The Possibility of Approving the Programs and Performance Budget in the Planning of Governmental Health Units in Iraq: A Case Study

Zainab Raad Dawood¹ Alaa Fareed Abdulahad²

¹Management Technical College, Southern Technical University, Iraq Email: <u>Zainab.ra3d@gmail.com</u> ²Management Technical College, Southern Technical University, Iraq Email: <u>alaabotto@stu.edu.iq</u>

Received: 11 May 2023	Accepted: 10 J	June 2023								
Citation: Dawood ZR, A	Abdulahad AF (20	023) The	Possibili	ty of App	roving the	Program	s an	d Performai	nce Bud	lget in the
Planning of Governme	ntal Health U	Inits in	Iraq:	A Case	Study.	History	of	Medicine	9(2):	536-545.
https://doi.org/10.17720/2409-5834.v9.2.2023.071										

Abstract

Administrative accounting plays a crucial and significant role in providing management with information to assist them in performing their functions, particularly in the process of planning and making sound decisions. It is the primary system for all accounting information, and it determines the extent to which units are committed to budget planning. Due to significant developments in the business environment, unit performance must be developed in a manner that keeps pace with this evolution, moving from preparing the budget using the traditional budget method (item budgeting) to program and performance budgeting. Therefore, program and performance budgeting have been adopted and applied in the Basra Health Department / Third Governorate Center sector (the research sample). One of the most important findings of this research is that the current budget, which is the traditional item budget, does not assist in planning because it does not contain main programs, sub-programs, and activities, and is unable to link revenues and expenses to responsibility centers to achieve an appropriate framework for effective performance control. Thus, the need to focus on program and performance budgeting and activate its role has been proposed, so that program and performance budgeting is a translation of objectives and plans into quantitative and financial form, in order to optimally raise the efficiency and effectiveness of financial performance. Therefore, this study recommended focusing on program and performance budgeting and boosting its significance. This is in order to convert objectives and plans into numerical and financial expressions, which can enhance the efficiency and effectiveness of financial performance to a considerable extent.

Keywords:

General Budget, Program and Performance Budget, Planning.

Business units, especially government units, seek to optimize their expenditures through planning, control, and performance evaluation. Program and performance budgeting is one of the control tools that impact the performance of the government unit, increases its ability to achieve its goals, and is an important tool used in the public sector, playing a crucial role in decision-making. Program and performance budgeting is used as a planning tool in both the public and private sectors by creating a vision of the unit's work to enable it to achieve its established goals.

Effective planning helps achieve a balance between the unit's goals and capabilities that are proportional to each other. This leads to decision-making to optimally utilize expenses, and thus, program and performance budgeting is considered the most appropriate tool to help achieve efficiency in spending.

1) Research Problem:

The research problem has been identified by answering the following question:

To what extent does budgeting and performance help in planning government health units for the research sample?

2) Importance of research:

The importance of research comes from the focus of government units on the importance of commitment in planning budgeting and performance and using it as an effective means of supervision and evaluating future performance, as well as being a predictive tool that leads to improving effectiveness and financial efficiency.

3) Research objectives:

The main objective of the research has been identified as follows:

The extent to which is it possible to apply budgeting and performance in planning for the research sample, and how to introduce the method that can be used to apply this approach in government health units in Iraq for the research sample.

4) Research hypothesis:

The following hypothesis has been formulated:

Adopting budgeting and performance contributes to financial budget planning for the research sample (Sector of the Third Governorate Center/ Basra Health Department).

5) Research sample:

The research sample was represented by the sector of the Third Governorate Center in the Basra Health Department, one of the general directorates in the Iraqi Ministry of Finance. Financial data and information for the Third Governorate Center sector/ Financial and Administrative Affairs Department for the fiscal year (2022) were relied upon.

6) Previous studies

Widodo's study (2017), titled "Performance-based budgeting: Evidence from Indonesia" aimed to investigate budget implementation based on performance through a case study from Indonesia. The study examined the use of performance information by government officials or practitioners in the national-level budget planning and making process within Indonesia. Specifically, it evaluated the impact of performance results on budget allocations compared to other factors that influence budget allocation decisions. The study used a survey method to measure study variables and found that Indonesia has made significant efforts towards using performance information in budget planning processes.

