

Original Article

Received: 2025/09/08
Revised: 2025/10/31
Accepted: 2025/11/01



COPYRIGHTS

©2025 The author(s). This is an open access article distributed under the terms of the Creative Commons Attribution (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, as long as the original authors and source are cited. No permission is required from the authors or the publishers.



HOW TO CITE THIS ARTICLE

Ghorbani F. Behboud D. Identification and systematic analysis of barriers to implementation Performance- Based budgeting: evidence from Tabriz municipality. *Urban Economics and Planning* 7(3):4-27.

DOI: [10.22034/uep.2025.545412.1708](https://doi.org/10.22034/uep.2025.545412.1708)

Identification and systematic analysis of barriers to implementation Performance- Based budgeting: evidence from Tabriz municipality

Fahmideh Ghorbani^{1*}, Davood Behboudi²

1. Postdoctoral Fellow, Department of Development Economics and Planning, Economic and Management Faculty, University of Tabriz, Iran
2. Professor, Department of Development Economics and Planning, Economic and Management Faculty, University of Tabriz, Iran

Abstract

This study aims to identify and systemically analyze the barriers to implementing Performance-Based budgeting in Tabriz Municipality. A qualitative research approach and thematic analysis were applied. Data were gathered through a systematic review of literature, relevant laws and official documents, and semi-structured interviews with managers and experts in urban planning and budgeting. Data analysis was conducted in MAXQDA, while causal relationships among the barriers were illustrated through causal loop diagrams (CLDs) developed in Vensim. To ensure coding reliability, inter-coder agreement was assessed, yielding an agreement rate of 82 percent.

The findings indicate that the barriers to Performance-Based budgeting fall into three themes: barriers due to environmental attributes, barriers due to organizational resources, and barriers due to organizational capability. Key environmental barriers include centralized decision-making, political influences, insufficient legal support, economic instability, and limited stakeholder participation. Barriers due to organizational resources are inadequate sustainable financial resources, weak information infrastructures, limited professional expertise, and the lack of integrated financial systems. Moreover, weak accountability culture, short-term managerial perspectives, misalignment between planning and budgeting, and the absence of a clear overarching strategy represent major barriers due to organizational capability.

The CLDs and the resulting conceptual framework identified twenty-one feedback loops—thirteen positive and eight negative—highlighting the dynamic and interconnected nature of the barriers. Overall, the results suggest that successful and sustainable implementation of Performance-Based budgeting depends on simultaneous reforms in urban governance structures, enhancement of information infrastructures, human resource capacity development, and institutionalization of a performance-oriented culture within the municipality.

Keywords

Causal Loop Diagram (CLD)
Performance Budgeting
Qualitative System Dynamics
Systems Thinking
Urban Governance

* Corresponding Author: f_ghorbani@tabrizu.ac.ir

1. Introduction

Municipal budgeting is a crucial process in urban management, serving as a tool for planning, organizing, and controlling financial resources to deliver public services to citizens. This process provides a framework for organizing urban development needs, service provision, and the implementation of development projects within the limits of available financial resources. Municipal budgets are not only a financial tool but also a strategic document that plays a vital role in guiding sustainable urban development and achieving social, economic, and environmental objectives.

This definition aligns with concepts from authoritative sources. For example, Article 23 of the Financial Regulations of Iranian Municipalities defines the municipal budget as a comprehensive financial plan that outlines necessary services, actions, and activities for the fiscal year, along with forecasts of resources, costs, and revenues required to cover expenses (Mahdipour, 2017). Therefore, budgeting in municipalities, as one of the fundamental pillars of urban management, is essential for planning, resource allocation, and urban project implementation. Municipal budgets are typically prepared based on predetermined programs, various tasks and activities, and their associated costs (Norouzi, 2023).

The main aim of municipal budgeting is to achieve a sustainable balance between financial resources and expenditures, ensuring that while short-term needs are met, long-term urban development is also supported. Proper formulation and execution of the urban budget can significantly enhance citizen satisfaction, improve service quality, and promote urban infrastructure development. To realize these goals, municipalities should improve their budgeting processes by applying principles of transparency, public participation, and data analysis, while managing challenges through innovative solutions.

In this context, Performance-Based Budgeting (PBB) has been proposed as a new approach for designing municipal budgets. This method emphasizes efficiency, effectiveness, and economy in resource allocation to enhance municipal performance and accountability. However, implementing performance budgeting in municipalities involves challenges that require thorough analysis and careful planning (Raei Kouchmeshki, 2023).

As a new approach in urban management, performance budgeting is not just a technical tool for organizing financial resources; it is also a critical instrument for improving transparency, accountability, and efficiency

within municipalities. International experiences demonstrate that establishing such systems can lead to improved public service quality and optimized resource utilization. For instance, the World Bank (2008) report, which emphasizes strengthening local capacities, states that without institutional and organizational reforms, sustainable improvements in public service delivery are unlikely. Additionally, reports from the Organization for Economic Cooperation and Development (OECD) (2019; 2025) highlight the importance of developing meaningful performance data and implementing effective audit systems to ensure the success of performance budgeting.

Despite these benefits, a review of the experiences of different countries shows that the successful establishment of this system often faces numerous challenges. Studies such as Khairani (2025) and Mohangi and Nyika (2023) reveal that factors including a lack of detailed planning, mismatches between goals and results, cultural and structural barriers, and the dominance of political considerations over management processes pose significant barriers to achieving Performance-Based budgeting objectives.

These challenges are also evident in the Iranian context. Studies conducted in municipalities and other public institutions in the country suggest that establishing Performance-Based budgeting in Iran encounters numerous barriers at three organizational and managerial, human, and environmental levels. Weak organizational culture and motivation, lack of specialized skills, inadequate information and costing systems, and ineffective institutional mechanisms are among these key barriers. Although some studies have spoken of relatively favorable legal and political environments, the lack of institutional, motivational, and technical infrastructures still hinders the full realization of this approach.

Accordingly, the evidence available, both at the international and national levels, indicates that moving toward performance budgeting is not a mere managerial choice but an inevitable necessity for improving urban governance, financial accountability, and citizens' quality of life. The significance of this issue in the current situation in Iran is becoming increasingly evident due to the financial constraints faced by municipalities, the growing demand for accountability, and the need to enhance efficiency. Consequently, identifying and analyzing the barriers to establishing performance budgeting can provide a solid scientific and practical foundation for institutional and management reforms, as an important step

toward achieving sustainable urban development. Studies conducted in Iran on the barriers to establishing performance budgeting in municipalities, universities, and other government and public organizations demonstrate that a wide range of inhibiting factors can be identified in three main dimensions: organizational and managerial, human, and environmental. For instance, research by Kheradmand and Zeinali (2011) in East Azerbaijan municipalities, Mansourabadi (2011) and Moradi et al. (2012) in Shiraz municipality, and Marjani (2013) in Tehran municipality pointed to problems such as weak organizational culture and motivation, lack of sufficient legal and procedural authority, and weak management structures. Ghaei's (2016) study in Karaj Municipality and Bodagi and Eyvazzadeh's (2016) study in Tabriz University of Medical Sciences highlighted the lack of specialized skills and the weakness of information and costing systems as key barriers. In contrast, Heydari et al.'s (2018) study in Tehran Municipality and Norouzi's (2023) study on new budgeting methods in municipalities revealed relatively favorable conditions in dimensions such as legal authority and political and managerial acceptance. However, the findings of these studies also suggest that the lack of sufficient motivation, lack of institutional and technical infrastructure, and weak human capacities continue to hinder the full realization of performance budgeting in public organizations.

In summary, the domestic research, including Abbasi and Nikdel Navi (2022), Yousefi et al. (2022), and Yazdani and Ghaffari Komleh (2023), primarily emphasizes the need for organizational and institutional reforms, improving human capabilities, and providing the environmental conditions for the successful establishment of performance budgeting. In the meantime, examining the issue in Tabriz Municipality is particularly important. Tabriz, as one of the most populous metropolises in the country, despite a significant role in the economy and urban management of northwest Iran, faces extensive financial and managerial challenges. The large and complex organizational structure of the municipality, the multitude of development and service projects, the strong dependence on unsustainable incomes, and the increasing expectations of citizens for receiving high-quality and transparent services have all created conditions that make the establishment of performance budgeting an inevitable necessity for this institution.

In addition, the pressures resulting from limited

financial resources and the need to improve public accountability have placed Tabriz Municipality in a position where, without utilizing new approaches to budgeting, the continuity and efficiency of urban services will face serious threats. On the other hand, due to Tabriz's strategic position as one of the country's leading municipalities in management innovations, accurately identifying barriers and deterrents to implementing performance budgeting in this city can act as a model for other municipalities in the country. Therefore, the present study, focusing on Tabriz Municipality, aims to clarify the gap between the theoretical necessity of establishing performance budgeting and its implementation realities, providing solutions to overcome the identified barriers.

Budgeting, as the main tool for planning and allocating resources in municipalities, plays a vital role in achieving the goals of urban management, financial accountability, and sustainable development. However, implementation experiences show that establishing an performance budgeting system in municipalities faces numerous challenges and barriers, including institutional and structural limitations, lack of information and technology infrastructure, employee resistance to change, weak performance-based organizational culture, and lack of effective mechanisms linking performance and rewards. Previous studies in Iran and worldwide have primarily focused on the descriptive identification of these barriers, with less attention to analyzing the causal and dynamic relationships between them. Thus, a study that centers on Tabriz Municipality and employs a variety of information sources, including research history, laws and regulations, expert reports, and semi-structured interviews, while comprehensively identifying barriers, analyzes their mutual relationships and dynamic effects through a causal loop diagram (CLD), is necessary. The findings of this study could help provide scientific and practical solutions to enhance transparency, efficiency, and financial accountability in urban management, ultimately facilitating the successful implementation of performance budgeting.

The following sections will begin with a review of the literature on the topic, followed by an examination of the research background through a review of domestic and international studies conducted in this field. Next, the research methods utilized in this study will be discussed. Finally, the research findings will be presented, and the study will conclude with a summary of conclusions and recommendations.

