not keep a separate mental account for taxes. For example, they stated that when I earn income, I do not think about paying taxes. The results show that mental separation has a positive relationship with age, positive attitude towards taxes, and tax compliance reported by the test subjects. Olsen et al. (2019) used a questionnaire to investigate the self-use of mental accounting by employers to manage income and value-added tax obligations, the relationship between tax knowledge, personality, and business characteristics with mental accounting, and the relationship between mental accounting and evasion,n as well as planning. The results showed that several taxpayers separate tax from sales in their minds, while others consider the two as integrated.

Moreover, there was a slight difference between the subjective income tax and value-added tax accounting. The results showed that the mental separation of taxes has a negative relationship with impulsivity and a positive relationship with the attitude towards taxes and business success. Hikmah et al. [16] investigated attitude, norms, intention, performance, and mental accounting in tax compliant behaviors. This study investigated descriptive norms, prescriptive norms, subjective norms, personal norms, tax compliance intention, financial performance, and subjective accounting regarding tax compliance based on the theory of planned behavior. Data analysis shows that the attitude toward tax compliance, command norms, mental norms, personal norms, and financial performance affects tax compliance. In addition, financial performance and tax compliance positively affect tax compliance behavior, and mental accounting effectively strengthens the effect of tax compliance goals on tax compliance behavior.

3 Research hypotheses

1. There is a significant relationship between income tax and tax knowledge in smartening the tax system.
2. There is a significant relationship between income tax and religiosity in smartening the tax system.
3. There is a significant relationship between income tax and patriotism in smartening the tax system.
4. There is a significant relationship between income tax and the perception of the transparency of tax reports in smartening the tax system.
5. There is a significant relationship between value-added tax and tax knowledge in smartening the tax system.
6. There is a significant relationship between value-added tax and religiosity in smartening the tax system.
7. There is a significant relationship between value-added tax and patriotism in smartening the tax system.
8. There is a significant relationship between value-added tax and the perception of the level of transparency of tax reports in smartening the tax system.
9. There is a significant relationship between tax thinking and knowledge in smartening the tax system.
10. There is a significant relationship between tax thinking and religiosity in smartening the tax system.
11. There is a significant relationship between tax thinking and patriotism in smartening the tax system.
12. There is a significant relationship between tax thinking and the perception of the level of transparency of tax reports in smartening the tax system.
13. There is a significant relationship between mental accounting and tax attitudes in the smartening of the tax system.

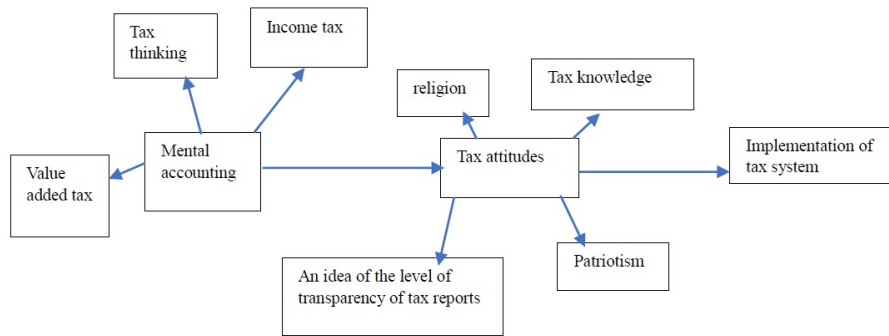According to the hypotheses, the research model was plotted as follows.

Figure 1: Conceptual model of hypotheses

4 Research method

This mixed study used the Delphi technique and Smart PLS software to evaluate the current situation and explain the mental accounting model, with tax attitudes in smartening the tax system using the Delphi method. The following steps were completed using appropriate statistical methods:

The first stage (research): The study was conducted in the first stage to explain the mental accounting model with tax attitudes and behaviors in smartening the tax system. Critical criteria were extracted after gaining sufficient knowledge about the problem. The second stage (questions and questionnaire design): According to the principles extracted from the first stage, questions for the questionnaire design are prepared and provided to the experts in the form of a questionnaire. Mental accounting Tax Income tax thinking Value added tax Tax attitudes Tax knowledge religion Patriotism An idea of the level of transparency of tax reports Implementation of tax system intelligence The third stage (answering the questions - distributing the questionnaire): In the third stage, a group called Delphi members who must answer the questions are identified. According to the basis of the Delphi method, the basic designed questionnaires were given to experts and key experts in the field of taxation, accounting, and economics, which include experts and academic staff of universities in the field of accounting, tax, and economics. The fourth stage (collection of answers and their analysis): The answers, results, and statistical tests were analyzed in this stage.