The study titled "The Feasibility of Implementing Program and Performance Budgeting and Its Role in Rationalizing Government Spending in Iraq" by Sultan & Hussein (2018) aimed to explore the concept of program and performance budgeting as a modern approach to preparing the general budget for achieving economic and social development. The research utilized a survey to identify the problems associated with the traditional budgeting approach and assess the potential for implementing program and performance budgeting to rationalize public spending. The findings indicated that program and performance budgeting could effectively address the limitations of the traditional method, and the study recommended that countries, whether developed or developing, should adopt this modern approach to budgeting.

A study by Marinucci (2021) titled "Effective budgeting tool and performance evaluation for a private trader/Italy" aimed to design a budgeting tool that would help estimate and monitor the financial performance of the company. The benefit of budgeting is to translate plans into clear and tangible objectives. Another main benefit of budgeting is understanding whether the company is meeting its goals and expectations. It can also help avert unnecessary risks and obstacles that are always imminent in all business operations. The study relied on the application of the general budget in a company (Case Company) and found that it would always be useful for small and medium-sized companies to start the budgeting process. Budgeting increases the quality of the company's operational planning, helps to define objectives, and is also a useful tool when it comes to decision-making. The study recommended that budgeting is an ideal opportunity to improve the company's operations and design them in the present. The presence of budgeting in company units has become necessary to achieve goals and monitor actual

and planned performance in the budget and evaluate whether the company is reaching achievable goals.

This current study adopts the practical application of program budgeting and performance in health service units for the Directorate of Health in Basra/Third Governorate Sector (research sample) as well as the application of such techniques and their role in the budgeting process in government health units in Iraq.

2-General Budget

The budgeting method is one of the oldest planning methods used, where managerial accounting borrowed this term, "budgets," from general financial studies. Originally, the word "budget" referred to the disclosure prepared by the state to estimate its revenues and expenditures, and the origin of the term "Baguette" goes back to the French financial term "Budget." In the early stages of using the general budget, the English Minister of Finance in the government prepared the budget estimates and presented them to the British House of Commons (Jouda & Abu Sar Dana, 2010, pp. 251-252). Therefore, the general budget is considered the main tool that reflects the state's financial policy, enhancing the efficiency and effectiveness of public revenues and expenditures bv linking the appropriations allocated to government agencies with measurable results (Bazzoli & Wernz, 2020, p. 35). Thus, the budget is considered the main planning tool used in most government units, as it helps in the development of work and making the right decisions in government units, and it has an impact on the success of government units (Foster, 2017, p. 18). Therefore, the budget has become necessary in the modern era, and every country in the world needs it, no matter what its political system or form of government is.Without budgets, it is difficult for ministries, departments, and government units to function regularly, and without them, the state cannot perform its assigned tasks, making it difficult to manage the national economy and direct it in the planned direction (Asfour, 2020, p. 2). The general budget is defined as "a financial statement that represents the revenues and expenses proposed by the government for the fiscal year." Usually, the budget is prepared by public employees appointed within a ministry or planning department, and it is reviewed by

the government's executive body and passed by the legislative body to become a law as a bill of appropriations. Ultimately, it is approved by the executive president. After approval, the appointed ministry or department oversees its implementation under the supervision of the executive authority and is monitored by the legislative authority." (Adeiza et al., 2019, p. 67).

1-Importance of public budget:

The importance of the budget can be summarized in three main aspects, as follows (Sanouri, 2017, p. 30):

Firstly: the budget serves as an indicator of the national economic direction of the state, demonstrating the extent to which the state is utilizing its resources and determining growth objectives and national investment in more detail.

Secondly: the budget aims to achieve economic balance, i.e., it works to stabilize and determine the appropriate level of growth, reduce unemployment and inflation, and maintain balance in the external sector.

Thirdly: the budget utilizes tax collection and imposition processes and uses revenues for fair distribution in society, including imposing taxes on the wealthy and redistributing them to the poor through the expenditure process.

2-The basic principles of the general budget:

The general budget includes several accounting principles that are relied upon when preparing and developing the budget, as follows:

- **A.** principle of inclusivity: This principle means that the budget should include all revenues and expenditures, showing all state revenues and expenditures without any deduction or offset between revenues and expenditures. (Boumaad, 2021, p. 30).
- **B.** The principle of time distribution: This principle is based on distributing and timing the budget over the period, usually a fiscal year, in terms of occurrence by dividing the budget into quarterly or monthly periods. (Amroun, 2019, p. 11).
- **C.** The principle of clarity: This principle represents the sufficient clarity for understanding the contents and details of the budget, by not including summary

appropriations, but rather separate ones. (Shtayeh, 2022, p. 15).