2. Research Background

In this section, the research background is examined in two separate sections, including theoretical background and empirical background.

2.1. Theoretical Background of the Research

In financial literature, various views and theories are presented about the budget. The definitions are directly influenced by the political, economic, and cultural conditions of each society, as well as by economic approaches to the government's role. The primary reason for this diversity is the various and changing uses of the budget at different historical periods (Sheykhoeslami Nasab, 2011). The first official and legal definition of the budget in the Iranian financial legal system dates back to Article 1 of the Public Accounting Law, approved in 1990. In this law, the budget is introduced as follows: "The government budget is a document in which transactions related to the country's income and expenditure for a certain period are predicted and approved. This period, which is one solar year, is called the fiscal year" (Mansourabadi, 2011). Additionally, Article 23 of the Municipal Finance Regulations defines the annual municipal budget as a comprehensive financial plan that encompasses all services, activities, and measures that ought to be carried out during the fiscal year, accompanied by an estimate of revenue sources and expenses necessary to cover them. The implementation of this plan will be possible after the approval of the City Council (Sadeghi, 2017; Shahrokhian, 2021). Budgeting in municipalities is a vital tool for planning, resource allocation, and financial management that pursues several objectives:

- Resource planning and allocation: Budgeting allows municipalities to optimally distribute financial resources between different projects and services and prevent waste of resources.
- Increasing efficiency and effectiveness: With performance budgeting, municipalities can identify the relationships between costs and results and improve efficiency and effectiveness in service delivery (Shayegan, 2023).
- Transparency and accountability: Accurate and documented budgeting increases financial transparency and allows for more effective monitoring of the municipality's financial performance.
- Coordination with strategic goals: Budgeting helps municipalities coordinate their short-term and long-term plans with urban strategic objectives and

achieve sustainable development.

- Financial control and oversight: Budgeting, as a control tool, allows for continuous monitoring of costs and revenues and prevents financial deviations.
- Improving service delivery: By appropriately allocating resources, municipalities can improve the quality of services provided to citizens and increase public satisfaction.

Achieving these goals requires establishing an performance budgeting system and employing modern management methods that lead to enhanced municipal performance and improved quality of life for citizens (Yazdani & Ghaffari, 2023).

Performance budgeting in municipalities is not only a financial tool but also a vital part of the urban governance mechanism. In this framework, the concepts of institutional economics, good governance theory, and behavioral economics are introduced in the budgeting and new public management (NPM) models. Institutionalism is based on the principle that the behavior of actors in the realm of policymaking and public management is not solely formed on individual rationality but also within the framework of formal (laws and regulations) and informal (norms and organizational culture) institutions. In the field of budgeting, this theory helps analyze how the rules of the game, institutional structures, and the interests of influential groups affect the allocation of public resources. In countries with weak financial institutions, budgeting is often opaque, politicized, and inefficient. On the other hand, in countries where budget institutions (such as the Program and Budget Organization, the Supreme Audit Court, the Parliament, etc.) enjoy institutional power and independence, the budgeting process can be more transparent, based on performance evaluation and predictability (Fabrizio & Mody, 2006).

According to some domestic studies (Talebniya & Talebi, 2018; Sarzaeem, 2022), the structure of the Iranian public sector budget is highly centralized and influenced by informal institutions such as political considerations and sectoral lobbying, which hinder the realization of an accountable and efficient resource allocation system. Good governance is a key concept in public sector management that promotes principles such as participation, transparency, accountability, effectiveness, efficiency, justice, and the rule of law. Within the framework of good governance, the budget is not simply considered a financial document but also a tool for accountability to citizens and the realization of social justice. The budgeting system should serve as

the platform for the realization of good governance. This means involving stakeholders in the process of formulating and approving the budget, publicly disseminating budget information, and monitoring and evaluating the performance of institutions. Countries such as New Zealand and South Korea have been able to increase public trust in the public sector financial system by implementing good governance components in the budgeting process (such as participatory budgeting and high transparency) (I Gusti, 2025).

Behavioral economics examines the cognitive limitations, mental biases, and psychological factors in the economic behavior of individuals (including policymakers and government managers). Unlike classical economics, which assumes that individuals always make rational decisions, behavioral economics shows that decision-making is often influenced by biases such as “present bias,” “anchoring effect,” or “loss aversion.” In the government budgeting process, managers may be inclined to allocate resources to short-term or showy projects that have a faster political response, while neglecting long-term infrastructure (Esosa, 2025).

New Public Management (NPM) emerged in the 1980s in response to the inefficiency of welfare states, to make the public sector more agile and productive. This approach aims to enhance the quality of public services by adopting private sector principles, including competition, results-based management, outsourcing of services, and performance evaluation. Within the framework of NPM, budgeting should be performance-based; that is, instead of focusing on inputs (such as the amount of budget allocated), it should focus on outputs and final results. Also, managers of institutions should have clear authority and responsibility for achieving goals (Katat et al., 2025).

Although performance budgeting, as one of the new models in financial management, is considered an effective tool for improving efficiency, transparency, and accountability, and can play a significant role in the optimal allocation of resources and improving the productivity of public institutions, especially municipalities, its full establishment in practice encounters serious barriers. This approach requires a shift in attitude from focusing on credits and inputs to results and outputs, as well as institutional, technical, and managerial platforms.

Given the importance of budgeting in urban management and its role in the sustainable development of cities, examining the causal dynamics

and structures of barriers to establishing performance budgeting seems necessary to improve the budgeting process in municipalities. This can help improve the efficiency and effectiveness of urban management by identifying the weaknesses and strengths of the current budgeting system and providing appropriate solutions.

2.2. Empirical Background

To examine the barriers to establishing performance budgeting, a review of the empirical background is crucial, as practical experiences and research conducted inside and outside the country can shed light on various aspects of this issue. The following section presents the most important findings of foreign research, followed by domestic studies.

Major International Studies

International studies have extensively examined the barriers to establishing performance budgeting in the public sector, especially in local governments. At the global level, the World Bank report by world bank (2019), Shah and Shen (2007), and the International Monetary Fund studies by Robinson (2007) and OECD (2019, 2025) emphasize that weak institutional capacity, lack of an accrual accounting system, and political resistance are among the most important barriers.

In her doctoral dissertation, Kichigina (2017) examined the experience of implementing the performance management system in local governments of the Russian Federation from 2013 to 2014. This research pursues a set of questions related to the system implementation process. First, it analyzes the actual process of implementing performance management in the context of Russian local governments. Second, it reflects the views and perceptions of local managers towards the goals and implementation of this system. Third, it identifies and examines the main challenges encountered during the implementation of this system. Reliance on the frameworks of policy transfer theory, institutional theory, and an integrated approach to performance management, this dissertation presents a more comprehensive picture of the practical implementation of this system in Russian local governments. Research data were collected through semi-structured interviews, literature review, and participatory observation. The main barriers to establishing effective performance management were identified as follows:

- A lack of organizational culture that supports

- performance management;
- Insufficient commitment from managers;
- Low executive priority of performance management;
- A lack of belief in and understanding of the performance management system;
- Frequent changes in management;
- Employee resistance to change;
- An excessive focus on results without considering the change process;
- Vague and unmeasurable goals;
- A time-consuming implementation process;
- Inadequate connections between the performance management system and the rewards system;
- Absence of a performance evaluation mechanism;
- Limited knowledge and skills related to performance management; and
- Limited resources and executive capacity.

These factors collectively hinder the successful implementation of performance management initiatives.

In their study, Kuntadi and Livrianti (2022) examined the factors affecting the implementation of performance-based budgeting policies. The study was a literature review aimed at developing a hypothesis about the mutual effect of variables, which can be used in future research. The results of this study revealed that communication, resources, and bureaucratic structure have an impact on the implementation of performance-based budgeting policies. The research was conducted through a literature review and qualitative method, identifying relevant studies and classifying sources based on their relevance and quality. The study extracted theories, relationships, and effects between variables from reliable sources, including Mendeley, Google Scholar, and other online resources. The results can be summarized as follows:

- Communication affects the implementation of performance-based budgeting policies;
- Resources affect the implementation of performance-based budgeting policies; and
- Bureaucratic structure affects the implementation of performance-based budgeting policies.

Salman et al. (2023) examined the feasibility of implementing performance budgeting in Iraqi public universities using the PESTEL model. The research period was 2022, and the statistical population included 35 Iraqi public universities, from which 15 top universities were selected as a sample. The research data were collected through 198 questionnaires,

completed by financial managers, accounting experts in the field of finance, and budgeting specialists from selected universities. The results of hypothesis testing showed that all dimensions of the model, including political, economic, social, technological, environmental, and legal factors, had an impact on the process of establishing performance budgeting in Iraqi public universities, and all research hypotheses were confirmed.

Alkhuzaie et al. (2025) conducted a study to provide a conceptual framework for the acceptance of implementing performance budgeting in the Iraqi public sector by combining two theories: the Diffusion of Innovation Theory and the Theory of Planned Behavior. They also collected factors that affected the acceptance of performance budgeting in Iraqi public sector ministries. The presented framework included factors such as awareness of performance budgeting, innovation characteristics including complexity, adaptability, and comparative advantage, perceived behavioral control, and attitude towards innovation, which were important for influencing employees to accept performance budgeting in Iraq. According to the findings, six concepts were developed, which collectively formed the theoretical framework of "performance budgeting acceptance," and each concept included specific meanings of the theoretical framework.

In his study, Jomardi (2025) examined the effectiveness of performance budgeting in achieving financial goals in the public sector. Using a qualitative research approach, the study conducted a comprehensive literature review to analyze existing frameworks, case studies, and empirical evidence related to the implementation of performance budgeting in various government contexts. Findings suggested that performance budgeting can enhance fiscal accountability, improve resource allocation, and foster a results-based culture in public sector management. However, the effectiveness of performance budgeting depends on several factors, including the political environment, organizational capacity, and stakeholder participation. Challenges such as resistance to change, inadequate training, and inadequate data systems were identified as significant barriers to successful implementation.

