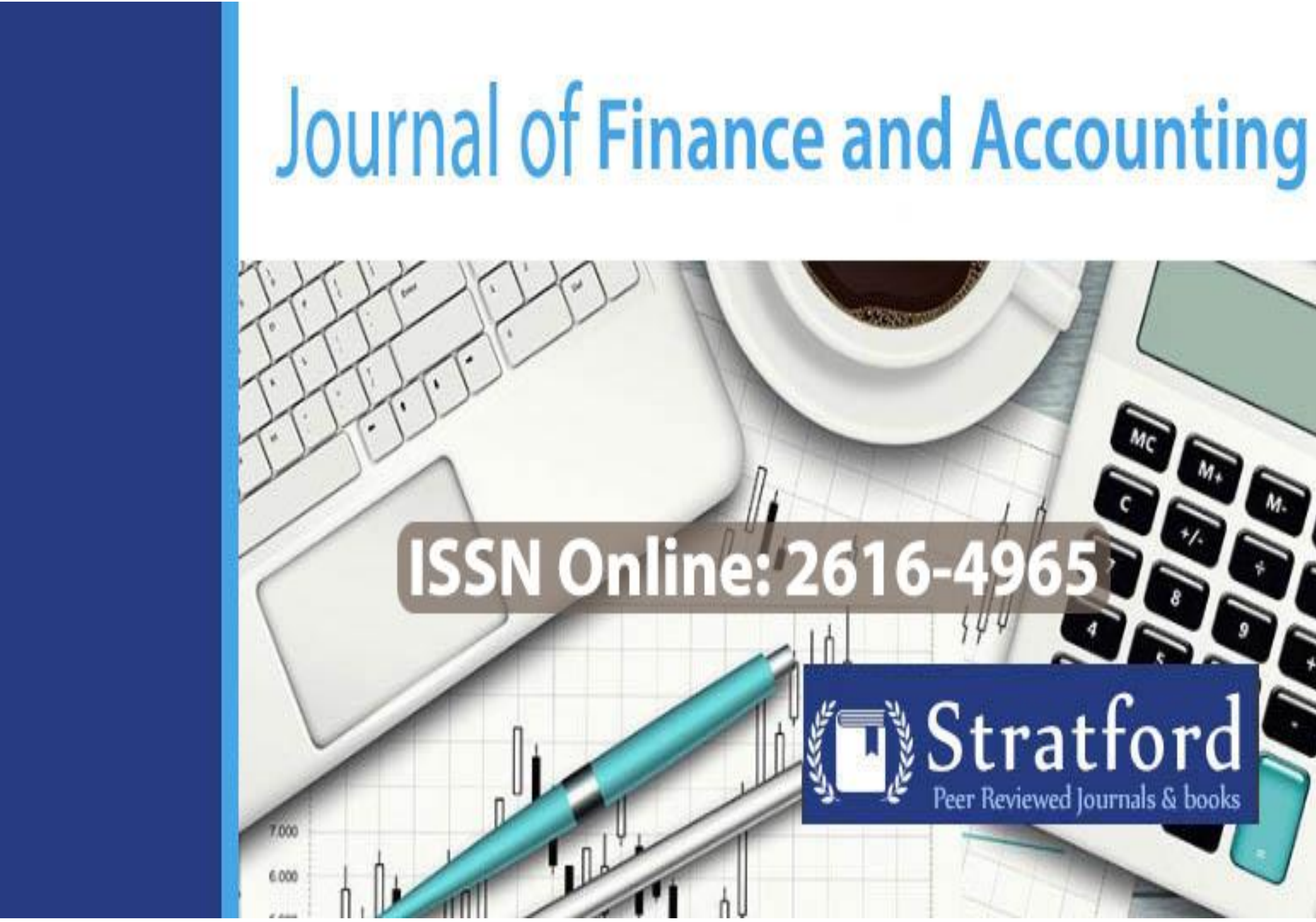

Effect of Budgeting Practices on Performance of Public Institutions. A Case of Kirehe Hospital

Nshimiyimana Dieudonne & Dr. Twesigye Daniel

ISSN: 2616-4965

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 8||Issue 2||Page 90-97 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-4965

Effect of Budgeting Practices on Performance of Public Institutions. A Case of Kirehe Hospital

Nshimiyimana Dieudonne[1] & Dr. Twesigye Daniel[2]

[1] **Master of Accounting and Finance, University of Kigali, Rwanda**
[2] **Senior Lecturer, University of Kigali, Rwanda**

