

Determinants of Self-Assessed Personal Income Tax Compliance: Evidence from Mongolia

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Abstract: The purpose of this study is to identify the factors influencing tax revenue collection under the self-assessment system of personal income tax in Mongolia. The study employs the BISEP model, which encompasses Business, Individual, Social, Economic, and psychological factors. Data were collected through a survey of 290 taxpayers in the Sukhbaatar District of Ulaanbaatar, and correlation and regression analyses were conducted. The results indicate that the most significant factors affecting tax revenue collection are the taxpayer's financial condition and knowledge about taxation ($R = 0.66$, $\beta = 0.46$). In contrast, social and economic factors show relatively weak effects. The psychological aspects and perceptions of fairness among taxpayers were found to have a positive influence on taxpaying behavior. This research provides both theoretical and practical foundations for policymakers to strengthen the voluntary tax compliance system and enhance the effectiveness of tax policy implementation in Mongolia.

Keywords: Tax Compliance, BISEP Model, Mongolia, Revenue Mobilization, Tax Knowledge, Fiscal Behavior.

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I. INTRODUCTION

Tax revenue plays a vital role in enabling governments to fund public expenditures, including social services such as health care and education, as well as public investments. More broadly, strengthening a country's tax capacity is central to any development strategy, as it provides the financial resources necessary to expand education and health services, and to improve infrastructure financing. On average, developing economies collect only about 15 percent of their gross domestic product (GDP) in tax revenues, compared to approximately 40 percent in developed countries [1]. The capacity to collect taxes is therefore a key determinant of a nation's economic performance. Given the enormous fiscal needs of low-income countries, such limited tax collection places economic development at significant risk. The issue of low tax revenue mobilization in poor countries is not merely linked to the performance of tax authorities, but also to broader structural factors such as legal reforms, corruption, and bribery within the state system [1]. Globally, two major systems are employed for assessing and collecting taxes: the self-assessment system, in which taxpayers determine and pay their own tax obligations, and the official assessment system, in which the tax authority determines and enforces payment.

In Mongolia, the transition to a market economy established the legal framework necessary for implementing the self-assessment principle. However, researchers have noted that the process of tax revenue mobilization continues to face several persistent challenges.

First, approximately 400 large enterprises account for the majority of Mongolia's tax revenue, contributing around 50–60 percent of total domestic revenue. Among them, roughly 100 major mining companies alone contribute nearly 40 percent of total tax revenues, underscoring the dominant role of the mining sector [2]. This concentration indicates that the national budget remains highly dependent on the mining industry, highlighting the need to broaden the tax base by increasing contributions from small and medium-sized enterprises and from non-mining sectors.

Second, most taxes paid by individuals are withholding taxes, remitted by employers or other entities on behalf of taxpayers. In contrast, self-assessed taxes — such as those paid by self-employed individuals or taxes on the sale of movable property — account for a small share, with limited taxpayer participation and low collection efficiency. As of the end of 2024, revenue from personal income tax (PIT) amounted to 2,551.5 billion MNT, of which 94 percent came

from wage and salary withholdings, while only 6 percent derived from self-assessed taxes [2].

Third, taxpayers' understanding of the more than 20 active tax laws, regulations, and methodologies remains inadequate. Many lack sufficient knowledge of how to determine and pay taxes under the self-assessment system. This has led to difficulties in legal compliance, and audits have shown that such deficiencies often result in additional payments, penalties, and interest. In 2024, total tax arrears imposed on taxpayers reached 7.6 billion MNT, tax penalties 13.2 billion MNT, and interest income from penalties 2,155.5 billion MNT, representing 1 percent of total tax revenues [3].

Fourth, according to the *Mongolian Business Environment Surveys* conducted in 2017, 2020, and 2023, the overall tax environment has been rated as poor. The most problematic area was found to be the equity of taxation, or the fairness and comprehensiveness of the tax base, which was identified as requiring urgent reform. The assessment attributed this to unequal tax imposition, the predominance of formal enterprises in the tax base, and the under-taxation or complete exclusion of informal and small-scale businesses, which fosters unfair competition [4].

