

# Guidelines for Improving the Budget Performance Management of Public Universities in Guangdong

Deng Liling<sup>1</sup>, Luxana Keyuraphan<sup>1</sup>, Niran Sutheeniran<sup>1</sup> & Patchara Dechhome<sup>1</sup>

<sup>1</sup> Graduate School, Bansomdejchaopraya Rajabhat University, Bangkok, Thailand

Correspondence: Luxana Keyuraphan, Graduate School, Bansomdejchaopraya Rajabhat University, Bangkok, Thailand. E-mail: luxanakeyuraphan@gmail.com

Received: August 22, 2023

Accepted: September 13, 2023

Online Published: September 14, 2023

doi:10.5430/ijhe.v12n5p140

URL: <https://doi.org/10.5430/ijhe.v12n5p140>

## Abstract

The objectives of this research were: 1) to study the current situation of budget performance management of public universities in Guangdong; 2) to investigate the guidelines for improving the budget performance management of public universities in Guangdong; 3) to evaluate the adaptability and feasibility of guidelines for improving the budget performance management of public universities in Guangdong.

The sample group of this research was 285 administrators in public universities in Guangdong. They were selected by systematic random sampling and sample random sampling. The interview group was ten administrators from seven representative universities in Guangdong. The experts for evaluating the adaptability and feasibility of guidelines for improving budget performance management consisted of high-level administrators from each usual public university, totaling seven people. Research instruments included 1) a questionnaire, 2) a structured interview, and 3) an evaluation form—data analysis using percentage, mean, standard deviation, and content analysis.

The results found that the overall level of budget performance management of public universities in Guangdong was high, but also reflected many problems and three issues: (1) widespread challenges in budget performance goal management within universities; (2) incomplete performance execution tracking and monitoring management; (3) insufficient strategic alignment of performance evaluation management; and (4) difficulties in applying performance evaluation results in feedback and application management. The second issue included that the guidelines for improving the budget performance management was divided into three aspects, specifically (1) budget organization, (2) budget process, and (3) information system. The third issue was in regard to the poor level of guidelines for adaptability and feasibility to improve the budget performance management of universities were at the highest level.

**Keywords:** budget performance management, public universities, guidelines for improving

## 1. Introduction

### 1.1 Introduce the Problem

In recent years, there has been a consistent increase in national investment in higher education. Data reveals that China's expenditure on education has exceeded 4% of the gross domestic product (GDP) for ten consecutive years, achieving the goals outlined in the "Outline of China's Education Reform and Development." This reflects the country's high regard for the development of the education sector. However, it's important to note that while investment in higher education has increased, the growth rate has gradually decreased. This trend can be observed from 2011 to 2021 in the nationwide fiscal education expenditure, as depicted in Figure 1.

