

RESEARCH ARTICLE



ASSESSING THE EFFECTIVENESS OF THE CONTROLLING SYSTEM IN THE PUBLIC SECTOR: AN ANALYTICAL REVIEW OF MODERN APPROACHES

AVALIANDO A EFICÁCIA DO SISTEMA DE CONTROLE NO SETOR PÚBLICO: UMA REVISÃO ANALÍTICA DE ABORDAGENS MODERNAS

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ABSTRACT

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Objective: The study aims to improve the methodological and procedural foundations of controlling in the public sector by developing an approach to evaluate its effectiveness under the conditions of global economic shifts and growing demands for efficiency in public administration.

Methodology/Approach: The research is based on an analytical review of Russian and international literature, regulatory frameworks, and applied practices. The authors apply system-based, object-based, and risk-oriented approaches, integrating them into a comprehensive methodology that allows both narrow (component-specific) and broad (system-wide) evaluations of controlling effectiveness.

Originality/Relevance: While existing studies mainly focus on corporate or sector-specific contexts, this work emphasizes the public sector as a distinct environment, proposing an integrated approach to measuring the maturity and effectiveness of controlling systems. In addition to strengthening governance and accountability in state institutions, the proposed framework enhances sustainable competitive intelligence by equipping organizations with tools for resilience, policy development, and strategic management in uncertain environments.

Main Conclusion: The results demonstrate that a balanced integration of system, object, and risk-oriented approaches yields a synergistic effect, ensuring flexibility, transparency, and improved decision-making in public sector management.

Theoretical/Methodological Contribution: The article contributes a conceptual framework and methodological toolkit for assessing controlling effectiveness in the public sector. It systematizes evaluation principles, tools, and indicators, offering a model adaptable to different organizational contexts, and thereby advancing both theory and practice of sustainable public sector management.

Keywords: Public sector. Efficiency assessment. System-based approach. Object-oriented approach. Risk-oriented approach. Integrated approach





RESUMO

Objetivo: O estudo visa aprimorar os fundamentos metodológicos e processuais da controladoria no setor público, desenvolvendo uma abordagem para avaliar sua eficácia diante das mudanças econômicas globais e das crescentes demandas por eficiência na administração pública.

Metodologia/Abordagem: A pesquisa baseia-se em uma revisão analítica da literatura russa e internacional, marcos regulatórios e práticas aplicadas. Os autores aplicam abordagens baseadas em sistemas, objetos e orientadas ao risco, integrando-as em uma metodologia abrangente que permite avaliações tanto restritas (específicas de componentes) quanto amplas (de todo o sistema) da eficácia da controladoria.

Originalidade/Relevância: Embora os estudos existentes se concentrem principalmente em contextos corporativos ou setoriais, este trabalho enfatiza o setor público como um ambiente distinto, propondo uma abordagem integrada para mensurar a maturidade e a eficácia dos sistemas de controle. Isso torna a pesquisa particularmente relevante para o aprimoramento da governança e da accountability em instituições estatais.

Conclusão Principal: Os resultados demonstram que uma integração equilibrada das abordagens sistêmica, objeto e orientada ao risco produz um efeito sinérgico, garantindo flexibilidade, transparência e melhor tomada de decisão na gestão do setor público.

Contribuição Teórica/Metodológica: O artigo contribui com um arcabouço conceitual e um conjunto de ferramentas metodológicas para avaliar a eficácia do controle no setor público. Sistematiza princípios, ferramentas e indicadores de avaliação, oferecendo um modelo adaptável a diferentes contextos organizacionais e, assim, promovendo o avanço tanto da teoria quanto da prática da gestão sustentável do setor público.

Palavras-chave: Setor público. Avaliação de eficiência. Abordagem baseada em sistemas. Abordagem orientada a objetos. Abordagem orientada a riscos. Abordagem integrada



1. INTRODUCTION

Developing a controlling system in the public sector implies the advancement of methodological tools for evaluating its effectiveness. An analytical review of the current Russian and international research on the effectiveness of controlling systems shows the absence of a unified methodology for such evaluation. Existing methodologies generally employ system-based, object-specific, or risk-oriented approaches. However, it is often difficult to define the boundaries of each approach as distinctions between many phenomena and processes have become blurred. We believe that the most promising and innovative methodological approach to evaluating the effectiveness of controlling systems in the public sector is the integrated approach. This approach allows for a flexible combination of elements from system-based, object-specific, and risk-oriented methodologies, depending on the purpose of the evaluation procedure, the object being evaluated, and the specific characteristics of the public sector entity under consideration. Currently, there is no standardized methodology for evaluating the effectiveness of controlling systems. Therefore, different organizations are compelled to address this issue independently.

