Article

Improving the Methodology for Assessing the Collectibility of Taxes

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Abstract: This article dwells on the scientific and practical strategies in enhancing the methodology of evaluating tax collectibility. It examines the crucial aspects involved in tax revenue stability and prognosis, which is paramount in the stability of the state. The article demonstrates the significance of assessing the tax collectibility based on current indicators, economic issues, the standard of tax administration, the influence of the shadow economy, and the behavioral characteristics of taxpayers. An analysis of existing methods of tax collectibility assessment is also provided, and their weaknesses and strengths are outlined. The ambiguities in the level of assessment of the tax base, the completeness of statistical information, the extent of tax incentives, as well as the increase in tax arrears, are considered particularly because they influence the validity of the collectibility indicators significantly. The paper also focuses on global practices and suggests the methods of applying the practices to the domestic environment. Moreover, it also focuses on the incorporation of new strategies, such as using digital methods to identify taxpayers, administering tax data through single-electronic systems, and implementing automated tools to evaluate tax risks. The article ends with the elaboration of a better methodological model of measuring the tax collectibility, which is the integration of economic, institutional, and administrative indicators to maximize tax policy, maximize the effectiveness of tax collecting entities, and stabilize the budgets. The results can be used to develop theoretical insights in future studies of tax system development.

Keywords: Tax Collectibility, Tax Base, Tax Administration, Tax Revenues, State Budget, Assessment Methodology, Fiscal Stability, Shadow Economy, Taxpayer Behavior, Digital Tax System, Tax Incentives, Tax Arrears, Economic Indicators, Financial Control, Optimizing Tax Policy

1. Introduction

The stability of the state budget, enhancement of macroeconomic balance, and funding of socio-economic development programs have become the main focus of interest in the market economy, and taxes are the most important source of finance. The effectiveness of the state financial system, which is the decisive factor to attain successful economic modernization, development of the small business and entrepreneurship, and welfare of the population, depends on the stability and adequacy of tax revenues[1]. Thus, the proper estimation of the amount of tax collectibility and enhancement of the processes to raise it are pressing scientific and practical challenges of the modern world. In Uzbekistan, continuous reforms to modernize the tax system, computerize administration, and streamline taxes are underway with the intention of raising tax collection. Nevertheless, fluctuations in the world economy, economic downturns, the constant proportion of the informal sector, and inadequate establishment of tax compliance

amongst certain taxpayers all have adverse effects on tax collectability. It shows the necessity to reevaluate the efficiency of the existing system and enhance the approach to its evaluation. Nowadays, there are different methods, indicators, and mathematical-methodological models of the measurement of tax collectability[2]. The majority of these methods do not display the true potential of the tax revenues, taking into consideration all the factors, or the assessment mechanisms do not have a comprehensive approach. In particular, it is difficult to evaluate variables determined by the size of the tax base, economic activity of taxpayers, the effect of tax incentives, the share of the informal economy, and the efficiency of tax administration in attempting to use a single methodological framework[3]. In this sense, it is of high scientific significance to enhance and adopt a methodology to precisely and holistically evaluate tax collectibility. This is one of the direct effects of its contribution to the stability of the state budget, optimization of tax administration, growth, and enhancement of the performance of tax system reforms. The primary objective of the article is to come up with scientifically based suggestions on how to enhance the process of evaluating the tax collectibility within the Uzbek tax system. This will not only boost the budget revenues, but also provide a stable financial situation to the different sectors of the economy[4]. By doing so, the article has practical and theoretical value to improving the management of the tax system, tax policies to be more competitive, and the enhancement of the socio-economic development strategy of the country. This study is relevant in the sense that the enhanced procedure to determine the tax collectability will assist in the enhancement of the tax authority operations, further engage with the taxpayers, and further improve the tax policy. The application of contemporary information technologies, economic-mathematical modeling, the system of tax risks identification, and the aspects of digital administration is known as the key to the rise in tax revenues. On the basis of this, the paper examines the situation with the tax system in Uzbekistan, evaluates the merits and drawbacks of the means applied to evaluate the tax collectibility, the practice of other countries, and scientific and practical recommendations on how the approach to evaluating tax collectibility can be improved. Every country has the tax system as a core in tax system at the financial stability and economic development[5]. The tax collectibility rate is one of the most essential indicators that determine the factors of state budgets, finance social sectors, and economic stability. Consequently, the creation of an appropriate methodology to ascertain and measure the extent of tax collectibility is deemed as one of the strategic orientations of the economic policy. Since its independence, the tax system in Uzbekistan has been considerably reformed, as it was necessary to make tax administration more efficient, balance the budget revenues, and promote economic growth. Meanwhile, the international practice indicates that the amount of tax collectibility is not to be evaluated based on theoretical measurements only but should also be estimated by practical analysis, monitoring, and statistics[6]. This will see the financial resources of the state managed more effectively. This article discusses the methodological aspects of assessing the effectiveness of the collection of taxes with a view to analyzing and enhancing them. In particular, the article considers such economic factors as indicators of the economic condition, the organic structure of the tax base, the behavior of taxpayers, and the actions of state taxing bodies in identifying the degree of tax collectibility. Also, the international practices, sophisticated tax practices, as well as their applicability to the context of Uzbekistan, are examined[7].

