Rethinking Performance-based Budgeting: The Case of the Russian Healthcare System

Irina Dokalskaya, Rubens Pauluzzo*

Aiming to enhance efficiency, performance, and accountability in the management of the public sector, performance-based budgeting (PBB) has gained prominence worldwide. The present study addresses the challenges of implementing and managing PBB in the Russian public sector, with a particular focus on the Orel region’s long-term targeted healthcare programs. Drawing on case study analysis and empirical evidence, the study identifies specific challenges hindering effective PBB implementation, including effectiveness issues, revenue generation concerns, and passive actors with limited knowledge and skills. The study sheds light on the complexities and tensions arising from a top-down approach to PBB implementation and offers insights into prioritizing expenditures amid economic and geopolitical factors in emerging market economies like Russia.

Keywords: performance-based budgeting, public sector, healthcare, case study, emerging countries, Russia.

Ripensando il performance-based budgeting nei Paesi emergenti: il caso del Sistema Sanitario Russo

Con l’obiettivo di migliorare l’efficienza, la performance e la responsabilità nella gestione del settore pubblico, il performance-based budgeting (PBB) ha acquisito rilevanza a livello mondiale. Questo studio affronta le sfide dell’implementazione e della gestione del PBB nel settore pubblico russo, con particolare attenzione ai programmi sanitari a lungo termine della regione di Orel. Attingendo alle evidenze empiriche di un caso studio, l’analisi identifica specifiche difficoltà che ostacolano l’efficace implementazione del PBB, tra cui problemi di efficacia, preoccupazioni sulla generazione di entrate e attori passivi con limitate conoscenze e competenze. Lo studio getta luce sulle complessità e tensioni derivanti da un approccio top-down e offre spunti sulla definizione delle priorità di spesa in economie emergenti come la Russia.

Parole chiave: performance-based budgeting, settore pubblico, assistenza sanitaria, caso studio, Paesi emergenti, Russia.

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Acknowledgments. The article is the outcome of the joint work of all authors. Rubens Pauluzzo wrote the sections ‘Introduction’, ‘Evolution and challenges of performance-based budgeting in Russia’, and ‘Findings’; Irina Dokalskaya wrote the sections ‘Healthcare system in Russia’, ‘Methodology’, and ‘Conclusion and directions for future research’.

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First submission: 24/07/2023, accepted: 12/12/2023

1. Introduction

Over the past three decades, there has been a significant push for change, innovation, and modernization in public administration, leading to a greater emphasis on measuring and communicating results (Lapsey, 2009). In this regard, governments worldwide are still concerned about public sector reforms, particularly regarding the integration of budgetary decisions with the results achieved (Gilmour and Lewis, 2006). The structural foundations of public organizations have undergone changes in many countries as a result of modernization initiatives aimed to improve the quality and productivity of services by adopting management techniques inspired by the private sector (Perry, Engbers and Jun, 2009). The increasing demand from citizens for higher quality services and policies, coupled with limited resources, has driven the need for a better understanding of economic and financial performance, which is crucial for achieving strategic objectives, maintaining service quality, and ensuring the effectiveness of public administration (Gilmour and Lewis, 2006; Perry, Engbers and Jun, 2009).

Aiming to enhance efficiency, performance, and accountability, outcome-based systems in the management of the public sector, such as performance-based budgeting (PBB), have thus gained prominence and have become a cornerstone of the New Public Management (NPM) approach (e.g., Diamond, 2005; Pollitt and Bouckaert, 2011; Speklé and Verbeeten, 2014). These techniques emphasize the measurement and evaluation of outcomes and results, providing a framework for linking funding decisions to performance goals and objectives, allowing for better decision-making and allocation of resources based on expected outcomes (Lapsley and Miller, 2019; OECD, 2018; Schick, 2014). In this respect, even though PBB approaches have gained global support, practitioners have raised concerns about its implementation and impact (Aleksandrov, Khodachev and Bournistrov, 2021). Such issues mainly relate to the interpretation and measurement of outputs and outcomes, the potential manipulation of reported performance, the ways in which PBB is introduced and managed, and how performance funding is operationalized (de Vries and Nemec, 2019; Schick, 2008). To address these concerns, several studies have explored PBB-related reforms from interdisciplinary perspectives, such as accounting, public management, and organizational sociology (e.g., Mauro, Cinquini and Grossi, 2017; Saliterer, Sicilia and Steccolini, 2018). Nonetheless, they have primarily focused on Western developed economies, mainly considering the English-speaking context, thus limiting their applicability to other settings (van Helden and Uddin, 2016).

More specifically, while the PBB model has gained traction in industrial countries, its use and attention in emerging market economies have been relatively recent. Even though there is no universally accepted definition, emerging market economies refer to countries in the process of transitioning to a more advanced stage of economic development. They typically exhibit rapid economic growth, industrialization, and urbanization, as well as increasing per
capita income, expanding middle class, rising consumer demand, and improving infrastructure (Duttagupta and Pazarbasioglu, 2021). These economies have started to recognize the potential benefits of PBB in improving public sector efficiency, transparency, and accountability. However, they have faced unique challenges in implementing PBB systems (Diamond, 2003). In this regard, even though some of these economies have made progress in adopting medium-term budget frameworks, they have also acknowledged that real financial discipline requires a shift in the underlying budget-management model (Nemec and de Vries, 2019). Indeed, the lack of rapid advancements in transitioning from traditional program-based budgeting to PBB suggests that emerging market economies have encountered important implementation problems (Diamond, 2003). These challenges include limited technical expertise and institutional capacity to establish robust performance measurement frameworks and track relevant performance indicators, the absence of strong institutions and legal structures, resistance from entrenched interests and bureaucratic inertia with potential loss of control over budget decisions or the fear of negative political consequences, inadequate data and information systems, limited stakeholder engagement and participation, few resources and competing priorities that can hinder the allocation of adequate funding for capacity-building efforts, and the lack of dialogue among practitioners across government levels during PBB reforms (Aleksandrov, Khodachek and Bourmistrov, 2021; Mauro, Cinquini and Grossi, 2017; OECD, 2018; Pollitt and Bouckaert, 2011; Schick, 2014).