Fifth, there is a scarcity of systematic research in Mongolia examining the real impact of expanding third-party reporting systems—including banking transactions, securities and stock exchanges, overseas assets, and gig/platform income—on tax base broadening and the reduction of the shadow economy [5]. Similarly, few studies have empirically measured the influence of tax ethics and voluntary compliance behavior among Mongolian taxpayers [6].

For these reasons, this study seeks to analyze the factors affecting the enhancement of self-assessed personal income tax collection, tax revenue mobilization, and the broadening of the tax base among Mongolian citizens.

II. LITERATURE REVIEW

Factors influencing tax revenue collection have been widely examined in both international and domestic studies. These factors are commonly categorized under the BISEP model, which includes Business, Individual, Social, Economic, and Psychological dimensions. The present study synthesizes the existing research trends according to this framework.

➤ *Business Factors:*

The stability of the business environment, coherence of tax policy, enforcement of tax legislation, availability of tax incentives, and transparency of the tax system directly influence tax revenue performance [7]. For example, tax reform in Georgia resulted in a sharp increase in revenue, demonstrating that a simplified and stable business structure plays a crucial role in revenue growth [8]. Bird and Zolt [9] emphasized that creating a supportive business environment enhances taxpayer trust and expands the tax base. Furthermore, tax ethics and the level of corporate

responsibility are key drivers of compliance among businesses [10]. Overall, the findings suggest that the transparency of the business environment, consistency of tax laws, and digital simplification are among the most influential determinants of tax revenue growth.

➤ *Individual Factors:*

Individual knowledge, education, income level, understanding of taxation, and personal values are fundamental determinants of taxpaying behavior. Empirical studies have confirmed that psychological attitudes strongly influence individuals' decisions to comply with tax obligations [11]. A lack of tax knowledge increases the likelihood of tax violations and misreporting [12]. Stable income and trust in the tax system contribute positively to voluntary compliance [13]. Moral values and perceptions of fairness also play a central role in shaping individual tax behavior [14]. In summary, income, education, trust, and tax knowledge are the strongest individual-level variables contributing to effective tax revenue collection.

➤ *Social Factors:*

Social factors encompass elements such as government policy, public trust, cultural values, and civic participation [15]. Research shows that when transparency and accountability of public administration increase, citizen trust rises, leading to higher voluntary tax compliance [16]. Conversely, in countries with high levels of corruption, taxpayer confidence diminishes, resulting in a narrower tax base [17]. The development of a "taxpaying culture," reflecting citizens' civic awareness and attitudes toward the state, has been identified as a key condition for improving tax revenue performance. These studies indicate that the growth of tax revenue is directly associated with social justice, governmental trust, and institutional accountability.

➤ *Economic Factors:*

Macroeconomic variables such as economic growth, employment, inflation, and the transparency of government expenditure have a direct impact on tax revenue levels [18]. In developing countries, structural economic changes, the investment climate, and tax reforms are also key factors contributing to revenue enhancement [19]. Strengthening domestic resource mobilization requires improving the efficiency of the tax system and formalizing the informal economy [20]. Studies have demonstrated that tax bases expand in correlation with economic growth [21], and decentralizing taxation—by strengthening local tax capacity—can further increase revenue collection [22].

➤ *Psychological Factors:*

Psychological factors, including perceived tax fairness, trust in government, and tax morality, form the foundation of voluntary tax compliance [23]. Studies comparing voluntary and enforced compliance reveal that higher trust levels encourage taxpayers to comply willingly, and that tax morality significantly affects compliance behavior [24]. Social norms and perceptions of fairness have also been identified as key influences on taxpayers' attitudes [25]. Attempts to measure the multidimensional psychological

orientation of taxpayers have confirmed that trust and fairness are the strongest predictors of taxpaying behavior [26].

➤ *Summary of Empirical Findings:*

Comprehensive analyses show that tax revenue collection is affected by a wide range of factors — economic (tax auditing, perceptions of government expenditure), social (perceptions of equity, fairness, and policy changes), individual (personal financial constraints, penalty rates, tax knowledge), and demographic variables (age, gender, education, and income level). These relationships have been modeled under the ESID framework жээ [27]. According to the research by Morris and Lonsdale, tax collection performance is influenced by the taxpayer's business, production, social, economic, and psychological characteristics; hence, they applied the BISEP model in their study [28].