The objective of this study is to develop an approach for evaluating the effectiveness of controlling systems in the public sector based on a balanced integration of theoretical foundations, methodological developments, and tools from system-based, object-specific, and risk-oriented approaches. This approach is expected to generate a synergistic effect.

2. LITERATURE REVIEW

The analysis of literary sources led us to the conclusion that, within the scope of the examined issue, most studies are primarily devoted to internal control and its impact on effectiveness in the public sector (Hoai et al., 2022); the organizational system of accountability, integrity, control, and leadership methods in the public sector (Aziz et al., 2015); the influence of organizational innovations, organizational culture, and the capabilities of modern information technologies on improving the quality of public services (Hurley et al., 2025; Popa et al., 2024); and the issues of public administration effectiveness (Lin & Lu, 2024). Some studies address the impact of organizational innovations on the efficiency of public sector entities (Magdliyan & Setiawan, 2023). International scholarship emphasizes innovation, leadership, and information technology as drivers of controlling effectiveness, yet these contributions frequently assume higher levels of institutional maturity than those present in many public sector contexts. This contrast underlines the difficulty of direct transferability and highlights the need for an integrated framework tailored to the specificities of state institutions. The controlling system should be considered an innovative system for organizing activities within this context.

In-depth theoretical and methodological developments in assessing the effectiveness of controlling systems in the commercial sector are presented in the works of several Russian scholars. Zhakevich (2016) explores the formation of an effective controlling system at industrial enterprises. Pyrkova (2010) develops models and algorithms for controlling in the construction industry. Komarova (2006) addresses the development of scientific and methodological principles for evaluating corporate controlling. Petrova and Zhivaeva (2011) assess the effectiveness of implementing a controlling system in inventory management. Vasilyeva (2003) develops indicators for evaluating the performance of controlling departments. Glukhova (2010) evaluates the effectiveness of operational controlling systems, while Romanovskiy and Ignateva (2016) focus on financial controlling systems. Mandrazhi (2021) proposes using qualitative indicators to assess the effectiveness of a company's



controlling system.

In addition to Russian contributions, international research provides valuable but varied perspectives on controlling systems. Studies emphasize the role of internal control in fostering innovation, transparency, and accountability in the public sector (Arynova et al., 2025; Stepanova et al., 2025; Virani et al., 2023). Other works highlight the influence of organizational culture, leadership, and digitalization in shaping the effectiveness of controlling systems (Beloglazova et al., 2025; Kazakov et al., 2024). However, these studies often focus on specific aspects, such as innovation management or accountability, without offering a comprehensive methodological framework. Moreover, some approaches are heavily context dependent, making their direct transferability to other public sector environments problematic (Kamysbayev et al., 2025; Cinar et al., 2024). This contrast between Russian and international literature underscores the fragmented nature of current scholarship and reinforces the need for an integrated framework that balances system based, object based, and risk-oriented perspectives. However, still these approaches remain largely sector-specific and quantitative, often neglecting risk dynamics and qualitative dimensions. This creates a methodological gap when applied to the public sector, where non-financial performance indicators and accountability are equally critical.

Some scholars have addressed these issues in relation to the public sector. A group of researchers from the Financial University under the Government of the Russian Federation (Vankovich et al., 2022) study the theoretical and practical foundations of controlling in the public sector. Yurchenko et al. (2015) consider the institutional and economic aspects of evaluating the effectiveness of management in public sector entities.

Despite the growing body of research, significant problems remain since existing studies are often fragmented, overly descriptive, and fail to critically integrate system based, object based, and risk-oriented approaches. Thus, the present study is among the first to focus specifically on the development of a methodology for evaluating the effectiveness of controlling systems in the public sector.