Islam (2025) conducted a study based on 94 studies published between 2015 and 2025, examining the adoption and outcomes of key budget reforms, including participatory budgeting, performance

budgeting, gender-responsive budgeting, and international donor-supported financial initiatives. A systematic review of the impact of budget innovations in developing economies suggested that the main barriers to sustainable reforms include limited administrative capacity, inadequate coordination between ministries, weak political will, and the widespread influence of informal institutions, such as clientelism and personal patronage. In addition, reforms led by international donors, although often effective in creating change, usually face limited local ownership and sustainability challenges after the project ends.

In a systematic review, Sahara and Salomo (2025) examined the impact of performance budgeting on public financial management in Indonesia, with an emphasis on efficiency, accountability, and transparency. The study aimed to identify key barriers and factors affecting the success of performance budgeting implementation, drawing lessons from international experiences, particularly those of Ukraine, the United States, Colombia, and Chile. It analyzed 60 relevant studies. The findings revealed that performance budgeting in Indonesia has yet to significantly improve financial management due to persistent challenges, such as poor data quality, insufficient institutional capacity, and political resistance. Despite some progress, these barriers continued to limit the effectiveness of performance budgeting. Comparative case studies showed that successful implementation requires strong political will, improved data infrastructure, strengthened institutions, and active public participation. The study concluded that while performance budgeting has the potential to improve financial management, its full realization in Indonesia depends on overcoming these challenges.

Major Domestic Studies

Kheradmand and Zeinali (2011) examined the barriers and challenges of establishing a performance budgeting system in the municipalities of East Azerbaijan province. To test the research hypotheses, the required data were collected through a questionnaire designed and distributed among managers and executive officials of the municipalities (including mayors, deputies, and staff managers). The study aimed to identify the most important indicators related to the problems of implementing performance budgeting and, in addition, to provide solutions in this field. Based on the results obtained and relying on

previous studies and the views of budgeting experts, the identified barriers were categorized into three main groups: environmental, structural, and human.

Pourzamani and Naderi (2012) identified the barriers to establishing a performance budgeting system in free trade-industrial zones organizations in Iran. The statistical population of this study included financial managers and planning and budgeting managers in the free trade-industrial zones and the Secretariat of the Supreme Council of Free and Special Economic Zones of Iran. The research data were collected through interviews and the distribution of questionnaires. The results showed that weaknesses in performance evaluation, a lack of human resource capability, a lack of legal authority, a lack of procedural authority, and a lack of acceptance incentives are among the main barriers to establishing performance budgeting based on the Shah model. In contrast, factors such as technical capacity, organizational authority, political support, and managerial acceptance were not identified as barriers.

Moradi et al. (2012) examined the implementation of the performance budgeting system in Shiraz Municipality. The statistical population of this study consisted of four groups of individuals familiar with the budgeting process in Shiraz Municipality: senior managers and administrative-financial deputies; financial managers, accounting heads, and budget officials; financial experts; and experts in the planning, education, and information technology sectors. The data collection tool was a questionnaire, and a one-sample t-test was used to test the research hypotheses. The research findings revealed that from the respondents' perspective, Shiraz Municipality has the necessary capacity to implement performance budgeting in all three dimensions of authority (including legal, procedural, and organizational authority). The results also showed that favorable conditions were available in the two dimensions of acceptance, namely political acceptance and managerial acceptance. However, in the dimension of motivational acceptance, there was not sufficient motivation to establish this system.

In his research, Marajani (2023) examined the barriers to establishing the performance budgeting system in Tehran Municipality, focusing on District 19, through applied research and using a descriptive-correlational method. The data were collected through field collection and a questionnaire. The results of analyzing the individual effect of independent variables on the

dependent variable, based on Spearman's correlation coefficient, showed that variables such as strategic barriers, technological barriers, organizational barriers, technical barriers, and economic barriers impact the establishment of performance budgeting. Additionally, analyzing the simultaneous effect of independent variables on the dependent variable using multiple regression suggested that, from the respondents' perspective, barriers related to organizational culture and technical, economic, and social factors have a positive impact on the establishment of the performance budgeting system. Bodagi and Eyvazzadeh (2016) identified and examined the existing barriers and problems in establishing performance budgeting at Tabriz University of Medical Sciences, to increase productivity at this university. The required data were collected through interviews and questionnaires to identify barriers in three basic axes of organizational and managerial, individual and human, and environmental factors in 2015. The results revealed that the barriers in establishing the performance budgeting system at Tabriz University of Medical Sciences were organizational and managerial, individual and human, and environmental barriers, respectively. Ghaei (2016) studied and prioritized the challenges of this system in Karaj Municipality in a study titled "Identifying and Ranking the Barriers to Establishing Performance Budgeting with Activity-Based Costing Approach". The research was a descriptive survey with an analytical approach. The library resources and field studies were used to collect data, followed by a researcher-designed questionnaire. The results revealed a high level of agreement among experts regarding the existence of 28 barriers to implementing activity-based costing-based performance budgeting, with a Kendall's concordance coefficient of 80 percent. In the third stage of the Delphi method, the barriers were ranked using the Friedman test. In addition, the results of the binomial test and descriptive analyses based on the opinions of the financial staff of Karaj Municipality revealed that their views of the identified barriers were consistent with those of the planning and budget experts. Among the barriers, "the lack of a specialized, dominant, and experienced upstream institution to review, approve, and allocate the operating budget based on activity costing" was identified as the most important barriers, and "the difficulty in accurately identifying activities in Karaj Municipality" was identified as the least important barriers. In "The Role of Intra-Organizational Factors in

Implementing the Performance Budgeting System: An Interpretive Structural Modeling Approach (Case Study: Tehran Municipality)," Heidari et al. (2018) examined and introduced the intra-organizational factors affecting the implementation of the performance budgeting system. To identify the factors, the content analysis method was employed, and to classify the identified factors, the interpretive structural modeling tool was used. The results showed that a total of eleven intra-organizational factors impact the process of implementing performance budgeting, which include: organizational culture, communication and coordination, the necessity of strategic planning, the necessity of connection between the plan and budget credits, activity-based costing, an integrated information system, a comprehensive performance management system, leadership, establishment of an incentive system, and specialized skills. Based on the findings, the citizen-centered factor had the least impact, and the integrated information systems factor had the most impact on the establishment of this system. Abbasi and Nikdel Navi (2022) examined barriers to establishing a performance budgeting system in hospitals of the Social Security Organization in Tehran province. The data required for the research were collected through questionnaires distributed among the heads, managers, and employees of these hospitals. After collecting the information, the research hypotheses were evaluated using a factor analysis test. The results showed that among the three categories of environmental, human, and organizational factors, only the environmental and organizational factors have a significant effect on the problems in establishing the performance budgeting, indicating that successful implementation of this system in the hospitals under study necessitates paying attention to the organizational and environmental dimensions. In a study titled "Reforming the Revenue and Expenditure Management System of Tabriz Municipality", Olad et al. (2022) attempted to reform the Tabriz municipal finance system and improve the efficiency of the municipality's revenue and expenditure structure. Adopting a systemic approach, they analyzed the municipal financial structure within five main components: input data, processes, outputs, feedback, and environment. They identified 36 internal dimensions and 24 key challenges. The most significant challenges included a lack of communication between planning and budgeting systems, centralization, insufficient innovation in financing, a lack of a single

treasury, and insufficient transparency. In the following, six fundamental reform goals were identified: 1) institutional regulation and establishing theoretical foundations of urban finance; 2) focusing on sustainable financing; 3) improving efficiency and innovation in service pricing; 4) connecting the budgeting system to urban development planning; 5) integrating financial mechanisms; and 6) reforming national laws related to city administration. Then, using SWOT analysis, a set of offensive, competitive, conservative, and defensive strategies was developed, and, after sustainability testing, policies and performance plans, such as creating a single urban treasury, the implementation of performance budgeting, diversification of financing, transparency in fees, and the formation of local councils, were proposed. In addition, four forward-looking scenarios, including “flight”, “rise”, “recurrence”, and “turbulence”, were also drawn for different institutional and economic conditions. Finally, a macro-model of urban finance based on regions and neighborhoods was presented to allocate resources in accordance with spatial justice and economic efficiency.

The present study is innovative in several ways compared to previous studies on performance budgeting in urban management. In most domestic and foreign studies, analyzing the barriers to establishing performance budgeting remained at the level of identification and descriptive classification, as seen in the studies of Ahmadi (2025), Ebrahimi et al. (2022), and Kim and Lee (2018). In these approaches, barriers were generally examined individually, without attention to the mutual and dynamic relationships between them. In contrast, this study, employing a systemic and analytical approach, aims to go beyond identifying barriers and achieve a causal and structural understanding of barriers.

The primary innovation of the research lies in combining qualitative content analysis with cause-effect modeling, the Causal Loop Diagram (CLD). First, the main barriers to establishing performance budgeting in Tabriz Municipality are extracted using a qualitative thematic analysis method, and then the relationships between these barriers are modeled. As a result, a systemic barriers map is drawn that demonstrates not only the effective factors, but also the direction and type of their mutual influence.

While similar studies in Iran have primarily employed conventional statistical methods, such as factor analysis or Delphi methods, to rank barriers (e.g., Islam, 2025; Mahd Gharib, 2024), this study highlights

the dynamics and interdependence of barriers. The use of CLD diagrams allows for the identification of feedback loops through which barriers can reinforce or weaken each other over time. This type of analysis, especially in public policy and institutional reforms, such as performance budgeting, is a novel and less widely used approach in the literature on municipal financial management in Iran.

In addition, the present study focuses on Tabriz Municipality as a case study, considering the specific institutional, managerial, and cultural characteristics of this organization in the model. This was less concentrated in previous studies, making the findings less applicable to real-world contexts. Thus, the results of this study not only fill the knowledge gap in the literature on performance budgeting at the local level but also provide a new analytical tool for urban decision-makers from the policy perspective.