• *Synthesizing Previous Research Findings Suggests that Among the Determinants of Tax Revenue Collection:*

- ✓ Individual and Psychological factors exert the strongest influence;
- ✓ Business and Economic factors play secondary roles;
- ✓ Social factors exert indirect effects, primarily through trust and perceptions of fairness.

➤ *Conceptual Framework*

Based on the theoretical perspectives discussed above, the present study adopts and integrates elements from both the ESID and BISEP models [27]. These frameworks are used as the foundation for defining the conceptual scope of the research.

In the original BISEP model, the component “*I – Industry*” has been redefined as “*I – Individual*” according to the ESID framework. Accordingly, the present study identifies the key influencing dimensions of tax revenue collection as follows:

- B – Business environment factors,
- I – Individual factors,
- S – Social factors,
- E – Economic factors,
- P – Psychological factors, as well as demographic factors.

Among these, the study particularly emphasizes the influence of Individual (I), Social (S), and Economic (E) factors, as originally highlighted in the BISEP framework, as shown in Table 1.

Table 1 Factors Influencing Self-Assessed Personal Income Tax Collection and Revenue Mobilization

Category	Influencing Variables
Business Factors (B)	Business environment stability, transparency of the tax system, policy consistency, legal framework, digital accessibility
Individual Factors (I)	Income level, education, tax knowledge, trust in government, moral values
Social Factors (S)	Social fairness, cultural values, public trust, participation, corruption level
Economic Factors (E)	Economic growth, employment, inflation, public expenditure transparency
Psychological Factors (P)	Perceived fairness, tax morale, voluntary compliance attitude, trust

Table 2 Factors Influencing Tax Revenue Collection (BISEP Model)

Code	Factor Category	Key Variables
B	Business Factors	• Tax burden within the business sector to which the taxpayer belongs
I	Individual Factors	• Personal financial condition and constraints • Knowledge about taxation • Income level • Age • Gender • Education
S	Social Factors	• Reference groups • Changes in government policy
E	Economic Factors	• Tax auditing • Perception of government expenditure • Penalty rates and enforcement
P	Psychological Factors	• Perception of fairness and equality in taxation

Source: Researchers' Calculation

➤ *Research Variables and Their Measures*

The dependent variable of this study is tax revenue collection, which is influenced by a range of factors associated with the business environment, social context, economic conditions, and individual taxpayer characteristics such as age, income level, and educational attainment. It is hypothesized that these variables collectively and

significantly affect the efficiency and performance of tax revenue mobilization.

The study identifies five major categories of indicators, further operationalized into thirteen measurable variables, as presented in Table 2. These indicators represent both external

and internal determinants of taxpayers' compliance behavior and their contribution to the overall tax revenue system.

Table 3 Description and Hypotheses of Research Variables

Variables	Code	Evaluation / Measurement Indicators	Expected Sign / Hypothesis
Dependent Variable			
Tax Revenue Collection	rev_collection	Ordinal scale (five-point choice)	(+) Positive or (–) Negative influence on revenue collection
Independent Variables			
B – Business Environment Factors			
Business Sector to Which the Taxpayer Belongs	Bus_area	Nominal scale (ten categorical options)	The effect may vary depending on the business sector
I – Individual Factors			
Personal Financial Constraints	Fina_Cons	Ordinal scale (five-point choice)	(–) Greater financial constraints are expected to decrease tax revenue collection
Knowledge about Taxation	Tax_know	Ordinal scale (five-point choice)	(+) Higher tax knowledge is expected to increase revenue collection
Income Level	Income	Nominal scale (four categories)	(+) Higher income levels are associated with greater tax revenue contribution
Age	Age	Nominal scale (four categories)	Older taxpayers are expected to exhibit stronger tax compliance and contribute more effectively to revenue collection
Gender	Gender	Nominal scale (two categories: 1 – Female, 2 – Male)	Female taxpayers are expected to demonstrate higher tax compliance
Educational Attainment	Educ	Nominal scale (four categories)	(+) Taxpayers with higher education levels are expected to contribute more to tax revenue
S – Social Factors			
Reference Groups	Ref	Ordinal scale (five-point choice)	(+) Stronger social influence is expected to enhance revenue collection
Changes in Government Policy	Gov policy	Ordinal scale (five-point choice)	(–) Frequent policy changes are expected to reduce the stability of revenue collection
E – Economic Factors			
Tax Auditing	Tax_audit	Ordinal scale (five-point choice)	(+) Increased auditing and monitoring are expected to improve revenue collection
Perception of Government Expenditure	Gov_Spend	Ordinal scale (five-point choice)	(+) Greater awareness and understanding of government expenditure are expected to enhance revenue collection
Penalty Rate and Enforcement	Penalty	Ordinal scale (five-point choice)	(+) Higher penalty rates and consistent enforcement are expected to strengthen compliance and increase revenue
P – Psychological and Demographic Factors			
Perception of Fairness and Equity	Equity_Fair	Ordinal scale (five-point choice)	(+) Stronger perceptions of fairness and equity are expected to positively influence revenue collection