3. METHODS

In the course of this study, we examined the theoretical and methodological foundations of controlling; analyzed regulatory frameworks in the areas of financial planning, accounting, analysis, and control; reviewed information, analytical and reference sources, statistical data, and other materials on the activities of public sector organizations. The research is grounded in the experience of organizing and operating controlling systems within economic entities, assessing their effectiveness, and analyzing current issues in public administration and the interrelation between functional activities and strategic objectives. This comprehensive approach helped us expand the theoretical basis of controlling in the public sector by focusing on its effectiveness. As a result, we proposed our own interpretation of the concept of effectiveness of a controlling system in the public sector and formulated the main objectives and principles for evaluating such effectiveness. In this study, effectiveness is operationalized through a combination of quantitative and qualitative indicators, including goal achievement ratios, budget execution efficiency, compliance with reporting standards, and risk management outcomes

An analytical review of the Russian and international research on the evaluation of controlling systems in corporate and public sectors led to the development of new methodological approaches. These include theoretical justification and a methodological toolkit for evaluating the effectiveness of controlling systems in the public sector, which can be integrated into newly established and existing systems. For empirical validation, data sources



such as the World Bank Governance Indicators, IMF Government Finance Statistics, OECD Public Governance Reviews, and UNCTAD public administration databases can provide benchmarks for assessing effectiveness in different contexts. In our opinion, the methodological approaches used for organizing controlling systems in the public sector (the system-based approach, process-based approach, risk-controlling, and smart-controlling) should align with the methodological approaches applied to evaluating their effectiveness.

The system-based approach enabled the formulation of the objective, tasks, principles, subjects, objects, tools, and methods for evaluating the effectiveness of the controlling system in the public sector. The process (object-based) approach focuses on assessing the effectiveness of individual components of the controlling system (goal setting, strategic planning, budgeting, accounting and reporting, control, and decision-making) and the extent to which these components achieve the operational and strategic development goals of public sector entities. This evaluation is conducted using a system of indicators (quantitative and qualitative, financial and non-financial). The effectiveness assessment based on the risk-oriented approach in the public sector involves a comprehensive cycle of risk management activities. These include risk identification, qualitative and quantitative analysis, development of risk management measures, and the implementation of continuous or periodic risk monitoring systems. This approach should be applied to each component of the controlling system and to the system as a whole.

An interdisciplinary research method allowed us to propose an integrated approach to evaluating the effectiveness of controlling systems in the public sector, which we consider the most promising. The essence of this approach lies in the balanced integration of the theoretical foundations, methodological developments, and tools derived from the systems, object-based, and risk-oriented approaches. This balanced integration within public sector entities will contribute to achieving a synergistic effect. While the framework contributes to theory by integrating multiple approaches, its practical applicability can be demonstrated through illustrative case studies, for example evaluating the budgeting processes of a national ministry or the strategic planning cycle of a state-owned enterprise.

4. RESULTS

The concept of effectiveness is used across various fields and is interpreted through multiple perspectives, including philosophical (moral and ethical viewpoints), legal, economic, technical, mathematical, etc. Scholars generally agree that effectiveness is a complex indicator comprising consumer effectiveness (the degree to which goals align with ideals and norms), outcome effectiveness (the degree to which results are achieved), and cost effectiveness (the efficiency of resource utilization) (Camanho et al., 2024; Kaplan & Norton, 1996).

Drawing upon economic interpretations of the term "effectiveness" and considering the identified controlling objects in the public sector, we propose a paradigm for evaluating the effectiveness of the controlling system in the public sector, approached from both narrow and broad perspectives. The narrow approach focuses on assessing the effectiveness of individual elements (or combinations thereof) within the controlling system in public sector organizations to determine their performance level and identify potential areas for improvement. Thus, the evaluation may target specific components of the controlling system (for example, decisionmaking) or a set of elements that receive particular emphasis within an organization (strategic planning, budgeting, etc.). This interpretation is realized within the framework of the objectbased approach.

Within a broad interpretation, the analysis encompasses the entire set of elements of the controlling system using methods, tools, technologies, performance indicators, and evaluation criteria. These enable an assessment of the degree to which the stated goals and objectives have been achieved and the extent to which the core functions of management in public authorities





and organizations have been implemented. As a result, growth points are identified, and measures are developed to enhance information transparency and the effectiveness of managerial decision-making in the short term. In the long term, this contributes to the increased maturity level of the controlling system. This definition is realized through system-based, riskoriented, and integrated approaches. For example, the evaluation of controlling effectiveness in the public sector may be broken down into the following components: assessment of the achievement of goals and objectives; assessment of the effectiveness of strategic planning; budgeting; accounting and reporting processes; internal control system, and managerial decision-making.