4.1 Population and statistical sample

Due to the importance of the quality of the experts' opinions compared to the number of people, non-probability sampling was used based on the people's knowledge in line with the nature of the problem and research objectives. In this method, the members are selected by purposeful or judgmental sampling because this method assumes that the researcher's knowledge about the society can be used to determine the panel members. In this research, the purposive sampling method has been used in the qualitative part. In the first round of Delphi, 20 experts were identified, and finally, 13 of them declared their readiness to cooperate in providing expert opinions. In this research, a simple random sampling method was used for sampling in the quantitative part. The statistical sample size was calculated using Cochran's formula, which includes the employees of the Tax Affairs Department of Tehran city in the accounting field, as much as 285 people.

5 Research findings

5.1 Delphi study

The Delphi study was provided to experts, managers, and employees of the Tax Affairs Organization to measure the acceptance percentage of questions in three stages. The basis of the decision regarding the questions based on previous studies in the Delphi method is as follows: Acceptance percentage less than 30% indicates non-acceptance of questions, between 30-70% presents referral to the next round, and above 70% shows acceptance of questions.

5.2 The first step of the Delphi study

In the first step, questionnaires related to accounting, tax attitude, tax behaviors, and smartening the tax system were given to 13 tax affairs organization experts. Demographic characteristics are presented in Table 1.

Table 1: Demographic characteristics of the interviewees in the Delphi study

Organizational position	Frequency	Frequency excluding non-responses	Average duration Years of service
Auditor	1	1.11	
Head of Tax Affairs	1	1.11	
Faculty member	1	1.11	
Employee and teacher	1	1.11	
Administration Manager	1	1.11	
Audit manager	1	1.11	20.7 years
Technical audit manager	1	1.11	
financial consultant	1	1.11	
Representative of Tax Affairs Organization in Tax Dispute Resolution Boards	1	1.11	
No answer	4	–	
Total	13	100	

Out of 13 people who were interviewed in the Delphi study, four have not determined their organizational position. However, auditor, head of tax affairs, faculty member, employee and lecturer, executive director, audit director, technical director of audit, financial consultant, and representative of tax affairs organization have mentioned their organizational position in tax dispute resolution boards.

5.3 The second step of the Delphi study

The results regarding the questionnaires related to smartening the tax system the second step of the Delphi study showed that all the questions were accepted, considering that the percentage of non-acceptance of all questions is less than 30%.

5.4 Descriptive statistics related to demographic characteristics of people

The demographic characteristics of the respondents to the questionnaire questions, including organizational position, gender, education level, and amount of work experience, were studied as qualitative variables using frequency and percentage tables.

Table 2: Frequency and frequency percentage related to demographic characteristics of people

Organizational position	Frequency	Correct percentage
Auditor	79	28
Head of Tax Affairs	50	7.17
Faculty member	4	4.1
Employee and teacher	37	1.13
Administration Manager	12	3.4
Audit manager	44	6.15
Technical audit manager	8	8.2
Financial Consultant	23	2.8
Representative of Tax Affairs Organization in Tax Dispute Resolution Boards	25	9.8
No answer	3	
Total	285	100

Based on Table 2, 28% of people (79 people) are auditors, 17.7% (50 people) are heads of tax affairs, 1.4% (4 people) are faculty members, 13.1% (37 people) are employees and lecturers, 4.3% (12 people) are executive directors, 15.6% (44 people) are audit managers, 2.8% (8 people) are audit technical managers, 8.2% (23 people) are financial advisors, and 8.9% of people (25 people) are representatives of the Tax Affairs Organization in dispute resolution boards. Further, 91.9% of people (262) are men, and 8.1% (23) are women. In addition, 34% (97 people) have a bachelor's degree, 49.8% (142 people) have a master's, and 16.1% of people (46 people) have a Ph.D. Moreover, 6% (17 people) were under five years old, 11% (31 people) were between 5 and 10 years old, 6.7% (19 people) were between

Table 3: Frequency and frequency percentage related to demographic characteristics of people

Gender	Frequency	Percentage	Level of Education	Frequency	Percentage	Work experience	Frequency	Percentage
Male	262	9.91	Bachelor	97	34	Under five years	17	6
Female	23	1.8	Masters	142	8.49	Between 5 and 10 years	31	11
Total	285	100	Ph.D	46	1.16	Between 10 and 15 years	19	7.6
			Total	285	100	Between 15 and 20 years	18	4.6
						Between 20 and 25 years	59	9.20
						Over 25 years old	138	9.48
						No answer	3	
						Total	285	100

10 and 15 years old, 6.4% (18 people) were between 15 and 20 years old, 20.9% (59 people) and 48.9% (138 people) have more than 25 years of work experience.