D. The principle of coordination: It means coordinating the sub-tables prepared after taking into account the mutual relations that were not taken into consideration and achieving homogeneity by creating

complete interdependence and coordination between them. (Al-Bayati, 2022, p. 73).

E. The principle of sharing: This principle represents the sharing of all administrative levels related to budget preparation. (Al-Saadi, 2022, p. 38). The following figure (1) illustrates the principles of the general budget.



Figure (1):



3- Functions and Benefits of the General Budget:

The benefits of the budget are as follows:

A.

lanning Tool: It helps in setting long-term and short-term goals, identifying the best alternative among available options, and assisting in achieving goals under available circumstances (Hilton & Platt, 2020, p. 384).

- **B.** Coordination Tool: It is a tool for coordinating the different activities of the various departments of the government unit (Anthony et al, 2012, p. 397).
- **C.** Communication Tool: Communication refers to ensuring that all employees understand these goals (Datar et al., 2021, p. 215).
- **D.** Motivational Tool: The participation of individuals working at various managerial levels in determining the unit's goals generates a sense of responsibility

and motivates them to accomplish their assigned tasks to the fullest extent, and then achieve goals with high efficiency (Al Bayati, 2022, p. 72).

principles of

- E. Performance Evaluation **Tool:** It is an effective tool through which management can carry out performance evaluation and control by comparing the plan or estimate with the actual performance. In case of any deviations between expected and actual results, the reasons for these deviations are analyzed to determine whether they are positive or negative deviations, so that management can take corrective action (Hassoun, 2017, p. 83).
- **F.** Control Tool: It is a tool for controlling the different activities of the unit, including collecting feedback to ensure that the plan is implemented or modified correctly with changing circumstances (Garrison et al., 2021, p. 355). Figure (2) illustrates the functions and benefits of the general budget.



Figure (2) functions and advantages of Public budget Source :PreparationResearcher

4-Stages of general budget:

The general budget goes through four stages (Boumaad, 2021, p. 31):

- 1. Preparation and drafting stage: This stage is carried out by the relevant government agencies, which determine estimates and projections for both general revenues and expenditures for the upcoming fiscal year. It also clarifies the objectives of the state's financial and economic policy and the suitability of the budget for it. The publication reviews comprehensive economic and financial forecasts for the upcoming fiscal year, as well as indicators and economic and financial policies established by the national authority.
- **2.** Budget approval stage: This stage is carried out by the legislative authority, which votes on accepting

the budget. The legislative authority exercises oversight over the executive authority.

- **3.** Budget implementation stage: This stage is carried out by the executive authority according to what the legislative authority approved and under its oversight. During this stage, the government complies with what was approved in the budget. The items approved in both the revenue and expenditure sides of the budget cannot be exceeded without first returning to the legislative authority for approval before implementation.
- **4.** Oversight stage of budget implementation: The final account is prepared for any work carried out to ensure the safety of implementing the state's financial plan in terms of expenditures and revenues, as decided by the budget law. Figure (3) illustrates the stages of the general budget.



Figure (3): Stages of public budget. Source :PreparationResearcher

Program and performance budget

After traditional budgeting lost its importance as a control tool due to the stability of government accounting and internal control systems, continuous attempts in many countries emerged to increase the benefits of budgeting and transform it into a new functional service, focusing on reforming government administration by emphasizing administrative rather than financial aspects. Due to the multiple problems related to the use of the line-item budgeting approach, which focuses on the controlling side of the general expenditures and obtaining funds, and does not focus on performance results that the expenses were made for, from limited resources, a comparison between alternatives or programs provided to achieve greater benefits is required (Bonomi Savignon et al, 2019, p. 4. This has led many countries and government units to move towards program and performance budgeting as a means to improve alignment with public policy priorities and enhance accountability and transparency, in addition to changes in the budget documents structure. This reform leads to transformations in budget and expenditure management systems, which requires closer cooperation between the Ministry of Finance and executive ministries (Abewe et al., 2021, p.1).