Below is a description of the proposed methodological approaches to evaluating the effectiveness of the controlling system in the public sector.

The evaluation process based on the systems approach involves identifying the overall effectiveness of the controlling system, which encompasses the entirety of its components (goal setting, strategic planning, budgeting, accounting and reporting, control, and decision-making). This process assesses the extent to which the system enables the achievement of the operational and strategic objectives of public sector entities, using a set of indicators (quantitative and qualitative, financial and non-financial).

The described elements of the evaluation process contribute to the development of a system-based methodology for assessing the effectiveness of the controlling system in the public sector. This methodology includes the following components: objective, tasks, principles, objects, subjects, tools and methods (Figure 1).



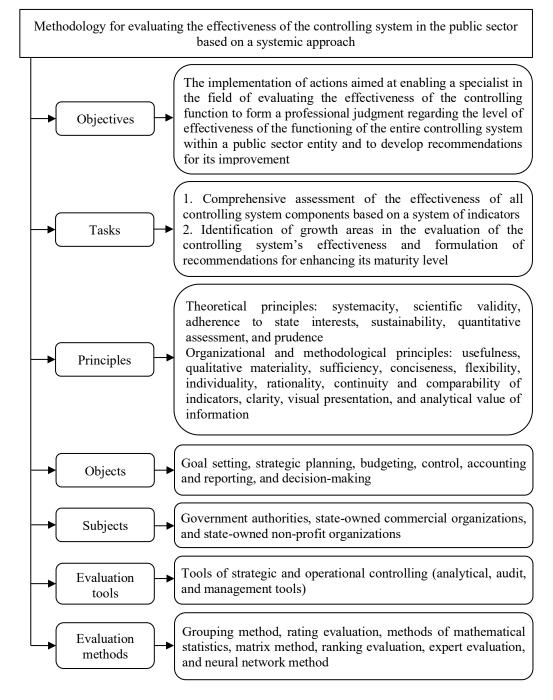


Figure 1. Methodology for assessing the effectiveness of controlling in the public sector based on the system approach

Source: compiled by the authors.

The object-based approach to evaluating the effectiveness of the controlling system in the public sector involves assessing the performance of individual objects within the controlling system. In other words, the evaluation under this approach is conducted in a targeted manner. Applying the object-based approach is particularly appropriate in public sector entities where it is necessary to evaluate the effectiveness of a specific component of the controlling system rather than assessing the system.

The implementation of the object-based approach is clearly illustrated in a threedimensional model that demonstrates the evaluation of the effectiveness of the controlling system in the public sector (Figure 2).



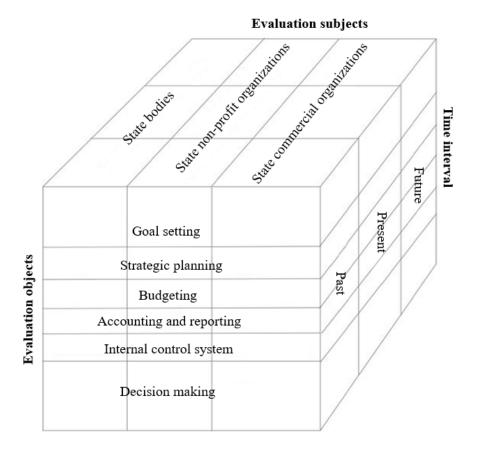


Figure 2. Three-dimensional model for assessing the effectiveness of the controlling system in the public sector based on the object-based approach **Source:** compiled by the authors.

The model for assessing the effectiveness of the controlling system in the public sector based on the object-based approach reflects the previously identified evaluation objects (goal setting, strategic planning, budgeting, accounting and reporting, internal control system, decision-making), which can be evaluated at different time intervals of operation and in different evaluation subjects.