5.5 Validity and reliability analysis of research structures

Convergent validity was studied through confirmatory factor analysis of the constructs and average variance extracted (AVE) and composite reliability (CR) indices, and convergent validity was analyzed by calculating the HTMT index. The values of the probability of non-significance of the factor loading are smaller than the probability of the first type error of 0.05. Therefore, the significance of the factor loading of questions is accepted at this level of probability of type 1 error of 0.05. The factor loading of the questions is also greater than 0.315, more than the standard limit of 0.3. Question 6 of the tax thinking questionnaire and questions 1, 2, 3, and 5 of the value-added tax questionnaires were removed from the analysis process because the factor loading was insignificant.

Table 4: The composite reliability coefficient (CR) and average variance extracted (AVE) in convergent validity analysis for research constructs

Component	Average Variance Extracted (AVE)		Composite Reliability Coefficient (CR)	
	Size	Acceptable level	Size	Acceptable level
Smartening the tax system	0.5170	0.5	0.945	0.6
An idea of the level of transparency of tax reports	0.5550	0.5	0.862	0.6
Tax thinking	0.59	0.5	0.602	0.6
Tax knowledge	0.5350	0.5	0.85	0.6
religiosity	0.6770	0.5	0.893	0.6
VAT	1	0.5	1	0.6
income tax	0.5380	0.5	0.639	0.6
Patriotism	0.77	0.5	0.944	0.6

The AVE index for all structures is greater than or equal to 0.5. CR index for all structures is greater than 0.6 and more significant than AVE. Therefore, these results indicate the existence of convergent validity in the measurement of research instruments by the relevant items.

Table 5 shows that for all the constructs, the HTMT index is less than 0.9, so the research constructs have good divergent validity. In this regard, Cronbach's alpha method and composite reliability coefficient were used for reliability analysis.

Cronbach's alpha coefficient for all structures is more significant than 0.7, and the CR index for all structures is more significant than 0.7. Therefore, these results indicate the necessary reliability in measuring the research instruments by the relevant items.

Table 5: Differential validity analysis of research constructs with the HTMT index

Component title	Smartening the tax system	An idea of the level of transparency of tax reports	Tax thinking	Tax knowledge	Religiosity	VAT	income tax
An idea of the level of transparency of tax reports	0.563						
Tax thinking	0.457	0.3					
Tax knowledge	0.479	0.296	0.278				
Religiosity	0.657	0.294	0.644	0.199			
VAT	2.0	0.292	0.19	0.13	0.296		
income tax	0.571	0.429	0.895	0.307	0.719	0.127	
Patriotism	0.683	0.288	0.602	0.214	0.888	0.216	0.615

Table 6: The composite reliability coefficient (CR) and Cronbach's alpha coefficient in the reliability analysis of research structures

Component title	Cronbach's alpha coefficients		Composite Reliability Coefficient (CR)	
	Size	Acceptable level	Size	Acceptable level
Smartening the tax system	0.936	0.7	0.945	0.6
An idea of the level of transparency of tax reports	0.803	0.7	0.862	0.6
Tax thinking	0.747	0.7	0.602	0.6
Tax knowledge	0.782	0.7	0.85	0.6
religiosity	0.839	0.7	0.893	0.6
VAT	1	0.7	1	0.6
income tax	0.786	0.7	0.639	0.6
Patriotism	0.925	0.7	0.944	0.6

5.6 Descriptive statistics indicators and checking the normality of probability distribution of quantitative research variables

The average scores related to the questions of that component were calculated to scale each quantitative variable related to the studied component. After scaling the quantitative variables, some statistical indices were calculated for these variables, and the normality of the distribution of these variables was checked using the Kolmogorov-Smirnov test.

