# A STUDY OF METHODOLOGICAL INSTRUMENTS FOR FORECASTING TAX REVENUES OF THE STATE BUDGET

## SHIRINOV SABIR ERKINOVICH

**Abstract**

*In this article, a study of methodological instruments for forecasting tax revenues of the State budget was carried out. The approach to the forecasting of tax revenues, the factors affecting the choice of the method of forecasting tax revenues at the macro level, the methods used in the forecasting of tax revenues at the macro level, the conditions of application of the methods, problem situations and their solutions are described.*

**Author correspondence:**
*SHIRINOV SABIR ERKINOVICH*

*Professor, The department of Tax and Taxation,Tashkent Institute of Finance, Tashkent, Uzbekistan*

*Email:*shirinovsobir@gmail.com

## INTRODUCTION

Tax forecasting is carried out in the statistical database of socio-economic development prospects of the country and its regions and macroeconomic indicators. Tax forecasting is a complex process that involves a wide range of issues. Therefore, it is necessary to use different types of methods at the same time in tax forecasting.

## LITERATURE REVIEW

Let us consider several approaches to determining the essence of forecasting
tax revenues that are found in the modem economic literature.

Kokin A. S., Edronov A.V. believe that the forecast is the initial prerequisite for tax planning, in the process o f which tactical tasks of tax revenue management are solved [1].According to Kobesova N. B., tax planning can be characterized as an assessment of the generated revenues of taxes and fees to the budget system of the country and regions, regulated by the norms of budget legislation and based on social and economic planning for the

development of the regions of the country and the entire state as a whole. It includes the determination of the tax base for each tax; analysis o f the dynamics of tax revenues for several previous periods, the

amount of lost income, the state of arrears on tax payments.; assessment o f the results of changes in tax legislation for the investigated period [2].E. Ts. Chimitdorzhieva states that the forecasting of tax revenues is divided into current and prospective depending on the period of anticipation. Current forecasting includes operational and shortterm forecasting. Forecasting for the medium and long-term periods refers to the perspective [3].

### MATERIALSANDMETHODS

Economists have different opinions on the number of methods used in the process of forecasting. According to V. N. Yedronova, more than 150 methods of forecasting are available today, of which only about 20 are actively used in practice. E.Y.E. According to Tikhonov, more than 100 methods are used in forecasting today. As a result of the widespread use of modern information technologies and software products in the process of forecasting, the number of forecasting methods used in practice is increasing.

N.B. According to Antonova, the "method of forecasting" is such a method, based on the analysis of retrospective data, exogenous and endogenous relations of the predicted object, an opinion is obtained about the future state of the object. There is no single conclusion among economists about the grouping of all the methods that can be used in forecasting the tax revenues of the state budget.