Therefore, the emergence of the need for program and performance budgeting techniques to link administrative expenditure and revenue elements has led many units to adopt a program and performancebased budgeting approach. This approach utilizes modern budgeting methods that keep pace with the latest developments in management to ensure efficient and effective implementation of assigned tasks according to the plan. The introduction of modern financial management methods is considered one of the main reasons for this development, which has led to the adoption of this type of budgeting (Al-Hilu, 2017, p. 49). Yusuf defined it as "a planning and evaluation system that prioritizes the achievement of work results (outputs or outcomes) from various programs and activities via a quantifiable and qualitative budget. This means that any funds allocated in the budget to implement different programs and activities must have measurable performance indicators, such as inputs and outputs, outcomes, benefits, impacts, and expected goals or objectives represented in the standards. Budget implementation can be improved through adequate financial control, leading to increased accountability for government performance" (Yusuf, 2021, p. 61).

Components of programs and performance budget:

This method of preparing the budget depends on the necessity of having the following ingredients (Dawood & Al-Muhaihi, 2022, p1326):

- a) Determining the final product units of services so that appropriate measurement and accountability of responsible parties can be conducted.
- **b)** Defining the functions of the state and translate them into specific objectives linked to specific time periods.
- c) Designing a cost accounting system and follow the accrual basis in expense treatment.
- **d)** Identifying performance and cost centers to which cost components can be attributed.
- e) Establishing performance standards and measures that may be economic standards indicating optimal expense usage. They may be quantitative or financial standards, or they may be social standards that measure the extent to which the unit fulfills its social responsibility, such as to what extent customers are satisfied with government services, which may be difficult to define.
- f) Developing a system for periodic progress reports on the stages being executed and the cost of each stage.
- **g)** Developing an expense analysis system linked to benefits to help evaluate performance.

4- Planning

The process of management accounting involves several steps such as establishing unit goals, devising plans, anticipating outcomes by exploring different approaches, deciding on the methods to achieve the goals, and conveying the objectives and methods to the entire unit. Management accountants play a vital role in this process by collaborating as business partners for planning activities. They possess a comprehensive understanding of the principal factors that contribute to success and value creation (Datar et al., 2021, p. 28).

Figure (4) below illustrates the role of budgets in planning, control, and performance evaluation in government units.



Figure (4): The role of budgets in planning, monitoring and evaluating performance in government units Source: Prepared by the researcher

From the above figure, it can be observed that budgets play a planning role by setting unit objectives and defining performance standards. This represents the planning function. Then, the actual performance is measured and compared to the planned performance, representing the control role of budgets. Next, deviations are analyzed to identify their causes and those responsible for them, and then appropriate actions are taken to correct them. This represents the role of budgets in performance evaluation.

5-The practical aspect

The Directorate of Health in Basra was established on 30/12/1914 and later became a general department under the name "Basra Health Department" on 20/8/1980. Currently, the department employs (18424) staff, including doctors, healthcare and administrative personnel. The department includes ten administrative departments in addition to the office of the general director, fifteen hospitals, ten primary healthcare sectors, and (138) primary healthcare centers in the center and outskirts of the province, as well as fifteen specialized centers. In 2017, the third provincial center sector (research sample) was established as part of the department's restructuring, with (490) employees.

1- Applying the program and performance budgeting approach to the third provincial center sector (research sample):

A proposed model for program and performance budgeting for the third provincial center sector (research sample) for the year 2022 will be reviewed, using the proposed items for the main programs of the research sample, as shown in Table (1) below:

Program Number	The main programs	Fiscal Allocation (2022)	Actual Expenditure (2022)	Deviation (2022) (3)–(4) = (5)
(1)	(2)	(3)	(4)	(5)
1	Administrative, financial and media affairs	1,613,000,000	1,612,050,112	949,888
2	Legal and informational affairs	93,000,000	92,225,266	774,734
3	Engineering affairs	69,520,000	69,462,000	58,000
4	medical affairs	2,478,847,080	2,462,513,980	16,333,100
5	Internal audit and control	144,000,000	143,885,763	114,237
6	Special programs	2,166,165,920	2,152,610,602	13,555,318
7	Quality assurance and healthy performance	343,000,000	342,907,651	92,349

Table (1) Program and Performance Budget for the Third Governorate Center Sector using Proposed ItemMethod