In the context of emerging market economies, Central and Eastern European (CEE) countries and Russia, due to their unique situation, represent a crucial testing ground for implementing PBB (Nemec and de Vries, 2019). The insights gained from their experiences hold significant global significance and offer compelling evidence for developing countries worldwide. Transitioning from their previous centrally planned and organized system, these countries stand as a distinct case, since the adoption of NPM ideas did not stem from business practices, but rather from international financial institutions (Pollitt, 2009; Timoshenko and Adhikari, 2010). Indeed, unlike many developing economies, these countries had an existing accounting tradition and a sophisticated administrative planning system inherited from the socialist state (Khodachek and Timoshenko, 2018). Nonetheless, they followed different evolutionary trajectories. While some CEE countries (Bulgaria, Czech Republic, Slovakia, and Slovenia) formally adhered to all the rules used in modern market-based democratic societies, others, like Russia, adopted a sort of state-regulated market economy/developmental state with significant impact on governmental accounting (Khodachek and Timoshenko, 2018). More specifically, since the beginning of 2000s, Russia experienced a wave of NPM-driven reforms in its public sector (Bourmistrov, 2006). These reforms, initiated from the top-down, represented a clear shift in the ideological underpinnings of Russian public administration. They included structural reforms of government agencies, changes in federal relations and self-government, the introduction
of PBB and medium-term financial planning, and a move towards accrual accounting from traditional cash accounting (Khodachek and Timoshenko, 2018). As a result, a hybrid accounting system, that combines historical elements from the past with some present-day innovations, has emerged (Antipova and Bourmistrov, 2013). Hence, the introduction of PBB into the context of Russian government, where planning and forecasting have longstanding traditions, may thus lead to unanticipated outcomes that can diverge from what is typically observed in liberal market economies, which deserve more attention from both scholars and practitioners. However, while the extant body of research has mainly investigated the implementation of PBB systems among Western developed economies, there is a noticeable lack of rigorous research specifically focused on the current Russian PBB system (Khodachek and Timoshenko, 2018; van Helden and Uddin, 2016).

The primary objective of this study is to tackle this existing research gap. In this light, our analysis aims to address the following research question (RQ):

RQ. What are the main challenges arising from the implementation and management of PBB in the Russian public sector?

In particular, we adopted a case study analysis focusing on long-term targeted (budgetary) healthcare programs of the Orel region in Russia. We gathered empirical evidence from multiple data sources: interviews, field observations, and internal documents. The remainder of the study is organized as follows: Section 2 investigates the evolution and challenges of PBB in Russia, with particular reference to the Russian healthcare system. Section 3 explains the methodology employed. Section 4 discusses the primary findings of the study, focusing on three key challenges that emerged during the analysis: effectiveness issues, concerns related to revenue generation and distributive mechanisms, and the presence of passive actors or participants with limited knowledge and skills. Finally, the concluding section offers closing remarks and suggests potential avenues for future research.

2. Evolution and challenges of performance-based budgeting in Russia

PBB in Russia has undergone a significant transformation over the years. Following the disintegration of Soviet Union, Russia embarked on a path to incorporate fundamental market mechanisms, while the modernization agenda for public governance emerged only in the late 1990s (Alexandrov et al., 2021). Nonetheless, since the beginning of 2000s, the Russian state has significantly strengthened its presence in the national economy (IMF, 2013), increasing budget investments to support state-owned companies and state corporations, and de-privatizing key assets in the fossil fuels sector (Khodachek and Timoshenko, 2018). In this regard, the importance of reforming the budget process was considered highly significant, particularly when taking into account the on-going administrative and other reforms in federal relations and self-government (Kommersant, 2004). Indeed, the former budgeting process primarily relied on input-based budgeting, where funds were allocated based on historical expendi-
ture patterns and incremental adjustments. However, recognizing the need for more efficient resource allocation and improved public service delivery, Russia undertook a series of reforms to transition towards PBB (Klimenko, 2019). In this respect, Russian decision-makers were significantly affected by international organizations like the International Monetary Fund and the World Bank, which propagated budgeting and accounting ideas commonly found in the West, that were coercively diffused by government officials throughout Russia (Khodachek and Timoshenko, 2018).