Table 7: Statistical indicators to check the normality of probability distribution of quantitative research variables

Index title	income tax	Tax thinking	VAT	The idea of transparency	Tax knowledge	Religiosity	Patriotism	Smartening
Volume of observations	285	285	285	285	285	285	285	285
Average	63.3	5.3	58.3	8.4	7.3	48.3	85.3	82.3
Middle	8.3	6.3	67.3	2.4	8.3	5.3	4	92.3
Mode	4	6.3	4	5	4	25.3	4	4
standard deviation	8.0	68.0	76.0	69.0	76.0	83.0	78.0	7.0
Skewness coefficient	−54.0	−21.0	−28.0	−49.0	−58.0	−51.0	−17.1	−57.0
Elongation coefficient	3.0	−17.0	5.0	−22.0	33.0	33.0	29.2	3.0
The lowest amount	2.1	4.1	1	6.1	4.1	1	1	62.1
The maximum amount	5	5	5	5	5	5	5	5
Kolmogorov–Smirnov statistic	124.0	077.0	107.0	102.0	097.0	121.0	154.0	097.0
Probability of assuming normality	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

The variables have been scaled from 1 to 5 based on the average scores of five-choice questions. Therefore, the average score for each component is three. The average of all quantitative variables studied in the research is greater than 3. In addition, the probability of testing the assumption of normal distribution of all quantitative research

variables is lower than the error probability of 0.05. Therefore, at this error level, the probability distribution of all variables can be assumed to be unnormal.

5.7 Analyzing structural equations of research

Based on the studied hypotheses, two structural models have been designed and analyzed by the partial least squares (PLS) method. The first structural model of the research is presented in Figure 2.
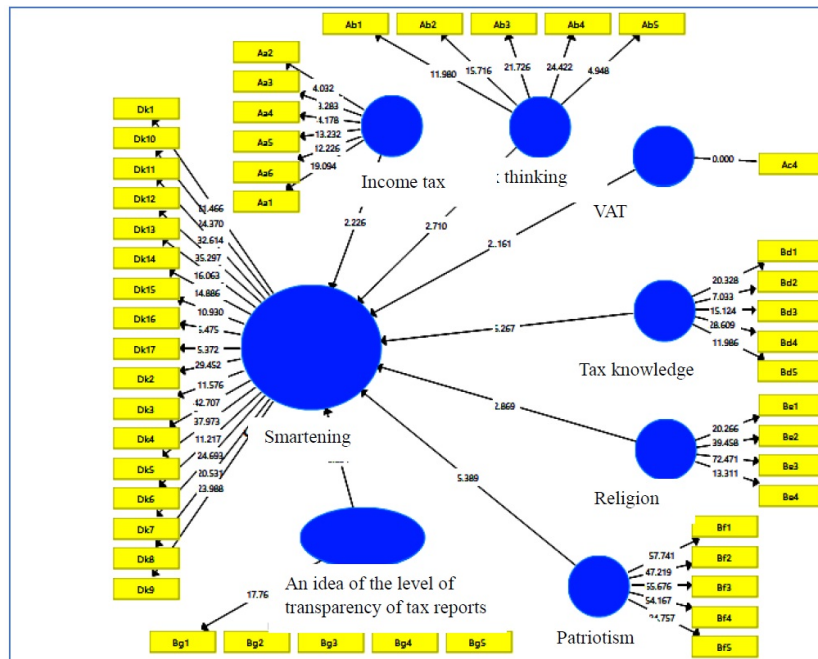

