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Providing a model of the tax factors influencing the performance of the business environment with an emphasis on increasing entrepreneurship

Mohsen Jafari, Jamshid Edalatian Shahriari*, Mohammad Reza Kabaran Zadeh

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

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Abstract

Nowadays, tax factors are so influential in occupations and businesses that the present research aimed to design a model of tax factors influential on the performance of the business environment with an emphasis on increasing entrepreneurship in the tax affairs of the city and province of Tehran. The research method used is applied and quantitative in terms of purpose. The research population is 366 tax officers of Tehran city and province. However, after sampling with Cochran's method, a sample size of 187 people was obtained. Structural equations and prioritization of the factors obtained from the Interpretive Structural Modelling (ISM) method have been used to test the research hypotheses. The results showed that the tax factors include tax components of the institutional environment, tax frameworks, legal and implemented measures, tax policies, and tax system policy. After testing, all the hypotheses were confirmed. According to the prioritization, the institutional environment's tax components were prioritized, and the tax policies were prioritized last. Thus, it is recommended that the Head of the Tax Affairs Office of Tehran city and province devote more attention to the tax components of the institutional environment to improve the business environment and increase entrepreneurship. These tax components are legal and religious framework, administrative and organizational stability, security of property rights, and public and infrastructural services. They should also provide more vital programs to improve the conditions.

Keywords: tax factors, business environment performance, entrepreneurship, tax affairs of Tehran city and province
2020 MSC: 91B64

1 Introduction

This common belief among entrepreneurs and policymakers is that the tax system is an obstacle to the creation and growth of small businesses. However, to date, little hard evidence has supported this notion. Several years ago, research was conducted to determine how reducing marginal tax rates might influence the growth of sole proprietorships. The results revealed that income tax significantly influences a company's growth rate [5].

Economic activists announced their three significant concerns for business in 2022. On the eve of reviewing and approving the 2022 budget bill in parliament, the threats that the provisions of the budget can pose for businesses

*Corresponding author
Email addresses: baboonehmohsenja@gmail.com (Mohsen Jafari), dr.edalatian@yahoo.de (Jamshid Edalatian Shahriari), kabaranzadeh@yahoo.com (Mohammad Reza Kabaran Zadeh)

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were extracted in the Iran Chamber survey. The national business environment index fell for the third time this year. The evaluations show that from the winter of 2019 to the fall of 2014, the level of the national index of the business environment has deteriorated seasonally. Iran Chamber's new survey of economic activists denotes that they are worried about three obstacles or risks for their businesses, considering the provisions of the budget next year, which include "exchange rate fluctuations," "tax increase," and "budget deficit and price increase." [24].

The tax is an essential environmental factor affecting the business environment. Hence, policymakers and planners should know that when taxes are imposed, companies and the government will reasonably take advantage of this issue. Collecting, levying, and implementing various types of taxes will require more interaction between companies with tax administration offices. Accordingly, companies are primarily dissatisfied with this issue since the variety of taxes increases their inconveniences, which is more common in poor and developing countries. Reducing exemptions and special privileges and providing special tax exemptions weaken the tax basis. Undoubtedly, in these systems, companies that do not have exemptions are constrained to pay more taxes. In effect, the transparency of economic activities will be reduced, and their management will become more costly.

Governments often resort to excessive taxation, and countries with restrictive tax policies cause entrepreneurs to leave the country. The production obstacle for the entrepreneur is the tax imposed on the business, insurance, and production location when it is new and needs more support [7]. The National Tax Administration is the primary interface between the government and citizens, whose good performance is considered a symbol of a good government. To this end, in recent years, policymakers, aware of the importance of this issue, have been looking for ways to promote and develop businesses and to ensure voluntary and fair tax compliance and payment in the country.

In Iran, there are many problems and issues facing entrepreneurial activities and creating new businesses; one of these issues might be the tax policies established by the government. These issues are enumerated as high tax rates in the industry and production sector compared to developed countries, granting tax exemptions to specific groups of capital market activists, tax coefficients, lack of unity between entrepreneurs and finance department officers in assessing tax revenues and acceptable tax expenses, and information lack of transparency. The current research attempts to identify and present these tax factors in a model. The essential problem of the research concerns presenting a model of tax factors influencing the performance of the business environment with an emphasis on increasing entrepreneurship.

2 Theoretical foundations and research background

The business environment is the conditions needed to increase production and expand business. In other words, the business environment is the variables affecting the business of enterprises, which, despite having a significant influence on the results of their efforts, are outside the control and power of the enterprises. The business and investment environment might be a political, institutional, and behavioral environment that affects the efficiency and risks associated with economic activities and investments [26]. Another definition published by one of the DCDE Committees for Investment Development has introduced the business environment as a set of policies and legal, institutional, and regulatory conditions governing business activities [9].

Business environment refers to factors affecting the performance of economic units, such as the quality of governance institutions, the stability of laws and regulations, the quality of infrastructure, set forth. Changing these factors is beyond the authority and power of managers of enterprises [19]. The business and investment environment is an institutional and behavioral policy environment that affects the returns and risks associated with economic activities and investments [6].

In every country, the government has unique rules and regulations that make every effort to achieve them. Some governments interfere in all the existing fields and enforce many regulations. That is why they take the authority from the private sector and involve themselves in all aspects [4]. Excessive government intervention reduces efficiency in the economy. If the private sector is more accessible and the government has less interventionist laws, it can better continue its activities [23].