In the early 2000s, pilot projects were initiated in several regions and federal agencies to modernize the public sector budgetary and accounting system (e.g., introducing multiannual budgeting and accrual accounting for public-sector institutions) and test PBB concepts (Alexandrov et al., 2021). For instance, the Russian Federation Government Resolution number 249/2004 “On measures to improve the effectiveness of budget expenditures” was directly related to PBB implementation. These projects aimed to identify key performance indicators (KPIs) and develop frameworks for measuring and evaluating program effectiveness. Lessons learned from these pilots paved the way for broader implementation across the country. To support the adoption of PBB, Russia has also introduced legislative changes, including amendments to budgetary laws and the establishment of guidelines and methodologies for performance measurement, with particular reference to ministries and agencies’ spending obligations and revenue generation plans (Klimenko, 2019). These reforms aimed to align budget allocations with the achievement of specific targets and outcomes, encouraging government entities, as well as regional and local governments, to focus on results and accountability (Alexandrov et al., 2021). Furthermore, Russia has invested in developing the necessary institutional capacity to implement PBB effectively. This involved training budget officers, establishing performance evaluation units, and enhancing data collection and analysis capabilities. The government has also promoted the use of technology to streamline budgeting processes, monitor performance, and facilitate data-driven decision-making. As a result, PBB in Russia has expanded beyond individual programs and projects to encompass entire government sectors and agencies. It has become an integral part of the budgetary cycle, with performance information influencing resource allocation decisions at various government levels (Antipova and Bourmistrov, 2013; Timoshenko and Adhikari, 2009). In particular, the implementation of a PBB system has become crucial in the last few years, due to the economic stagnation and the reduction of budget revenues in the wake of fluctuating energy prices, international sanctions, and the consequences of the Russia-Ukraine war (Klimenko, 2019). As a result, enhancing the effectiveness of budgeting spending for all Russian government levels has become a fundamental objective that deserves further investigation.

However, such a top-down approach created difficulties for many public sector entities, leading to a gap between the external perception of Russia as an NPM reformer and the local reality (Khodachek and Timoshenko, 2018). While these reform efforts resonated...
PBB approach requires a fundamental transformation of budgetary practices and mindset. Resistance from vested interests and a reluctance to adopt new methodologies thus pose a significant hurdle.

In addition, the introduction of PBB has raised concerns about the effective degree of autonomy of local entities to manage the competing demands of internal and external accountability (Aleksandrov, Bourmistrov and Grosi, 2020). According to the Russian hybrid PBB system, municipal budgets must align with the government’s goals (Khodachek and Timoshenko, 2018). This is achieved through program documents that outline specific outputs and performance measures to assess whether the programs are effectively achieving their objectives within the allocated funds. In this approach, budget allocations at the local level are determined based on planned outputs and outcomes. Hence, local governments are required to meet performance targets set by higher-level authorities in order to receive co-financing of local activities, without much reflection on whether and how these targets adhere to local interests (Aleksandrov, Bourmistrov and Grosi, 2020). As a result, local entities are now more dependent, not only on input demands, but also on outputs and outcomes, thus improving the tensions between external requirements and local discretion, and increasing the risk of distracting the local entity from internal needs (Aleksandrov, Khodachek and Bourmistrov, 2021). In practice, this centrally driven control means that local interests find no space in budgeting and the results delivered by local entities and the related activities are not coherent.
face limitations in achieving its intended goals of enhancing efficiency, accountability, and the allocation of public resources.

3. Healthcare system in Russia

The healthcare financing system in Russia is complex and has evolved as a result of reforms implemented in both the healthcare sector and budgetary practices. These reforms include the introduction of PBB, treasury budget execution, procurement systems, and changes in the organizational and legal structures of state and municipal institutions (Faiberg and Shcherbakova, 2021). In this regard, despite efforts to implement an insurance model, Russia has developed a budget-insurance model for healthcare financing. More specifically, the process of allocating funds from funding bodies to medical institutions, and subsequently to healthcare facilities, consists of two largely separate components.

The first one involves budget financing and is carried out by federal, regional, and local authorities through the redistribution of funds received from taxes in favor of medical institutions. Indeed, regional budgets play a prominent role, as the majority of healthcare institutions in the country are owned by regions. State budgetary and autonomous institutions thus receive budget allocations and grants and have the freedom to use any income generated from paid services, whereas government institutions are required to transfer such income to the budget without any discretion (Faiberg and Shcherbakova, 2021). Budget financing allows for control over funds and the implementation of national priorities, particularly ensuring access to medical care for the population. Furthermore, it
facilitates the effective containment of rising medical costs. Consequently, budget financing system for healthcare aligns more closely with the principles of economic efficiency and social equity (Mechanik, 2011).

The second component, on the other hand, pertains to insurance-based financing and comprises compulsory and voluntary medical insurance. Despite the significant advantages of budget financing, there is a growing trend to shift towards mandatory health insurance funds as the primary source of healthcare financing at the national level (Ivanov, 2012). Hence, a substantial amount of financial resources is now being redistributed within the framework of compulsory health insurance. Established in 1993, the Extra-budgetary Compulsory Health Insurance Funds involves a federal and a regional compulsory insurance. While this approach aimed to enhance the quality of medical services, it has not produced any radical change in the healthcare system, but instead has led to increased costs associated with maintaining the funds and insurance companies, negatively impacting the accessibility of medical care and exacerbating the shortage of funds (Faiberg and Shcherbakova, 2021; Reshetnikov et al., 2019). Voluntary medical insurance complements the state-funded healthcare system, providing individuals with an opportunity to acquire additional coverage beyond what is offered by mandatory health insurance. Employers often provide voluntary medical insurance as part of employee benefits packages, while individuals can also purchase policies independently. However, even though voluntary medical insurance has gained popularity in Russia, it remains supplementary to the mandatory health insurance system, which ensures basic healthcare coverage for all citizens (Nikulina and Ratkin, 2020).

