

Assessing Tax Potential of Regions



Aytbay Orazbaevich Madreimov

Senior Lecturer, Karakalpak State University Named after Berdakh (Nukus city)

ABSTRACT: This article is devoted to the consideration of methods for assessing tax potential of regions, as well as the factors impacting tax potential. The aim of the research is to review approaches designated to determining the essence of the tax potential concept, as well as to study the factors influencing thereupon. In the process of assessing tax potential of the regions in the analysis, we use the data on budget revenues by region for 2008-2020, regional GDP, investments in fixed assets, tax arrears and the number of operating taxpayers. The analysis of the panel revealed that the impact of regional GDP on agriculture and industry on tax revenues was positive, there has been observed high statistical significance and negative impact on the number of small businesses. As a result of the analysis, appropriate conclusions on important aspects of assessing tax potential of the regions have been formulated.

KEYWORDS: tax system, tax potential of the region, regional Gross Domestic Product, investment, local budget, taxpayer, tax rate.

I. INTRODUCTION

An objective assessment of the tax potential of the regions in terms of collecting taxes and fees in the tax system will help to coordinate the interests of the government at all levels for the purpose of financing the activities of public bodies and local authorities. Herewith, tax receipts are considered an implemented part of the tax potential. In addition, tax potential of the regions constitutes an integral part of the tax potential of the country and includes tax potential of the municipalities located in that region. Many factors make an impact on the formation of the tax potential and its volume.

II. LITERATURE REVIEW

When considering the tax potential category, it is crucially important to cover a wide range of concepts, such as tax potential of the taxpayer, tax potential of the country, tax potential of the region, which are widely used in foreign literary sources and specialists in this area, revealing the essence of their content. Tax potential of a region comprises of the number of taxpayers and the tax base, and local budgets are made up of the tax potential of the main, major taxpayers who serve to generate their tax revenues. Furthermore, tax opportunity (capacity) of a territory is the amount of taxes that can be levied on a regional scale. Tax potential of a country can be perceived as a set of tax opportunities (capacity) of the country's regions [1]. The availability of information on taxes and fees actually collected within the territory, as well as on the grounds for taxation in reality, enable to calculate the amount of tax revenues in the region. The amount of tax revenues, determined by the calculation for the region, can be considered as the amount of the tax potential of the region. In reliance upon the research findings there have been worked out five stages of applying the method of the tax system of representative taxation: to determine the classification of all tax and non-tax revenues that formulate local budget revenues; set a unified classification of local budget revenues and cover all tax and non-tax revenues of the territory; determine the composition of the standard tax base for each type of revenue; calculation of the representative (average) tax rate of taxation and calculation of the tax potential of the region by multiplying the representative tax rate by the taxable base by type of the revenue [2].

In the opinion of Gorshkova and Shamanin, there are different approaches to assessing tax potential, the use of several methods in assessing tax potential of regions in Russia (the system of representative taxation, real tax revenues, regression, per capita income, etc.). Herewith each method takes into account certain indicators: income per capita, tax rate, tax base, regional Gross Domestic Product, etc.

Meanwhile, the factors that affect tax potential of the region are distributed among legislative, resource and raw materials, production, organizational, resource and raw materials, production, organizational, infrastructural and social groups.

Assessing Tax Potential of Regions

Gorshkova and Shamanin noted that the method of adjustment factors for calculating tax potential is a rational method that enables to meet current requirements and take into account the maximum number of factors [3]. Within this method, it is possible to take into account the population labor efficiency factor, urban and rural population factor, tax collection factor and other socio-economic factors characterizing the efficiency of the regions. Herewith current methods of calculating tax potential do not take into account the differentiation of the population structure in the territory (the correlation of the employed and unemployed population). When developing a unified technique for assessing tax potential proposed by Popova, it is required to make scientifically grounded management decisions that are related to distribution of regional transfers between donor regions and subsidized regions; development of the strategy for the socio-economic development of the region; a quantitative assessment of the current tax system and availability of the ways for its further development; inter-sectoral comparison at the regional level as well as possibility of using the comparison of positions of the tax potential dynamics formation; interstate comparison of tax potential, which enables to assess the regions in terms of tax competition [4]. According to the results of the empirical analysis conducted by Gupta, structural factors such as GDP per capita, the share of agriculture in GDP, trade transparency and foreign aid make a significant impact on budget revenues. Other factors include corruption, political stability, the share of direct and indirect taxes, etc. In this empirical analysis, models with constant effects (fixed effect model) and random effects (random effect model) have been applied in the panel data base regression [5].