3. Research Method

In this study, the qualitative method of “Thematic Analysis” was employed to identify barriers to establishing performance budgeting in Tabriz Municipality. Thematic analysis is a qualitative research method that emphasizes identifying semantic patterns in data. Essentially, this approach involves pinpointing themes within qualitative data. Its main aim is to extract significant and meaningful themes from the data to answer research questions or explain specific aspects of a phenomenon (Azizian, 2022; Maguire & Dalehunt, 2017). Therefore, the output of this method is not merely a summary but an in-depth analysis that extends beyond raw information.

In this study, three sources of data were utilized: research background, documents, published reports, and semi-structured interview transcripts with experts, former and current managers of Tabriz Municipality, and specialists in planning and budgeting. Data collection involved library research and semi-structured interviews. After collecting data, the thematic analysis was conducted using MaxQDA 2020 software to analyze and code the sources.

Initially, the research background was reviewed, resulting in the identification and analysis of 21 studies, comprising research articles, doctoral theses, and master’s theses focused on performance budgeting in municipalities, particularly Tabriz Municipality. From this, 529 initial codes were generated. Next, laws, guidelines, and published expert reports related to municipal budgeting were examined, including 26 texts. The coding of these texts

produced a total of 386 initial codes. The third part involved data from semi-structured interviews with experts, scholars, managers, and budgeting specialists in municipalities, mainly Tabriz Municipality. A total of 25 interviews were conducted; although theoretical saturation was achieved after 22 interviews, three additional interviews were conducted to confirm this,

making a total of 25. These interviews were conducted in the summer of 1403, with an average duration of 30 minutes each. Analysis of the interview texts yielded 679 initial codes. In total, 1594 primary codes were derived from analyzing the 72 sources mentioned. Descriptive statistics of the sample participants from the field phase are presented in Table 1.

Table 1. Descriptive statistics of sample members

| Title | Number | Age Range (Years) | Education Level |
|---|--------|-------------------|-----------------------|
| Elites and Experts | 4 | 60 | Specialized Doctorate |
| Members of the Islamic City Council | 3 | 50 | Doctorate |
| Former Municipal Managers | 5 | 65 | Bachelor/PhD |
| Municipal Managers | 4 | 50 | Doctorate |
| Experts of the Municipality and the Council Research Center | 9 | 45 | Master/PhD |
| Total | | 25 | |

After coding the text of collected information sources, the obtained codes were categorized into 3 main themes. Then, to map the causal relationships between the barriers to establishing performance budgeting in Tabriz Municipality, the systems thinking approach was employed, and CLD diagrams were drawn in the Vensim software. A CLD diagram was developed for each key theme by incorporating relevant variables. Ultimately, a comprehensive conceptual model of the barriers to establishing performance budgeting was created by merging the CLD diagrams related to the three main themes. CLD diagrams are visual tools that model and analyze complex systems, illustrating the causal relationships between variables and helping to differentiate between positive and negative feedback patterns within the system. CLDs originate from the systems thinking principles and are used in the development of system dynamics models. In the present study, to identify the type of causality (positive or negative) between variables and barriers, two complementary data sources were utilized: theoretical background and findings from previous studies, as well as the data from semi-structured interviews with experts. Thus, the existing theoretical evidence provided the initial basis for the orientation of causal relationships, and content analysis of the interviews was also used to confirm, modify, or explain the type of effect each factor poses on other variables. This mixed-method approach, combining both data and theoretical insights, allowed for a more accurate identification of the types of causality between variables, whether

positive or negative. Finally, the Inter-Coder Reliability method was employed to assess the validity of the results derived from coding various sources, including research background texts, legal documents, expert reports, and the conducted interviews. In this method, an expert, as a research associate, analyzed and evaluated several samples of interview texts, scoring them on a scale from +2 to -2. By examining the results, the percentage of agreement and disagreement was determined, and by applying the relationship one in the intra-subject agreement method, the degree of stability and reliability of the results was determined (Ghorbani, 2022; Guest et al., 2012).

$$(1) \quad Agreement \% = \frac{N(Agreement) \times 2}{TCodes} \times 100$$

N: number of agreed codes; and TCodes: total number of codes defined for each item.

4. Research findings

After coding the text of collected information sources and reviewing them, the initial codes were categorized into sub-themes. The sub-themes were then reviewed and categorized into three main themes: barriers due to organizational environment, barriers due to organizational resources, and barriers due to organizational capabilities. The schematic pattern of the relationships between the main themes can be seen in Figure 1.

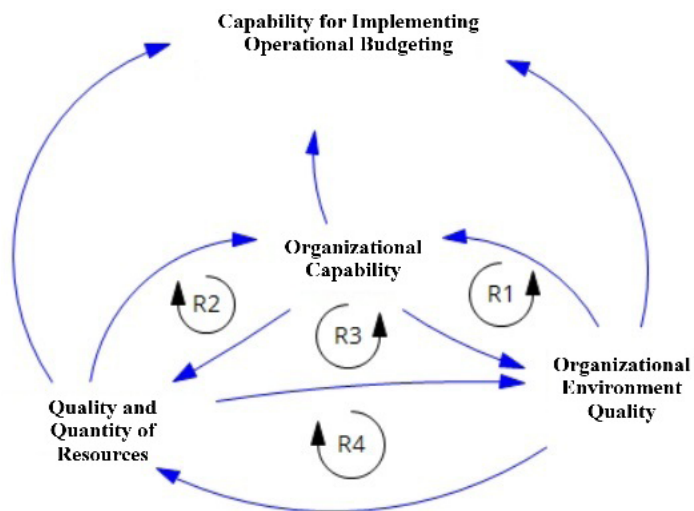


Figure 1. Schematic model of relationships between the themes of barriers to establishing Performance-Based budgeting in Tabriz Municipality

The schematic model in Figure 1 shows the relationships between the main themes of barriers to establishing performance budgeting. The high quality of the organizational environment can enhance the organizational capability to establish performance budgeting. Additionally, the appropriate quality and quantity of resources available to the organization can further improve this capability. However, the high quality of organizational environment, as well as the

high quality and quantity of resources available to the organization, do not guarantee the organization's capability in establishing performance budgeting; the organization's capability in how to use its environment and resources is also determining. In the following sections, themes and categories in Figure 1 will be discussed in detail, and the relationships between the variables will be clarified. Table 2 shows an example of the coding and classification process of the themes.

Table 2 - Sample codes, sub-themes, and main themes identified in the present study

| Main Theme | Sub-Theme | Code | Examples |
|---|-----------------------|--------------------------------|--|
| Barriers due to environmental characteristics | Immediate environment | Reluctance to change | Sometimes one concludes that they themselves like to proceed in the same way and manner. |
| | | Disbelief in the plan | Most of our work is person-centered rather than plan-centered. |
| | | Excessive bureaucracy | The time gap in preparing comprehensive and detailed plans, alongside a lack of attention to the city's dynamics, has been a factor in reducing the effectiveness of the plans, the main reason for which is the waste of time in the approval process. Thus, the plan preparation system faces a problem. |
| | Distant environment | Lack of authority and autonomy | This law (the Sustainable Revenues Law), with its strong concentration of decision-making, eliminates any initiative and creativity in local administrations to manage financial resources, generate new revenues, and reduce costs. |

| Main Theme | Sub-Theme | Code | Examples |
|---|-----------------------|--|--|
| Barriers due to organizational resources | Information sources | Access to information | The importance of receiving comprehensive, accurate, and clear information for reviewing and making correct decisions is not hidden from anyone; no need to emphasize how the lack of reliable and valid information can result in deviations in policy and decision-making. Many problematic and harmful policies and decisions are made in the absence of accurate information, imposing excessive and sometimes irreparable costs on the city and society. |
| | Human Resources | Weak human resource selection criteria | I can confidently say that, apart from the fact that they do not have relevant educational qualifications, 90 percent of the people working in the municipality are individuals who learned their jobs on the job; they were not experts or experienced when they started. Many of our personnel in the municipality are like this; they came to the municipality and learned the job, just to the point of working with a system; then, based on a series of connections, they got a position and moved up. |
| Barriers due to organizational capabilities | Systems and Processes | Weak awareness | The awareness of managers in various departments about the plan and its understanding is also emphasized. |
| | Strategy and Plan | Lack of an appropriate strategy at the macro level | With a quick look at the history of development plans before and after the revolution, and the pursuit of urban management issues, we conclude that, despite efforts, we have yet to reach a coherent urban management literature that can be translated into development plans. In the Seventh Plan as well, there is no coherent and solid view in this field. Although traces are seen in some sections, it does not pay much attention to urban management issues. It is as if municipalities are abandoned within the amalgam of intertwined issues, with no special measures to get out of this situation or, of course, special and considerate delegation so that cities can at least manage themselves. |

4.1. Main themes of barriers to establishing performance budgeting in Tabriz Municipality

After coding and categorizing the sources and information, three main themes of barriers were identified: barriers due to organizational environment, barriers due to organizational resources, and barriers due to organizational capabilities. This section will describe each of these themes.

Sub-themes of barriers due to the organizational environment

No organization or economic entity operates in isolation; all exist within a dynamic environment continuously interacting with its various components (Jajarmi, 2018; Moshkelgosah & Nazari, 2019). Barriers stemming from the organizational

environment are mainly divided into two sub-categories: the immediate environment and the distant environment. The distant environment comprises factors outside the organization that it has limited control over, including economic, social, cultural, political, and technological aspects. The immediate environment includes subsystems that form the organization. As an open system, the organization contains these subsystems within itself, and their coherence gives the organization its meaning and function (Asadpour, 2009). The sub-codes related to the main theme of barriers due to the organizational environment are shown in Table 3.