We can divide all the methods that can be used in forecasting the tax revenues of the state budget into two groups: genetic and non-targeted. See Figure 1.1. If we want to predict the amount of tax revenues expected to be collected in the future after studying the current situation, we choose forecasting methods belonging to the Genetic Group. If, in the future, we want to adopt measures to increase tax revenues by setting goals for ensuring a stable growth of tax revenues of the budget, we should use methods belonging to the target-normative group. In our opinion, it is one of the methods included in the target-normative group in Uzbekistan. It is mostly used in tax revenue forecasting. Prognostic methods belonging to the genetic group are not used enough.
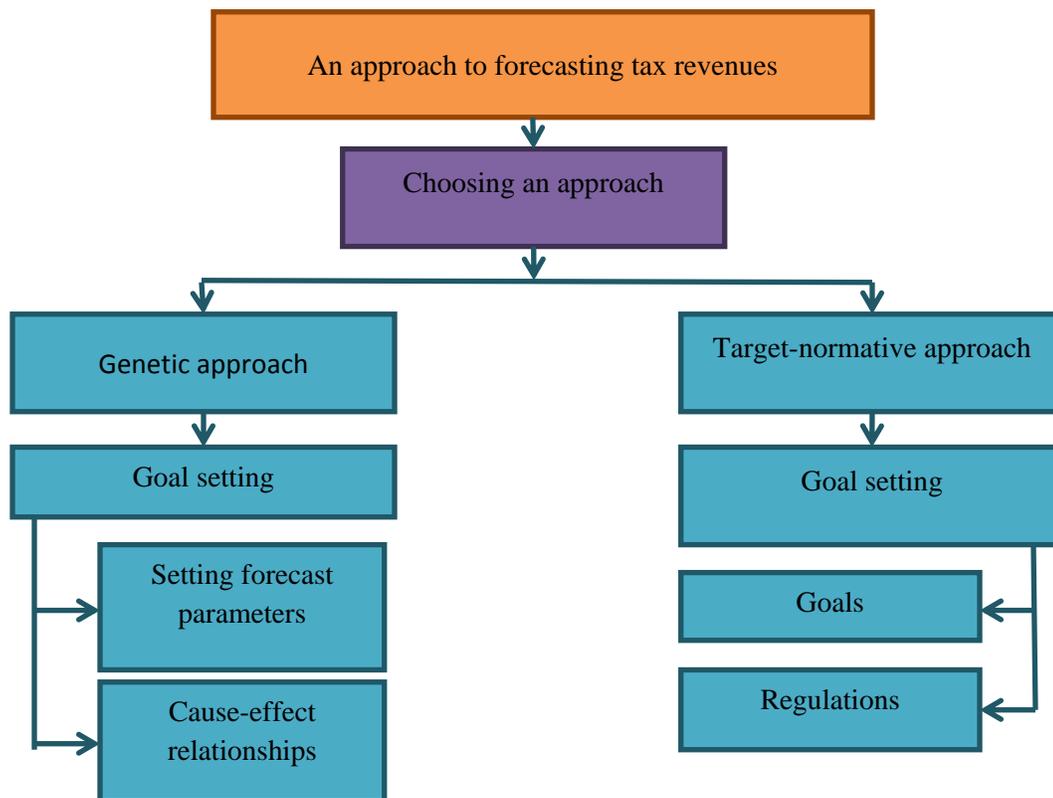
*Figure 1.1. An approach to forecasting tax revenues*[1]

The methods of forecasting tax revenues are special scientific research methods, which are used to predict the amount of tax revenues expected to be collected in the state budget. The selection of effective methods of forecasting is carried out based on the existing database and the characteristics of the forecast. See Figure 1.2. It should be said that the methods of forecasting tax revenues at the macro level are divided into different groups in the economic literature. Most economists try to divide forecasting methods into two groups - formalized and non-formalized.

One or another method is used in the practice of forecasting tax revenues depending on the state of the taxation system, its complexity, the availability of data, and the specificity of the forecasting object.

Recently, the use of statistical methods is common in the practice of forecasting. Because the use of statistical methods requires the use of analysis equipment. Tax revenue forecasting using statistical methods is carried out in two stages.