The methodology for evaluating the effectiveness of the controlling system based on the object-based approach involves decomposing the controlling system into objects, among which the most prioritized ones are selected from the perspective of assessing their effectiveness in a specific public sector entity. These objects are evaluated in terms of the degree of goal achievement and task fulfillment, relying on evaluation principles, the set of effectiveness tools used, and evaluation methods. For example, when assessing the effectiveness of strategic planning, methods such as econometric, analytical, and scenario analysis can be applied, while tools may include SWOT analysis, benchmarking, competitive analysis, Boston Consulting Group matrix, McKinsey matrix, portfolio analysis, potential analysis, gap analysis, balanced scorecard system, etc. When evaluating budgeting, methods such as gap analysis, analytical methods, grouping methods, mathematical statistics, matrix methods, expert evaluation, and others may be used; tools may include budgeting models and budget analysis (Miroshnichenko & Khmeleva, 2014). This methodology for evaluating the effectiveness of the controlling system in a public sector entity based on the object-based approach allows to diagnose controlling system objects as either "effective" or "ineffective", identifying growth reserves and developing recommendations to improve its effectiveness.

Currently, the risk-oriented approach is applied in almost all fields of activity, and the



evaluation of controlling effectiveness should be no exception. D.V. Gorokhova (2022) claims that the evaluation of the effectiveness of the controlling system is an analysis of the informational and analytical support of managerial decision-making that takes place under conditions of uncertainty. Accordingly, risk is one of the key components that must be considered when assessing the effectiveness of the controlling system based on the ideology of risk minimization.

We consider it appropriate to distinguish the evaluation of the effectiveness of the controlling system in the public sector as an independent approach based on the risk-oriented method. This evaluation includes a set of components of the risk management cycle, consisting of risk identification, qualitative and quantitative analysis, development of risk management measures, and a system of continuous or periodic monitoring of risks, which should be applied within each object of assessing the effectiveness of the controlling system and the system as a whole.

Within each evaluation object, its own nature of risks arises, influenced by a significant number of external and internal factors. In the process of assessing the effectiveness of goal setting, it is necessary to start with risk identification (e.g., the risk of incorrectly assessing the strategy implemented by a public sector entity as "weak"; the risk of failing to identify areas for strategy adjustment, which could subsequently reveal the potential of the public sector entities to a greater extent, etc.). Each public sector entity forms its risk map, which depends on the purpose of evaluating the overall controlling effectiveness and for each object separately, the type of activity, ownership form, time interval, internal and external environmental factors, etc. After risk identification, qualitative and quantitative analysis must be conducted to determine the possible consequences of risk realization and the likelihood of negative risk factors. The results of this analysis help identify zones of varying risk levels (low, moderate, high) and develop risk management measures within the scope of the evaluation object. Based on this set of actions, it is advisable to develop a risk monitoring system for the goal-setting object.

Today, interdisciplinary research is being conducted, and it is difficult to clearly define the boundaries of approaches as the lines between many phenomena and processes become blurred. In our opinion, the most promising and newest methodological approach to assessing the effectiveness of the controlling system in the public sector is the integrated approach.

The essence of this approach lies in the balanced integration of the theoretical foundations, methodological developments, and tools necessary within public sector entities, combining systemic, object-based, and risk-oriented approaches to evaluating the effectiveness of the controlling function. This balanced integration based on systemic, object-based, and riskoriented approaches within public sector entities will contribute to achieving a synergistic effect.

The methodology for assessing the effectiveness of the controlling system in the public sector based on the integrated approach involves modeling the methodology and techniques for evaluating the controlling function, formed based on a balanced integration of systemic, objectbased, and risk-oriented approaches (Figure 3).



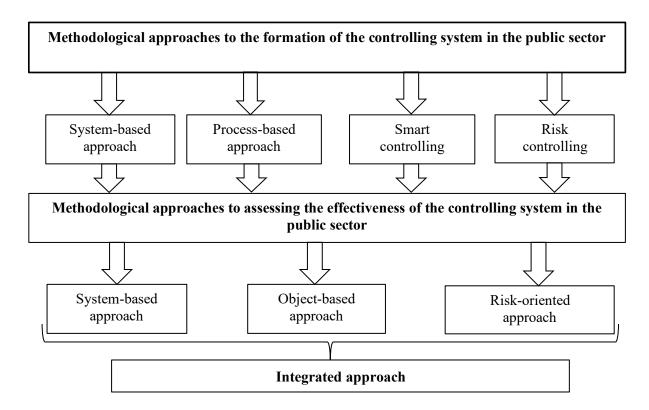


Figure 3. Methodological approaches to the formation and assessment of the effectiveness of the controlling system in the public sector **Source:** compiled by the authors.