The intended outcome of these measures was to achieve improvements in the quality and accessibility of constitutionally guaranteed free medical care, while enhancing efficiency and optimizing the utilization of available resources in hospitals and clinics. However, in practice, these actions have resulted in a policy shift towards greater direct participation in healthcare financing, leading to a reduction in the scope of state-guaranteed free services, increased citizens’ responsibility, and higher budget savings (Muhetdinova, 2010). Given the challenging economic circumstances of Russia, exacerbated by the global repercussions of the COVID-19 pandemic and the Russia-Ukraine conflict, the quest for additional government revenues has gained significant importance. In this respect, the importance of an effective healthcare system, together with the implementation of an appropriate budgeting mechanism, have become even more evident. However, the current budgeting process in Russia’s healthcare sector suffers from several shortcomings that need to be addressed. These include redundant links in the funding chain, complexity in fund allocation, and variations in financial resource acquisition and utilization by medical institutions (Faiberg and Shcherbakova, 2021). These issues directly impact the amount of funding available for medical services and hinder the overall effectiveness of the healthcare financing mechanism. In an effort to reduce budgetary expenses, various
measures have been considered, including enhancing the effectiveness of state extra-budgetary funds or moving functions to the federal budget. These challenges acquire particular relevance also in light of the significant regional disparities that characterize healthcare in Russia. Indeed, the country’s geographic size and diverse economic conditions contribute to variations in the availability and quality of medical care across different regions. These differences can be observed in several aspects, such as the number of doctors per population, the availability of specialized medical facilities, the accessibility of healthcare services, the level of care provided, as well as the allocation of financial resources (Klepach and Luk’yayanenko, 2023; Nikulina and Ratkin, 2020). In particular, the examination of healthcare financing at regional level reveals instances of inefficient allocation of financial resources. This because healthcare financing results in an excessive accumulation of funds within the mandatory medical insurance system, which are then directed to the federal budget (Kadyrov, Obukhova and Brutova, 2016), thus generating a deficit in the required annual funding for some regions (Khokhlova and Shatonov, 2016). With shrinking revenues of federal and regional budgets, the future financial provision of healthcare in Russia will become even more dependent on the capacities of regional and federal budgets (Nikulina and Ratkin, 2020). Hence, a thorough assessment of the country’s healthcare financing model within the framework of the existing budget-insurance paradigm is considered crucial to ensure equitable access to healthcare services for all individuals.

4. Methodology

The current research utilized an instrumental case study methodology (Yin, 2018). In this study, we specifically focused on a holistic examination of a single case, namely the Orel region in Russia, to explore the primary challenges faced by long-term targeted (budgetary) healthcare programs. By examining various elements of the case, including its context, participants, and dynamics, researchers can uncover profound insights and develop a nuanced understanding of the intricate complexity and interconnectedness of the phenomenon being investigated (Stake, 2005).

4.1. Data sources

To address a wide range of contextual, attitudinal, and behavioral issues, we employed multiple sources of evidence, as recommended by Yin (2018). These included interviews, field observations, and internal document analysis. This approach was essential for ensuring the validity and reliability of the data, thereby increasing the likelihood of obtaining trustworthy results (Lincoln and Guba, 1985).

In our study, we conducted interviews with nine individuals who held key positions in the public sector of the Orel region and possessed significant practical experience relevant to our research focus. Specifically, we interviewed two representatives from the Orel Regional Council of People’s Deputies, two representatives from the Department of Finance, two representatives from the Department of Health and Social Development, a representative from the Territorial Mandatory Medical Insurance Fund,
and two representatives from the Orel Regional Clinical Hospital. Our decision to target these managers aligns with Patton’s (2002) concept of identifying and selecting cases that provide substantial information, optimizing the use of limited resources. Moreover, we specifically sought out individuals with specific expertise related to the phenomenon under investigation (Creswell and Plano Clark, 2011).

The Orel region is part of the Central Federal District of the Russian Federation. Situated in the Western part of Russia, it covers an area of almost 25,000 square kilometers with a population of 713,000 inhabitants. In terms of gross regional product, the region ranks 8th among those of the Central Federal District and 29th among all regions of the federation. However, specifically in the last few years, it has suffered severe disparities in terms of socio-economic development. We thus focused on the Orel region since it represents one of the main recipients of the state budgetary funds. Indeed, this region receives financial resources through the budget equalization mechanism and represents a crucial example of the implementation of the PBB logic, which makes it possible to effectively determine the directions for investing budgetary funds in order to increase the overall level of socio-economic development. All interviews were conducted individually at the respective headquarters of the entities involved, spanning the period from July to October 2021. Semi-structured questions guided the interviews and primarily focused on the following areas of information: (i) the effectiveness of budget allocation and its evaluation; (ii) coordination challenges in implementing government policy measures; (iii) the transition to the new budget system; (iv) difficulties in monitoring funds amidst changing conditions; (v) the shift from estimated funding to program-based funding approach; (vi) limitations in healthcare planning, funding, and budgetary programs in the healthcare sector; and (vii) the determination of priorities in expenditure planning. Each interviewee was allocated a minimum of thirty minutes and a maximum of two hours for the interview. The interviews were recorded and transcribed to ensure accurate quotation of the interviewees’ statements. Prior to the interviews, informed consent was obtained from the participants, and in return, we assured them of the confidentiality of their identity and provided information about the study’s objectives (Lincoln and Guba, 1985). To minimize or eliminate cultural bias, the interviews were conducted neutrally, with the interviewer (one of the authors) and interviewees being native speakers of the same language (Holstein and Gubrium, 1995).