Total 6,907,533,000 6,875,655,374 31,877,626			
	Total	6,907,533,000	

Source: Prepared by the researcher

Table (1) shows that the total financial allocation reached IQD 6,907,533,000, which was distributed among the main programs of the budget and performance budget for the year 2022. The total actual expenses amounted to IQD 6,875,655,374, which were distributed among employee compensation and operating expenses for the year 2022. The difference (deviation) between the financial allocation for the year 2022 and the actual expense for the year 2022 was IQD 31,877,626. The highest positive deviation was for the medical affairs program, reaching IQD 16,333,100 compared to other programs in the budget and performance budget for the third governorate center (the research sample). The deviation between the financial allocation and actual expenses for the budget and performance budget for the third governorate center (the research sample) for the year 2022 was also shown. The lowest positive deviation was for the engineering affairs program, reaching IQD 58,000 compared to other programs in the budget and

performance budget for the third governorate center (the research sample). The table above shows that control was achieved through the implementation of the set plans, in order to detect any deviations that hinder the achievement of goals, by comparing the financial allocation (planned) with the actual expense (implemented) to achieve the set goals.

2- The Role of Program and Performance Budget in Planning:

Based on the results obtained from developing a proposed model for program and performance budgeting for the research sample, a future (predictive) budget is prepared for the next fiscal year (2023), which in this case is considered a planning tool. As shown in Table (2) the role of program and performance budgeting in planning for the third governorate center sector (research sample) is as follows:

Table (2) The Role of Program Budget and Performance in Planning for the Third Governorate Center Sector(Research Sample)

Program number	The main	The ratio	Actual	Expense amount	Program and	
-	programs	(100%)	expenditure for	for the program	Performance	
			the year (2022)	the expense	Budget for the year	
				actual for a	(2023)	
				year(2022)	(4)+(5)=(6)	
(1)	(2)	(3)	(4)	(5)	(6)	
1	Administrative,	(23%)	1,612,050,112	370,771,526	1,982,821,638	
	financial and media					
	affairs					
2	Legal and	(1%)	92,225,266	922,253	93,147,519	
	informational affairs					
3	Engineering affairs	(2%)	69,462,000	1,389,240	70,851,240	
4	medical affairs	(36%)	2,462,513,980	886,505,033	3,349,019,013	
5	Internal audit and	(2%)	143,885,763	2,877,715	146,763,478	
	control					
6	Special programs	(31%)	2,152,610,602	667,309,287	2,819,919,889	
7	Quality assurance and	(5%)	342,907,651	17,145,383	360,053,034	
	healthy performance					
Total		100%	6,875,655,374	1,946,920,437	8,822,575,811	

Source: Prepared by the researcher

It appears from Table (2) that the total actual expenditure for the year 2022 amounted to (6,875,655,374) Iraqi dinars, which was distributed

among the main programs of the budget programs and performance for the year 2022. The total expenditure for each program from the actual expenditure of the year 2022 amounted to (1,946,920,437) Iraqi dinars, which was distributed among all the main programs of the budget programs and performance for the year 2022. The budget for the programs and performance for the year 2023 amounted to (8,822,575,811) Iraqi dinars for the third governorate center (research sample). It is observed from the above table that the planning tool, which is one of the important functions of the process of preparing the budget programs and performance, has been achieved. This is done by predicting the unit's goals and plans in the future to achieve the set objectives. It is evident from the table that the highest estimated (predicted) budget for the programs and performance budget for the third governorate center (research sample) for the year 2023, represented by the medical affairs program, amounted to (3,349,019,013) Iraqi dinars for the year 2023, due to the urgent need for medical supplies, medicines, and treatment.

As for the lowest estimated (predicted) budget for the programs and performance budget for the third governorate center (research sample) for the year 2023, represented by the engineering affairs program, it amounted to (70,851,240) Iraqi dinars for the year 2023.

Conclusions and recommendations

The implementation of the budget for programs and performance in the third governorate center (research sample) for the year 2022 resulted in the development of an estimated (predictive) budget for programs and performance for the year 2023, which in turn fulfills the role of planning. It is necessary for the budget for programs and performance to be a tool for future planning, whereby it is used as a tool to predict the financial processes for future years, which also reflects the financial goals that the unit wants to achieve. These goals are achieved through effective and continuous supervision, which may have an impact on the financial efficiency of the unit in planning. To achieve the first and most important function of the budget, which is planning, the transition must be made from item budgeting (traditional budgeting) to program and performance budgeting, as item budgeting (traditional budgeting) lacks control over programs and activities, and its role in monitoring financial performance and controlling the efficiency and effectiveness of programs and activities diminishes.