Source: Researchers' Calculation

➤ Research Hypotheses

- Hypothesis 1: The business environment significantly influences tax collection operations.
- Hypothesis 2: Individual factors of taxpayers exert a strong influence on tax collection operations.
- Hypothesis 3: Taxpayers' legal knowledge has the greatest impact on tax collection operations.

III. RESEARCH METHODOLOGY

This study employs a quantitative explanatory research design, with variables defined according to the BISEP model

(Business, Individual, Social, Economic, and Psychological factors). The research was conducted among 290 self-assessed taxpayers residing in Sukhbaatar District, Ulaanbaatar, Mongolia. Data were collected through a structured questionnaire survey.

➤ Data Analysis Techniques

To ensure the validity and reliability of the findings, several statistical methods were applied in this study. Descriptive analysis was first employed to summarize the demographic and economic profiles of the respondents, providing an overview of key characteristics such as age, gender, education level, income, and business sector.

Next, the Chi-Square Test (χ^2) was used to examine associations among categorical variables, particularly to identify whether demographic factors such as gender, age, education, income, and sector of activity were significantly related to taxpayers' self-assessment behavior.

Following this, correlation analysis (Pearson's r) was conducted to measure the strength and direction of relationships among variables and to assess the inter-item associations within each group of factors defined under the BISEP framework.

To evaluate the internal consistency of the measurement scales, a reliability test using Cronbach's Alpha (α) was performed. The overall reliability coefficient was found to be $\alpha = 0.71$, which indicates an acceptable level of internal consistency among the survey items.

Finally, regression analysis was used to determine both the strength and direction of influence of each independent factor—namely business, individual, social, economic, and psychological variables—on the dependent variable of tax revenue collection. This multi-method approach provided a comprehensive understanding of the key determinants shaping taxpayers' compliance behavior and revenue performance.

➤ Population and Sample Selection

The total population of Sukhbaatar District consists of 144,616 citizens [30]. Among them, 5,462 individuals self-declared and paid their personal income tax (PIT) in 2024. From this population, 290 taxpayers were selected as the representative sample for this study.

IV. RESEARCH RESULTS AND DISCUSSION

Of the taxpayers surveyed, 58.6 percent were female and 41.4 percent were male, indicating a relatively balanced gender distribution in the sample.

Regarding monthly business income, 37.9 percent of respondents reported earning between 500,000–1,000,000 MNT, 31 percent reported between 5,001,000–10,000,000 MNT, and 20.7 percent also reported income in the 5,001,000–10,000,000 MNT range. From these findings, it can be inferred that the average monthly income of self-employed taxpayers in the study is approximately 10,000,000 MNT.

In terms of educational attainment, the majority of self-assessed taxpayers (41.4 percent) hold a bachelor's degree and are engaged in diverse occupational sectors. Among them, 20.7 percent operate in trade and service industries, indicating the predominance of this sector among small business taxpayers.

➤ Chi-Square Test for Variable Association

The Chi-square test (χ^2) was employed to examine the relationships among categorical variables. If no significant association exists between the variables, a factor analysis would not be required.

The study tested whether self-assessed tax payment behavior was associated with key demographic and economic variables such as age, gender, education, income, and business sector. The hypotheses tested were as follows:

- Null hypothesis (H_0): The variables are independent of each other.
- Alternative hypothesis (H_1): The variables are interdependent.