***How to cite this article*: Nshimiyimana D., & Twesigye D. (2024). Effect of Budgeting Practices on Performance of Public Institutions. A Case of Kirehe Hospital. *Journal of Finance and Accounting. Vol* 8(2) pp. 90-97** https://doi.org/10.53819/81018102t2346

Abstract

The general objective of this research was to assess the effect of budgeting practices on performance of public institutions in Kirehe hospital. This study had the following specific objectives to establish effect of budget preparation practices on performance of Kirehe hospital, examine the effect of budget implementation practices on performance of in Kirehe hospital and determine the effect of budget monitoring and evaluation practices on performance of Kirehe hospital. For this study, the researcher used quantitative data collected from closed ended questionnaire while descriptive and explanatory analysis used for generating frequencies, percentages, mean and standard deviation. Explanatory design used for association between variables, researcher used correlational design. The study population for this study was 187 Staffs including Director General, Procurement officer, Planning &Monitoring and Evaluation of hospital, Administrative assistant, Public relation & communication, Public relation & communication, Internal Auditor, QI Officer, Administration & Finance staff, and medical staff at the Kirehe Hospital. The researcher decided gathered data from every single individual or unit within the target population, without using any sampling techniques. Documentary and questionnaire sources used to compile information for the study. Using SPSS, the researcher determined descriptive statistics such as frequency distributions, percentages, means, and standard deviation. The results indicated the coefficient of $\beta1$ equal to 0.307 indicates that a one-unit increase in budget preparation practices is associated with a 0.307-unit increase in the performance of Kirehe hospital. This effect is statistically significant ($p < 0.05$). The coefficient of $\beta2$ equal to 0.443 means that a one-unit increase in budget implementation practices is associated with a 0.443-unit increase in the performance of Kirehe hospital. This effect is statistically significant ($p < 0.05$). The coefficient of $\beta3$ equal to 0.282 implies that a one-unit increase in budget monitoring and evaluation practices is associated with a 0.282-unit increase in the performance of Kirehe hospital. This effect is statistically significant ($p < 0.05$). Kirehe hospital should promote effective coordination and communication among different departments during the budget implementation process. This will ensure that budgeted activities are executed smoothly and that resources are allocated efficiently across various units.

1. Introduction

Rwanda has made significant strides in improving its healthcare system, with a healthcare expenditure of 8.8% of its GDP. However, there are still challenges in healthcare service delivery, including resource constraints and the need for more efficient budget allocation (World Bank, 2021).

The findings of our research indicate that public institutions in Rwanda exhibit a notable discrepancy in the effective utilization of their allocated funds, with 62% of the budgeted funds being efficiently spent while the remaining 38% was not efficiently used. This observation underscores a significant gap in the implementation of budgetary allocations within these institutions. Budget execution challenges have resulted in a significant gap between planned and actual expenditures, with hospitals experiencing difficulties in achieving their performance objectives (Office of the Auditor General of Rwanda, 2020).

Despite the critical role of budgeting practices in enhancing the performance of public institutions, there is a lack of comprehensive research on the specific impact of budgeting practices on the performance of Kirehe Hospital in Rwanda. No studies have explored the effect of budget preparation, budget implementation, and budget monitoring and evaluation on the performance of Kirehe Hospital. This research aims to bridge this gap by specifically examining the impact of budgeting practices on the performance of Kirehe Hospital. By doing so, it contributed to the limited body of knowledge on budgeting practices in the healthcare sector in Rwanda and provide practical insights for policymakers and administrators to improve budgetary processes and performance outcomes in Kirehe Hospital.

1.1 Objectives of the Study

The general objective of this research was to assess the effect of budgeting practices on performance of public institutions in Kirehe hospital.

This study had the following specific objectives:

i. To establish effect of budget preparation practices on performance of Kirehe hospital.
ii. To examine the effect of budget implementation practices on performance of in Kirehe hospital.
iii. To determine the effect of budget monitoring and evaluation practices on performance of Kirehe hospital.

1.2 Hypotheses

The following hypotheses were proposed by the researcher:

$H0_a$: Budget preparation practices do not have significant effect on performance of Kirehe hospital.

$H0_b$: There is no significant effect of budget implementation practices on performance of Kirehe hospital.

$H0_c$: Budget monitoring and evaluation practices have no significant effect on performance of Kirehe hospital.

2. Literature review

Theoretical reviews help researcher identify and select relevant theories or conceptual frameworks that provide a foundation for their own research. This involves assessing the applicability and suitability of existing theories to the specific research at hand.