In the meantime, tax is one of the crucial indicators of improving the business environment, so that, on the one hand, by its means, appropriate policies can be adopted to improve economic activities (including the growth of the business environment, increasing the level of quality production, employment, and above all attracting foreign investors in creating heavy and light infrastructural projects and plans) in the country. On the other hand, with the correct circulation of tax resources in the economy and its deliberate injection into the desired sectors, especially the production sector, it is possible to take steps toward creating economic stability [27].

This issue is critical in the budget of single-product countries, which rely more on the income from the export of

natural resources to finance the government's expenses [2]. Taxes are one of the most important sources of government financing, and tax policies are one of the most effective policies in the public sector [22]. Taxes are a type of social cost that citizens pay for government services, including creating welfare and comfort and sustainable security, education, higher education, and health care [15].

The revenue generation of the government from collecting more taxes contributes to all-round economic development such as growth of the business environment, increasing the level of quality production and employment, and, above all, attracting foreign investors in creating heavy and light infrastructural projects and plans. As it is inferred, the authorities have put a wide range of measures on the agenda to achieve this end [10]. The transparency and health of the business environment are prerequisites for the competitiveness of a dynamic society because they lead to the improvement of the economic process, such as economic development. The tax payment index is one effective index in improving societies' business environment [18]. Therefore, the existence of the tax system and the adoption of effective and efficient tax policies are essential factors in realizing tax goals and improving business, as tax policies are very effective in public investments and income redistribution.

Nowadays, improving the business environment is known as an economic strategy. Improving the business environment can lead to creating activities based on entrepreneurship [16]. One of the critical factors in improving the business environment is paying particular attention to tax issues so that by adopting appropriate policies, the conditions for improving economic activities will be provided by this vital tool of financial policy [3].

2.1 Literature review

Hossen and Fagge [14] studied the impact of multiple taxes and the performance of small and medium enterprises in Nigeria. Different levels of government impose taxes on each economic actor, company, government, and even foreign sectors to generate income for the production sectors. Thus, the present study recommends that the government provide uniform tax rates and policies to develop SMEs in Nigeria.

Agu et al. [2] studied the impact of taxation on the performance of small and medium enterprises. They investigated the challenges small and medium enterprises (SMEs) face in introducing new government tax policies for the financial performance of SMEs. Their research findings indicate that the transfer of intermediary tax significantly influences the financial performance of small and medium companies.

In another study, Bird [5] studied the factors determining the effective tax burden of companies in telecommunication activities in the Republic of Croatia. The results showed that the effective tax burden of companies in the telecommunications sector is affected by the effective tax burden of the previous period, company size, power of influence, inventory intensity, profitability, and economic cycle. At the same time, capital and labor were not statistically significant.

Kintu et al. [18] examined tax administration and entrepreneurial performance to study SMEs in Uganda. They found that tax rates positively and significantly influence entrepreneurial performance, while tax administration does not influence entrepreneurial performance. Other primary factors for improving entrepreneurial performance encompass access to credit, company age, male ownership, education, and export participation.

Sheikhhassani et al. [25] designed a model of tax policies to encourage productive entrepreneurship in Iran. According to the interviews' open and axial coding, a productive entrepreneurship incentive model has been extracted for tax policymakers. This model includes eight dimensions of the definition of entrepreneurs: education, justice, trust, legal reforms, executive reforms, improvement of the audit process, and administrative health.

Harati et al. [12] developed a tax policy model based on an institutional framework. They found that strategies such as official participation, improving information flow, public participation, and bottom-up approach in policy-making can be utilized in order to design and develop efficient tax policies in the country. Nahavandi [21] studied designing a model of tax policy development in Iran's professional football using a grounded theory approach. The research results demonstrated that the consequences of developing tax policies in Iran's professional football include individual and organizational consequences. The study also revealed a good model fit.

3 Research methodology

A suitable research method should be used to carry out a scientific study whose purpose is to find the truth. Selecting the correct research method depends on the research and implementation facilities' goals, nature, and topic. The purpose of research is easy and accurate accessibility to answer research questions. The current research uses measurable parameters to evaluate the situation and often expresses how the situation is. The statistical population

of the present research includes 366 tax officers of Tehran city and province. Furthermore, to answer the interpretive structural modeling questions, 14 university professors, experts, and managers in the field of taxation were selected.

3.1 Sample size and measurement method

The sample size was calculated using Cochran's formula, one of the most widely used methods for calculating the statistical sample size. The sample size obtained was 187 out of a statistical population of 366 people.

$$n = \frac{\frac{Z^2 pq}{d^2}}{1 + \frac{1}{N}\left(\frac{Z^2 pq}{d^2} - 1\right)} \tag{3.1}$$

n: Statistical sample size

N: Statistical population size

d: Tolerated margin of error (usually considered equal to 0.05)

z: Value of the normal variable with confidence level $\alpha - 1$ (for a level of confidence of 95%, z = 1.96, for a level of confidence of 99%, z = 2.58)

p: Proportion of the desired characteristic (ex: male population)

The questionnaire is a set of structured questions to collect data. After designing the questionnaire, it will be given to the concerned professors and experts to be validated. The questionnaire will be distributed among the statistical population to answer the questions. Validity refers to whether the measurement tool can correctly measure the characteristic it is designed for. A questionnaire was designed according to the obtained variables and indices to be distributed among the statistical population. The questionnaire was given to the university professors and experts to evaluate its validity, and the validity of the questionnaire was finally confirmed.