Our second source of evidence consisted of field observations. We employed a selective observation approach (Angrosino and Perez, 2000) to follow the activities of public representatives/deputies in the Orel region who were involved in implementing the PBB system. These observations took place from July to October 2021. Throughout this period, we actively participated in both formal and informal conversations and meetings related to the implementation process. During the field observations, our focus was on examining the actions and behaviors of the
individuals engaged in the implementation and operation of the PBB system. We carefully observed their organized routines and recorded their actions and interactions, including both verbal and physical aspects. Our objective was to capture specific details that could contribute to a comprehensive description of the context and identify potential patterns that emerged. In addition, we made theoretical and personal notes to record our thoughts and feelings regarding the observations made. These details were subsequently incorporated into the final write-up, allowing for the analysis of emergent categories and patterns, as well as providing commentary on our observations.

Lastly, we gathered both internal and public documents to enrich our research. This included annual reports, governmental documents (e.g., resolutions of the Government of the Orel region and orders of the Board of the Orel region, policy documents related to the modernization of the healthcare system in the Orel region), as well as other organizational documents (e.g., programs outlining state guarantees of free medical care in the Orel region and KPIs of the Department of Health and Social Development). We also collected slides utilized during meetings discussing the development, implementation, and evaluation of public programs, including long-term regional target programs (LRTPs) and departmental targets. Furthermore, we relied on datasets containing longitudinal, quantitative, and qualitative data pertaining to the proposed projects. These diverse sources of data enabled us to employ triangulation, enhancing the trustworthiness of our research.

This comprehensive approach allowed us to delve into subjective experiences, explore their meanings, develop concepts, and test theories based on empirical evidence. It also facilitated the generation of more meaningful results concerning the interrelationships between core factors from an emic perspective. By studying the phenomenon within its contextual framework, we were able to gain an understanding of the underlying meanings and beliefs that drive actions. To ensure the quality of our investigation, as well as assess internal validity, external validity, construct validity, and reliability, we considered dimensions of trustworthiness adapted from Yin (2018) and other scholars (e.g., Campbell and Stanley, 1963; Eisenhardt, 1989).

4.2. Data analysis
We conducted content analysis on the collected evidence using qualitative coding techniques as outlined by Strauss and Corbin (1998). To facilitate data analysis, the data gathered from various sources were transcribed into the Nvivo software package. During this process, we re-read the transcripts and made annotations in the margins to record our thoughts and observations. Subsequently, we applied coding to the data at different levels, including word, phrase, sentence, or paragraph, in order to identify specific patterns and themes. Some codes were refined to provide a more precise description of the data, while others were grouped into broader categories. The process of classifying the data involved identifying overarching themes or dimensions. Through interpretation, these themes were then interconnected or linked to constructs...
developed in a research map. From the content analysis, several key challenges emerged, including: (i) effectiveness issues; (ii) concerns related to revenue generation and distributive mechanisms; and (iii) the presence of passive actors or participants with limited knowledge and skills. These themes will be further discussed in the subsequent paragraphs with greater detail.

4.3. Long-term healthcare programs in the Orel region

The financial support for long-term healthcare programs in healthcare is ensured through the implementation of specific programs outlined in the State Program of the Orel region ("Development of the healthcare industry in the Orel region"). The responsibility for executing these programs lies with the healthcare facilities in the region, and the funding is allocated from both regional and federal budgets. The state program consists of various components, including LRTPs (e.g., the "Personnel healthcare facilities of the Orel region"), subprograms (e.g., the "Personnel maintenance of the healthcare system"), target indicators and state program indicators, program stages and timelines, and expected outcomes of the state program (see Fig. 1 for the structure of the state program).

Regional programs and the related subprograms define goals, targets, parameters, expected outcomes, and indicators of socio-economic benefits. However, the achievement of final results depends on various factors, including morbidity rates, ecological impact, population lifestyle, and the social situation in the region, which are beyond the direct influence of the Department of Health and Social Development. In this regard, even though the development of multi-
ple LRTPs has allowed to encompass all the activities of the Department of Health, along with several target programs aligned with the directions of healthcare industry, a clear connection between goals, objectives, activities, and the system of target indicators is still missing. A correct definition of performance indicators for each activity and the identification of the needed changes in their values are thus essential to make these activities purposeful and measurable. This is also necessary for monitoring the progress of the program implementation and evaluating the extent of its success in qualitative and quantitative terms.

In the next paragraphs, we will describe the key challenges that emerged from the content analysis in greater detail.

5. Findings

Table 1 presents a meta-matrix that displays the data collected from multiple sources, providing a comprehensive view of how the challenges that hinder the proper implementation and further management of PBB processes in the healthcare sector, as well as their main related issues, arise from specific institutional levels. The analysis and presentation of the data were based on the three identified challenges (effectiveness issues; concerns related to revenue generation and distributive mechanisms; the presence of passive actors or participants with limited knowledge and skills). By triangulating data from various sources, we reached a detailed and reliable understanding of the complex nature of PBB implementation and management. This method ensured a thorough and accurate comprehension of the subject matter, allowing us to explore the interplay between institutional processes and factors hindering PBB within the organizations under investigation, as well as their implications for organizational behavior and decision-making. The findings related to each category in Table 1 are discussed separately below, highlighting the specific issues encountered by the investigated organizations and the initiatives adopted to balance them.