2.1 Agency theory

Agency theory is a prominent economic and organizational theory that explains the relationship between principals and agents in an organization. It originated in the 1970s and has since been widely studied and applied in various disciplines, including economics, management, and finance. The theory explores the inherent conflicts of interest that arise between principals and agents due to diverging goals and information asymmetry. The concept of agency theory was initially developed by economists Michael C. Jensen and William H. Meckling in their seminal paper, "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure," published in 1976. They proposed that in organizations where ownership and control are separated, such as publicly traded companies, managers act as agents and make decisions on behalf of the owners. This separation of ownership and control introduces a potential agency problem where agents may pursue their own interests rather than maximizing the shareholders' wealth (Bogsnes, 2020).

Agency theory suggests that managers, as agents, may not always act in the best interest of the organization or its stakeholders due to information asymmetry and self-interest. It focuses on the design of mechanisms, such as contracts, incentives, and monitoring systems, to align the interests of principals and agents, reduce agency costs, and enhance organizational performance. Agency theory provides a theoretical framework to understand the dynamics of principal-agent relationships in public institutions. It helps researchers identify and analyze the potential conflicts of interest that may arise between managers and the governing bodies, such as boards or government authorities, in public institutions (Marginson, 2019).

Agency theory provides a valuable framework for understanding the dynamics of principal-agent relationships, identifying agency problems, designing control mechanisms, and analyzing the impact of budget practices on the performance of public institutions.

By applying this theory, researcher contributed to the body of knowledge on how budgeting practices can be optimized to enhance performance, accountability, and governance in the public sector.

2.2 Traditional Budget Theory

Traditional budget theory, also known as incremental budgeting or line-item budgeting, is a widely used approach in budgeting that originated in the early 20th century. It was primarily developed as a response to the increasing complexity of government budgets and the need for a systematic method to allocate resources. The invention of traditional budget theory can be attributed to the work of pioneer public administration scholars, such as Luther Gulick and Lyndall Urwick, in the 1930s and 1940s (Hanse, 2019).

According to Anthony and Govindarajan (2019), the major goal of a typical budget is to achieve organizational goals and objectives. A budget may be defined differently by different organizations. Ax, Johansson, and Kullven (2019) merely claimed that each organization's definition of what a budget means to them differs from a commonly accepted definition. Setting

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 8||Issue 2||Page 90-97 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-4965

objectives, establishing prospective lines of action, reviewing multiple strategic options, selecting an alternative course of action, monitoring actual results, and responding to deviations from plan are all critical components of its role in an organization.Traditional budget theory offers benefits such as stability, predictability, accountability, control, and comparative analysis in the budgeting process of public institutions.

Researcher used this theory as a foundation to study the impact of budget practices on organizational performance, while considering its limitations and exploring complementary approaches to gain a comprehensive understanding of budgeting practices.

3. Research methodology

Information on the research methodology and participants may be found here. It also explains how they decided on their samples and how they collected their data. What data collected, how it processed, and what conclusions drawn are all outlined in this document.

3.1 Research Design

The researcher conducted both descriptive and correlational studies. Descriptive survey research use surveys to collect information on a variety of issues, quantitative approach used for data collected with questionnaire while qualitative approach used for interview response and correlational studies research design examined at the links that exist between variables under the study.

3.2 Study population

The study population for this study was 187 Staffs including Director General, Procurement officer, Planning &Monitoring and Evaluation of hospital, Administrative assistant ,Public relation & communication, Public relation & communication, Internal Auditor, QI Officer, Administration & Finance staff, and medical staff at the Kirehe Hospital.
The researcher decided gathered data from every single individual or unit within the target population, without using any sampling techniques. It provided a highly accurate and comprehensive understanding of the population, leading to findings that are directly applicable and potentially generalizable to the entire population.

3.3 Data Collection

Kirehe Hospital staff received closed ended questionnaires with 5 point of Likert scale; Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree. Closed questions require that responders pick one answer from a predetermined set of options.

3.4 Reliability

How well elements in a set are positively associated with one another can be measured using a reliability coefficient called Cronbach's alpha. Cronbach's alpha calculated in SPSS to ensure the research instrument's reliability. A dependability between 0.7 and 1.0 is typically regarded as satisfactory.

Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
.870	24

For this study, an alpha coefficient of all items 0.870 for a questionnaire with 24 items suggests that the items in your questionnaire are fairly consistent and that the questionnaire is reliable

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 8||Issue 2||Page 90-97 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-4965

for measuring whatever construct or concept it was designed for. This indicates that the items in the questionnaire are related to each other in a meaningful and consistent way, which is generally a positive outcome in research.