The reliability of a measurement tool is a quantity representing the degree of consistency of the results obtained from repeated measurements with a defined method. The reliability of a test is a scale by which the degree of trustworthiness in the test findings is determined. In the present research, Cronbach's alpha method was used to determine the reliability of the measurement tool.

$$r_\alpha = \frac{J}{J-1}\left(1 - \frac{\sum S_j^2}{S^2}\right) \tag{3.2}$$

J= Number of subsets of questionnaire questions

S_j^2= Variance of the sub-test

S^2= Variance of the total test.

The closer the percentage is to 100%, the more reliable the questionnaire is.

Table 1: Calculation of Cronbach's alpha

Dimensions	**Cronbach's alpha**
Tax system policy	0.714
Tax frameworks	0.805
Institutional environment factors	0.894
Tax policies	0.720
Legal and implemented measures	0.799
Business environment	0.771
Entrepreneurship	0.727

Cronbach's alpha statistic of all dimensions in the current research is 0.7, which indicates the good reliability of the research instrument. Descriptive statistics and descriptive statistics indices will be used to examine the characteristics of the respondents. These characteristics are demonstrated in many tables and charts, so the researcher has investigated the characteristics of the respondents.

3.2 Kolmogorov-Smirnov test

To test the normality of the data, the null hypothesis (premise: distribution of the data is normal) is tested at the significance level of 0.05. Thus, if the test statistic greater than or equal to 0.05 is obtained, there will be no reason to reject the null hypothesis.

Like Mann-Whitney Test, run the following command to use the Kolmogorov-Smirnov Test:

-Sample K-S... 1Analyze→ Nonparametric Tests→ Leagcy Dialogs→

In the appeared box, activate the Kolmogorov-Smirnov option. One of the most essential uses of this test is to measure the normality of the data. However, there are other uses, which include:

Activate the "Normal" option to compare the observed distribution with the normal distribution.

Activate the "Uniform" option to compare the observed distribution with the uniform distribution.

Enable the "Poisson" option to compare the observed distribution with the Poisson distribution.

Activate the "Exponential" option to compare the observed distribution with the exponential distribution.

To test the uniformity of the data, the null hypothesis (the data distribution is uniform) is tested at the error level of 0.05. There is no reason to reject the null hypothesis if a significance value is obtained greater than or equal to the error level (5%). In other words, the data distribution will be uniform. To test the normality of the data, the null hypothesis (the data distribution is normal) is tested at the error level of 0.05. For the normality test, the statistical assumptions are set as follows:

H_0 : The distribution of data of each variable is normal.

H_1 : The distribution of data of each variable is not normal.

Therefore, if the test statistic is greater than or equal to 0.05, there will be no reason to reject the null hypothesis. In other words, the distribution of data is normal.

3.3 Structural equation

In order to test the hypotheses, the structural equation method is used, which has the following steps:

The main idea in the structural equation model is the effect of addition and multiplication on numbers. Like mean and variance, if all the values are multiplied by a fixed number like k, their average will be multiplied by the same number. That is, if we have, then we will have. The variance of the transformed numbers will be multiplied by the same number, as well:

$$\sigma_y^2 = k^2 \sigma_x^2 \tag{3.3}$$

Accordingly, the following relationship holds for the standard deviation of the transformed data:

$$s_y = |k| s_x \tag{3.4}$$

The point used here is to assume a linear relationship between Y and X in the form of Y=4X. As a result, the variance of Y must be 16 times the variance of X. To imagine the reverse, comparing the variance of Ys with 16 times the variance of Xs, the appropriateness of the Y=4X model can be tested according to the data. This idea can be applied to several correlated variables in a group of linear models. Although, in this case, the number of calculations and selected models are multiple, the basis is similar.

3.4 Model determination

At this step, the theoretical literature of the topic and its derivatives are reviewed, and the constructs involved in that topic are identified.

3.5 Identifying the measurement of constructs

The observed variables related to the structures are drawn after drawing the model containing the structures and the relationships between them. In fact, how to measure the structures is determined at this step. After drawing the model with all its components, the relationships of the obvious and latent variables are estimated. These relationships are of two types: internal and external. By selecting the Partial Least Squares (PLS) approach and the Smart PLS

software, the factor loading coefficients and the t values are calculated by the software, allowing the researcher to interpret the external and internal relationships.

The initial model of the research is obtained from investigating the theoretical foundations and backgrounds of the research, and its purpose is to introduce the frequent components concerned with the research topic. Therefore, examining the theoretical foundations and extracting the components and indices of the previous domestic and foreign research conducted by other researchers, the researchers presented the initial model of tax factors influencing the business environment performance with an emphasis on increasing entrepreneurship as follows:

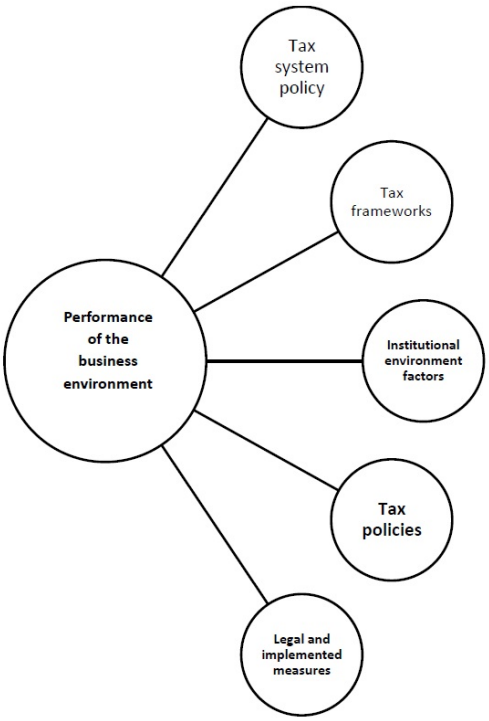

Figure 1: The initial research model

4 Results

4.1 Descriptive statistics of the research variables

The descriptive statistics of the research variables, including mean, standard deviation, and variance are discussed, in the following:

Table 2: Descriptive statistics of research variables

Variables	**Min**	**Max**	**Mean**		**SD**	**Skewedness**		**kurtosis**	
	statistic	statistic	statistic	SEM	statistic	statistic	SEM	statistic	SEM
Tax system policy	1	5	3.14	0.65	0.887	178	−0.323	0.394	0.354
Tax frameworks	1	5	3.37	0.56	0.764	178	−0.930	0.839	0.354
Institutional environment tax components	1	5	3.40	0.55	0.757	178	−0.795	0.837	0.354
Tax policies	1	5	3.46	0.57	0.781	178	−0.583	0.398	0.354
Legal and implemented measures	1	5	3.39	0.58	0.790	178	−0.562	0.390	0.354
Performance of the business environment	1	5	3.67	0.67	0.37	178	−1.273	2.825	0.354
Increasing entrepreneurship	1	5	3.74	0.60	0.819	178	−0.877	0.247	0.354

According to Table 2, the mean of the leading research variables that played the role of independent and dependent variables in the model is given. This table demonstrates that the mean of all the variables is almost in the average range without considering the standard deviation value. In order to use these variables in the modeling, a one-variable normality test should be used. Thus, the Kolmogorov-Smirnov test was used, the results of which are given below.

4.2 Kolmogorov-Smirnov normality test

Before testing the research hypotheses, the normality of the variables should be ensured. A one-sample Kolmogorov-Smirnov test was used to check the normality of the studied variables. The variable is normal if the significance level is more than 0.05%. Otherwise, the data is abnormal. Therefore, according to the table below, all the variables are non-normal (Table 3).

Table 3: Kolmogorov-Smirnov test results to check the assumption of normality

Variables	**Sample size**	**Statistic**	**Sig.**
Tax system policy	187	0.241	0.000
Tax frameworks	187	0.086	0.000
Institutional environment tax components	187	0.079	0.000
Tax policies	187	0.105	0.000
Legal and implemented measures	187	0.113	0.000
Performance of the business environment	187	0.077	0.000
Increasing entrepreneurship	187	0.097	0.000

4.3 Assessing the fit of the research model

Assessing the fit of the research model is carried out in three stages. In the first stage, the external model of the research is examined; in the second stage, the internal model is examined; and in the third stage, the whole model of the research is examined.

4.4 Evaluation of the measurement model (external model)

Cronbach's alpha coefficient is another factor ranging from 0 to 1. Cronbach's alpha value higher than 0.7 [8] is an acceptable reliability indicator. However, Moss et al. [20] introduced the value of 0.6 as the bound of Cronbach's alpha coefficient in the case of variables with a few questions. In the table below, the value of this coefficient is estimated for each factor.

Table 4: Cronbach's alpha coefficient

Variables	**Cronbach's alpha**
Tax system policy	0.889
Tax frameworks	0.911
Institutional environment tax components	0.750
Tax policies	1.000
Legal and implemented measures	0.882
Performance of the business environment	0.884
Increasing entrepreneurship	0.753

According to the above tables, the criteria for the desired construct is higher than 0.7, which indicates the appropriate reliability of the model. If the composite reliability value for each construct is above 0.7, the internal reliability is suitable for measurement models. A value of 0.6 indicates a lack of reliability. However, composite reliability in structural modeling is better than Cronbach's alpha because all indices are included in the calculations with equal importance in calculating the coefficient for each construct. However, in composite reliability, indices with higher loading are more critical. This issue makes the composite reliability values of the constructs a more realistic and accurate measure than Cronbach's alpha.

Table 5: Composite reliability

Variables	**CR**
Tax system policy	0.907
Tax frameworks	0.957
Institutional environment tax components	0.872
Tax policies	1.000
Legal and implemented measures	0.924
Performance of the business environment	0.912
Increasing entrepreneurship	0.842

Since the composite reliability coefficient of the variables in the above table is higher, the measurement models have an appropriate and acceptable fit. If a variable's average variance extracted (AVE) measure is lower than 0.5,

the question with the lowest factor load should be removed. In the table below, as the AVE values for all variables are greater than 0.5, the convergent validity of the constructs is acceptable.

Table 6: Average variance extracted (AVE)

Variables	**AVE**
Tax system policy	0.766
Tax frameworks	0.918
Institutional environment tax components	0.776
Tax policies	1.000
Legal and implemented measures	0.804
Performance of the business environment	0.653
Increasing entrepreneurship	0.578

Divergent validity is the third criterion for evaluating the model fit of the measurement models, which covers two issues: a) Comparison of the correlation between the indices of a construct with that construct in contrast to the correlation of those indices with other constructs, b) Comparison of the correlation of a construct with its indices in contrast to the correlation of that construct with other constructs. The current research used the second part (b) of the divergent validity.