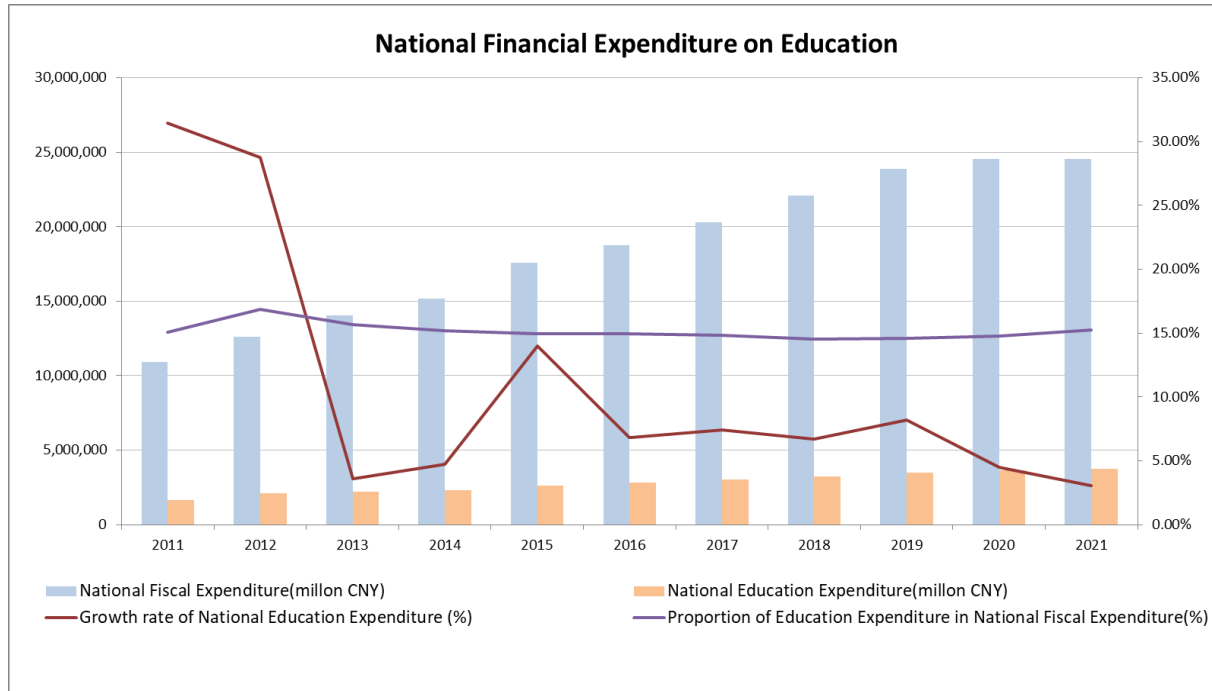


Figure 1.

Figure 1 shows that while national educational expenditures have been increasing annually, the growth rate has slowed, with the increment decreasing yearly. In May 2020, during the Government Work Report, Premier Li Keqiang emphasized the government's need to tighten its fiscal belt, which further signaled the direction of future budgetary development. Consequently, it becomes imperative to delve into how to ensure the effective, reasonable, and scientific utilization of allocated resources, implement performance management for fund usage, and optimize fund allocation further. These areas require thorough research and investigation.

As significant administrative institutions, higher education institutions are compelled to respond to the national call by expediting comprehensive budget performance management reforms. Furthermore, being majorly funded by government appropriations and with the gradual and steady increase in educational funding in our country, the allocation of educational resources is more focused on cutting-edge fields, allocating resources in higher education a topic of both theoretical and practical significance. However, due to public institutions' public nature and non-profit orientation, there has long been an issue of "emphasizing input while neglecting management and prioritizing expenditure over performance" in higher education. Institutions often focus on setting budgets and fulfilling tasks assigned by superiors. Weak budget control and evaluation mechanisms make it difficult to guide resource allocation effectively. Most university funds are also earmarked for specific purposes, entailing a rigid budget. This was initially intended for scientific budget management and to prevent misappropriation of funds. However, universities' "base + increment" budgeting model often leads to funds being allocated similarly to previous years, lacking scientifically convincing allocation criteria. This practice sometimes transforms dedicated funds into "special allocations" for specific departments, disrupting the flow of resources toward more efficient areas. The issue also hampers university governance by impeding the ability of university administrators to harmoniously allocate resources from a long-term development and strategic perspective, thereby compromising the unified arrangement of teaching and research activities across departments.

The academic community has offered various suggestions in response to this current situation. Some scholars have provided macro-level recommendations involving establishing budget management committees, budget information systems, clear budget objectives, and emphasis on budget outcomes. Others have focused on details, exploring the application of performance indicators and discussing using tools like the Balanced Scorecard (BSC) and strategy maps.

However, more comprehensive and in-depth university budget performance management research must be done. Based on this backdrop, this study is rooted in the contradiction between the rapid funding needs and the limited education financial resource supply of public universities in Guangdong. By reviewing relevant literature and

domestic management regulations and analyzing the current state of budget performance management in public universities in Guangdong, the study aims to explore guidelines for improving budget management in these institutions. This effort seeks to optimize the allocation of financial resources in universities and contribute to advancing higher education reform in China.

### *1.2 Explore the Importance of the Problem*

In recent years, China has undergone several significant milestones in budget performance management: In 2015, the promulgation of the "Budget Law of the People's Republic of China" formally clarified the status and requirements of performance management in a legal framework for the first time. In 2018, as China's economy entered a new normal phase, heightened and urgent demands for administrative budget management arose. In September of the same year, the Central Committee of the Communist Party of China and the State Council issued the "Opinions on the Comprehensive Implementation of Budget Performance Management," setting a goal to establish a comprehensive, all-process, and all-encompassing budget performance management system within 3-5 years. This signified the onset of a new phase marked by standardized and coordinated development in China's budget performance management. In January 2022, the Ministry of Finance released the revised "Financial Rules for Institutions" (Ministry of Finance Order No. 108), emphasizing "practicing thrift" and "macroeconomic regulation and control" from a strategic perspective. The newly added provisions in the second chapter concerning institutional budget management stress the need to strengthen comprehensive budget performance management.

