



## INCOME AND ECONOMIC GROWTH FROM LEGAL ENVIRONMENT: EMPIRIC ANALYSIS

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### ANNOTATION:

The following is an econometric analysis of corporation income tax and its impact on the country's GDP. An analysis of the literature on the topic is first followed by the results of an empirical analysis. According to the results of the study, the short-term impact of corporation income tax on economic growth is high. All the results are obtained at the end of the work.

*Keywords: economic growth, corporation income tax, regression equation, coefficient of determination, correlation coefficient.*

### INTRODUCTION

According to a large number of scientific studies, there is a very strong link between tax rates and economic growth, in which short-term tax rates stimulate the revenue part of the state budget. However, according to Laffer's theory, the long-term growth of the tax rate will have a negative impact on economic development. According to this theory, the long-term increase in the tax rate would lead to an increase in the shadow economy's contribution to the economy [1]. Also, a reduction in tax rates could have a negative impact on the state budget. The key issue here is that determining the optimal tax threshold has always been considered as a scientific problem in the economy. The manifestation of this problem gives a great opportunity to determine the relevance of scientific work and the range of issues to be solved.

The following example illustrates the impact of corporation income tax on economic growth, that is, the annual GDP growth trend.

The empirical analyzes presented in the study were evaluated in the Eviews 9.0 application package, which analyzed the quality of the regression equation developed, including the deterministic coefficient (R<sup>2</sup>), the Darbin-Watson criterion, F and t - statistics, and summarized all the final results obtained at the end of the study.

### LITERATURE REVIEW

This study also provides a methodological analysis of the views of national and foreign economists. Most analyzes show that changes in tax rates have a negative impact on the economy. This, according to economic theory, has been proven both theoretically and practically as a negative impact of the tax rate on the economy.

The study of the impact of taxes on the economy has been the subject of scientific interest, not only for foreign scientists, but also for economists of the country.

In particular, the question of modeling and forecasting the impact of tax burden on macroeconomic indicators is reflected in the research of S.R.Adizov [2], and the essence of the study is that the effects of the general tax on economy on GDP are studied using regression models. However, the main disadvantage of this study is that the development of the main variables in the economy was studied using trend equations. The main disadvantage of Trend equations is that it assumes that the economy will be as stable as it was before. However, this view is problematic for today's advanced market system states.

S.K. Khudoykulov's research focuses mainly on improving the methodology of forecasting tax revenues. It mainly uses the ARDL model to forecast tax revenue. According to him, the dynamics of tax revenues were initially determined to meet the criteria of stationary criteria. This criterion was analyzed using the Dickie-Fuler ADF test and the Phillips-Perron method. After solving the stationary problem of dynamic arrays, dynamic models have been developed [3].

U.A. Radjapov's research aims to improve the tax mechanism in the context of liberalization of Uzbekistan's economy [4].

Issues of ensuring economic growth through improving the taxation mechanism of small businesses are the basis of the research of B.R.Sanakulova [5].

Issues of improving the tax burden assessment are reflected in the research of G.Z. Gaybullaeva [6].

N.B. Ashurova's research mainly focuses on the improvement of the taxation mechanism to ensure sustainable economic growth, and in-depth analysis of the benefits provided to businesses [7].

In the case of O.R.Meyliev, who has conducted research on increasing tax efficiency in ensuring regional economic stability, the issues of increasing local budget revenues in ensuring sustainable economic development of the regions [8].

A.J.Musagaliev's research on ways to increase the effectiveness of taxation of legal entities in the formation of regional budget revenues focuses on taxation mechanisms for effective budgeting in the region and provides insights into the expansion of local budget revenues [9].

In Chernogorsky's thesis mathematical models of optimization of parameters of the tax system of the country were developed and justified [10].

### **Research methodology**

The analysis of the above and other research shows that they do not study the effect of corporate income tax on economic growth. Econometric methods and models in the study of economic growth factors serve as a reliable scientific tool. In addition, econometric methods and models are widely used in macro-level research based on the peculiarities of economic growth factors and the macroeconomic analysis.

One of the most important features of economic growth is the one-way and multilateral interaction between them. Typically, correlation-regression of analyzing methods are used to investigate these relationships.

Therefore, the econometric analysis of corporate income tax and its impact on the country's GDP was used.

**ANALYSIS AND RESULTS**

According to the results of 2018, GDP of Uzbekistan will reach 407514.5 billion this year and increased by 5.1% as compared to the respective period of the previous year. GDP deflator index is 128.1% compared to 2017 prices. This is stated in the bulletin developed by Goskomstat. According to the official website of the Ministry of Finance, the income tax on corporate income was 3502.2 billion soums in 2018, up 2026.7 billion soums compared to the same period of the last year. Table 1 below shows the gross domestic product and corporate income tax revenues for 2008-2018.

Table-1  
Information on gross domestic product and income tax of legal entities in the Republic of Uzbekistan for 2008-2018

Annual	GDP	Profit tax from legal entities (TAX)
2008	38969.8	432.9
2009	49375.6	544.8
2010	74042.0	644.5
2011	96949.6	861.6
2012	120242.0	1001.1
2013	144548.3	1038.8
2014	177153.9	1120.2
2015	210183.1	1180.5
2016	242495.5	1215.1
2017	302536.8	1475.5
2018	407514.5	3502.2

Source: Author's development based on data from the State Statistics Committee of the Republic of Uzbekistan (www.stat.uz) and the Ministry of Finance

The data from this table shows that during the period under review, the GDP increased during the years 2008-2018, and also increased the revenues for corporate income tax. If we trace the change in GDP to income tax from legal entities, we will have some changes. This shows the effect of the chosen factor on GDP.