4.5 Fornell and Lacker method

Another important criterion that is characterized by divergent validity is the degree of relationship between the construct and its indices in the comparison of the relationship of that construct with other constructs in such a way that the acceptable divergent validity of a model indicates that a construct interacts more with its indices than with other constructs. Divergent validity is acceptable when the AVE for each construct is greater than the shared variance of that construct and other constructs (the square of the correlation coefficients between constructs) in the model.

A matrix is used to investigate this issue. The cells of this matrix contain the values of the correlation coefficients between the constructs and the square root of the AVE values of each construct. This model has acceptable divergent validity if the numbers in the main diagonal are greater than the values below. The main characteristic of this matrix is that the main diagonal is one. Then, the values on the matrix's main diagonal are replaced with the square root of the variance values described in AVE. Finally, Table 7 is presented.

Table 7: Fornell and Lacker method

Variables	**Tax system policy**	**Tax frameworks**	**Institutional environment tax components**	**Tax policies**	**Legal and implemented measures**	**Performance of the business environment**	**Increasing entrepreneurship**
Tax system policy	0.875						
Tax frameworks	0.420	0.958					
Institutional environment tax components	0.432	0.689	0.881				
Tax policies	0.150	0.498	0.274	1.000			
Legal and implemented measures	0.457	0.927	0.710	0.512	0.897		
Performance of the business environment	0.139	0.182	0.139	0.078	0.178	0.797	
Increasing entrepreneurship	0.095	-0.007	-0.042	-0.040	-0.013	0.558	0.760

As the table taken from the method of Fornell and Lacker [11] shows, the root value of the AVE of the latent variables in the present study, which are located in the main diagonal of the matrix, is greater than their value of correlation which are arranged in the lower and left of the main diagonal. Therefore, it can be stated that the latent variables in the model interact more with their indices than with other constructs, and the divergent validity of the model is at an acceptable level.

4.6 Confirmatory factor analysis in standard estimation mode

Before testing the research hypothesis, it is necessary to ensure the correctness of the questions concerned with the research variables. Thus, confirmatory factor analysis is used in this phase. Factor analysis measures and reports the indicators chosen for the latent variable and how accurately the selected indicators represent or fit the latent variable. For factor analysis in PLS software, all variables must be connected.

4.7 t-value significance coefficients

Several criteria are used to assess the fit of the research's structural model. The first and most basic criterion is the significance coefficients of t. The fit of the structural model using t coefficients is such that they must be more than

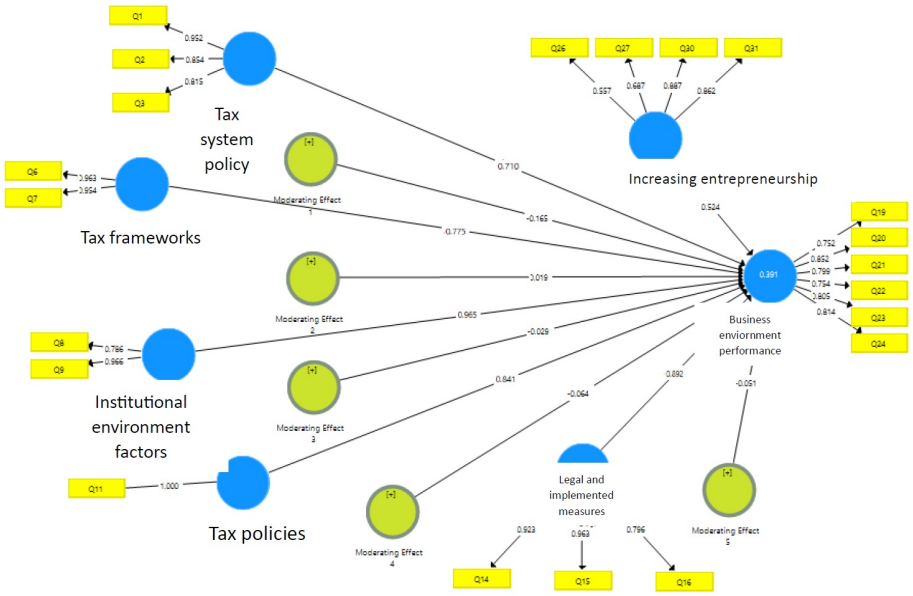

Figure 2: Path coefficient in the conceptual model

1.96 to confirm their significance at the 95% confidence level. The significant results of the coefficients are reported based on the value of the t statistic. Therefore, if the value of the t statistic is greater than 1.96, it can be concluded with 95% confidence that the independent variable affects the dependent variable.