Figure 2: Significant analysis of relationships between variables in the first structural model of the research
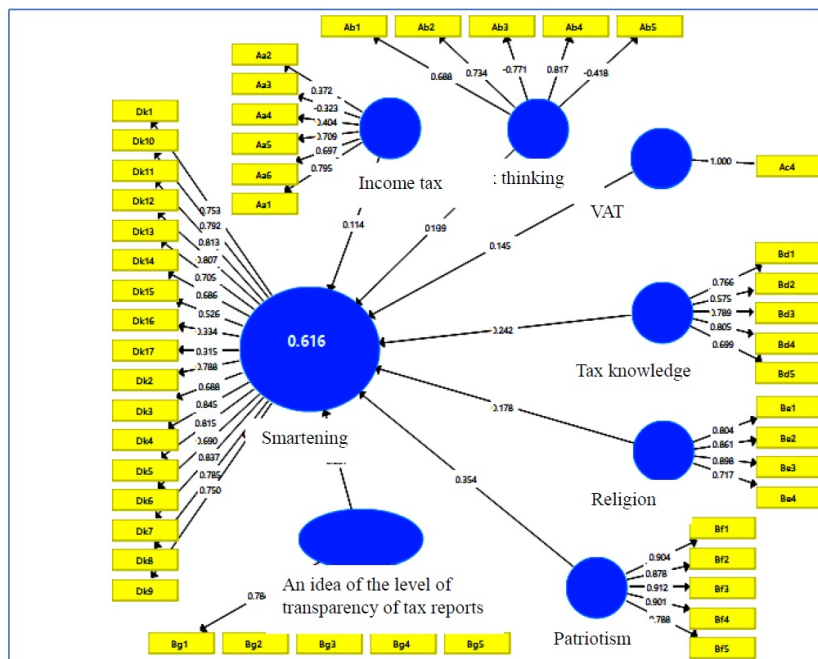
Figure 3: The size of path coefficients in the relationships between variables in the first structural model of the research

The results indicated that the coefficient of explanation of the prediction of the variable dependent on smartening the tax system in the first model is equal to 0.606. The second model is similar to 0.591, which is between 0.5
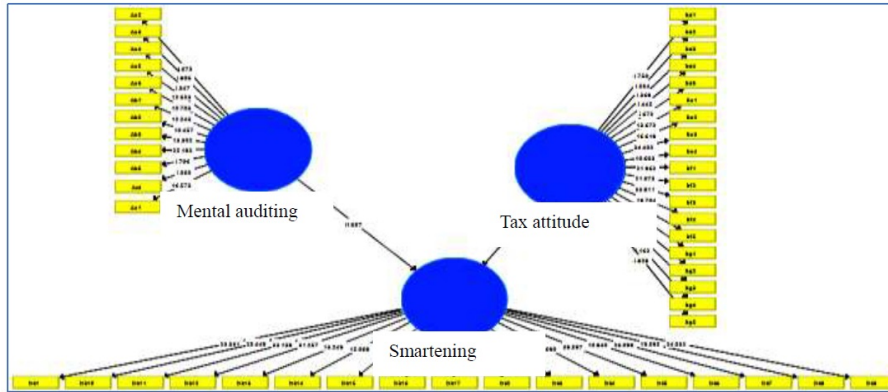
Figure 4: Significant analysis of relationships between variables in the second structural model of the research
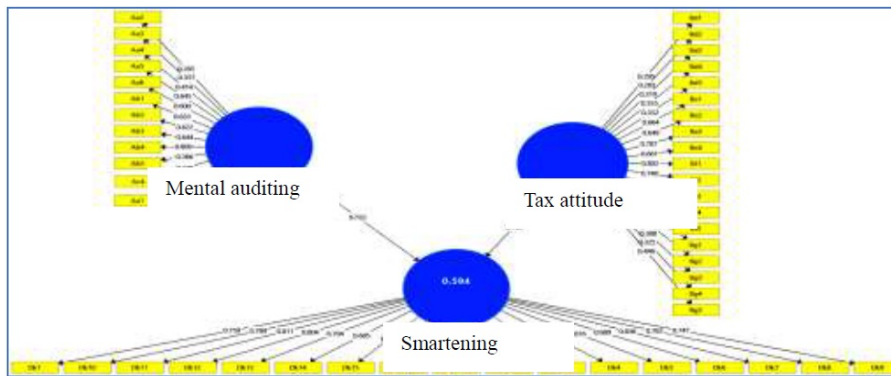

Figure 5: Analysis of path coefficients in the relationships between variables in the second structural model of the research

and 0.7. Therefore, the influential independent variables have moderate power in predicting smartening the tax system. In addition, the effect size of 2F of subjective accounting and tax attitude was 0.721 and 0.832, respectively, more significant than the acceptable limit of Cohen [7], i.e., 0.35. The size of the 2F effect of the perception of the transparency of tax reports was 0.186 and between 0.15 and 0.35. Based on these results, mental accounting and tax attitude have a strong effect, and the perception of the transparency of tax reports has a moderate effect on smartening the tax system, but other independent variables have a weak impact in this regard.

5.8 Hypotheses testing

Hypothesis 1) Smartening the tax system has a significant relationship between income tax and tax knowledge.