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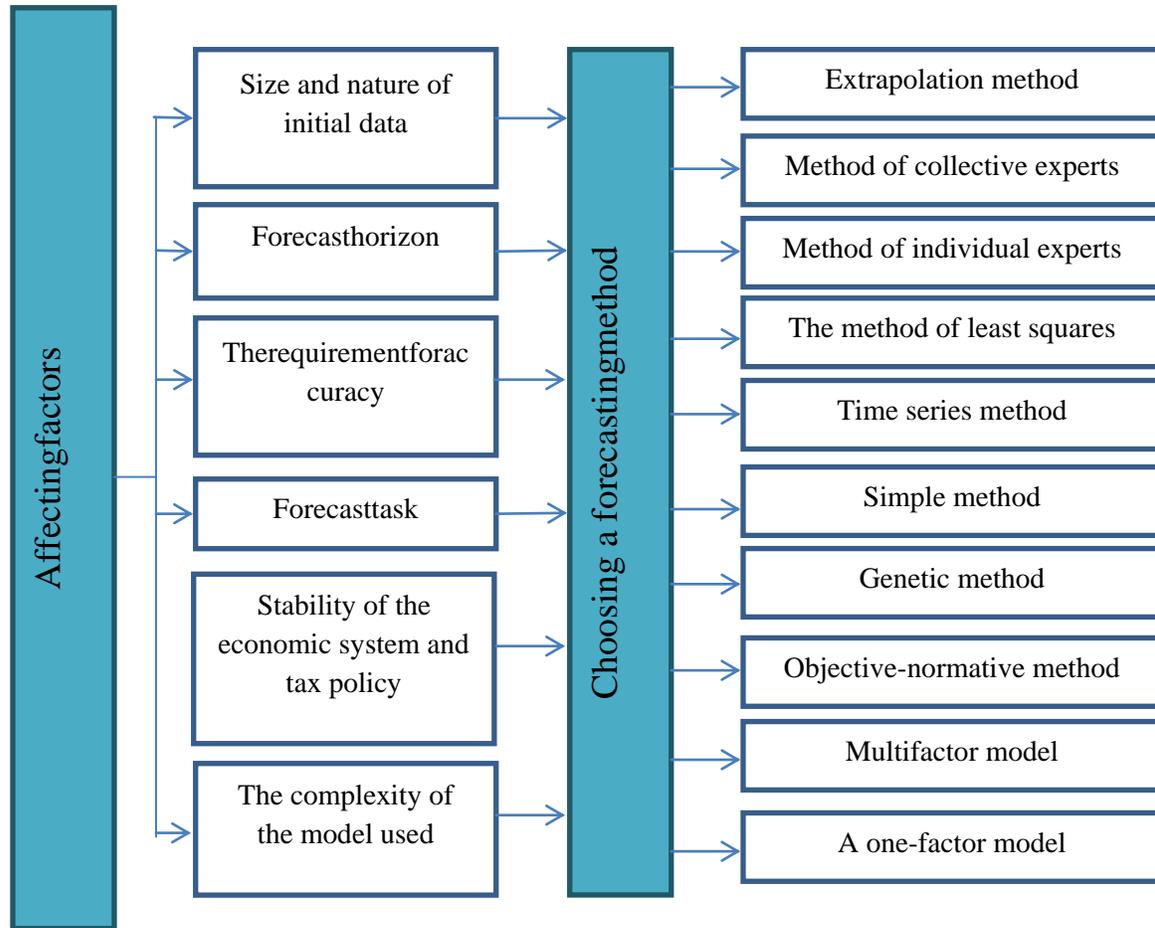
*Figure 1.2. Factors affecting the choice of the method of forecasting tax revenues at the macro level* [2]

In the first stage, data for a certain period is collected and summarized. A model is created in the form of an analytical expression of development laws (trend extrapolation) or in the form of one or more factor-arguments with a non-functional connection (regression equation). No matter what model is used for the forecasting process, it is necessary to choose a form of tagging that reflects the dynamics of tax revenues and factors related to them, as well as a method of estimating tagging parameters using one or another method.

At the second stage, tax revenue forecasting is carried out. In this case, the expected value of the forecast indicators is estimated based on the established laws. Of course, it is not

[2]Muallif tomonidan ishlab chiqilgan

appropriate to look at the forecast calculations as some kind of final result. Because, when determining the final result, it is necessary to take into account the factors, limitations and circumstances that are not included in the model. When making changes to the model, it is necessary to take into account the future expected changes in the existing conditions.

A mixed method can be used to forecast tax revenues. It is appropriate to use a mixed method in the conditions of a complex socio-economic system. An econometric model is an example of a mixed method.

In two cases, it is recommended to use the expert assessment method in forecasting tax revenues. When the object of research is too simple or complex, the expert assessment method is used in forecasting tax revenues. In addition, when a tax is newly introduced, if there are uncertainties in the formation of some important features of tax revenues, if there is not enough clear and complete information about tax revenues, if there is an opportunity to fully formalize the process if not, it is recommended to apply the expert assessment method to the forecasting of tax revenues.

The basis of the individual expert evaluation method is the maximum use of the expert's individual abilities and the principles of imperceptible psychological pressure on him. However, due to the fact that the expert will not have sufficient theoretical and practical knowledge of all areas of the economy, it is not recommended to use this method in forecasting taxes with a complex mechanism.