7- References

- Abewe, C., Kyaddondo, D., Nabyonga-Orem, J., & Orach, C. G. (2021). Transition to programme budgeting in Uganda: status of the reform and preliminary lessons for health. International Journal of Health Policy and Management, 10(1), 1-12.
- Adeiza, M. O., Salihu Aruwa, S. A. O., & Bashir, A. M. (2019). Public Budgeting: A Theoretical Review on Preventing Misappropriation. IOSR Journal of Humanities and Social Science, 24(7), 66-71.
- Al-Bayati, Q. A. O. (2022). The extent of reliance on planning budgets in monitoring and performance evaluation: a study in the General Company for Vegetable Oils. World Economics and Finance Bulletin, 14, 2749-3628.
- Al-Hilu, A. G. M. (2017). The extent of availability of the elements of the application of the program and performance budget in Palestinian government universities: A case study of Al-Aqsa University. (Unpublished Master's thesis). Palestinian Al-Aqsa University.
- Al-Saadi, R. A. H. (2022). The role of planning budgets in improving financial performance – A field study on Saudi joint-stock companies in Jeddah city. Arab Journal of Literature and Humanities Studies, 6(22), 29-68.
- Amroun, H. (2019). The importance of activity-based budgeting (ABB) in improving the performance of the economic institution. (Unpublished master's thesis). University of M'sila.
- Anthony, R. S., Kaplan, R. S., Matsumura, E. M., & Young, S. M. (2012). Information for Decision-Making and Strategy Execution. Harvard Business School Working Paper, No. 12-002.
- Asfour, M. S. (2020). Principles of Public Budgeting. Amman: Dar Al-Maseera for Publishing and Distribution.
- Bazzoli, G., & Wernz, C. (2020). Impact of Performance-Based Budgeting on Quality Outcomes in U.S. Military Healthcare Facilities. Virginia Commonwealth University. VCU Scholars Compass.
- Bonomi Savignon, A., Costumato, L., & Marchese, B. (2019). Performance budgeting in context: An analysis of Italian central administrations. Administrative Sciences, 9(4), 79.
- Boumaad, M. (2021). Bank financing for the general budget deficit of Algeria. Abdelhafid Boussouf Mila University Center.
- Dawoud, Y. I., & Al-Muhaihi, R. A. H. (2022). A proposed framework for developing program and performance budgeting in the health sector in Egypt. Scientific Journal of Financial and Administrative Studies, 13(3), 1316-1361.
- Foster, T. A. (2017). Budget planning, budget control, business age, and financial performance in small businesses. Walden University.
- Garrison, R. H., Noreen, E. W., & Brewer, P. C. (2021). Managerial accounting (17th ed.). McGraw Hill Education.
- Hassoun, A. (2017). Evaluating the use of planning budgets in financial control: Case study of the General Company for Cotton Yarn in Lattakia. Journal of Tishreen University for Research and Scientific Studies, Economic and Legal Sciences Series, 39(2).

- Hilton, R. W., & Platt, D. E. (2020). Managerial accounting: Creating value in a dynamic business environment (12th ed.).
- Datar, S. M., & Rajan, M. V. (2018). Horngren's cost accounting: a managerial emphasis. Pearson.
- Jouda, A. M., & Abu Sar Dana, J. A. R. (2010). Evaluating the planning budget system in Greater Amman Municipality: A field study. Al-Basaer Journal, 13(2), 292-237.
- Marinucci, S. (2021). Effective budgeting tool and performance evaluation for a private trader.
- Sanouri, A. H. S. (2017). The extent of the impact of the transition from item budgeting to program budgeting on the financial performance of the Palestinian government. (Master's thesis, An-Najah National University).
- Shtayeh, W. (2022). The impact of exchange rate fluctuations on the general budget: A case study of Algeria during the period 2011-2021. (Master's thesis, University of Msila).
- Sultan, A. S., & Hussein, M. R. M. (2018). The possibility of applying program and performance budgeting and its role in rationalizing government spending. Al-Ghari Journal of Economic and Administrative Sciences, 15(4),
- Widodo, T. (2017). Performance-based budgeting: Evidence from Indonesia (Master's thesis). University of Birmingham.
- Yusuf, M. (2021). The impact of local government accounting systems and performance-based budgeting on local government performance accountability. Journal Economic Resource, 3(2), 60-68.