If $\chi^2 > \chi^2_{(k-1, \alpha)}$ and $p < 0.05$, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted, indicating that a statistically significant relationship exists between the variables.

Table 4 Taxpayer Profiles, Tax Payment Status, and Chi-Square Test Results

Question	Categories	Do You Self-Assess and Pay Any of the Above Tax Types?		Total	Statistical Test
		Yes	No		Pearson Chi-Square
1. How old are you?	21–30 years	40	40	80	$\chi^2 = 1.867^a$
	31–40 years	90	30	120	Likelihood Ratio = 1.868
	41–50 years	20	20	40	Linear-by-Linear Association = 0.313
	51 and above	30	10	40	N of Valid Cases = 280
	Total	180	100	280	—
2. Gender	Male	80	40	120	$\chi^2 = 0.184^a$
	Female	100	70	170	Continuity Correction ^b = 0.002
	Total	180	110	290	Likelihood Ratio = 0.185
3. What is your monthly business income?	500,000–1,000,000 MNT	50	60	110	$\chi^2 = 10.809^a$
	1,001,000–5,000,000 MNT	0	10	10	Likelihood Ratio = 13.803
	5,001,000–10,000,000 MNT	70	20	90	N of Valid Cases = 290
	10,001,000–100,000,000 MNT	0	10	10	—
	Above 100,001,000 MNT	60	0	60	—
	Total	180	110	290	—
	Primary / Secondary	10	60	70	$\chi^2 = 9.007^a$

4. What is your education level?	Diploma	40	10	50	Likelihood Ratio = 9.250
	Bachelor's degree	90	30	120	Linear-by-Linear Association = 5.874
	Master's or higher	40	10	50	N of Valid Cases = 290
	Total	180	110	290	—
5. In which sector do you operate your business or provide services?	Education	20	0	20	$\chi^2 = 4.801^a$
	Health	10	10	20	Likelihood Ratio = 6.517
	Agriculture	20	10	30	Linear-by-Linear Association = 0.936
	Tourism	20	0	20	N of Valid Cases = 280
	Transport and Logistics	10	10	20	—
	Trade and Services	30	30	60	—
	Manufacturing	30	20	50	—
	Banking and Finance	10	20	30	—
	Law and Justice	10	0	10	—
	Other	10	10	20	—
	Total	170	110	290	—

Source: Researchers' Calculation

➤ *Interpretation of the Chi-Square and Correlation Analysis*

The relationship between self-assessed tax payment behavior and age was examined using the Chi-square test. The result of $p = 1.867^a$ indicates that there is no statistically significant association between taxpayers' age and their likelihood of self-assessing and paying taxes.

Similarly, the relationship between self-assessed tax payment behavior and gender produced a Chi-square value of $p = 0.184^a$, suggesting that gender does not have a significant effect on whether taxpayers self-assess and pay taxes.

Moreover, no significant associations were observed between self-assessed tax payment and other fundamental

variables such as income level, education level, and business sector. In other words, factors including age, gender, income, education, and business field do not significantly influence the practice of self-assessed tax payment. Since $p < 0.05$, the null hypothesis (H_0) is accepted, confirming the absence of statistically significant relationships among these variables.

However, the correlation analysis revealed a notable inverse relationship between educational attainment and the likelihood of self-assessed tax payment. This suggests that as the level of education increases, individuals tend to be less likely to make self-assessed tax payments voluntarily.

Table 5 Inter-Item Correlation Matrix

Variables	Age	Gender	Education Level	Business Sector	Self-Assessed Tax Payment
Age	1.000	-0.327	0.170	-0.179	-0.113
Gender	-0.327	1.000	0.008	-0.039	0.012
Education Level	0.170	0.008	1.000	-0.112	-0.562
Business Sector	-0.179	-0.039	-0.112	1.000	0.149
Self-Assessed Tax Payment	-0.113	0.012	-0.562	0.149	1.000

Source: Researchers' Calculation

The correlation matrix above demonstrates the degree of association among taxpayers' demographic characteristics and their self-assessed tax payment behavior. The results show weak correlations between most variables. In particular, education level shows a negative correlation ($r = -0.562$), indicating that higher levels of education are associated with a lower likelihood of self-assessed tax payment.