5.1. Effectiveness issues

Despite significant efforts made by the government, regions, and municipalities to enhance the effectiveness of budget expenditures, there is still a lack of a well-developed system for evaluating effectiveness. At the federal level, there is no normative document that provides guidelines for selecting target indicators by regions. Indeed, the Budget Code of the Russian Federation merely suggests that "in the preparation and execution of budgets [...] budgetary authorities aim to accomplish the desired outcomes while minimizing expenditure or maximize the outcomes achieved with a specific budget allocation". Consequently, each region independently chooses indicators based on its own judgment. It is logical to assume that evaluating the effectiveness of LRTPs using indicators that do not accurately reflect the objectives of these programs would result in outcomes that diverge from reality, thus generating confusion and lack of consistency. In this regard, a representative from the Orel Regional Clinical Hospital pointed out:

"At the clinic level, performance indicators have not been calculated, except for those related to the profitability of paid medical services, rather than their effectiveness. Cur-
### Tab. 1 – Relationships between the challenges hindering PBB and institutional levels

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<th>Levels of analysis</th>
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<th>Revenue generation and distributive mechanisms</th>
<th>Passive actors—participants with limited knowledge and skills</th>
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**Note:** Leg.: legislative level (adoption of laws, decrees, legal acts, methodological support, etc., ensuring the implementation of PBB tools in budgeting practices); Org.: organizational level ("technical" organization of budget processes, including the distribution of powers between the appropriate authorities, construction of hierarchical relations, formation of goals and objectives; Acc.: accounting level (budget reporting, considering the stages of the budget process).
rently, there is no specific methodology in place to assess the effectiveness of budgetary funds in terms of PBB implementation”.

Second, the practice of evaluating effectiveness based on the correlation between the dynamics of effectiveness indicators and the level of funding represents another significant problem. In the Orel region’s Department of Health and Social Development, the impact of each indicator is assessed by examining the relationship between its dynamics and the funding volume. If negative dynamics occur while the funding remains the same or increases, the program is deemed unsatisfactory. Conversely, if positive dynamics occur while the funding remains the same or decreases, the program is considered successful. This example demonstrates that budget administrators mainly focus on the dynamics of effectiveness indicators rather than the actual effectiveness itself. Consequently, programs with low effectiveness but positive changes are mistakenly perceived as positive. Additionally, economic evaluation of program effectiveness does not apply to activities that have undergone significant changes compared to the previous year, leading to their exclusion from the overall assessment. This understanding of effectiveness shapes budget allocations based on data that do not reflect the reality accurately. As highlighted by a representative from the Department of Health and Social Development:

“In the health industry, it would be more preferable to focus on the social impact of such expenditures, which is challenging to quantify in numerical terms (e.g., reduction in mortality rates, increase in life expectancy, etc., as defined by the Department of Health and Social Development)”.

Third, results achieved in terms of performance in the Orel region are not compared with effectiveness indicators from other regions (which have exhibited varying degrees of success despite receiving similar levels of funding) or, at the very least, with previous performance indicators within the same region. Evaluating effectiveness requires comparing results. It is thus crucial to consider performance indicators and compare achieved values with planned indicators to gain a comprehensive understanding of the effectiveness level of the programs.

5.2. Concerns related to revenue generation and distributive mechanisms

Revenue generation and distributive mechanisms suffer from several contradictions. First, the policies adopted during the transition to a new budgeting model differ significantly between wealthy and financially disadvantaged regions. Highly subsidized regions tend to resort to spending cuts, while low subsidized regions focus on improving expenditure efficiency, as reported by a representative from the Department of Finance:

“Regions with significant subsidies, such as the Orel region, are at the brink of substantial reductions in transfers. In such cases, the initial measure to be taken is still reducing expenses”.

In this respect, “poor” regions usually view PBB tools, particularly target programs, as a means of obtaining additional funding. In practice, these regions often address issues that could
result, the effectiveness of the program is significantly compromised. Without establishing spending priorities for budget allocations, there is a tendency to replicate experiences from federal-level parent organizations without conducting region-specific analyses. This issue thus hinders the successful implementation of the PBB model. In this respect, a representative from the Orel Regional Clinical Hospital argued that:

“If there is a need to allocate additional funds for prioritized expenditures, we would have to request higher authorities to reduce the number of outpatient visits under our responsibility. This would lead to a decrease in available appointments and an increase in the tariff charged for services”.

Fourth, the high fragmentation of funding sources poses challenges in controlling the utilization of allocated budgets and evaluating their effectiveness. Indeed, as suggested by a member of the Orel Regional Council of People’s Deputies:

“Regardless of the situation, relying solely on federal funding is insufficient for the efficient and complete implementation of the program. If there is a lack of equity at the regional level, the program is executed with minimal resources”.

Currently, budgetary institutions in the healthcare sector of the region are funded from various sources, including the regional budget, a mixed source consisting of regional and federal budgets, mandatory health insurance funds, and revenue generated from income-generating activities. This fragmentation makes it difficult to oversee the appropriate use of allocated funds and assess their effectiveness.

be solved within their existing funding, as evidenced by the substantial proportion of spending allocated to other needs within program activities. Furthermore, the relationship between the regions and the federal center is cautiously built based on the region’s efforts to enhance budgetary efficiency. The Russian Ministry of Finance closely monitors the implementation of regional programs aimed at improving efficiency, and the results of these programs may serve as a basis for providing additional financial assistance to the regions. Hence, there is a high risk of perpetuating the disparities among regions with negative effects on the level of healthcare provided.

Second, the absence of provisions for alternative scenarios in case of changes in program financing conditions significantly affects most regional target programs in healthcare. Consequently, when there is a reduction in the cost of a LRTP, it becomes unclear which activities are essential and which are secondary. Changes in the financing of specific program activities increase the risk of disrupting the cause-effect relationship between them, thereby diminishing the program’s potential to achieve its targets. In this regard, it is rare for program goals, objectives, and activities to be adjusted when funding is reduced, which results in a more declarative rather than practical approach to the target program.