The combination of constituent elements of these approaches to assessing the effectiveness of the controlling system in the public sector within the framework of the integrated approach depends on the purpose of the assessment procedure and the specific functioning of a public sector entity. For example, if it is necessary to evaluate the entire controlling system within a public sector entity, it is advisable to apply elements of the systemic approach combined with the risk-oriented approach since the need for monitoring and assessing risk levels is a critical aspect under conditions of uncertainty, especially when using modern information systems. If it is necessary to evaluate a single object or a set of objects within the controlling system of a public sector entity, it is reasonable to integrate the methodological principles and techniques of the object-based and risk-oriented approaches, also utilizing modern data processing information systems.

Within the framework of the conceptual approach to assessing the effectiveness of the controlling system in the public sector presented in Figure 3, the theoretical and methodological principles should be supplemented by methodological approaches and the corresponding toolkit. For methodological support, public sector entities should develop and approve methodologies and models for assessing controlling effectiveness based on the systemic, object-based, risk-oriented, and integrated approaches. As tools, internal standards for evaluating the effectiveness of the controlling system, a set of working documents, job descriptions of specialists assessing controlling effectiveness, and an approved system of performance indicators for assessing the effectiveness of the controlling system in the public sector should be considered.

Within the framework of the conceptual approach to assessing the effectiveness of the controlling system in the public sector (Figure 3), the theoretical and methodological principles should be supplemented with methodological approaches and appropriate tools. For methodological support, public sector entities should develop and approve methods and models



for evaluating the effectiveness of controlling based on systemic, object-oriented, risk-oriented, and integrated approaches. We consider the following tools: internal standards for assessing the effectiveness of the controlling system, a set of working documents and job descriptions for specialists evaluating controlling performance, and an approved system of indicators for assessing the effectiveness of the controlling system in the public sector.

5. DISCUSSION

In relation to public sector entities, there is significantly less research on evaluating the effectiveness of controlling systems compared to the commercial sector.

Garcia-Sanchez and Cuadrado-Ballesteros (2016) associated the use of new tools for public financial management with improved efficiency in the use of these resources. At the 49th IEEE Conference on Decision and Control held in the United States in 2010, X. Sun and Y. Li presented the results of their joint study on evaluating the effectiveness of controlling systems using the multi-criteria decision-making (MCDM) method. Based on a synergetic approach, they integrated areas such as decision-making and control through the application of fuzzy set theory. The scholars identified a relationship between control tasks and decision-making, wherein the tasks of a controller are aligned with the alternatives considered in the decision-making process.

Sousa and Kaymak (2002) examine control systems from time and frequency perspectives and interpret them as follows: if a control system is defined in the time domain, the optimal system is the one with the shortest rise time, the least overshoot, the smallest error, and the lowest control effort. However, these efficiency criteria often contradict one another. For instance, a system with a shorter rise time typically has higher overshoot and requires greater control effort. Thus, when multiple conflicting criteria must be considered simultaneously, selecting the most effective system becomes a typical task for the MCDM method. This research proposes a conceptually new approach based on the integration of MCDM methods into evaluating the effectiveness of controlling systems. The same approach was also adopted by Sun and Li. The authors emphasize that the primary goal of MCDM is "the finding compromise solution that best satisfies conflicting goals/attributes/constraints" (Sun & Li, 2010, p. 3718).

An international team of researchers led by Otoo et al. (2023) published the results of a study on the impact of internal control systems on the efficiency of the banking sector. The study was based on data from 15 commercial and 20 agricultural banks. The findings showed that three key components of the internal control system significantly affect organizational efficiency: control activities, control environment, and risk assessment, i.e., all these elements are represented in the COSO model. In evaluating the effectiveness of the internal control system, the authors applied agency theory and contingency theory. Contingency theory posits that there is no universally superior strategy for assessing the effectiveness of internal control systems. Nevertheless, the authors unanimously concluded that the low maturity level of the internal control system is the root cause of most corporate failures, often leading to theft, revenue loss, and fraudulent collusion. In this context, a comprehensive approach to evaluating effectiveness is considered highly relevant. Comparable reform trajectories in EU countries demonstrate how integrated controlling frameworks contribute to higher transparency and fiscal discipline, particularly in Germany and the Netherlands where performance-based budgeting is coupled with risk monitoring. Similarly, emerging economies such as Brazil and Vietnam have piloted hybrid controlling systems that highlight both the opportunities and challenges of adapting international best practices to less mature institutional contexts [insert references]. These parallels underscore that the integrated framework proposed here aligns with broader global trends in public administration reform.