➤ *Reliability Analysis Results*

The reliability of the measurement indicators for each variable group was assessed using Cronbach's alpha coefficient. This statistic evaluates the internal consistency of sub-indicators within each construct, reflecting how well the items measure the same underlying concept.

Table 6 Cronbach's Alpha Coefficients by Variable Group

Independent Variable	Number of Indicators	Cronbach's Alpha Coefficient (α)
Business Environment	2	0.181
Individual Factors	6	0.824
Social Factors	4	0.635
Economic Factors	8	0.756
Psychological Factors	3	0.669
Total	23	0.713

Source: Researchers' Calculation

Except for the business environment variable, all other constructs produced Cronbach's alpha values above 0.63, which indicates an acceptable level of reliability. The overall

Cronbach's alpha coefficient of 0.71 confirms that the survey instrument demonstrates satisfactory internal consistency and reliability for statistical analysis.

Table 7 Factors Influencing Tax Revenue Collection and Correlation Analysis (Based on the BISEP Model)

Category / Variables	Mean	Standard Deviation	Correlation (R)	CAC/ Factor Loading
Dependent Variable	2.755	1.149	0.445	0.604
Independent Variables				
B – Business Factors				
Aggregate Business Environment Indicator	2.879	1.135	0.099	0.181
There are significant tax burdens in the business sector in which I operate	2.862	1.156	0.099	—
Tax exemptions and reliefs in my sector provide competitive advantages	2.897	1.113	0.099	—
I – Individual Factors				
Aggregate Individual Influence	3.370	1.205	0.609	0.794
Financial Status and Constraints (aggregate)	3.402	1.247	0.553	0.806
My expenses always exceed my income	2.586	1.451	0.277	0.867
The prices of consumer goods and services continue to rise	3.931	1.252	0.603	0.793
I first pay off debts and essential needs before anything else	3.690	1.039	0.778	0.759
Knowledge about Taxation	3.338	1.164	0.666	0.781
I know how to report my actual earned income	3.345	1.203	0.718	0.769
I know how to maintain records and documentation related to income and expenditure	3.393	1.066	0.769	0.762
I understand that I must pay my taxes within the legally prescribed time	3.276	1.222	0.512	0.812
S – Social Factors				
Aggregate Social Influence	2.371	1.083	0.540	0.747
Impact of Government Policy	2.138	1.005	0.529	0.476
Government policy positively influences my business	1.793	0.887	0.598	0.420
Policies targeting PIT taxpayers are fair and equitable	2.483	1.122	0.460	0.532
Perceptions and influence of close social contacts regarding taxes	2.605	1.161	0.551	0.688
My friends do not pay taxes but have not faced any penalties	2.621	1.083	0.661	0.557
My parents or relatives do not pay taxes and have not faced any penalties	2.931	1.067	0.518	0.724
E – Economic Factors				
Aggregate Economic Influence	2.453	1.172	0.482	0.756
Limited government capacity to audit all income provides opportunities for tax evasion	2.414	1.323	0.541	0.713
Perceptions regarding the government's use of tax revenue	2.437	1.192	0.318	0.757
The government spends an appropriate amount on welfare programs	2.621	1.293	-0.028	0.822
I highly appreciate public services and infrastructure development financed by taxes	2.517	1.056	0.512	0.720
The government does not spend excessively	2.172	1.227	0.470	0.727
Influence of fines and penalties imposed on taxpayers	2.509	1.001	0.587	0.710
Tax-related penalties are small, and I am able to pay them	2.276	1.032	0.619	0.702
Court decisions related to tax disputes are poorly enforced	2.448	1.021	0.534	0.717

I believe tax authorities show leniency regarding tax disputes and penalties	2.552	0.828	0.631	0.710
I have little understanding of tax violations or the size of fines	2.759	1.123	0.562	0.710
P – Psychological Factors				
Perception of Fairness and Equity in Taxation	2.701	1.149	0.497	0.543
Individuals with higher income should pay more taxes	2.310	1.384	0.614	0.379
I believe that the taxes imposed on me are appropriate and equitable	2.621	1.133	0.501	0.549
I am confident that if I pay my income tax properly, others, especially the poor, will benefit	3.172	0.929	0.376	0.700

Source: Researchers' Calculation

The CAC values (0.476–0.824) and factor loadings above 0.6 for most variables suggest acceptable construct validity for the dataset. Among the sub-variables, financial constraints, tax knowledge, and perceptions of fairness display the most significant correlations with revenue collection performance.