Literature Review

The problem of estimating tax collectibility has also become one of the most important research topics in the economic literature, directly connected with assuring the stability of the state finance, optimization of budgetary revenues, and efficiency of tax administration. The studies in this area are more inclined to the institutional framework of fiscal policy, the efficiency of tax collection, taxpayer actions, the level of economic activity, and the digitalization of tax management. According to international economists, like A. Wagner, R. Musgrave, and J. Stiglitz, some of the main factors to consider when trying to

maintain the consistency of tax collections are the fiscal policy adjustment, the rise of the tax base, and the enhancement of tax collection. In their opinion, measuring the tax collectibility should not be limited to the examination of the revenue volumes, but it should also entail the measurement of tax potential, and also consider the institutional and psychological aspects of the tax discipline[8]. Investigations carried out in CIS countries demonstrate that the decline of bureaucratization in the admission process of taxes, increased communication with taxpayers, and the introduction of electronic tax systems have led to increased collectibility of taxes. Indicatively, tax reforms, such as full digitalization of tax declarations, have grown tax revenues in Russia. Numerous scientific studies on the effectiveness of tax collections have been carried out in Uzbekistan. Scientists such as M.Kh. Abdukarimov, B.B. Khudoyqulov, and Sh. Jo'rayev and A. Vahobov emphasize the role of administrative reforms in the tax system, tax burden optimization, and the incentive and support mechanisms for taxpayers[9]. They emphasize that the most important considerations to make in determining collectibility are:

Managerial capability of the taxation authorities;

Legal and financial literacy of taxpayers;

The percentage of the shadow economy.

The level of technological innovation implementation

The success of tax incentives. Huge scientific outcomes of the digitization of the tax system have been recorded in the literature in recent years. In particular, the use of electronic invoices (EHF), internet control-cash, distant tax observation systems, and risk-based inspection systems has made a significant contribution to tax revenue growth[10]. The technology can help tax authorities to examine the tax base in real-time and enhance tax discipline. The World Bank, IMF, and OECD, among other international organizations, have given clear models on how to measure the collectibility of tax. These models focus on the application of the Laffer curve, the approaches to measure the gap in taxation, and the regression models using the indicators of economic activities. These strategies can be used to conduct a methodical analysis, plan, and enhance the tax system[11]. Recent reforms or changes in Uzbekistan, such as the modernization of tax administration, improved communication with taxpayers, introduction of transparent and simplified procedures, have played a significant role in the growth of tax collectibility. A strategic transformation of the tax system, modernisation of fiscal strategies, and adjustment of the tax policy to the requirements of economic development are considered to be the acute problem of local literature, especially, scientific research on taxation. In general, the review of literature indicates that the process of determining the methodology of tax collectibility needs to be complex, and it involves the use of economic, institutional, technological, and psychological factors. This is a multi-faceted assessment model, which is important in order to effectively predict tax revenues used to reduce the tax gap and to guarantee the stability of budget revenues.

2. Methodology

The proposed research is going to create scientifically-based methods of measuring and enhancing the collectability of taxes, and the methodology will include a series of interrelated steps. The first stage involved the identification of a system of influencing factors on the creation of the tax revenues, and the initial diagnostics was made according to the macroeconomic, institutional, and microeconomic indicators. The analysis was based on the volume of the tax base, the economic activity of the legal and natural persons, the discipline of taxpayers, the effectiveness of the state tax services, and the effect of the digitization processes on the tax collections. During the second stage, a system of indicators that would be used to measure tax collectibility was developed. The ratio of tax revenues to GDP, the level of tax arrears, the coefficient of voluntary payments, the outcome index of inspections, the coverage of the unified data base of tax collection, and