The "interview" method of forecasting is carried out in the form of a survey. The forecaster communicates with the expert in the form of "question-answer" and "conversation" based on a pre-prepared program, in order to assess tax collection and tax potential. The effectiveness of this method depends to a large extent on the level of mental preparation of the expert in giving a conclusion to the frequently asked questions. The presence of mental pressure on the expert is manifested as a disadvantage of using the "interview" method in forecasting.

The association method (garland of coincidences) used in forecasting appeared in the 70s of the 20th century. This method can also be used in forecasting tax revenues. The essence of the association method is that the signs of a random object and the elements collected according to such signs are applied to the prohibited object. Of course, the signs that are perceived as analogues are analyzed. Based on the results of the analysis and information about the research object, a development combination of the object under study is made. The best option is selected based on the future state of the research object. It should be said that forecasting using this method is carried out individually, and it is applied to practice after collective discussion. This method is distinguished by its simplicity and simplicity. For this reason, it is recommended to use it in solving not so complicated, narrow forecasting problems.

The essence of the morphological analysis method of forecasting is that the taxation system is abstracted, the problem to be solved is systematically studied and all possible solutions are determined. Decisions of particular interest may be identified during the study. In this case, it is

required to select the most optimal of the available solutions. Today, several methods of morphological analysis have been developed: "decimal matrix", "organizational concepts", "morphological grouping". It should be said that the methods of morphological analysis are focused on identifying all possible decisions within the framework of the morphological collection, which are compatible with the structure of the research object, in accordance with the task, and aimed at solving the given problem. At this point, it should be emphasized that the morphological analysis method of forecasting is proposed to be used in forecasting tax revenues for taxes with a complex mechanism in cases of significant changes in the tax administration.

Today, the method of creating scenarios can be used to forecast tax revenues. Unlike traditional expert methods, the method of creating scenarios includes a number of parametric approaches and combinations. Scenarios are developed on future tax revenues, taking into account the impact of various factors (tax collection rate, tax arrears, tax overpayments). In the process of forecasting, three types of scenarios are usually developed: optimistic, pessimistic and realistic (most likely). In the process of creating scenarios, a logical sequence of hypothetical events with mutual cause-and-effect relationships is determined. The sequence of events is considered in the time coordinate. In the process of creating scenarios, it is recommended to develop and include in the scenario the measures aimed at ensuring the achievement of the set goal of the subjects managing the tax system in the event of unexpected circumstances. It should be said that it is not recommended to forecast revenues from taxes with different tax objects in one scenario.

The method of mental-intellectual creation of ideas is based on the awakening of creativity, and it is also subjective, like other methods of individual assessment. Therefore, the final decision in predicting taxable income using this method should be made by the researcher, analyzing expert data.

In conclusion, the expert method of forecasting is used in the cases of radical reform in the field of tax administration, in the solution of little-studied, complex problems. Having knowledge of a scientifically based approach to the application of the expert assessment method in functional management technology is an important and necessary requirement for objective forecasting of tax revenues.

Today, collective expert assessment methods are also used in the field of forecasting. We believe that appropriate use of such methods in forecasting the tax revenues of the budget will have a great effect. Collective expert assessment methods are aimed at finding collective opinions of experts about the state of future development of tax revenues. Since it is a modern scientific method, we can effectively use collective expert assessment methods in forecasting taxable income.

The categories of collective expert assessment methods that are most widely used among researchers include: commission (round table), "Delphi", team creation of ideas ("brainstorming") methods.

When using the commission method, a "round table" is organized. The members of the special commission gathered around the round table discuss the expected tax revenues and the factors affecting them, form a single opinion. In order to improve the quality of the forecast results, the commission includes not only tax system specialists, but also specialists in related fields. In this case, it is recommended to teach group members the rules of teamwork before entering the discussion. There should be no mental conflict between group members. We believe that it is inappropriate to include senior and authoritative persons in the commission regarding service issues. Because the discussion should be organized in the form of a free dialogue, the presence of such persons in the commission does not allow unbiased opinions. The commission method of forecasting is also not without flaws. The logical co-compromise of experts during the discussion may lead to an increase in the risk of obtaining incorrect and unrealistic forecast results.