According to the results, the probability of assuming no effect of income tax and tax knowledge in smartening the tax system is equal to 0.026 and 0.000, respectively, and less than the probability of type 1 error 0.05. The path coefficient of these two relations is equal to 0.114 and 0.242, respectively, positive and less than 0.5. Therefore, income tax and tax knowledge are directly and weakly effective in smartening the tax system. According to these results, the first research hypothesis is not rejected.

Hypothesis 2) There is a significant relationship between income tax and religiosity in smartening the tax system.

According to the results, the probability of assuming no effect of income tax and debt in smartening the tax system is equal to 0.026 and 0.004, respectively, and is less than the probability of a type 1 error of 0.05. These two relationships' path coefficients are equal to 0.114 and 0.178, respectively, positive and less than 0.5. Therefore, income tax and debt are directly and weakly effective in smartening the tax system. According to these results, the second research hypothesis is not rejected either.

Hypothesis 3) There is a significant relationship between income tax and patriotism in smartening the tax system.

The probability of assuming no effect of income tax and patriotism in smartening the tax system was 0.026 and 0.000, respectively, and less than the probability of type 1 error of 0.05. These two relationships' path coefficients are equal to 0.114 and 0.354, respectively, positive and less than 0.5. Therefore, income tax and patriotism are directly

and weakly effective in smartening the tax system. According to these results, the third research hypothesis is not rejected either.

Hypothesis 4) There is a significant relationship between income tax and the perception of the transparency of tax reports in smartening the tax system.

The probability of assuming no effect of income tax and the perception of the transparency of tax reports in smartening the tax system are equal to 0.026 and 0.000, respectively, and are less than the probability of the first type error of 0.05. The path coefficient of these two relations is equal to 0.114 and 0.297, respectively, positive and less than 0.5. Therefore, income tax and the perception of transparency of tax reports are directly and weakly effective in smartening the tax system. According to these results, the fourth research hypothesis is not rejected either.

Hypothesis 5) Smartening the tax system has a significant relationship between value-added tax and tax knowledge.

According to the results, the probability of assuming no effect of tax knowledge and value-added tax in smartening the tax system was equal to 0.000 and 0.046, respectively, and less than the probability of type 1 error 0.05. These two relations' path coefficients are equal to 0.242 and 0.145, respectively, positive and less than 0.5. Therefore, tax knowledge and value-added tax are directly and weakly effective in smartening the tax system. According to these results, the fifth research hypothesis is not rejected either.

Hypothesis 6) Smartening the tax system has a significant relationship between value-added tax and indebtedness.

The probability of assuming no effect of indebtedness and value-added tax in smartening the tax system was equal to 0.004 and 0.046, respectively, and less than the probability of the first type error of 0.05. These two relations' path coefficients are equal to 0.178 and 0.145, respectively, positive and less than 0.5. Therefore, religiosity and value-added tax are directly and weakly effective in smartening the tax system. According to these results, the sixth research hypothesis is not rejected either.

Hypothesis 7) Smartening the tax system has a significant relationship between value-added tax and patriotism.

Based on the results, the probability of assuming no effect of patriotism and value-added tax in smartening the tax system is equal to 0.000 and 0.046, respectively, and is less than the probability of the first type error of 0.05. These two relationships' path coefficients are equal to 0.354 and 0.145, respectively, positive and less than 0.5. Therefore, patriotism and value-added tax are directly and weakly effective in smartening the tax system. According to these results, the seventh research hypothesis is not rejected either.

Hypothesis 8) There is a significant relationship between value-added tax and the perception of the transparency of tax reports in smartening the tax system.

The probability of assuming no effect on the transparency of tax reports and value-added tax in smartening the tax system is equal to 0.000 and 0.046, respectively, and is less than the probability of the first type error of 0.05. These two relationships' path coefficients are equal to 0.297 and 0.145, respectively, positive and less than 0.5. Therefore, the perception of transparency of tax reports and value-added tax is directly and weakly effective in smartening the tax system. According to these results, the eighth research hypothesis is not rejected either.

Hypothesis 9) There is a significant relationship between tax thinking and knowledge in smartening the tax system.

The value of the probability of assuming no effect of tax thinking and tax knowledge in the smartening of the tax system is equal to 0.008 and 0.000, respectively, and is less than the probability of the first type error of 0.05. The path coefficient of these two relations is equal to 0.139 and 0.242, respectively, positive and less than 0.5. Therefore, tax thinking and knowledge are directly and weakly effective in smartening the tax system. According to these results, the ninth research hypothesis is not rejected either.