Third, the lack of clear priorities in implementing program activities and understanding which activities are key and contribute most to achieving the target program leads to a reduction in funding for all measures when there is a decrease in budget financing. As a
5.3. Passive actors-participants with limited knowledge and skills

Another factor that hinders the successful implementation of PBB is the lack of active participation and inadequate knowledge and skills among the actors involved in the PBB implementation process. In this respect, insufficient coordination between different departments is the first significant obstacle. Departments involved in budget planning, such as the Department of Health and Social Development, often set goals and tasks that require collaboration with other departments. However, departments usually do not share information with others. Hence, without access to relevant information, departments may work in isolation, duplicating efforts, or pursuing conflicting objectives, leading to inefficiencies and reduced productivity, inhibiting informed decision-making, and hindering innovation and problem-solving.

Second, failure to adhere to the hierarchical structure of goals and objectives is a common issue. Many executive staff members in regional authorities lack sufficient knowledge and skills in applying the PBB approach, resulting in the disregard of goal and objective hierarchies. For instance, problems are often formulated in a way that duplicates the objectives, or a single objective is used to achieve multiple goals. This generates significant issues also for higher level entities, as stressed by a representative from the Department of Finance:

“The primary challenge in this scenario is determining the precise amount of funding required to implement the necessary measures aimed at achieving the results outlined in the target programs and using that as a basis to create the program budget. However, due to the current structure of budget classification and reporting, the Department of Finance faces difficulties in comprehending the actual objectives pursued by local administrators when allocating budget funds and the specific tasks for which these funds are utilized. The existing budget classification does not facilitate the creation of a comprehensive budget as well as its reporting in an easily understandable format”.

Third, there is a lack of coherence among the PBB tools. Analysis of PBB tool implementation in regional practices has revealed that, despite participants’ efforts during the integration of the PBB model into the budget process, departments often employ a mechanical approach to prepare relevant documentation. The PBB tools are frequently limited to the budget drafting stage and are either unused or poorly interconnected during subsequent stages of the budgeting process. Indeed, as reported by a member of the Orel Regional Council of People’s Deputies:

“The absence of specific indicators to measure the effectiveness of budget expenditures in line with the new approach is one of the main causes of reduced coherence among PBB tools”.

Fourth, as previously mentioned, directly replicating experiences from higher level organizations without considering regional priorities and specificities negatively affects PBB results. In some cases, health target programs are regarded as counterparts to federal target programs. While aligning with regional and/or federal priorities is essential, it is crucial to incorporate the strategic priorities of the region and conduct a comprehen-
sive analysis of the situation. Merely copying experiences from other organizations can result in repeating past errors and weaknesses.

6. Conclusion and directions for future research

Fig. 2 supports us in interpreting the results by providing a framework to visualize the main challenges and issues that the healthcare system of the Orel region has been facing in the implementation and management of PBB.

6.1. Contribution to theory

Our work contributes to both PBB and emerging market economies literature. In particular, the current study provides insights into how the Russian context, at the different governmental levels, handles the problems generated by the implementation of PBB systems. In this regard, we identified specific challenges that impede the successful implementation and effective management of PBB processes, highlighting the institutional levels from which these challenges and their associated issues arise. The data analysis and presentation have revolved around three identified challenges: effectiveness issues; concerns related to revenue generation and distributive
mechanisms; the presence of passive actors or participants with limited knowledge and skills.

More specifically, the practical implementation of PBB represents a complex financial innovation in budget management. In this respect, it has been anticipated that it will have a long-term nature, requiring consideration of global experiences from both theory and practice in results-oriented budgeting (Diamond, 2003). Our study highlights that the complexity of PBB mainly arises from its multi-level application. This includes the planning of public expenditures at various levels of government, as well as the allocation of budget funds to individual administrators and recipients, such as ministries, departments, state agencies and enterprises, each with their unique characteristics. For policy makers, PBB primarily involves presenting and analyzing budget requests in a manner that allows the public to make effective choices. Executive administrators view PBB as granting them more autonomy, decision-making flexibility, and greater responsibility for the allocated funds.

Drawing on the case of Russia, we reveal that the implementation of PBB systems varies significantly across different levels of government, deviating from the consensus advocated in existing literature (OECD, 2018; Schick, 2014). Despite the rhetoric of efficiency and modernization in public budgeting processes for shared goals (Aleksandrov, Khodachek and Bourmistrov, 2021), our analysis indicates that PBB reforms were predominantly imposed coercively by central authorities, lacking a balanced and two-way exchange. Indeed, although efforts have been made to develop a standardized concept and framework for PBB (OECD, 2018), it is important to note that there is no universally applicable solution for adopting PBB in practical settings (Mauro, Cinquini and Grossi, 2017). In the context of Russia, the introduction of PBB reforms has led to the establishment of a complex regulatory framework for budgeting at the federal level. This complexity encompasses a combination of performance-oriented elements that fell somewhere between performance-informed and direct-performance budgeting approaches (OECD, 2018). Simultaneously, the new approach coexisted with traditional public administration and administrative planning traditions (Khodachek and Timoshenko, 2018). This has generated tensions for regional and local governments in their ability to embrace the central PBB reform and find utility for their own purposes. In this context, even though this reform was initially implemented with the aim of fostering dialogue, granting Russian regions the freedom to experiment with PBB and explore its applicability in collaboration with federal authorities, regional experiences or perspectives have been largely ignored (Aleksandrov, Khodachek and Bourmistrov, 2021). The results of our analysis thus support the argument that the PBB reform has resulted in limited autonomy for budget recipients in spending their allocations. In particular, we highlight that the need to conform to a contradictory and intricate PBB framework has prevent-
6.2. Contribution to practice