We recommend using the "Delphi" method in forecasting the tax revenues of the budget system. The purpose of the "Delphi" method is to develop a program of conducting individual surveys (which can be carefully adjusted). Corrections are made to the program based on the opinions of experts, in agreement with them. In practice, forecasting using the "Delphi" method is carried out in four ways. Initially, experts are sent a survey questionnaire with a list of questions to be answered in the form of a description of the problem and a quantitative and qualitative description. Experts send their answers by mail or other external devices. The organizers of the questionnaire will process the information available in the expert answers, and determine the assessment of the groups in the form of average and critical threshold values. In the second round, the members of the expert groups give reasonable answers to the dates of occurrence of the event, indicating the reasons. After the second round, the group leader prepares statistical data reflecting the opinions, as well as calculates the median, the average score of the group. In the third round, members of the expert group receive statistical information about the opinions sent by the group leader. The members of the expert groups send their comments to the presented statistics, taking into account the assumptions about the amount of tax revenues expected to be collected in the future. If the assessment given by the members of the expert groups does not correspond to the calculated interval, they will have to justify their opinion with arguments. The fourth type is considered the final stage, and the actions typical of the third type are also performed in it.

The method of collective formation of ideas ("brainstorming" method) appeared in the USA in the 50s of the last century, and its purpose is to create ideas by evaluating the results based on the rules of organization and conduct. is to activate the process associated with By applying the "brainstorming" method to forecasting tax revenues, many new ideas are obtained about the amount that can be collected in the future. We can theoretically divide the use of the "brainstorming" method in forecasting the tax revenues of the budget system into two stages: generating ideas and evaluating the generated ideas. We suggest using the following categories

of the "brainstorming" method when forecasting tax revenues: "Brainstorming" performed on the opposite side; brainstorming; double "brainstorming"; "brainstorming" in the form of a meeting of ideas.

"Brainstorming" carried out to the opposite party includes two "brainstorming" aimed at creating collective ideas: the first is a "brainstorming" aimed at identifying existing shortcomings in tax revenue forecasting, and the second - eliminating the identified shortcomings "brainstorming" to find new ideas to do. Group brainstorming in such two parts will increase the accuracy of the process of searching for ideas.

If the process of creating ideas is carried out in a single "brainstorming", it is not divided into parts, while in a double "brainstorming" two consecutive brainstorming and evaluation of ideas is carried out in two stages.The following principles are observed in the method of the conference of ideas: high level of professionalism, preparation of participants in advance, integration of methods of mental preparation with the rules of morphological analysis aimed at finding ideas.

### CONCLUSION

The forecast of tax revenues of the state budget is carried out in the process of developing the draft law on the state budget for the next year and budget targets for the next two years.

The forecast of tax revenues of the state budget is carried out on the basis of the priority directions of socio-economic development for the medium-term period and the forecast of macroeconomic indicators, information on tax revenues and tax objects.

Various state agencies participate in the process of organizing and implementing the forecasting of tax revenues of the state budget. If the Cabinet of Ministers of the Republic of Uzbekistan organizes the forecast of the tax revenues of the state budget, the Ministry of Finance of the Republic of Uzbekistan is responsible for the implementation of the forecast of the tax revenues.

The State Tax Committee of the Republic of Uzbekistan and other agencies participate in the process of forecasting the tax revenues of the State budget as subjects providing information. They are solely responsible for the quality and truthfulness of the information provided by them.

The task of organizing and coordinating the forecast of tax revenues of the respective local budgets is entrusted to the Council of Ministers of the Republic of Karakalpakstan, governors of regions and Tashkent city, districts and cities, respectively. Regional financial bodies are the agencies responsible for developing the forecast of tax revenues of local budgets.

State tax administrations, tax inspectorates and other state agencies perform the function of providing information necessary for forecasting in the process of forecasting the tax revenues of the respective local budgets.

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