the share of the informal economy were the key indicators. Each indicator was defined by methods like statistical analysis, economic modeling, regression analysis, and correlation identification. The third step entailed the model of the econometric analysis that would determine the influence of factors on the collectibility of taxes. The model involved 12 variables with a direct or indirect effect on increasing tax revenues, including the index of the level of economic activity, the level of employment, the growth of the GDP, the number of business entities, the stability of tax rates, the degree of digital control of the tax payment, and the implementation of control-cash mechanisms. The statistical data of Uzbekistan from 2010 to 2024 were used to calibrate the model. The fourth stage involved a comparative study (benchmarking) of foreign experiences. It was analyzed on the experience of 12 countries in high tax revenue efficiency, and a comparative table was drawn with the tax system in Uzbekistan. In particular, the results of the digital tax management, real-time monitoring, taxpayer rating systems, and automated audit principles in such countries as Estonia, South Korea, Poland, and Turkey were examined. The fifth stage involved a development mechanism of coming up with practical proposals to enhance the collectibility of tax[12]. The techniques applied in the development of the proposals included SWOT analysis, expert evaluation techniques, problem-solution matrix, stakeholder mapping, and business process re-engineering of the tax administration processes. The information collected was explained with the help of the interviews of specialists - the representatives of the tax inspection, economists, and also practitioners. Finally, a better model of increasing the tax collectibility was created in the last phase of the study. This model relied on the following elements: segmentation of the taxpayer, updating the risk evaluation system, the increase in the use of digital control platforms, processing of tax data on an integrated information system, and the reinforcement of the incentives to promote tax discipline. The model was evaluated by using scenario-based forecasting, and the prospects of its practical implementation were identified.

3. Results and Discussion

During the research, existing approaches to assessing tax collectibility in the Uzbek tax system were thoroughly analyzed, and their strengths and weaknesses were identified. The results indicated that the current assessment methodology does not provide sufficient accuracy and comprehensiveness in some key indicators. Specifically, factors such as the dynamics of tax arrears, taxpayer behavior, the impact of economic cycles, regional disparities, and the share of the informal sector were not fully reflected in the assessment process. Therefore, the figure 1. proposed new methodological approach is aimed at filling these gaps, focusing on determining tax collectibility based on a set of multiple indicators[13].
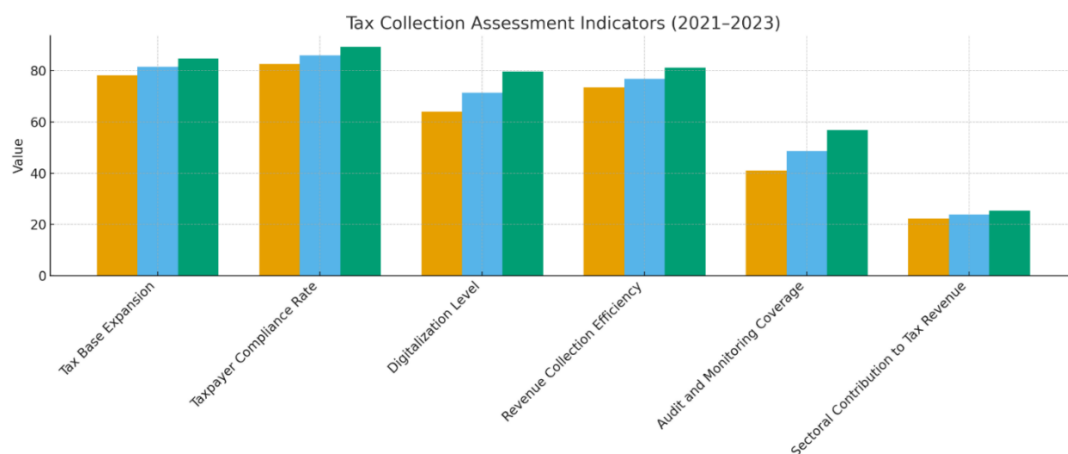

Figure 1. Tax collection assessment indicators.