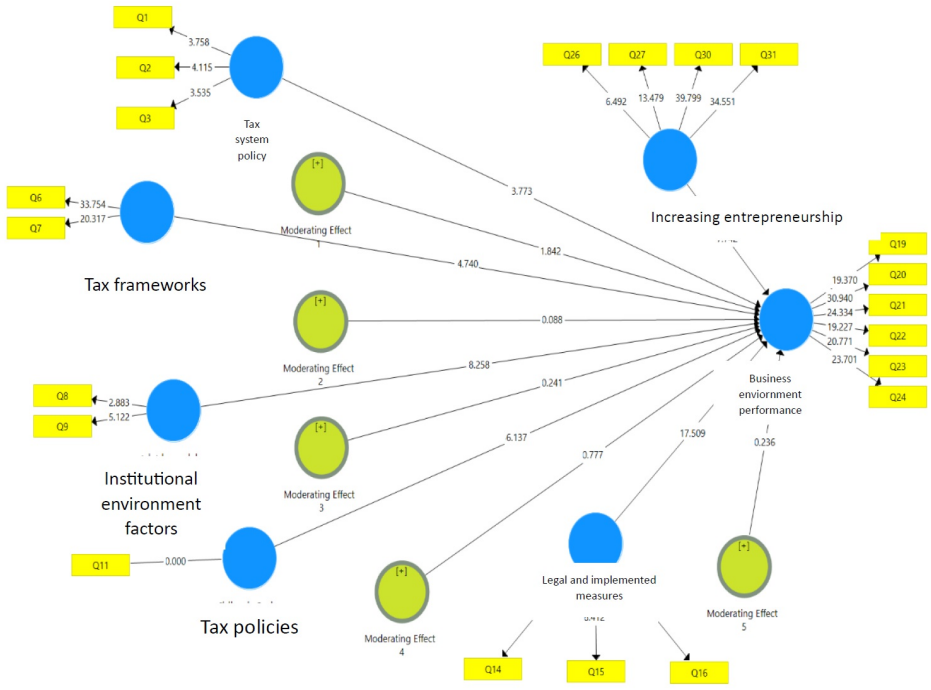

Figure 3: t-value significance coefficients in the conceptual model

Criterion values for introduced factor loadings are above 0.7. That is, questions with factor loadings less than 0.7 are not sufficient to remain in the model and should be removed.

4.8 Coefficient of determination (R^2: R Squares)

The R^2 criterion determines the impact of an exogenous variable on an endogenous variable. The essential point is that the value of R^2 is calculated only for the model's dependent (endogenous) constructs, and in the case of exogenous

structures, this value is zero. The higher the value of R^2 related to the endogenous constructs of a model, the better the model fit. Three values of 0.19, 0.33, and 0.67 are considered as criteria values for weak, medium, and strong values of the fit of the structural part of the model by the R^2 criterion. In the current research, as the value of R^2 is above 0.33, it can be declared that the research variables are medium and strong.

Table 8: Predictive quality of determination coefficient (Q^2)

Dependent Variables	Q^2	**Intensity**
Tax system policy	0.21	weak
Tax frameworks	0.23	weak
Institutional environment tax components	0.19	weak
Tax policies	0.38	medium
Legal and implemented measures	0.55	strong
Performance of the business environment	0.36	strong
Increasing entrepreneurship	0.38	strong
Mean	0.32	strong

This criterion indicates the predictive power of the model. Models with acceptable structural fit should be able to predict the indices related to the endogenous constructs of the model. Henseler et al. [17] have defined three values of 0.02, 0.15, and 0.35 to show the weak, medium, and strong predictive power of the concerned exogenous construct or constructs. It is noted that this value is calculated only for the endogenous constructs of the model whose indices are reflective.

Table 9: Predictive quality (Q^2)

Dependent Variables	Q^2	**Intensity**
Tax system policy	0.448	strong
Tax frameworks	0.561	strong
Institutional environment tax components	0.291	strong
Tax policies	1.000	strong
Legal and implemented measures	0.549	strong
Performance of the business environment	0.471	strong
Increasing entrepreneurship	0.326	strong
Mean	0.520	strong

4.9 Overall model fit (GoF)

The overall model includes both measurement and structural model parts. When the fit of the overall model is confirmed, it can be declared that assessing the model fit is complete. Three values of 0.01, 0.25, and 0.36 are reported as weak, medium, and strong for this criterion.

$$GOFModel = \sqrt{\overline{Communality} \times \overline{R^2}} = \sqrt{0.912 \times 0.39} = 0.62$$

4.10 Testing the research hypotheses

First hypothesis: The tax system policy has a significant effect on the performance of the business environment.

Since the significance coefficient, which is equal to T value = 3.773 and is greater than the value of 1.96, and the significance level, which is equal to p-value = 0.000 and is less than the value of 0.05, it can be declared that the tax system policy has a significant influence on the performance of the business environment and the hypothesis is confirmed. The beta value is equal to $\beta = 0.111$, which indicates the intensity of the influence; that is, if we change the tax system policy by one unit, the performance of the business environment will change by 0.111, in the same direction.

Table 10: Results of the first hypothesis testing

First hypothesis	β	**T.value**	**P-value**	**Result**
Tax system policy $\longrightarrow$ Performance of the Business environment	0.111	3.773	0.006	Confirmed

Second hypothesis: Tax frameworks have a significant effect on the performance of the business environment.

As the significance coefficient, which is equal to T value = 4.740 and is greater than the value of 1.96, and the significance level, which is equal to p-value = 0.000 and is less than the value of 0.05, tax frameworks have a significant effect on the performance of the business environment, and the hypothesis is confirmed. The beta value is equal to $\beta = 0.172$, which shows the intensity of the effect. In other words, if the tax frameworks are changed by one unit, the performance of the business environment will change by 0.172, in the same direction.

Table 11: Results of the second hypothesis testing

Second hypothesis	β	**T.value**	**P-value**	**Result**
Tax frameworks $\longrightarrow$ Performance of the Business environment	0.172	4.740	0.000	Confirmed

Third hypothesis: Institutional environment tax components have a significant effect on the performance of the business environment.