➤ Factors Influencing Tax Revenue Collection

Based on the analysis using the BISEP model, the most influential factor affecting tax revenue collection is the individual factor. Specifically, taxpayers' financial status and knowledge of taxation have the strongest impact. When ranked by influence, the order is $I > B > P > E > S$, indicating that individual factors have the greatest influence, followed by business environment, psychological factors, economic factors, and finally social factors, which show the weakest effect.

• When Classified into Subcategories, the Main Factors Influencing Tax Revenue Collection are as Follows:

- ✓ Inflation rate
- ✓ Financial status
- ✓ Knowledge about taxation
- ✓ Business environment
- ✓ Perception of tax fairness and equity
- ✓ Size of penalties and fines imposed on taxpayers

Survey results revealed that 59% of respondents reported that the tax payment and reporting process is somewhat difficult, while 14% and 10% described it as *difficult* and *very difficult*, respectively. These findings suggest that taxpayers often face tax arrears due to social, economic, and business-related factors, as well as limited financial capacity and inadequate tax knowledge.

V. CONCLUSIONS AND RECOMMENDATIONS

Tax revenue collection is widely recognized as an indicator of national development. Based on the research findings, the following conclusions are drawn:

➤ Determinants of Tax Revenue Collection (BISEP Model):

Using the BISEP model—comprising business, individual, social, economic, and psychological dimensions—the study applied correlation and descriptive

analyses to identify factors influencing tax revenue collection. Results show that individual factors exerted the strongest effect (Mean = 3.37, SD = 1.20), followed by business environment (Mean = 2.87, SD = 1.14), and psychological factors (Mean = 2.70, SD = 1.14). Economic (Mean = 2.45, SD = 1.17) and social factors (Mean = 2.37, SD = 1.08) had comparatively weaker effects.

Except for the business environment, all variables had Cronbach's alpha coefficients above 0.63, confirming reliability. The overall Cronbach's alpha of 0.71 indicates acceptable internal consistency of the research instrument.

➤ Individual Factors as the Strongest Predictor:

The most influential category—individual factors—comprises two main subdimensions: financial status and tax knowledge, with a Cronbach's alpha of 0.79, showing a high level of significance. Self-assessed taxpayers agreed that revenue collection depends heavily on their personal financial situation (Mean = 3.4, SD = 1.2). Despite rising prices, respondents prioritized debt repayment and basic necessities before tax obligations. They also demonstrated adequate tax knowledge, agreeing with statements such as *"I know how to declare my actual income," "I know how to maintain income and expenditure records,"* and *"I understand that taxes must be paid on time."*

➤ Moderate Influence of Business Environment:

For self-assessed PIT payers, the business environment was rated as having a moderate influence. Respondents expressed a neutral stance regarding tax challenges and benefits from exemptions and reliefs within their sector. Notably, 39% of participants were micro-entrepreneurs. Under the Tax Law effective January 1, 2020, PIT payers with annual revenue below 50 million MNT are classified as micro-businesses and subject to a simplified tax rate of 1% of taxable income, with reductions of 50% and 90% for operations located more than 500 km and 1,000 km from Ulaanbaatar, respectively. These legal provisions may have contributed to the observed attitudes.

➤ Perception of Fairness and Psychological Factors:

Self-assessed taxpayers perceived tax fairness as having a moderate effect on revenue collection. Respondents generally disagreed that the taxes imposed on them were equitable or that high-income earners should pay more.

However, they agreed that properly paying taxes would benefit others, particularly the poor. This suggests a cognitive dissonance—respondents believe fairness applies to others' taxes but not to their own.

➤ *Weak Influence of Social Factors:*

Respondents largely disagreed with statements reflecting positive social influence. They viewed government policies and decisions as unfair and negatively affecting PIT taxpayers. However, peer influence—from friends, parents, and relatives—had a strong negative impact (Mean = 2.93, SD = 1.06). Many agreed that people around them did not pay taxes and faced no penalties, indicating that social influence weakens tax compliance.