These regulatory changes underscore China's government's firm resolve and heightened attention in propelling the reform of budget performance management. The necessity for reform and the pressing urgency of fiscal budget constraints drive this commitment.

As public institutions, public universities in China mainly rely on government appropriations. In the current stage, as universities continue to expand enrollments, they seek alternative means to gather funds to meet their developmental needs. While this strategy, to some extent, eases financial pressures and facilitates growth, it can also disrupt income and expenditure balance, leading to challenges in budget management. In contrast, budget performance management is an approach that emphasizes responsibility and efficiency, with a focus on outputs and results. Throughout its implementation, this approach strives to engage relevant departments and faculty members, facilitating rational resource allocation, enhancing fund utilization efficiency, bolstering the overall strength of institutions, and providing a solid foundation for teaching quality and talent cultivation.

### *1.3 Describe Relevant Scholarship*

#### *1.3.1 The Concept of Budget Performance Management*

Sun (2009) believes that emphasizing budget execution and outcomes in performance management reform can lead to more meaningful fairness goals. This also provides significant insights and guidance for China's budget system reform.

Hu and Ou (2018) believe that traditional budget management no longer meets the demands of the current environment. As a results-oriented and innovative budget management approach, budget performance management forms a comprehensive system consisting of performance planning, communication, assessment, and feedback. Within this system, participants encompass government institutions and the public.

Ma (2019) believes that budget performance management plays an important role and provides impetus in achieving scientific and financial management and promoting the scientific nature of public administration.

Liu and Ou (2010) believe that performance budgeting is the central aspect of performance management. Despite the current fiscal expenditure having room for improvement, the existing budgeting methods still need to meet the requirements for establishing performance-based budgets. Additionally, there is significant potential for enhancement in the performance evaluation mechanism, and the capability to integrate resources also needs strengthening. Therefore, the reform of budget performance management should follow the approach of "process reengineering, holistic design, proactive piloting, and step-by-step implementation."

Jiang (2016) believes that performance goal management plays a leading role among various management factors or holds a significant position within the management process. This is particularly crucial in the context of budget performance evaluation. During the implementation of budget performance management, establishing the importance of performance goal management dramatically contributes to enhancing the level and quality of budget performance management; according to Li (2016), budget performance goal management, as the primary step in budget performance management, plays a pivotal guiding role throughout the implementation process. However, there are

currently several issues, such as insufficient emphasis on budget performance management concepts, a lack of mandatory measures in performance goal management, and the need for more scientific foundations for indicators and target values. Therefore, efforts should be intensified to promote budget performance management, strengthen institutional development, optimize processes, and enhance overall publicity.

The research mentioned above mainly focuses on aspects related to budget performance management, including its reform, drawing lessons from foreign budget performance practices, performance management, budget performance evaluation, and performance goal management.

### 1.3.2 Related Research on Budget Performance Management

In 2019, the Chinese Ministry of Education issued "Opinions on the Comprehensive Implementation of Budget Performance Management," a comprehensive document considering the practical situations of budget work in higher education institutions. This document presents targeted requirements and guidance, emphasizing the need to strengthen organizational leadership, enforce primary responsibilities, enhance team building, promote information technology development, supervise work assessments, and ensure strict accountability.

In their research, Xiao and Duan (2002) emphasized that budget management is the core content of financial management in universities. To achieve effective budget management, attention needs to be given to the following four aspects: strengthening the guiding role of budget management, emphasizing the foresight of budget management, fully utilizing the adaptability of budget management, and enhancing the supervision of budget execution. They believe that these measures can better harness the role of budget management.

Mao and Peng (2018) pointed out that due to the principal-agent relationship in universities, issues such as the relative liberalization of authority and information asymmetry in the budget preparation process have led to budget slack. They proposed methods to address this issue by analyzing the reasons for budget slack.

Lu (2019) highlighted existing problems in current financial budget management in universities, including weak awareness of budget management, unreasonable and unscientific budget preparation, and insufficient supervision intensity over budgets.

Liu (2012) identified problems in budget management, including a lack of strictness in budget execution, insufficient budget control, and a lack of integration of budget evaluation into performance assessment mechanisms. He also mentioned the need for a comprehensive system for budget performance assessment.