According to the significance coefficient, which is equal to T value = 8.258 and is greater than the value of 1.96, and the significance level, which is equal to p-value = 0.000 and is less than the value of 0.05, it can be stated that institutional environment tax components have a significant effect on the performance of the business environment, and the hypothesis is confirmed. The beta value is equal to $\beta = 0.136$, which shows the intensity of the influence. If the institutional environment tax components are changed by one unit, the performance of the business environment will change by 0.136, in the same direction.

Table 12: Results of the third hypothesis testing

Third hypothesis	β	**T.value**	**P-value**	**Result**
Institutional environment tax components $\longrightarrow$ Performance of the Business environment	0.136	8.258	0.000	Confirmed

Fourth hypothesis: Tax polices have a significant effect on the performance of the business environment.

As the significance coefficient, which is equal to T value = 6.137 and is greater than the value of 1.96, and the significance level, which is equal to p-value = 0.000 and is less than the value of 0.05, it can be confessed that tax policies have a significant effect on the performance of the business environment, and the hypothesis is confirmed. The beta value is equal to $\beta = 0.236$, which shows the intensity of the influence. That is, if the tax policies variable is changed by one unit, the performance of the business environment will change by 0.236, in the same direction.

Table 13: Results of the fourth hypothesis testing

Fourth hypothesis	β	**T.value**	**P-value**	**Result**
Tax polices $\longrightarrow$ Performance of the Business environment	0.236	6.13	0.000	Confirmed

Fifth hypothesis: Legal and implemented measures have a significant effect on the performance of the business environment.

Regarding the significance coefficient, which is equal to T value = 17.509 and is greater than the value of 1.96, and the significance level, which is equal to p-value = 0.000 and is less than the value of 0.05, it can be declared that legal and implemented measures have a significant effect on the performance of the business environment, and the hypothesis is confirmed. The beta value is equal to $\beta = 0.175$, indicating the influence's intensity. That is, if the legal and implemented measures variable is changed by one unit, the performance of the business environment will change by 0.175, in the same direction.

Table 14: Results of the fifth hypothesis testing

Fifth hypothesis	β	**T.value**	**P-value**	**Result**
legal and implemented measures $\longrightarrow$ Performance of the Business environment	0.175	17.509	0.000	Confirmed

Sixth hypothesis: Increasing entrepreneurship moderates the effect of tax factors on the performance of the business environment.

Considering the significance coefficient, which is equal to T value = 7.742 and is greater than the value of 1.96, and the significance level, which is equal to p-value = 0.000 and is less than the value of 0.05, it can be stated that increasing entrepreneurship moderates the effect of tax factors on the performance of the business environment and the hypothesis is confirmed. The beta value is equal to $\beta = 0.264$, indicating the influence's intensity. In other words,

if the increasing entrepreneurship variable is changed by one unit, the effect of tax factors on the performance of the business environment is moderated and changed by 0.264, in the same direction.

Table 15: Results of the sixth hypothesis testing

Sixth hypothesis		β	**T.value**	**P-value**	**Result**
Increasing entrepreneurship (modeates) environment	Tax factors ⟶ Performance of the Business	0.264	7.742	0.000	Confirmed

4.11 Interpretive Structural Modeling (ISM) analysis (ranking the research components)

Step one:

In the first step, the research's structural self-interaction matrix (SSIM) was formed using the opinion of the respondents, which is given in the table below.

Table 16: Structural self-interaction matrix

I \ J		**A**	**B**	**C**	**D**	**E**
A	Tax system policy	–	X	A	O	V
B	Tax frameworks		–	X	A	X
C	Institutional environment tax components			–	V	X
D	Tax policies				–	V
E	Legal and implemented measures					–

Step two:

The initial access matrix was formed in the second step by converting the structural self-interaction matrix to zero and one.

Table 17: Initial access matrix

	A	**B**	**C**	**D**	**E**
A	1	0	1	1	0
B	0	1	0	1	0
C	1	0	1	1	1
D	0	0	1	1	0
E	1	0	0	1	1

Step three

In the third step, the initial access matrix was adapted. This adaptation is added to the initial access matrix using secondary relationships that may not exist. In Table 18, the highlighted cells are the relationships created in the adapted matrix.

Table 18: The final access matrix

	A	B	C	D	E	influence	Total
A	1	0	0	0	0	0	1
B	0	1	1	1	1	1	4
C	1	1	1	1	1	1	5
D	0	1	0	1	0	1	2
E	0	0	1	1	1	1	3
Dependence	4	4	5	5	5	1	

Step four

In the fourth step, the levels of each variable should be obtained according to the adapted access matrix. The sum of the input and output variables and the subscription is calculated. In each iteration, if the output variable equals the subscription variable, that iteration is the i-th level. Afterward, in the next iteration, the row and column of that variable are removed from the matrix, and calculations are done again. The results are summarized below. Table 19 shows that the component of tax policies is placed at the first level; the components of tax frameworks, legal and implemented measures, and tax system policy are placed at the second level, and the institutional environment tax components are placed at the third level.

Table 19: Prioritization of components

Components	**Levels**
Tax policy	1
Tax frameworks	2
Legal and implemented measures	2
Tax system policy	2
Institutional environment tax components	

Step five

In the fifth step, the network of ISM interactions is drawn using the levels obtained from the criteria. If there is a relationship between two variables, i and j, we show it with a directional arrow.