III. RESEARCH METHODOLOGY

In assessing the tax potential of the regions in the analysis, we use the data on budget revenues for 2008-2020, regional GDP, investments in fixed assets, tax arrears and the number of operating taxpayers by region. These data have been obtained from the database on the official website of the State Committee of the Republic of Uzbekistan on Statistics, the Ministry of Finance of the Republic of Uzbekistan and the State Tax Committee of the Republic of Uzbekistan. Conducting regression analysis with the application of the OLS method, we evaluate the panel data based on the following regression model:

$$y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it} \quad (1)$$

Here: as a dependent variable y_{it} – i – tax receipts by regions in t period; α -free value; β - measurement vector of variables; as an independent variable X_{it} -amount of regional GDP, investments in fixed capital, volume of agriculture, volume of industry and operating small businesses (except for farms and dekhkan entities); ε_{it} - other factors and an error, which are not taken into account. \ln taxrevenue- tax receipts and impact factors by regions, \ln regionalGDP-regional GDP, \ln investment-amount of investments made in the fixes assets by regions, \ln agricultural-agricultural production and \ln industrial products-industrial production, \ln small business-number of operating small businesses have been accepted as dependent variables with the aim of performing regression analysis their logtransfer form has been used it was different from the unit of measurement of the variables (table 1)

Table 1. Statistical description

Variable	Obs	Mean	Std. Dev.	Min	Max
Intaxrevenue	182	6.574462	.8762239	4.368917	8.252081
InregionalGDP	182	8.959859	.9978612	6.680227	11.39152
Ininvestment	182	7.716202	1.185494	5.037602	10.82718
Inagricultural products	169	8.519332	1.045788	5.895504	10.37842
Inindustrial products	182	8.372477	1.203984	5.774466	11.10026
Insmall business	182	9.388622	.5474742	8.159946	11.21328

Source: [6]

IV. ANALYSIS AND RESULTS

The analysis made in reliance upon the panel data showed that the impact of regional GDP on agriculture and industry on tax revenues was positive, with a high statistical significance, the impact on the number of small businesses was negative, but not statistically significant (Table 2).

Assessing Tax Potential of Regions

Table 2. Results of regression analysis

	Random-effects
lnregionalGDP	0.252** (2.05)
lninvestment	0.034 (0.67)
lnagriculturalproducts	0.280*** (6.09)
lnindustrialproducts	0.235*** (3.62)
lnsmallbusiness	-0.014 (0.14)
_cons	-0.186 (0.27)
<i>N</i>	169

Standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

The results of the regression analysis demonstrate that the impact of the number of investments in fixed assets and the number of small businesses is not statistically significant in relation to the current tax system. In particular, the main part of tax revenues by regions falls on the share of large taxpayers (in 2019-2020, the share of large taxpayers in total tax revenues constituted 63-65%, respectively) and about 80% of fixed assets are subject to taxation. The main reasons of this may be formation of uncontrolled or privileged property.

Currently there is a downward trend in the share of local taxes in the state budget, which does not enable local authorities to generate local budget revenues from local taxes and levies, which represent their sources of income. Thus, it is necessary to create a complete database of taxpayers, taxes and other compulsory payments in the regions, to ensure efficient and smooth interaction of information systems at the local level, to expand the revenue base of local budgets by applying increased rates for unused facilities and land.