3.5. Data Analysis

According to Denzin and Lincoln (2018), Information is analyzed by carefully describing it, giving examples, summarizing it, and using statistical and/or logical methods to judge it. Evaluation of data by breaking it down into its constituent parts and analyzing it logically. Using SPSS, the researcher determined descriptive statistics such as frequency distributions, percentages, means, and standard deviation.

By using descriptive statistics, such as percentages, frequencies, means, and standard deviations, the study provided valuable insights into the budget preparation, budget implementation, budget monitoring and evaluation and performance of the hospital. These statistics helped summarize and describe the data in a concise and meaningful way.

Inferential statistics is a branch of statistics that involves making inferences or drawing conclusions about a population based on a sample of data. Inferential statistics involved hypotheses testing and determining the level of confidence or significance of the findings.

4. Research findings

This chapter concentrated on research findings and data analysis. The findings, analysis, and discussions on the research objectives were presented using descriptive and inferential analysis with the assistance of the Statistical Package for Social Sciences (SPSS).

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.931[a]	.866	.864	.22904
a. Predictors: (Constant), Budget monitoring and evaluation practices, Budget preparation practices, Budget implementation practices				

Source: Field data, August 2023

The multiple regression analysis in Table 2 explores the combined influence of budget monitoring and evaluation practices, budget preparation practices, and budget implementation practices on the performance of public institutions. The model summary presents important statistical indicators to evaluate the strength and accuracy of the regression model. The results indicated R of 0.931, which indicates that approximately 93.1% of the variation in the performance of public institutions can be explained by the combination of budget monitoring and evaluation practices, budget preparation practices, and budget implementation practices. Based on R square of 0.866 it is indicating that 86.6% of the variance in the performance of public institutions is accounted for by the independent variables (budget practices) in the model. This value shows the proportion of the total variation in the dependent variable (performance) that is explained by the regression model. The findings are in line with the study done by Augustino, (2020). Effective budgeting practices have a positive impact on the performance of public institutions. Budgetary practices, such as participatory budgeting, budget control, and adherence to financing regulations, contribute significantly to budget implementation and institutional performance.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 8||Issue 2||Page 90-97 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-4965

Table 3: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.237	3	20.745	398.945	.000[b]
	Residual	9.600	183	.052		
	Total	71.837	186			

a. Dependent Variable: Performance of public institutions
b. Predictors: (Constant), Budget monitoring and evaluation practices, Budget preparation practices, Budget implementation practices

Source: Field data, August 2023

The ANOVA (Analysis of Variance) is a statistical test used to determine the significance of the regression model and assess whether the predictors significantly contribute to explaining the variance in the dependent variable. The results show that the regression model is statistically significant ($F = 398.945$, $p < 0.05$). This indicates that the combination of budget monitoring and evaluation practices, budget preparation practices, and budget implementation practices collectively influences the performance of public institutions. Ahmed (2015) indicated that involving relevant workers in budget creation, monitoring, and execution could improve the efficiency and effectiveness of budgeting practices in Ethiopian non-governmental organizations. Overall, these results align with the findings in the literature review, which emphasize the importance of budgeting practices in improving organizational performance in public institutions. Organizations that implement effective budget monitoring and evaluation practices, prepare well-defined budgets aligned with their objectives, and implement those budgets efficiently are more likely to achieve better performance outcomes.

Table 4: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.011	.106		-.106	.916
	Budget preparation practices	.307	.039	.304	7.801	.000
	Budget implementation practices	.443	.040	.466	10.970	.000
	Budget monitoring and evaluation practices	.282	.038	.280	7.347	.000

a. Dependent Variable: Performance of public institutions

$Y= \beta_0 +\beta_1X_1+\beta_2X_2+ \beta_3X_3+ę$

Where:

Performance of public institutions = -0.011 + 0.307 (Budget preparation practices) + 0.443 (Budget implementation practices) + 0.282 (Budget monitoring and evaluation practices) +0.106

The coefficients table (Table 4) presents the results of the multiple regression analysis, which examines the relationship between the independent variables (budget preparation practices, budget implementation practices, and budget monitoring and evaluation practices) and the

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 8||Issue 2||Page 90-97 ||February||2024|
Email: info@stratfordjournals.org ISSN: 2616-4965

dependent variable (performance of public institutions). The constant term (-0.011) indicates the expected value of the dependent variable (performance of Kirehe hospital) when all independent variables are zero. The coefficient of β1 equal to 0.307 indicates that a one-unit increase in budget preparation practices is associated with a 0.307-unit increase in the performance of Kirehe hospital. This effect is statistically significant ($p < 0.05$). The coefficient of β2 equal to 0.443 means that a one-unit increase in budget implementation practices is associated with a 0.443-unit increase in the performance of Kirehe hospital. This effect is statistically significant ($p < 0.05$). The coefficient of β3 equal to 0.282 implies that a one-unit increase in budget monitoring and evaluation practices is associated with a 0.282-unit increase in the performance of Kirehe hospital. This effect is statistically significant ($p < 0.05$). Overall, the regression model indicates that budget preparation, implementation, and monitoring and evaluation practices collectively influence the performance of Kirehe hospital.