Despite the specific approach followed by the Russian government to implement PBB, integrating budget allocation decisions with achieved results remains a contentious issue (Gilmour and Lewis, 2006). This evidence suggests that a clear understanding of quantitative and qualitative indicators of budgetary expenditure effectiveness has not yet been established in practice. This lack of accepted legislative measures for assessing final performance may explain the absence of formal criteria for determining the effectiveness of public funds at the different governmental levels. In practice, ineffective expenditure often signifies the inappropriate use of funds, reflecting an inefficient planning logic. In order to bridge this practice gap, the development of an adequate control system is considered crucial prior to implementing new budget planning principles, as seen in most developed countries where PBB has being adopted. Hence, before delegating new financial mandates to executive authorities, an overall effective control system should be enforced.

Indeed, the implementation of PBB entails numerous challenges and additional requirements. Introducing enhanced accountability and the necessary changes in budget management will be particularly challenging. This will involve improving transparency,

ed regional and local entities from expressing their own voices, shifting regional and local priorities towards aligning with the federal government’s program. This has perpetuated the pivotal role played by the central government as regards the performance-oriented approach in budgeting. The findings thus contribute to our understanding of how public managers should navigate the complexities of operating within a centralized budget tradition, where resource allocation is primarily controlled by the central state in a hierarchical manner (van Helden and Uddin, 2016). The present study also sheds light on the local responses of public managers, particularly in contexts characterized by limited technical expertise and institutional capacity.

Special consideration should also be given to macroeconomic, geopolitical, and social factors. Economic stagnation and the reduction of budget revenues in the wake of fluctuating energy prices, international sanctions, the effects of the Russia-Ukraine war, and the ongoing consequences of the COVID-19 pandemic directly impact the volume of funds and the structure of regional budgets (Klimenko, 2019; Nikulina and Ratkin, 2020). With the shrinking revenues of federal and regional budgets, it is important to recognize them as risks that need to be carefully addressed during the modernization of the financing system. In this regard, the current contribution adds to the development of the theory on PBB by stressing the importance of setting priorities in expenditure, revealing the direct and indirect influence it has on the effectiveness of budgetary funds. Even though this aspect is somewhat overlooked in the literature on PBB, for specific categories of public services, such as healthcare, prioritization becomes even more crucial. In these cases, medical interventions may not be economically efficient, but they are necessary to achieve medical and social outcomes.
placing greater emphasis on evaluating outputs in relation to inputs, and streamlining control mechanisms to balance control needs and new efficiency requirements. Consequently, there will be increased pressure to generate new types of reports that facilitate resource management, potentially leading to an expansion of the accounting base (Diamond, 2003). Implementing output and performance contracting in its entirety is demanding in terms of resources and has been successfully adopted only in a handful of developed countries. However, even a partial shift towards this approach is expected to place significant pressure on administrative systems in emerging market economies. In practice, PBB has proven to be time-consuming and necessitate extensive administrative support (Diamond, 2003). This support includes enhancing accounting practices, costing methodologies, activity tracking, and performance-measurement systems. Our findings thus highlight the importance of having a system that is prepared and equipped to embrace PBB as a novel approach to managing public spending. In this regard, the challenge lies in creating a mechanism that, not only establishes a connection between socio-economic development indicators and budgetary funds, but also incorporates an administration mechanism that extends beyond the financial aspect. Consequently, it is justified to perceive PBB as a comprehensive concept of budget process management, entailing fundamental changes in all components of the budget management system, from planning and goal setting to control and motivation. Failing to understand this could result in implementing PBB as a mere formal project, detached from actual processes or to the ultimate reform goals, ultimately undermining its potential.

In this research, we demonstrate the causal link between factors hindering successful PBB implementation and the level at which these problems arise. Just as various PBB tools, such as program budgets and strategic planning documents, should be linked and integrated into the budget process, different levels of government should interact vertically and horizontally. This mechanism should be transparent and understandable to all participants involved to avoid creating situations where each administrative and managerial level relies on its subjective understanding, leading to numerous contradictions. As evident from the case study analysis, lower managerial levels often lack the necessary professional knowledge to effectively introduce such innovations. Hence, a constant dialogue among the different governmental levels should be carefully nurtured to reduce the risk of misunderstandings.

6.3. Limitations and suggestions for further research

While our findings provide insights into the implementation and functioning of PBB in the healthcare system of the Orel region, it is important to expand our research to investigate whether similar processes occur in different cultural and organizational contexts (in both developed and emerging market economies), as well as within other public sectors. To draw generalized conclusions, additional results from other settings need to be included. Additionally, conducting a
longitudinal study would be valuable to gather long-term data and analyze the dynamic aspects of the processes being studied. Furthermore, it is worth noting that instrumental case studies rely heavily on researchers’ interpretation and subjective judgment, introducing potential biases and limiting the objectivity of the study. During the course of our research, we also recognized the risk that participants’ responses may lack transparency. To mitigate this potential distortion, we incorporated multiple data sources, which allowed us to gather a broader range of information and perspectives. By accessing the field, we were also able to reduce the risk of obtaining one-sided findings. This approach provided us with a more comprehensive understanding of the subject matter.

To broaden our research, it is advisable to analyze other public entities that are currently implementing or planning to implement PBB in the future. Hence, we encourage further studies on this captivating research topic to explore how public entities can address the challenges of PBB and effectively manage its implementation, monitoring, and functioning.