Table 3. Theme of barriers due to the environmental characteristics of tabriz municipality

| Immediate environment | Distant environment |
|---|--|
| <ul style="list-style-type: none"> - Lack of management stability - Reluctance to change - Lack of legitimacy - Excessive bureaucracy - Existence of rent - Inefficient urban structure - Weak organizational culture - Dependence on the construction sector - Lack of coordination - Disbelief in the plan - Dependence on unsustainable income - Limited sources of sustainable income | <ul style="list-style-type: none"> - Lack of comprehensive urban management - Economic instability - International sanctions - Imposition of additional obligations - Lack of delegation and freedom of action - Lack of participation - Centralization - Lack of access to financial instruments and markets - Inefficiency of macro-governance of the country |

In Iran's centralized governance system, municipalities remain dependent on the government and macro-level decisions despite the self-sufficiency policy in the 1980s. This dependence is a major barrier to establishing performance budgeting. Economic instability caused by government structure and an oil-based economy, fluctuations in variables such as inflation and exchange rates, and limited access to financial markets have hindered long-term planning for municipalities, encouraging them towards unsustainable incomes. International sanctions have also negatively impacted municipal financial resources by reducing oil revenues and foreign investment. Additionally, a focus on short-term interests, weak planning, and a lack of institutional trust in the plans have caused inefficiencies in implementing strategic plans. Lack of integrated urban management, local centralization, limited citizen participation, and the expansion of rent (especially through selling excess density) are other structural and institutional barriers that hinder performance budgeting and keep urban management trapped in a cycle of dependence, inefficiency, and lack of transparency.

The causal relationships between the environmental barriers to establishing performance budgeting in

Tabriz Municipality are complex and nonlinear. The identification of feedback loops in Figure 2 also indicates the existence of 13 positive feedback loops (R) and one negative feedback loop (B).

In cause-effect diagrams, arrows indicate the direction of causality—how a change in one variable causes a change in another. A plus sign (+) near an arrow indicates a direct or co-directional relationship, meaning that an increase in the cause leads to an increase in the effect (and a decrease in one leads to a decrease in the other). Conversely, a minus sign (-) indicates an inverse or inhibitory relationship: an increase in the cause results in a decrease in the effect, and vice versa. The letters R and B in the loops denote the type of feedback loops; R stands for a Reinforcing loop and represents a positive or reinforcing feedback loop that intensifies changes in the same initial direction, while B signifies a Balancing loop and represents a negative or adjusting feedback loop that brings balance and stability to the system. The gray variables represent repeated indices of the main variables, called shadow variables, used to simplify and organize the structure of the CLD diagram without representing new variables in the system.

rapid access to data, while increasing legitimacy, public trust, and social capital, provides the basis for more realistic decision-making and optimal allocation of resources. Achieving these goals fully requires a specialized and dedicated workforce for data collection

and analysis. Even the most advanced technical infrastructure will be ineffective without this essential factor. The CLD diagram and the map of causal relationships between the variables of barriers due to the organizational resources are presented in Figure 3.

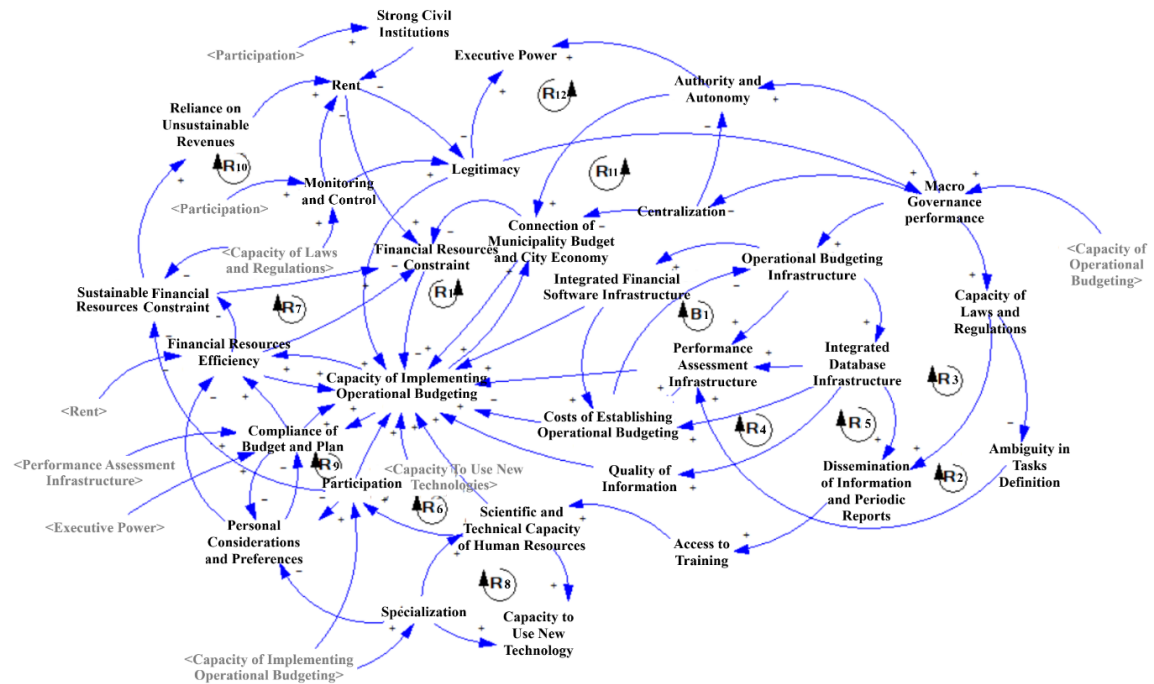


Figure 3. CLD diagram for barriers due to the organizational resources of tabriz municipality

Theme of barriers due to the organizational capabilities

The third main theme of barriers to establishing performance budgeting stands under the title of barriers due to the organizational capabilities, with

five sub-themes: organizational culture, systems and processes, structure and organization, strategy and plan, and leadership style. Table 5 represents the barriers caused by the organizational capabilities of Tabriz Municipality.

Table 5. Theme of barriers due to the organizational capabilities of tabriz municipality

| Organizational culture | System and processes | Structure and organization | Strategy and plan | Leadership style |
|------------------------------|--|--|--|---|
| Lack of accountability | Weak human resource selection process | Inefficiency of the governance structure | Lack of a connecting mechanism between the plan and the budget | Ineffective leadership style |
| Weak sense of responsibility | Weak accrual accounting system | Interventions by state and governmental institutions | Lack of comprehensive guidelines | Predominance of short-term attitude |
| Simulation implementation | Inability to determine cost | Lack of autonomy and authority | Lack of an appropriate strategy at the macro level | Partiality |
| | Inability to assess performance | Weak communication and coordination | Lack of strategic planning | Personal considerations and preferences |
| | Incomplete decentralization model | Weak participatory mechanisms | Lack of belief in the plan | Lack of creativity and innovation |
| | Lack of transparency in the path and processes | | | Managers' attitude (resistance and lack of support from managers) |
| | Weak learning capacity | | | |
| | Weak awareness | | | |
| | Weak adaptive capacity | | | |
| | Weak study and research | | | |

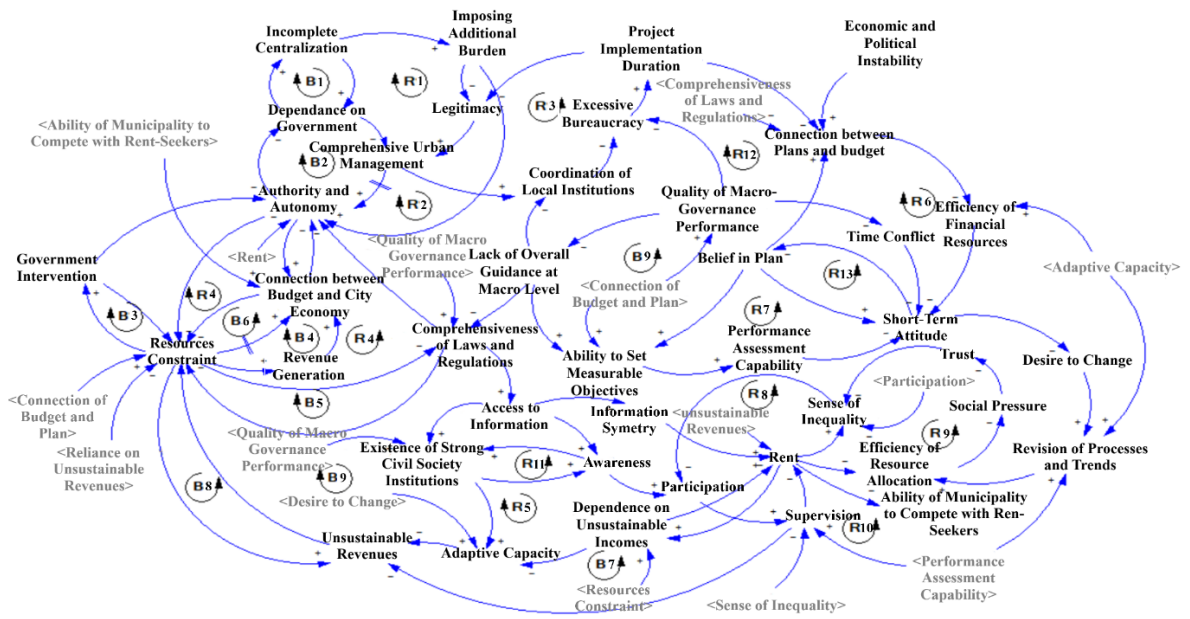


Figure 5. CLD diagram of the aggregated model of barriers to establishing performance budgeting in Tabriz Municipality

Figure 5 aggregates the primary barriers associated with each main theme that hinder the establishment of performance budgeting and illustrates the causal relationships between them. This diagram identifies

21 feedback loops, comprising 13 positive feedback loops and 8 negative feedback loops. Table 6 provides details about the identified feedback loops, including their related variables and the function of each loop.