In turn, the ongoing reforms require an increase in the responsibility of local governments for financing of first-tier expenditures in due time, approved programs and measures for the socio-economic development of regions, preventing the implementation of measures, which source is unclear, as well as further tightening budget discipline. Nevertheless, since 2020, local authorities and local councils have been assigned a number of powers for efficient formation and rational use of the local budget.

In particular, Jokargy Kenes (Supreme Council) of the Republic of Karakalpakstan, Kengashes (Councils) of people's deputies of regions and Tashkent city, districts and cities, respectively: approves a limited amount of budget funds allocated from the budget of the Republic of Karakalpakstan, local budgets of regions and Tashkent city, budgets of districts and cities to distributors of regional budget funds, and also a limited amount of normative budget transfers allocated from the budget of the Republic of Karakalpakstan, regional budgets of regions and from the budget of Tashkent city; approves the forecast of revenues of the republican budget, regional budgets of regions, the budget of Tashkent city, budgets of districts and cities; makes decisions on amendments to the budget of the Republic of Karakalpakstan, local budgets of regions and cities of Tashkent, districts and cities.

Local budgets constitute an essential component of the state budget of the Republic of Uzbekistan and are considered an important financial resource in the performance of local authorities. The system of local budgets enables to fully meet local needs and ensures the implementation of activities performed out by the state in a centralized manner, closely related to implementation. Local governments challenge the task of raising local budget revenues and saving resources.

V. CONCLUSION AND PROPOSALS

An objective assessment of the tax potential of the regions in the national tax system for collecting taxes and fees will facilitate coordination of the activities of public bodies and local authorities at all levels with the aim of providing financial support. In this process, tax potential is of great importance, which is currently considered as one of the crucially important parameters of stability and balance of fiscal relations in the regions. Knowledge of an objective assessment of tax potential, the mechanisms

Assessing Tax Potential of Regions

for its formation and factors affecting tax potential can play a primary role in raising efficiency of anti-crisis measures and, to a certain extent, in eliminating the negative socio-economic consequences of the global crisis.

The optimal system for forecasting local budget revenues is based on data on the level of attracted revenues, as well as tax potential of the region. In addition, the improvement of methods for distributing tax revenues between budgets of different levels is inextricably linked with an accurate and objective assessment of tax potential.

Scientifically grounded and practical results of our research are considered a key pillar in assessing tax potential of the regions, as well as in developing priority areas for further improving the tax system in our country. According to the conclusions formulated within the results of the research, when raising tax potential and its assessment, it is crucially important to implement the following:

1. increasing the volume of investments in regional GDP (in particular, industrial production) and production;
2. when assessing tax potential of regions, an adjustment factor is applied. This factor reflects indicators such as the level of socio-economic development of regions, including the structure of the regional Gross Domestic Product, the tax base and the composition of taxpayers;
3. when assessing the tax potential of a region in order to accurately predict the tax base of the region it is also recommended to take into account the location (the presence of borders with regions of other countries) and the specifics (tourism, industry, handicrafts, etc.) of the region.

REFERENCE

- 1) Islamkulov A.Kh. 2017. Issues of using tax potential in the formation of local budget revenues. Scientific electronic journal "Economy and Innovative Technologies", № 2, March-April, www.iqtisodiyot.uz.
- 2) Sinelnikov-Murylev S., Kadochnikov P., Idrisov G. 2011. Corporate Profit Tax: Analysis of the 2001 Reform and Modeling the Tax Potential of the Regions. M.: Institute named after Gaydar, 180 p.
- 3) Gorshkova N.V., Shamanin V.I. 2016. Methodological approaches to assessing tax potential of the region: evidence from Volgograd and Rostov regions. Journal of Volgograd State University, Volume 3, Economy and Ecology №2 (35).
- 4) Popova G.L. 2014. Classification of formalized methods for assessing tax potential. Economic analysis: theory and practice 34 (385) p.44-55.
- 5) Gupta A.S. 2007. Determinants of tax revenue efforts in developing countries //IMF Working Paper. <https://www.imf.org/external/pubs>.
- 6) <https://mf.uz>.