Hypothesis 10) There is a significant relationship between tax thinking and religiosity in smartening the tax system.

According to the results, the probability of assuming no effect of tax thinking and religiosity in the smartening of the tax system is equal to 0.008 and 0.004, respectively, and less than the probability of type 1 error of 0.05. The path coefficient of these two relations is equal to 0.139 and 0.178, respectively, positive and less than 0.5. Therefore, tax thinking and religiousness are directly and weakly practical in smartening the tax system. According to these results, the tenth research hypothesis is not rejected either.

Hypothesis 11) There is a significant relationship between tax thinking and patriotism in smartening the tax system.

The value of the probability of assuming no effect of tax thinking and patriotism in smartening the tax system is equal to 0.008 and 0.000, respectively, and less than the probability of type 1 error 0.05. The path coefficient of these two relationships is equal to 0.139 and 0.354, respectively, positive and less than 0.5, which shows that tax thinking and patriotism are directly and weakly effective in smartening the tax system. According to these results, the eleventh research hypothesis is not rejected.

Hypothesis 12) There is a significant relationship between tax thinking and the perception of the transparency of tax reports in smartening the tax system.

According to the results, the probability of assuming no effect on the transparency of tax reports and tax thinking in smartening the tax system is equal to 0.000 and 0.008, respectively, and is less than the probability of the first type error of 0.05. These two relationships' path coefficients are equal to 0.297 and 0.139, respectively, positive and less than 0.5. Therefore, the perception of the level of transparency of tax reports and tax thinking is directly and weakly adequate in smartening the tax system. According to these results, the twelfth research hypothesis is not rejected.

Hypothesis 13) Smartening the tax system has a significant relationship between mental accounting and tax attitudes.

The value of the assumption of the lack of influence of mental accounting and attitudes in smartening the tax system is equal to 0.001 and 0.000, respectively, and is less than the probability of the first type error of 0.05. These two relationships' path coefficients are equal to 0.732 and 0.75, respectively, positive and more than 0.7. Therefore, mental accounting and tax attitudes are directly and highly effective in smartening the tax system. According to these results, the thirteenth hypothesis of the research is not rejected either.

6 Conclusion

This study aimed to explain the effect of mental accounting on tax attitudes in smartening the tax system based on 13 hypotheses. The analysis showed a significant relationship between income tax and tax knowledge, religiosity, patriotism, and perception of the transparency of tax reports in smartening the tax system. In addition, there was a significant relationship between value-added tax and tax knowledge, religiosity, patriotism, and perception of the transparency of tax reports in smartening the tax system. Mental accounting has an influential role in tax attitude, which can be used in smartening the tax systems and is required to have a tax system to make taxes smarter. Mental accounting allows planners and policymakers in the tax field to plan for the future by separating accounts. The requirement of smartening the tax system is the existence of tax attitudes, in the sense that the way of looking at taxes is the foundation of the tax system. People with a correct view of taxes, such as having tax knowledge, understand smartening the tax system better.

According to the results of the hypothesis test, the research proposals are presented as follows:

1. A society's tax attitudes can positively affect the society's tax system. Smartening the tax system better requires extensive infrastructure. Therefore, planners and policymakers are recommended to improve the tax attitudes of society and taxpayers and taxpayers. Training in the online space or using the media and press and mass media such as radio and other mass media should be used to strengthen tax attitudes. People's religiosity and patriotism should be promoted to improve the tax system. In addition, mental accounting can be explained to these people in simple language to better understand financial and tax planning.
2. Tax knowledge is a requirement for all employees of government organizations and taxpayers and tax affairs organizations, and people in society should also have a correct understanding of tax knowledge. The planners of the tax system are developed to provide information about tax knowledge in the form of posters or brochures to their employees and people referring to the tax affairs organization. The role of social and audio-visual media is also essential, which can be used in smartening the tax system while being aware of tax knowledge. Therefore, people's awareness increases, which gives people a correct understanding and smartening of the tax system. Teaching mental accounting to these people can increase their financial knowledge for tax planning. In the first stage, this training should be implemented by the managers of organizations and then recommended to their subordinates. Finally, people in society are advised to train in mental accounting and tax attitudes to smarten the tax system in Iran.

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