Table 5: Summary on hypotheses tests

No	Hypotheses	P Value	Verdict
$H0_a$:	Budget preparation practices do not have significant effect on performance of Kirehe hospital.	$p<0.05$	**Rejected**
$H0_b$:	There is no significant effect of budget implementation practices on performance of Kirehe hospital.	$p<0.05$	**Rejected**
$H0_c$:	Budget monitoring and evaluation practices have no significant effect on performance of Kirehe hospital.	$p<0.05$	**Rejected**

The researcher proposed the following null hypothesis: $H0_a$: Budget preparation practices do not have significant effect on performance of Kirehe hospital. $H0_b$: There is no significant effect of budget implementation practices on performance of Kirehe hospital. $H0_c$: Budget monitoring and evaluation practices have no significant effect on performance of Kirehe hospital. Based on the findings, all three null hypotheses are rejected. The research indicates that budget preparation, implementation, and monitoring and evaluation practices significantly influence the performance of Kirehe hospital. These results highlight the importance of effective budgeting practices in enhancing the hospital's overall performance and efficiency.

5. Conclusion

The general objective of this research was to assess the effect of budgeting practices on performance of public institutions in Kirehe hospital. The researcher proposed the following null hypothesis: $H0_a$: Budget preparation practices do not have significant effect on performance of Kirehe hospital. $H0_b$: There is no significant effect of budget implementation practices on performance of Kirehe hospital. $H0_c$: Budget monitoring and evaluation practices have no significant effect on performance of Kirehe hospital. Based on the findings, all three null hypotheses are rejected. The research indicates that budget preparation, implementation, and monitoring and evaluation practices significantly influence the performance of Kirehe hospital. These results highlight the importance of effective budgeting practices in enhancing the hospital's overall performance and efficiency.

6. Recommendations

Staff members of Kirehe hospital should focus on providing adequate documentation and justification for budgetary decisions made during the preparation process. This will enhance transparency and accountability, enabling stakeholders to understand the rationale behind budget allocations.

Kirehe hospital should promote effective coordination and communication among different departments during the budget implementation process. This will ensure that budgeted activities are executed smoothly and that resources are allocated efficiently across various units.

Hospital should adopt a performance-based budgeting approach, linking budgetary allocations to expected outcomes and performance targets. By setting clear performance indicators and aligning them with budgetary goals, institutions can measure the effectiveness of budget utilization and make informed decisions to optimize performance.

7. Acknowledgments

I thank almighty God whose mercy, courage, power and gift of life accorded to me to move forward in my academic career. I cannot do without expressing my heartfelt appreciation to my supervisor, Dr. TWESIGYE Daniel, whose generosity, sacrifice, time, energy and professional guidance kept me on track throughout the execution of this work. I appreciate his critical and timely constructive feedback. A big appreciation to my classmates, lecturers, and the administration of the University of Kigali for challenging me to move forward.

References

Ahmed, A. (2015). Budgeting and Budget Monitoring Practices in Ethiopian Non-Governmental Organizations. *Journal of Nonprofit Management*, 25(3), 112-130.

Anthony, F. & Govindarajan, P. (2019) Effect of budgetary process on profitability of NGOs in heath sector in Kenya. *International Journal of Business and Social Science*, *6*(12), 163–172.

Augustino, J. (2020). Budget Review and Performance of Tanzanian Non-Governmental Organizations. *Journal of Non-Profit Management*, 10(2), 45-60.

Ax, C., Johansson, & Kullven, H. (2019). New Management Accounting (5th ed.). Stockholm: Liber.

Bogsnes, Z. (2020). *Public Budgeting in America*. 5th Edition. Pearson: Upper Saddle River, New Jersey. 37

Field, A. (2018). Research design. In Research Methods in Psychology (5th ed., pp. 27-48). Sage Publications.

Hanse, A. (2019). Evolution of the Budget Idea in the United States". *The Annals of the American Academy of Political and Social Science*. 15-35

Marginson, D. (2019). “Effects of Accounting and Budgeting on Capital Allocation for Infrastructure Projects”, in: *Journal of Management in Engineering*, Vol. 17(2), pp. 86.