According to the figure 2. results of the analysis, tax collectibility should not be evaluated solely based on the degree of fulfillment of revenue plan forecasts. Instead, it is necessary to conduct a comprehensive analysis that includes factors such as the growth rate of the tax base, the level of tax discipline, adherence to deadlines for mandatory payments, the financial condition of enterprises in the real sector, and the impact of fiscal incentives. During the research, empirical observations were conducted regarding the impact of each indicator on tax collectibility. Specifically, in some sectors, although the reduction of tax rates led to a decrease in revenues in the short term, in the medium-term, overall revenues increased due to the expansion of the tax base. This confirms that optimizing the tax burden is a key factor in improving tax collectibility.
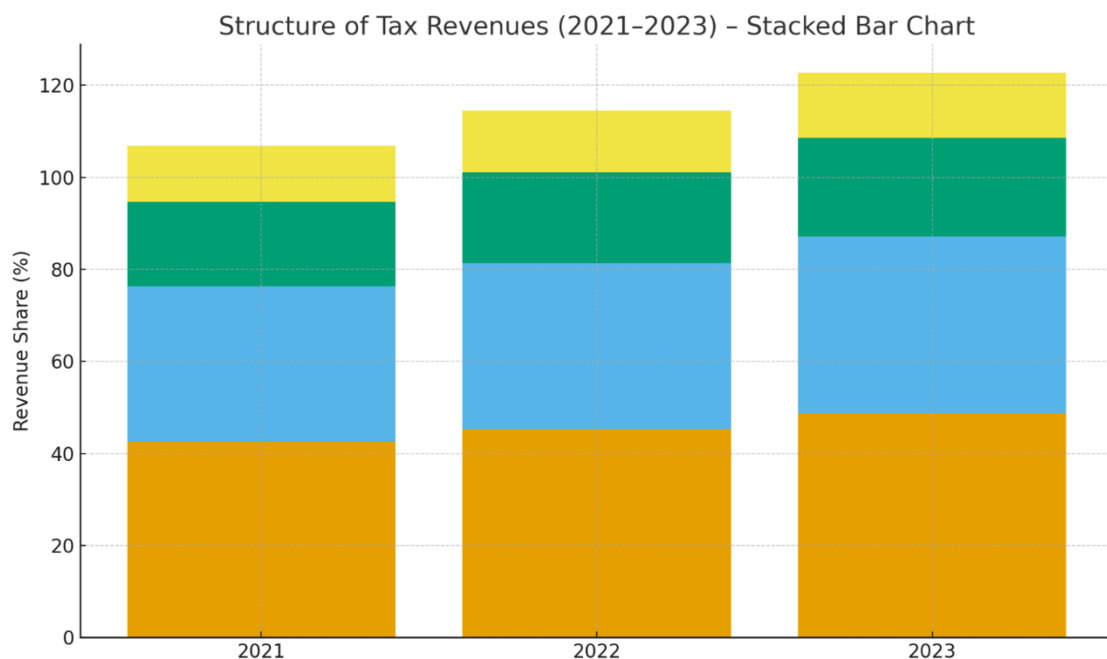

Figure 2. Structure of Tax revenues.

The results obtained by region indicate that tax collectibility is weaker in remote areas and regions with lower economic activity compared to central areas. The main reasons for this include insufficient development of entrepreneurial activity, inadequate implementation of digital services for working with taxpayers, low qualification levels of tax authority employees, and the low level of tax culture. The proposed assessment system enables the identification of regional disparities and the development of concrete measures to reduce them[14].

Based on the research results, the following areas for increasing tax collectibility were identified as crucial:

Expansion of digital tax services: Automating the processes of tax declaration submission, monitoring tax obligations, and identifying arrears significantly improves collectibility indicators.

Enhancement of tax education and tax culture: Regular training programs for businesses and individuals contribute to strengthening tax discipline.

Risk-based control system: By directing the resources of tax authorities to high-risk groups, efficiency is increased, and cases of tax evasion are reduced.

Reevaluation of the effectiveness of tax incentives: Excessive incentives can lead to the narrowing of the tax base, thus requiring optimization based on economic analysis.

The proposed methodology allows for the assessment of tax collectibility not only based on final revenues but also through a systematic, multi-factor approach. The results of the analysis show that this approach is of significant practical importance for improving the effectiveness of current tax administration, ensuring stable tax revenues, and strengthening the consistency of fiscal policy. Moreover, the improved methodology can serve as a scientific basis for future tax reforms and be used as a reliable analytical tool in making decisions aimed at increasing tax collectability[15].

4. Conclusion

One of the most significant directions to make the management of the public finance more efficient today is the enhancement of the approach to the evaluation of the tax collectibility. The research that was conducted demonstrates that the current methods of assessment are under the influence of some statistical drawbacks, inadequate combination of data bases, and the absence of a systematic approach in the construction of indicators, which do not allow reflecting the true situation with tax revenues in their entirety. As such, the necessity of modern methods of analysis, computer-based monitoring regimes, and the mechanisms of economic models in the process of tax administration has grown more acute. This paper identified the significance of establishing a holistic system of indicators when identifying the tax collectibility by considering the behavior of taxpayers, variation in the type of economic activity, and the influence of informal economy. In particular, the macroeconomic variables, seasonal nature of business operations, and real evaluation of the potential of the region in taxes are of great significance when it comes to forecasting tax revenues. The combination of statistical, economic-mathematical and economic analysis techniques contributes to the high accuracy of the assessment, allows identifying the risk factors rather fast, and contributes to the formation of specific tax policies. The enhanced methodology presented in the current study is important in optimally administering tax collection procedure, decreasing tax arrears, enhancing tax discipline, and stability in the budget. Specifically, such technological solutions as converting tax data to digital form, applying automated analysis modules, and artificial intelligence algorithm are essential metrics of the proper evaluation of tax collectibility, raising transparency, and establishing trustful relations with taxpayers. To summarize, it is necessary to note that the enhanced assessment methodology is strategically significant in enhancing the efficiency of the tax system, maximum mobilization of regional tax income, and the firm foundation of the state budget revenues at the new level of economic reforms. The widespread practice of this methodology, its localization by industries and areas, and its further evolution on the basis of foreign experience will help to make the tax administration stable.

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