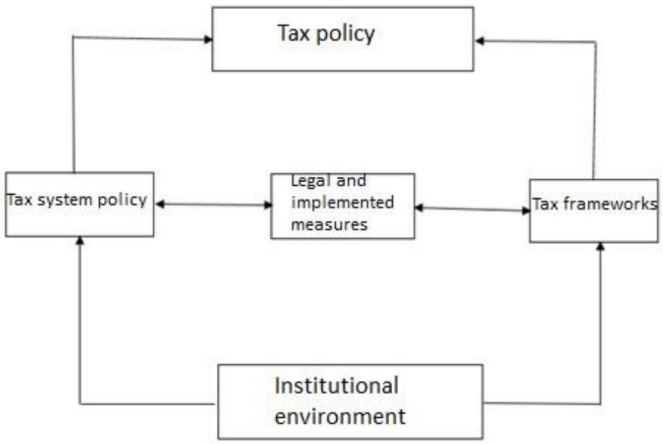

Figure 4: The interpretative structural model of the research

5 Discussion and conclusion

According to the findings of descriptive statistics in the present research, most respondents are male. In addition, the age group of 35 to 45 had the largest number of people, and the age group less than 25 years old had the least number of respondents. Furthermore, respondents with a bachelor's degree have the highest level of education, and respondents with an associate degree have the lowest level of education. Finally, respondents with 10 to 15 years of work experience have the highest frequency, and respondents with less than 5 years of work experience have the lowest frequency.

In the first hypothesis, which investigated the significant effect of tax system policy on the performance of the business environment, it was found that due to the significance coefficient of T value = 3.773, which is more than the value of 1.96 and the significance level of p-value = 0.000 which is less than 0.05, it can be stated that the tax system policy has a significant effect on the performance of the business environment with an emphasis on increasing entrepreneurship, and the hypothesis is confirmed.

The findings of the current research are in line with studies such as Harati et al. [12], Zamirie Kamel et al. [27], Sheikhassani et al. [25], Safari Nohdani [23], Salari [24], Agu et al. [2], and Kristina Kindsfaterienė and Lukaševičius [17].

In the second hypothesis, which investigated the significant effect of tax frameworks on the performance of the business environment, it was found that due to the significance coefficient of T value = 4.740, which is more than the value of 1.96 and the significance level of p-value = 0.000 which is less than 0.05, it can be declared that the tax frameworks have a significant effect on the performance of the business environment with an emphasis on increasing entrepreneurship, and the hypothesis is confirmed. These findings corroborate the studies by as Harati et al. [12], Zamirie Kamel et al. [27], and Abunouri and Motovassel [1].

In the third hypothesis, which investigated the significant effect of Institutional environment tax components on the performance of the business environment, it was found that due to the significance coefficient of T value = 8.258, which is more than the value of 1.96 and the significance level of p-value = 0.000 which is less than 0.05, it can be stated that the Institutional environment tax components have a significant effect on the performance of the business environment with an emphasis on increasing entrepreneurship, and the hypothesis is confirmed. These results are consistent with the research such as Harati et al. [12], Abunouri and Motovassel [1], and Safari Nohdani [23].

Investigating the effect of tax policies on the performance of the business environment showed that due to the significance coefficient of T value = 6.137, which is more than the value of 1.96, and the significance level of p-value = 0.000, which is less than 0.05, it can be stated that tax policies have a significant effect on the performance of the business environment with an emphasis on increasing entrepreneurship, and the hypothesis is confirmed. The results obtained align with the studies including Harati et al. [12], Agu et al. [2], and Baliamoune-Lutz [4]. Furtrhmore, the effect of legal and implemented measures on the performance of the business environment showed that due to the significance coefficient of T value = 3.273, which is more than the value of 1.96, and the significance level of p-value = 0.000, which is less than 0.05, it can be declared that legal and implemented measures have a significant effect on the performance of the business environment with an emphasis on increasing entrepreneurship, and the hypothesis is confirmed. The results obtained are consistent with the studies such as Harati et al. [12], Amiri et al. [3], and Abunouri and Motovassel [1].

To investigate the moderating effect of increasing entrepreneurship of the influence of tax factors on the performance of the business environment, since the significance coefficient of T value = 7.742, which is more than the value of 1.96, and the significance level of p-value = 0.000, which is less than 0.05, it can be stated that increasing entrepreneurship moderates the effect of tax factors on the performance of the business environment.

The Interpretive Structural Modeling (ISM) method was used to prioritize the tax components affecting the business environment's performance with an emphasis on increasing entrepreneurship. It shows that the tax policies component is at the first level, the tax framework component, the legal and implemented measures component, and the tax system policy component are at the second level, and the institutional environment tax component is at the third level. Thus, it is concluded that the institutional environment tax component has the most significant impact on the performance of the business environment. In order to present the model of tax factors affecting the performance of the business environment with an emphasis on increasing entrepreneurship according to the research hypotheses, the following suggestions are presented.

- As entrepreneurial businesses start with high risk, the tax system policies should be such to prevent their damage regarding the collection of taxes.
- The financial frameworks for businesses should be created so that proprietors can provide their financial reports easily and accurately.
- Administrative and organizational stability is one of the most important ways to prevent administrative corruption in the tax system. Thus, there must be sufficient supervision on this issue.
- Revising the tax laws and regulations can bring harmony and integrity between the current business conditions and the tax laws and regulations.
- The tax system can improve the business environment and increase employment by providing financial security to entrepreneurs.
- Tax exemptions for knowledge-based businesses that lead to entrepreneurship and job creation should be considered.
- Tax facilities should be considered as one of the solutions and laws to increase investment and entrepreneurship to improve the business environment.

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