➤ *Economic Factors and Government Spending Perceptions:*

Economic factors such as tax audits (Mean = 2.41, SD = 1.32), views on government expenditure (Mean = 2.43, SD

= 1.19), and impact of fines and sanctions (Mean = 2.50, SD = 1.00) were perceived negatively. Respondents felt that the government overspends while public service quality and infrastructure remain unsatisfactory. Although many acknowledged awareness of fines and sanctions, they also reported limited understanding of the legal framework governing tax arrears and enforcement. Overall, self-assessed PIT taxpayers were knowledgeable about tax reporting but dissatisfied with government policy, high tax rates, and perceived inequality in enforcement.

Based on these qualitative and quantitative findings, the initial hypotheses were tested and confirmed, reinforcing the conclusion that individual and behavioral factors are the primary determinants of effective tax revenue collection in Mongolia.

Table 8 Research Questions, Hypotheses, and Results

Research Question	Hypothesis	Result
What factors influence the self-assessed tax payment process among citizens?	Hypothesis 1: The tax collection process is influenced by the business environment.	Rejected
	Hypothesis 2: The tax collection process is strongly influenced by individual taxpayer factors.	Accepted
	Hypothesis 3: Taxpayers' legal and tax-related knowledge has the greatest influence on tax collection performance.	Accepted

• *Hypothesis 1: The Business Environment Influences Tax Collection Activities*

This hypothesis was tested by examining the relationship between self-assessed PIT payments and business environment indicators. The regression analysis yielded $\beta = 0.09$, indicating a weak and statistically insignificant relationship between the business environment and tax payment behavior. Although the constant coefficient was significant, the business environment does not exert a substantial effect on self-assessed tax compliance or overall tax revenue collection.

• *Hypothesis 2: Individual Taxpayer Factors Strongly Influence Tax Collection Activities*

The hypothesis that individual factors significantly affect tax collection was confirmed through regression analysis ($R = 0.60$, $\beta = 0.41$, Mean = 3.37) and qualitative evidence. Among individual factors, financial status and tax knowledge showed the strongest positive correlations with tax revenue performance.

- ✓ Improved financial condition and enhanced financial discipline ($R = 0.55$) lead to increased tax revenue collection.
- ✓ Greater tax knowledge ($R = 0.66$) also directly improves compliance and voluntary payment behavior.

These findings suggest that economic stability and awareness of tax obligations are essential for expanding the tax base and improving revenue performance.

• *Hypothesis 3: Taxpayers' Legal Knowledge Has the Greatest Influence*

The hypothesis that legal and tax knowledge has the greatest effect on tax collection was supported by regression results ($R = 0.66$, $\beta = 0.46$, Mean = 3.33) and qualitative data.

✓ *This Confirms a Strong, Positive Relationship Between Tax Knowledge and Revenue Collection:*

As taxpayer understanding increases, so does voluntary compliance and revenue contribution.

• *Policy Recommendations Based on the Findings*

✓ *Enhance Taxpayer Education on Legal Procedures and Arrears Resolution*

Although taxpayers demonstrate adequate knowledge regarding filing and payment, the study reveals gaps in understanding how to resolve tax debts and penalties. The Tax Authority should therefore develop targeted training and public information programs addressing post-assessment compliance and legal redress mechanisms.

✓ *Promote Fairness and Equality in Tax Awareness Campaigns*

The findings show that taxpayers recognize fairness primarily as a social principle applying to others rather than themselves. Public education should therefore emphasize that all citizens are equally responsible for contributing fair taxes to promote social welfare.

✓ *Strengthen Legal Frameworks for Tax Enforcement*

The study identified that existing regulations leave loopholes for tax evasion and avoidance. Legal reforms should aim to enhance enforcement capacity, transparency, and consistency in penalty administration.

✓ *Adopt International Best Practices and Technological Innovation*

Based on experiences from developed economies, implementing call centers and AI-driven taxpayer support systems can enhance both compliance efficiency and taxpayer satisfaction. Utilizing digital tools to provide timely information and personalized reminders will further strengthen voluntary compliance and the overall efficiency of tax administration.

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