Yang, Yin, and Wang (2018) believe that budget performance evaluation is not only a tool for budget management but also a means of institutional management. They emphasized the adjustment of weights based on the school's objectives at different stages, affecting the following year's budget preparation to achieve the school's development goals. Ling (2018) argues that implementing budget performance evaluation in universities enhances fund utilization efficiency, optimizing resource allocation, and facilitating sustainable development of higher education.

Zhang (2019) asserted that constructing a comprehensive indicator system is crucial for evaluating university budget performance. By designing and applying indicators, resources can be optimized, and fund utilization efficiency can be improved, leading to more cost-effective practices and more scientific and refined financial management.

Zhuo (2017) pointed out issues with special funds, primarily related to insufficient attention to budget performance management, overemphasis on fund execution progress, and the failure of special fund performance evaluation to fulfill its actual role.

Fu (2019) believes that solving issues with special funds requires raising staff awareness of budget performance management, constructing an all-encompassing performance management system, refining performance indicator systems, and strengthening the application of budget performance evaluation results.

Guo (2019) asserted that formulating practical performance management objectives for budgeting can enhance the efficiency of fund utilization in universities, optimize resource allocation, and drive reform in budget management.

Ma (2019) researched project budget management in universities using the PDCA cycle, managing projects from objectives, methods, implementation, evaluation, and improvement. This approach established mechanisms for pre-performance assessment, in-process performance monitoring, and post-performance evaluation, leading to improved fund utilization efficiency and project budget management levels.

Zhou (2019) proposed integrating budget performance management with strategic management. She suggested the following six steps: strategic objectives, performance indicators, target values, action plans, resource allocation, and performance assessment to achieve the development goals of universities.

Considering the research findings above, these results provide a specific theoretical foundation for the writing of this article. However, in the realm of research concerning budget performance management in higher education institutions, most literature tends to focus on specific aspects within the scope of budget performance management, such as performance evaluation and management of special funds. While studies on performance evaluation are indeed crucial, they only constitute a portion of the entire spectrum of budget performance management within higher education institutions. Existing literature needs to provide a comprehensive overview of the whole process of budget performance management.

Through the compilation of literature, it is evident that existing budget management practices in higher education institutions have several drawbacks, impeding the development of these institutions. Experts and scholars have primarily focused their research on areas such as budget performance evaluation in higher education, specialized fund management, and implementation pathways for budget performance management. However, current literature needs a comprehensive overview of the entire process of budget performance management. Additionally, much of the literature on budget performance management is predominantly theoretical and broad in scope, making practical implementation challenging.

Hence, in the context of using higher education institutions as a case study, this article aims to analyze the existing issues within budget performance management in these institutions, dissect the underlying causes, and comprehensively explore and study the entire process of budget performance management.

## **2. Method**

This research combined quantitative and qualitative methods to study the current situation of budget performance management of public universities in Guangdong. The purpose is to provide guidelines for improving the budget performance management of public universities in Guangdong and evaluate the guidelines' adaptability and feasibility.

### *2.1 Objectives*

- (1) To study the current situation of budget performance management of public universities in Guangdong.
- (2) To investigate the guidelines for improving the budget performance management of public universities in Guangdong.
- (3) To evaluate the adaptability and feasibility of guidelines for improving the budget performance management of public universities in Guangdong.

### *2.2 Scope of the Research*

#### *2.2.1 Population and Sample Group*

##### *(1) Population*

The population of this research includes 1060 administrators from 7 representative public universities in Guangdong, such as Guangdong University of Technology, Guangdong University Of Finance, Guangdong University Of Education, Zhaoqing University, Jiaying University, Guangdong Ocean University and Guangdong University of Petrochemical Technology.

##### *(2) The Sample Group*

According to Krejcie and Morgan's sampling table, the sample group of this research was 285 administrators from seven representative universities in Guangdong. Systematic and sample random sampling were also used by drawing from public universities in Guangdong.

The interviewees in this research were ten administrators from seven representative universities in Guangdong, using purposive sampling.

The experts for evaluating the adaptability and feasibility of guidelines for improving budget performance management were seven high-level administrators in public universities in Guangdong. According to the theory of performance management and the attributes of university budget management, the qualifications of interviewees were as follows: 1) at least ten years of work experience as a high-level administrator in public universities, 2) have extensive experience in financial management, audit oversight management, development planning management, educational management of seven representative universities in Guangdong, 3) academic title is associate professor or above.