Table 6. Feedback loops of the conceptual model of barriers to establishing performance budgeting in Tabriz Municipality

| Feedback Loop | Variables | Feedback Loop Function |
|---------------|---|---|
| 1 R1 | Excessive burden, legitimacy, comprehensive urban management, authority and autonomy, reliance on the government, and incomplete decentralization | Reliance on the government has led to the adoption of a short-term solution of incomplete decentralization in the early 1980s, and subsequently imposed an additional burden on the municipality. An additional burden also leads to a decrease in the legitimacy of the municipality and the quality of comprehensive urban management, as it weakens the overall performance of municipalities. Consequently, this limits the authority and autonomy of municipalities, further increasing their dependence on the government. Ultimately, this situation restricts the foundations for implementing performance budgeting. |
| 2 R2 | Excessive burden, authority and autonomy, reliance on the government, and incomplete decentralization | This feedback loop refers to the reduced authority and autonomy resulting from an additional burden imposed on the municipality, which in turn weakens the establishment of performance budgeting. |
| 3 R3 | Comprehensive urban management, coordination of local institutions, excessive bureaucracy, and project implementation time | Comprehensive urban management, by increasing the coordination of local institutions and reducing unnecessary bureaucracy, leads to a reduction in the duration of project implementation and strengthens the grounds for establishing performance budgeting. |
| 4 R4 | Authority and autonomy, resource constraints, and the connection between the municipal budget and the city economy | This loop shows that a basic solution to reducing the financial resources constraints in the municipality is to strengthen the connection between the budget and the city economy, which requires increasing the authority and autonomy of the municipality. If the conditions are created for this connection, the grounds for establishing performance budgeting will also be strengthened. |

| Feedback Loop | | Variables | Feedback Loop Function |
|---------------|-----|--|---|
| 5 | R5 | The presence of strong civil institutions, awareness, participation, monitoring, rents, dependence on unsustainable incomes, and adaptive capacity | This loop refers to citizen supervision over urban managers' performance, which leads to a reduction in rent and, consequently, a reduced reliance on unsustainable incomes; citizen participation is also influenced by the existence of powerful civil institutions. |
| 6 | R6 | Rent, efficiency of financial resource allocation, social pressure, trust, sense of inequality, participation, and monitoring | Increasing rent through reducing the efficiency of financial resource allocation leads to increased social pressure and reduced trust. Reduced trust leads to an increase in the feeling of inequality among citizens and reduces participation in urban affairs, which reduces public supervision and, consequently, increases rent. |
| 7 | R7 | Belief in the plan, setting measurable goals, performance assessment capability, and a short-term perspective | Strong belief in the plan leads to setting measurable goals for medium- and long-term plans and, through increased performance assessment capabilities, leads to a reduction in short-termism, which in turn strengthens belief in the plan and leads to improved conditions for establishing performance budgeting. |
| 8 | R8 | Access to information, existence of strong civil institutions, awareness, participation, monitoring, rent, reliance on unsustainable incomes, and adaptive capacity | This loop refers to the role of information in informing citizens and increasing their participation in urban affairs and monitoring urban managers. Increasing access to information through increased awareness and participation leads to reduced rents and increased adaptive capacity, which in turn increases access to information and facilitates the establishment of performance budgeting. |
| 9 | R9 | Short-term perspective, desire to change, review of processes and trends, efficiency of resource allocation, social pressure, trust, sense of inequality, participation, monitoring, rent, and performance assessment capability | This loop indicates that the short-term attitude of urban managers decreases the willingness to change, which in turn leads to a decrease in the review of processes and procedures and the efficiency of resource allocation. The decrease in the efficiency of resource allocation increases social pressure and reduces citizens' trust in city managers. The increased sense of inequality caused by decreased trust leads to a decrease in citizen participation and an increase in rents in the municipality. The increase in rents also reduces the performance assessment capability, intensifies the short-term attitude, and undermines the establishment of performance budgeting. |
| 10 | R10 | The ability of the municipality to compete with rent-seekers, the relationship between the municipal budget and the city economy, resource constraints, unsustainable incomes, monitoring, and rent | When the connection between the municipal budget and the city economy is weak, resource constraints lead to an increase in unsustainable revenues in the municipality; increased unsustainable revenues intensify the reliance on unsustainable revenues, leading to increased rent in the city and municipality. Increased rent diminishes the municipality's ability to compete with rent-seekers and consequently weakens the connection between the municipal budget and the city economy. |
| 11 | R11 | Awareness and the existence of strong civil institutions, and the reciprocal role of citizen awareness and the existence of strong civil institutions | This loop refers to the reciprocal relationship between citizen awareness and the existence of strong civil institutions. As citizen awareness about urban issues increases, civil institutions become more active, and in turn, the activity of civil institutions leads to an increase in citizen awareness. This contributes to the establishment of performance budgeting. |
| 12 | R12 | The relationship between the plan and the budget, the quality of macro-governance performance, excessive bureaucracy, and the duration of project implementation | With the increased comprehensiveness of laws and regulations at the macro level, the connection between the plan and the budget in municipalities increases. This, in turn, leads to an improvement in the performance of the municipality and the quality of urban services, adding to the performance quality of the country's macro governance. |
| 13 | R13 | Short-termism and belief in the plan | Reducing short-termism among city managers strengthens their confidence in the plan, and this increased confidence also diminishes the short-termism. Ultimately, the establishment of performance budgeting is strengthened. |

| Feedback Loop | | Variables | Feedback Loop Function |
|---------------|----|--|---|
| 14 | B1 | Incomplete decentralization and municipal reliance on the government | With the increased reliance on the government, in the early 1980s, the government decided to implement incomplete decentralization, which reduced dependence on the government to some extent. Reduced reliance on the government can pave the way for the establishment of performance budgeting. |
| 15 | B2 | Reliance on the government, comprehensive urban management, and autonomy | If the municipality considers increasing the quality of comprehensive urban management as the solution to reducing reliance on the government, this will lead to increased authority and autonomy of the municipality and, consequently, reduced reliance on the government. Reducing reliance on the government provides the basis for the establishment of performance budgeting. |
| 16 | B3 | Government interference, resource constraints, and autonomy | Increasing government intervention by reducing the authority and autonomy of the municipality leads to increased restrictions on the municipality's financial resources. This undermines the establishment of performance budgeting. |
| 17 | B4 | Resource constraints, revenue generation, the connection between the municipal budget and the city economy, and authority and autonomy | If the limitation of municipal resources is reduced through sustainable revenues, the connection between the municipal budget and the city economy will be strengthened. This, in turn, will increase the municipality's authority and autonomy and reduce the municipal financial resources constraints. Ultimately, the necessary conditions for establishing performance budgeting will be provided. |
| 18 | B5 | Comprehensiveness of laws and regulations, authority and autonomy, and resource constraints | This loop refers to the effect of comprehensiveness of laws and regulations on the extent of the authority and autonomy of municipalities. The decreased authority and autonomy, in turn, will increase the municipal financial resources constraints and weaken the establishment of performance budgeting. |
| 19 | B6 | The connection between the municipal budget and the city economy, and resource constraints | If financial resource constraints are resolved by increasing economic activities in the city, in addition to reducing financial resource constraints, the connection between the municipal budget and the city economy will also be strengthened, which in turn will facilitate the establishment of performance budgeting. |
| 20 | B7 | Reliance on unsustainable incomes, adaptive capacity, and unsustainable incomes | If the municipal financial resource constraints are resolved through an increase in unsustainable revenues, dependence on unsustainable revenues will be increased and, consequently, the adaptive capacity will be decreased. Reduced adaptive capacity will lead to an increase in unsustainable revenues, weakening the establishment of performance budgeting. |
| 21 | B8 | Financial resources constraints, and unsustainable incomes | As financial resource constraints in municipalities increase, unsustainable revenues increase. An increase in unsustainable revenues in the short term leads to a reduction in the financial constraints of municipalities. However, in the long term, it leads to reliance on this type of revenue and a decrease in the financial sustainability of municipalities. This, in turn, undermines the establishment of performance budgeting. |

4.3. Validation of Results

As mentioned in the methodology section, intra-subject validation was used to validate the results obtained from coding data and information sources. For this purpose, 10 percent of the total number of sources collected (72 sources, including research background, text of laws and regulations, and published expert reports and semi-structured interviews) was provided to the research associate

according to Table 7, and after coding, the results of the two codings were compared, and the level of agreement was calculated. The level of agreement between the two codings was calculated as 82 percent according to Table (7); based on the qualitative research literature in some sources (Avinal & Aydin, 2022), the level of agreement is above 85 percent, and based on some other studies (Hallgren, 2012; Landis & Koch, 1977; O'Connor & Joffe, 2020), the level of

agreement is above 70 percent or the kappa coefficient level of agreement between coders. is more than 0.61, indicating an acceptable or strong

Table 7. Validation of the results of data coding and information sources

| Title | Number of criteria | Number of agreements | Results |
|--------------------------------|--------------------|----------------------|---------|
| Interview No. 4 | 27 | 18 | 66% |
| Interview No. 10 | 27 | 20 | 74% |
| Interview No. 1 | 36 | 30 | 83% |
| Background No. 12 | 16 | 12 | 75% |
| Background No. 21 | 36 | 31 | 86% |
| Expert Report No. 2 | 7 | 7 | 100% |
| Text of Laws and Regulations 6 | 41 | 38 | 92% |
| Total | 190 | 156 | 82% |

In the next step, disagreements between the two coders were addressed through several group discussion sessions and rereading of the data. These sessions were held to achieve interpretive consensus, not simply to increase the number of agreements. During the discussions, the possible meanings of the data, the rationale for code selection, and the boundary between main and subthemes were examined, and the coding notebook was revised and rewritten as needed. This approach aligns with the recommendations of O'Connor and Joffe (2020), who highlight that resolving disagreements should be part of the learning process and the revision of the coding system, rather than a mechanical step to boost reliability. After reaching consensus and final revision, the final version of the coding system was prepared and became the foundation for the main theme analysis. This process enhanced transparency in analytical decision-making and improved the dependability and confirmability of the research results.

5. Discussion and Conclusion

The findings show that establishing performance budgeting in Tabriz Municipality is a complex, multidimensional phenomenon influenced by the interaction of institutional, structural, cultural, and behavioral factors. These factors interact in a feedback system, and their effect causes sustainability challenges in reforming the budgeting process. These results indicate that successful implementation requires more than technical adjustments to the budget writing process; it demands a systemic and integrated approach to urban management.

From an institutional perspective, most barriers stem from the weaknesses of formal and informal institutions governing urban management. Continued reliance on traditional methods, centralized decision-making at high administrative levels, and financial dependence on the central government hinder the development of performance-oriented rules and norms in Tabriz Municipality. This aligns with institutionalist views, which emphasize the role of institutions in shaping organizational change. Resistance to change, therefore, arises within institutional structures, and without reforming these institutions, changes in tools and procedures at the managerial level will not be sustainable.