Horváth & Partners proposes an "iterative approach to improving the effectiveness of controlling, which involves the implementation of a set of measures (positioning of controlling, analysis of the existing controlling system, benchmarking)" (Danilochkina, 2015, p. 45). Additional measures may include the search for new methods and tools, development of the controlling system design, implementation of adopted solutions, and management of training and change processes. The continuous application of this approach allows the controlling system to adapt to ongoing changes in the internal and external environments.

The implementation of management control and performance systems in public sector organizations is emphasized by Felício et al. (2021). Ramos et al. (2021) proposed the development of tools for assessing sustainable development effectiveness within public sector organizations. Fedchenko and Buryakova (2024) developed "an approach to assessing the performance of public sector organizations based on the principles of economic theory" (p. 13). The authors argue that the effectiveness of institutions under public ownership, from the standpoint of basic economic theory, is represented by the ratio of consumed resources (Cf) to the goods and services produced (Qf). Efficiency can be improved either by reducing the cost or volume of production factors used, or by increasing the output derived from their utilization.

Gorokhova (2022) developed a methodology for evaluating the effectiveness of automated controlling systems and proposed an algorithm for such evaluation tailored to public institutions. The author emphasizes that "controlling must be imbued with a risk minimization ideology", for which a risk map for public institutions has been developed based on the nature of risk occurrence. Furthermore, smart controlling should be proactive, which can be achieved through the application of artificial intelligence technologies, whose level remains extremely low in the public administration sector in general and in public finance management in particular. Rapid advances in digital transformation are reshaping public administration. Albased risk monitoring systems and predictive analytics already support smart controlling by identifying anomalies, forecasting budgetary pressures, and enhancing decision-making under uncertainty. Integrating such technologies within the proposed framework can significantly strengthen real-time transparency and adaptive governance, bridging the current gap between conceptual models and practical digital applications. Bracci et al. (2022) also explored the applicability of risk management tools in the public sector, assigning them a crucial role in enhancing the performance of public sector organizations.

The proposed integrated methodology has direct policy implications. By improving transparency through standardized indicators, enhancing accountability via structured risk assessment, and strengthening evidence-based decision-making, it supports the development of governance systems that are not only efficient but also resilient and trustworthy. These implications are particularly relevant for policymakers tasked with designing reforms in environments of fiscal constraint and rising public expectations.

6. CONCLUSIONS

Thus, we proposed a concept for evaluating the effectiveness of the controlling system in the public sector developed based on various methodological approaches. Within the framework of the study, an algorithm for applying a new methodological approach was designed based on the analysis of the system-based, object-based, and risk-oriented approaches to evaluating the effectiveness of controlling systems in the public sector. This new approach referred to as the integrated approach provides a balanced combination of theoretical and methodological principles, methodological guidelines, and tools from system-based, object-based, and risk-oriented approaches. It ensures flexibility in organizing and operating the evaluation system according to the conditions specific to public sector entities and contributes to achieving a synergistic effect.



For policymakers, the framework provides a structured basis for designing transparent and accountable governance mechanisms. For managers in public organizations, it offers tools to align strategic planning, budgeting, and risk management. For auditors, it delivers a set of indicators and evaluation principles that support rigorous and standardized oversight.

Future research should focus on empirical testing of the proposed framework across diverse public sector contexts. Cross country comparisons, particularly between EU states and emerging economies, could help identify transferability and adaptation challenges. In addition, applying the framework in crisis settings such as sanctions, pandemics, or fiscal shocks would demonstrate its resilience and adaptability.

Thus, the integrated approach not only advances the maturity of public sector controlling systems but also provides a foundation for sustainable competitive intelligence. By improving resilience, supporting evidence-based policy, and fostering strategic adaptability, this methodology contributes to organizational sustainability across sectors.

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