Based on the above data, we define the correlation dependencies between variables using the Eviews 9.0 implementation package and have the following Table 2 data:

Table-2  
Analysis of correlation of GDP with corporate income tax

Covariance Analysis: Ordinary		
Date: 11/15/19 Time: 12:49		
Sample: 2008 2018		
Included observations: 11		
<hr/>		
Correlation		
t-Statistic		
Probability	GDP	YUSHFS

GDP	1.000000	
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	----	
YUSHFS	0.902169	1.000000
	6.274012	----
	0.0001	----

Source: Author's development based on data from the State Statistics Committee of the Republic of Uzbekistan

The correlation matrix analysis shows that the factor influencing GDP is chosen correctly. The correlation coefficient of the variables is 0.90. This shows that there is a strong correlation between GDP and corporation income tax (Figure 1).

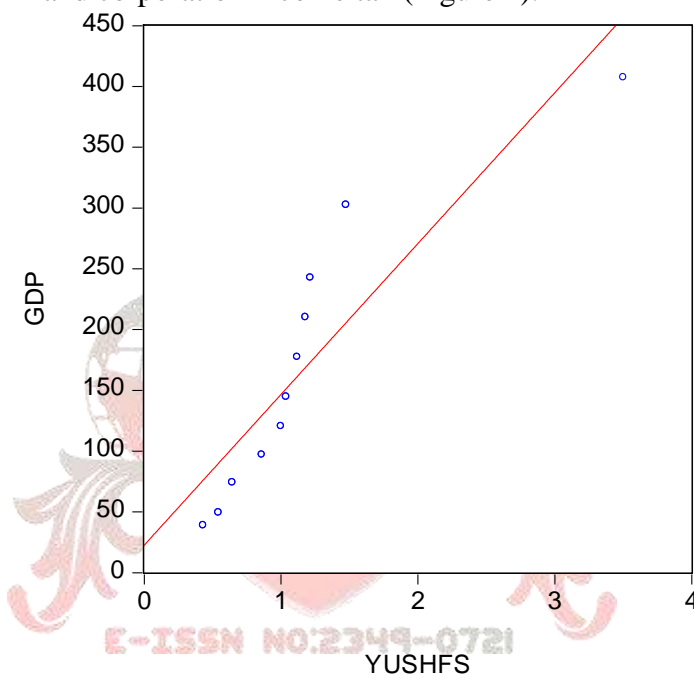


Figure 1. Dependence of corporate income tax on gross domestic product (author's development).

The graph above shows the correlation area and the regression lines. There is a direct relationship between GDP and corporate income tax, that is, a close relationship. Because the points are close to the regression line. The following regression equations are deduced:

$$GDP = 2261e+04 + 124.1 * TAX$$

Where: GDP is gross domestic product;

TAX - Income from corporation income tax

Reliability and reliability of a defined model are required by criteria, and this is also done in the Eviews 9.0 implementation package. The results can be seen in Table 3:

Table-3

Results of the analysis evaluated in the Eviews 9.0 application package

Dependent Variable: GDP  
 Method: Least Squares  
 Date: 11/15/19 Time: 12:33  
 Sample: 2008 2018  
 Included observations: 11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
YUSHFS	124.0909	19.77856	6.274012	0.0001
C	22608.64	28155.27	0.802999	0.4427
R-squared	0.813908	Mean dependent var		169455.6
Adjusted R-squared	0.793231	S.D. dependent var		114142.2
S.E. of regression	51902.54	Akaike info criterion		24.71509
Sum squared resid	2.42E+10	Schwarz criterion		24.78743
Log likelihood	-133.9330	Hannan-Quinn criter.		24.66949
F-statistic	39.36323	Durbin-Watson stat		1.022108
Prob(F-statistic)	0.000145			

Source: Author's development based on data from the State Statistics Committee of the Republic of Uzbekistan

As can be seen from the results of the table above, the coefficient of determination ( $R^2$ ) is 0.81. The coefficient of determination in the model shows that 81% of GDP growth depends on income from corporate income tax. The remaining 19% is due to unaccounted factors. The Durbin-Watson score was 1.02 and the t-statistic was 6.27. Using these values, we can see that there is a direct and strong link between GDP and corporate income tax.

#### Conclusions and suggestions

As a result of the research, the following conclusions were made:

As a result of the positive reforms implemented in the country in 2008-2018, it is important to ensure macroeconomic stability in the country, in particular, the tax reforms, which are mainly due to the increase in corporate income tax revenues.

According to the results of econometric analysis, the increase in corporation income tax revenue by one unit in Uzbekistan will lead to an increase in gross domestic product by 124.1, while other factors remain unchanged.

There are a number of things to do, including:

- Based on the results of the econometric analysis, it is necessary to increase the number of small businesses, taking into account that the increase in corporate income tax revenues will lead to an increase in gross domestic product.

- Achievement of an increase in the number of small businesses through the introduction of tax incentives and preferences to newly established small businesses in the context of strategic development of the economy.

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