From a good governance perspective, challenges such as limited transparency, imbalanced accountability, and restricted stakeholder participation in financial decision-making are significant. Qualitative data revealed that limited public access to financial information and the integrated monitoring system have eroded public trust and fostered institutional distrust. Consequently, social acceptance of the performance budgeting system has declined, facing resistance to its implementation. Hence, the budgeting system reform can only succeed if governance indicators like transparency, accountability, and citizen participation are simultaneously strengthened.

From a modern public management view, cultural and structural challenges within the municipality are serious barriers to implementing performance-based budgeting. Many sections prioritize compliance with administrative regulations over results, and managers' unfamiliarity with performance assessment tools, combined with concerns about transparency, has

created covert resistance to change. Therefore, achieving performance-based management in Tabriz Municipality requires redesigning incentive structures, developing coherent assessment systems, and training managers at various levels.

According to institutional capacity theory, key limitations include the shortage of specialized human resources, weak information infrastructure, and the absence of performance-based reward systems. A lack of reliable financial data and decision support systems has led to policy instability and costly decisions. To address this, Tabriz Municipality should focus on strengthening organizational learning, enhancing financial managers' skills, and developing management information systems.

The conceptual model analysis also reveals that the identified barriers, in the form of positive and negative feedback loops, influence each other reciprocally. For instance, increased citizen participation and oversight can lower rents and boost public trust (positive feedback), whereas extensive central government intervention in financial decisions diminishes independence and increases financial reliance (negative feedback). These findings reflect systems thinking principles, emphasizing the dynamic and nonlinear nature of relationships among variables.

In conclusion, the study suggests that establishing performance budgeting in Tabriz Municipality relies on integrating institutional reform, managerial capacity-building, and governance improvement. Maintaining this system requires fostering a culture oriented toward performance, strengthening accountability, financial transparency, and stakeholders' real participation. Therefore, when designing reform programs, urban policymakers should focus on developing the municipality's institutional and human capacities as the foundation for the sustainable implementation of the performance-based budgeting system, rather than prioritizing technical adjustments alone.

Additionally, the study's findings align with numerous previous studies. For instance, Valiqolizadeh and Kheyri (2016) identified the state-centered and centralized nature of Iran's urban planning system as a primary barrier to evolution and development, which is consistent with the results of this study on the role of macro-governance in limiting the independence of municipalities. Likewise, Montazeri and Khodai (2012) confirmed that municipal reliance on unsustainable revenue sources is a major barrier to performance budgeting.

The analysis related to rent-seeking and density selling also overlaps with Bidram (2011), who described density sales as a form of economic rent distribution, whose persistence hampers urban management capacity. This study shows that reliance on such revenues has created a vicious circle of dependence on unsustainable resources, weakening long-term planning capacity.

The findings on weak information systems and ineffective performance evaluations are comparable to international research, such as reports from the World Bank and OECD, which stress that the lack of reliable data hampers budget reforms in developing countries. The results indicate that delays in submitting performance reports and unreliable databases have severely reduced the ability to implement performance budgeting in Tabriz.

Overall, while consistent with previous domestic and international research, this study offers new insights through a system dynamics approach, which is the reflective and self-reinforcing nature of barriers, a feature less considered in previous studies. The study identifies several institutional, managerial, and structural barriers that must be addressed through specific policy, executive, and research measures.

Policy and Macro-Suggestions

- Delegating budgeting authority to municipalities, including Tabriz Municipality: Reducing the budget approval process at the national level by directly allowing local councils to approve 30% of the current budget, subject to periodic publication of financial and executive performance reports in municipal transparency systems and their presentation to the public and regulatory bodies. In addition, each budget decision should be accompanied by specific performance indicators and periodic evaluation of projects to strengthen municipal accountability and reduce the risk of corruption or rent-seeking.
- Creating sustainable revenue sources: Annual issuance of local partnership bonds in a specific amount to fund local development projects and allocate them based on functional prioritization.
- Linking the strategic plan and budget: Developing a binding legal framework to record the goals of each project in the performance budgeting system and connecting budget allocation to the achievement of at least 80% of the performance indicator goals.

Management and Executive Suggestions

- Integrated financial and performance information system: Launch a web-based system to record costs

and project progress in real time, with direct access by managers and council representatives.

- Investing in human resources: Conduct quarterly training courses for managers and municipal experts in performance budgeting and accrual accounting, with pre- and post-course evaluations to measure effectiveness.
- Transparent Reporting: Publish quarterly project performance reports by comparing goals and actual results and providing an analysis of the causes of deviations.
- Intersectional coordination: Establish a joint project committee including representatives of urban management, finance, and planning for each project over 50 billion Tomans to prevent parallel work

Research Suggestions

- Conduct comparative studies on the successful experiences of municipalities in other countries in establishing performance budgeting and examine the possibility of localizing these experiences in Iran.
- Engage in interdisciplinary research using a mixed approach that incorporates urban economics, public management, and political science to more thoroughly analyze institutional and cultural barriers.

Authors' Contributions

The authors contributed equally to this study.

Acknowledgments

We extend our sincere gratitude to all experts who generously assisted the researchers by providing their valuable opinions and experiences. We also express our gratitude and appreciation for the financial support of the Research Center of the Islamic Council of Tabriz Metropolitan City, which provided the basis for conducting this research.

Conflict of Interest

No conflict of interest was declared by the authors.

References

- Abbasi E., & Nikdel Navi K. (2022). Examining the Barriers to Establishing Performance-Based Budgeting in Hospitals Owned by the Social Security Organization in Tehran Province. *Public Sector Accounting and Budgeting*, 3 (9): 35–56. [In Persian]
- Ahmadi, G. (2025). Performance-based budgeting reforms in Iran and the United States of America. *Quarterly Journal of Public Sector Accounting & Budgeting*, 6 (2), 49-68. DOI: [10.22034/psab.2025.219282](https://doi.org/10.22034/psab.2025.219282)
- Alkhuzaie, R., Muhamad, H., Daud, Z. M., & Senik, R. (2025). The strategy of adopting performance-based budgeting in the public sector: A conceptual framework. *Corporate & Business Strategy Review*, 6 (1), 187–196. <https://doi.org/10.22495/cbsrv6i1art18>

- Asadpour A. (2009). *The Role of Cybernetic Exploration Management in the Organizational Learning Process (Case Study: Iran Khodro Company)*. Master's thesis, Faculty of Management, Allameh Tabataba'i University. [In Persian].
- Avinal, M., & Aydin, A. (2022). The effects of activities designed with three-dimensional printing technology on science education. *Journal of Turkish Science Education*, 19 (3), 887-910. DOI: [10.36681/tused.2022.155](https://doi.org/10.36681/tused.2022.155)
- Azizian D. (2022). *Identifying and Explaining Factors Affecting the Marketing Strategies of Logistics Businesses*. Master's thesis, Faculty of Economics and Administrative Sciences, University of Mazandaran. [In Persian].
- Bidram R. (2011). Examining Rent-Seeking Opportunities in the Budgeting Structure of Municipalities and Its Relationship with Efficiency: The Case of Metropolitan Municipalities. *Urban Management, Special Issue*: 61–82. [In Persian]
- Bodaqi H., & Eyvazzadeh A. (2016). Examining and Identifying the Barriers and Challenges in Establishing a Performance-Based Budgeting System to Increase Efficiency at Tabriz University of Medical Sciences. *The 2nd International Conference on Management and Economics in the 21st Century, Tehran, Iran*. [In Persian]
- Dwijia, I. G. A. M. A., Wirawati, N. G. P., Savitri, K. A. D., & Okayanti, N. M. D. (2025). IMPLEMENTATION OF GOOD GOVERNANCE, BUDGET PARTICIPATION, AND ORGANIZATIONAL COMMITMENT IN EFFORTS TO REDUCE BUDGET GAP. *EKUITAS (Jurnal Ekonomi dan Keuangan)*, 9(1), 29-42. DOI: [10.24034/j25485024.y2025.v9.i1.7076](https://doi.org/10.24034/j25485024.y2025.v9.i1.7076)
- Ebrahimi, A., Ahmadian, S., & Mozafari, G. (2022). Development of economic resource acquisition system in Tehran Urban Management based on strategies of competitive advantage of nations and hybrid fuzzy multi-criteria decision-making. *Journal of Urban Economics and Planning*, 3(3), 6–21.
- Edo-Osagie, E. (2025). Advanced Budgeting and Dynamic Allocation Strategies for Maximizing Financial Resilience Amid Economic Volatility and Market Shifts. *International Journal of Research Publication and Reviews*, 6(3), 1060-1077. DOI: [10.55248/gengpi.6.0325.1130](https://doi.org/10.55248/gengpi.6.0325.1130)
- Ghaei M. B. (2016). *Identifying and Ranking the Barriers to Establishing Performance-Based Budgeting Using Activity-Based Costing (Case Study: Karaj Municipality)*. M.A. Thesis, Faculty of Literature and Humanities, Shahed University. [In Persian]
- Gharib, N. S. M., Saleh, Z., & Isa, C. R. (2024). A Thematic Review on Performance-Based Budgeting in the Public Sector Organisation. *IPN Journal of Research and Practice in Public Sector Accounting and Management*, 14(2), 1-31. DOI: [10.58458/ipnj.v14.02.01.0104](https://doi.org/10.58458/ipnj.v14.02.01.0104)
- Ghorbani F. (2022). *Developing a Water Governance Model with a Participatory Management Approach (Case Study: Gharangoo Basin)*. Doctoral dissertation, Faculty of Economics and Management, University of Tabriz. [In Persian].
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012). Applied thematic analysis. Sage Publications. Thousand Oaks. Print ISBN: 9781412971676, <https://dx.doi.org/10.4135/9781483384436>
- Hallgren, K. (2012). Computing inter-rater reliability for observational data: An overview and tutorial. *Tutorials in Quantita-*

- tive Methods for Psychology, 8 (1), 23–34, DOI: [10.20982/tqmp.08.1.p023](https://doi.org/10.20982/tqmp.08.1.p023)
- Heydari A., Amiri M., & Jamour H. (2018). The Role of Intra-Organizational Factors in Implementing Performance-Based Budgeting: An Interpretive Structural Modeling Approach (Case Study: Tehran Municipality). *Journal of Urban Economics and Management*, 6 (4): 117–133, DOR: [20.1001.1.23452870.1397.6.24.8.5](https://doi.org/20.1001.1.23452870.1397.6.24.8.5) [In Persian]
- Islam, S. (2025). A systematic review of public budgeting strategies in developing economies: Tools for transparent fiscal governance. *American Journal of Advanced Technology and Engineering Solutions*, 2 (2), 348–381. <https://doi.org/10.63125/wm547117>
- Jajarmi M. (2018). *Examining the Relationship between Organizational Learning and Environmental Conditions with Customer Satisfaction, Considering the Mediating Role of Organizational Commitment (Case Study: Bank Melli, Golestan Province)*. Master's Thesis, East Golestan Higher Education Institute. [In Persian].
- Jumardi (2025). Assessing the effectiveness of performance-based budgeting in achieving public sector financial goals. *The Journal of Academic Science*, 2 (4), 1–10. DOI: [10.59613/zezb3994](https://doi.org/10.59613/zezb3994)
- Katat, S., Chi, Q., Mingqiu, G., & Yun, Z. (2025). Chronicle analysis of new public management and performance-based budgeting: delusion and existence. *Journal of the Knowledge Economy*, 75–91. DOI: [10.1007/s13132-025-02739-0](https://doi.org/10.1007/s13132-025-02739-0)
- Khairani, H. (2025). Literature study: Implementation of performance-based budgeting in regional financial management. *Kajian Akuntansi*, 26 (1), 40–46, https://doi.org/10.29313/kajian_akuntansi.v26i1.5885
- Kheradmand A., & Zeinali M. (2011). Investigating the Barriers and Problems of Establishing Performance-Based Budgeting in the Municipalities of East Azerbaijan Province. *National Conference on Identifying and Explaining Solutions for Achieving Economic Jihad in Municipalities, Shiraz*. [In Persian]
- Kichigina, A. (2017). *Challenges in the Implementation of performance management, case study of the Russian public services, Krasnoyarsk city*. Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, Faculty of Social Sciences and Humanities, London Metropolitan University.
- Kim, S., Lee, J., & Lee, J. (2018). Citizen participation and public trust in local government: The Republic of Korea case. *OECD Journal on Budgeting*, 18 (2), 73–92. DOI: [10.1787/budget-18-5j8fz1kqp8d8](https://doi.org/10.1787/budget-18-5j8fz1kqp8d8)
- Kuntadi, C., & Livrianti, N. (2022). Factors affecting the implementation of performance-based budgeting policies: communication, resources, and bureaucratic structure. *Journal of Research Social Science, Economics, and Management*, 20 (4), 466–484. DOI: [10.59141/jrssem.v2i04.279](https://doi.org/10.59141/jrssem.v2i04.279)
- Landis JRKoch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33 (1), 159–174. <https://doi.org/10.2307/2529310>
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: a practical, step-by-step guide for learning and teaching scholars. *AISHE-J*, 3, 3364.
- Mahdipour M. (2017). *The Impact of Organizational Components on the Establishment of Performance-Based Budgeting (Case Study: Rasht Municipality)*. Master's Thesis, Koushyar Higher Education Institute. [In Persian]
- Mansourabadi A. (2011). *Feasibility of Implementing Performance-Based Budgeting Based on the Shah Model: The Case of Shiraz Municipality*. M.A. Thesis, Faculty of Humanities, Islamic Azad University, Marvdasht Branch, Iran. [In Persian]
- Mody, M. A., & Fabrizio, M. S. (2006). Can budget institutions counteract political indiscipline? (No. 2006/123). *International Monetary Fund*. <https://doi.org/10.5089/9781451863833.001>
- Mohangi, P., & Nyika, F. (2023). Performance management implementation in local government: lessons from recent international literature. *Public Administration Journal*. 13 (1), 2548–7787, DOI: [10.31289/jap.v13i1.9520](https://doi.org/10.31289/jap.v13i1.9520)
- Montazeri, R., & Khodaei, Z. (2012). The Role of Sustainable Financial Resources in Municipalities Income Resources. *Journal of Urban Economics and Planning*, 4(13), 25–37.
- Moradi J., Valipour H., Mansourabadi A., & Zare R. (2012). Feasibility Study of Implementing Performance-Based Budgeting: The Case of Shiraz Municipality. *Health Accounting Quarterly*, 1 (2): 85–109. DOI: [10.30476/jha.2012.16597](https://doi.org/10.30476/jha.2012.16597) [In Persian]
- Morajani M. J. (2013). *Examining the Barriers to Establishing Performance-Based Budgeting in Tehran Municipality (Case Study: District 19)*. M.A. Thesis, Department of Management, Faculty of Humanities, Payam Noor University, West Tehran Branch. [In Persian]
- Moshkelgosha E., & Nazari R. (2019). Presenting a Blue Ocean Strategy Model in Sports Clubs. *Research in Sponsorship, Sports Management and Marketing Quarterly*, 1 (1): 110–128. DOI: [10.34785/J017.2020.975](https://doi.org/10.34785/J017.2020.975) [in Persian].
- Norouzi T. (2023). Budgeting Methods and the Application of Performance-Based Budgeting in Municipalities. *Journal of New Research in Management and Accounting*, 6 (2): 503–516. DOI: [10.22075/ijnna.2023.28909.4268](https://doi.org/10.22075/ijnna.2023.28909.4268) [In Persian]
- O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: Debates and practical guidelines. *International Journal of Qualitative Methods*, 19, 1609406919899220.
- OECD (2019). *OECD Good Practices for Performance Budgeting*. OECD Publishing, Paris, <https://doi.org/10.1787/c90b0305-en>.
- OECD (2025). *Government at a Glance 2025*. OECD Publishing, Paris, <https://doi.org/10.1787/0efd0bcd-en>.
- Olad M., Akbari A., & Adidi Siavashani M. (2022). *Reforming the Revenue and Expenditure Management System of Tabriz Municipality*. [Research Project]. Research Center of the Islamic City Council of Tabriz Metropolis
- Pourzamani Z., & Naderi B. (2012). Investigating the Barriers to Establishing Performance-Based Budgeting in the Free Trade–Industrial Zones of Iran. *Health Accounting Quarterly*, 1 (1): 1–16. DOI: [10.30476/jha.2012.16583](https://doi.org/10.30476/jha.2012.16583) [In Persian]
- Robinson, M. (2007). *Performance budgeting: linking funding results*. International Money Fund Publishing. London.
- Sadeghi F. (2017). *Equipping Municipal Toll and Renovation Centers with Geographic Information Systems (GIS): A Case Study of District 2, Kermanshah Municipality*. Master's Thesis, Payame Noor University, Central Kermanshah Branch. [In Persian].
- Sahara, K. I. M., & Salomoa, R. V. (2025). A Sytematic Literature

- Review: Assessing the Effectiveness of Performance-Based Budgeting in Government Financial Management. *Jurnal Ilmu Pemerintahan: Kajian Ilmu Pemerintahan dan Politik Daerah*, 10 (1), 52-74. <https://doi.org/10.24905/jip.10.1.2025.52-74>
- Salman, F., Hashemi, S. A., & Foroghi, D. (2023). Feasibility of establishing operational budgeting in Iraqi public universities. *Risks*, 11 (2), 44. <https://doi.org/10.3390/risks11020044>
- Sarzaeem A. (2022). *Economics for All*. Tehran: Termeh Publications. [In Persian]
- Shahrokhian A. (2021). *Examining and Forecasting Municipal Revenues from Macro to Microeconomic Perspectives and Providing Strategies for Sustainable Revenue Generation in Shiraz Municipality*. Doctoral dissertation, Faculty of Humanities, Islamic Azad University, Marvdasht Branch. [In Persian].
- Shan, A., & Shen, C. (2007). *Budgeting and Budgetary Institutions*. The World Bank Publishing. Washington, ISBN-13:978-0-8213-6939-5
- Shayegan S. (2023). Examining the Objectives of Performance-Based Budgeting in Municipalities. *The 21st National Conference on Urban Planning, Architecture, Civil Engineering, and Environment, Shirvan*. [In Persian]
- Sheikh-al-Eslami-Nasab, S. (2011). *Examining the Establishment of Performance-Based Budgeting in the Management and Planning Organization of Khuzestan Province Using the SWOT Matrix*. M.A. Thesis, University of Tehran. [In Persian]
- Talebnia G., & Talebi M. (2018). Budgeting System in Iran and Its Structure. *Journal of New Research Approaches in Management Sciences*, 1 (6): 41–67. [In Persian]
- Valiqlizadeh A., & Kheyri T. (2016). Clarifying the Role of Centralization to Create Challenges of Urban Management in Iran. *Research Political Geography Quarterly*, 3: 27–53. <https://doi.org/10.22067/pg.v1i1.47785> [In Persian]
- World Bank (2008). *Strengthening Local Government Budgeting and Accountability*. Policy Research Working Paper. Sustainable Development Network. Social Development Department. <http://econ.worldbank.org>.
- World Bank. (2019). *Implementing Public Sector Accounting and Financial Management Reforms: Challenges and Institutional Capacity*. Washington, DC: World Bank.
- Yazdani H., & Ghaffari Komleh S. (2023). Examining the features of performance-based budgeting in municipalities to improve services and enhance citizens' quality of life. *The 17th National Conference on Economics, Management, and Accounting, Rahjouyan Paya Shahr Atrak Research Institute, Shirvan*. [In Persian]
- Yousefi, Nayer. M., Fazaeli, A. A., Hamidi, Y. (2022). Hospital efficiency measurement in the west of Iran: Data envelopment analysis and econometric approach. *Cost Effectiveness and Resource Allocation*, 20:5. <https://doi.org/10.1186/s12962-022-00341-8>