### 2.3 Research Instruments

Research instruments included 1) a questionnaire, 2) a structured interview, and 3) an evaluation form—data analysis using percentage, mean, standard deviation, and content analysis.

#### 2.3.1 Questionnaire

(1) The questionnaire was the instrument for data collection for objective one based on budget performance management. The analysis results indicate that Cronbach's Alpha reliability coefficient of the scale is 0.956, indicating a high level of reliability. The use of exploratory factor analysis to validate validity yielded a Kaiser-Meyer-Olkin (KMO) value of 0.931, demonstrating that the scale possesses a high level of suitability.

The questionnaire was applied to 285 administrators from seven representative public universities in Guangdong and is waiting for data collection.

#### 2.3.2 Structured Interview

The instrument for collecting the data for objective 2 was a structured interview, and the qualifications of interviewees were as follows: 1) at least ten years of work experience as a high-level administrator in public universities, and 2) extensive experience in budget performance management. This stage adheres to the problem-oriented principle. It takes the shortcomings reflected in the four aspects of performance goal management, performance execution tracking and monitoring management, performance evaluation management, and performance evaluation results feedback and application management as the improvement direction. Put forward targeted guidelines to enhance the budget performance management further.

#### 2.3.3 Evaluation Form

The instrument to collect the data for objective 3 is to evaluate the adaptability and feasibility of guidelines for improving the budget performance management of public universities in Guangdong. At this stage, experts from seven representative public universities in Guangdong were invited to formulate policies regarding the budget performance management of universities. Seven people were asked to evaluate the adaptability and feasibility of the guidelines using the Likert scale method. The data interpretation for average value is based on Likert (1932).

### 2.4 Data Collection

The researcher distributed the questionnaire to 285 administrators. Ensure that all questionnaires are returned, accounting for 100% into four aspects: 1) performance goal management, 2) performance execution tracking and monitoring management, 3) performance evaluation management, and 4) performance evaluation results in feedback and application management. Three experts examined the index of objective congruence (IOC) of the questionnaire. The index of objective congruence (IOC) was 1.00.

The Structured Interview provided the guidelines for improving the budget performance management of public universities in Guangdong, China, by content analysis.

The evaluation form evaluated the adaptability and feasibility of the guidelines for improving the budget performance management of public universities in Guangdong by seven experts, selected an appropriate time and location to contact the experts, guided them to score the evaluation form, and ensured that the evaluation form was 100% collected.

### 2.5 Data Analysis

In this research, the researcher analyzed the data by package program as follows:

The questionnaire was analyzed by average value and standard deviation.

The structured interview was analyzed by content analysis.

The evaluation of the adaptability and feasibility of guidelines for improving the budget performance management of public universities in Guangdong was analyzed by average value and standard deviation.

## 3. Results

The researcher analyzed the data in 3 parts as follows:

Part 1: The analysis results of the current budget performance management of public universities in Guangdong. I presented the data in the form of average value and standard deviation.

Table 1. The average value and standard deviation of the current situation of budget performance management in four aspects (n=285)

|   | budget performance management of universities in Guangdong         | $\bar{X}$ | S.D. | level | rank |
|---|--|-----------|------|-------|------|
| 1 | performance goal management  | 3.94      | 0.93 | high  | 1    |
| 2 | performance execution tracking and monitoring management           | 3.85      | 0.90 | high  | 2    |
| 3 | performance evaluation management                                  | 3.58      | 0.89 | high  | 4    |
| 4 | performance evaluation results feedback and application management | 3.63      | 0.88 | high  | 3    |
|   | Total  | 3.75      | 0.90 | high  |      |

Table 1 found that the budget performance management of public universities in Guangdong in four aspects was high ( $\bar{X} = 3.75$ ). Considering the results of this research, characteristics ranged from the highest to lowest level were as follows: the highest level was performance goal management ( $\bar{X} = 3.94$ ), followed by performance execution tracking and monitoring management ( $\bar{X} = 3.85$ ), and performance evaluation management was the lowest level ( $\bar{X} = 3.58$ ).

Part 2: The analysis results of the interview contents about the guidelines for improving the budget performance management of public universities in Guangdong.

The researcher provided the guidelines for improving the budget performance management of universities divided into three aspects, which include budget organization, budget process, and information system, as shown in Figure 1.

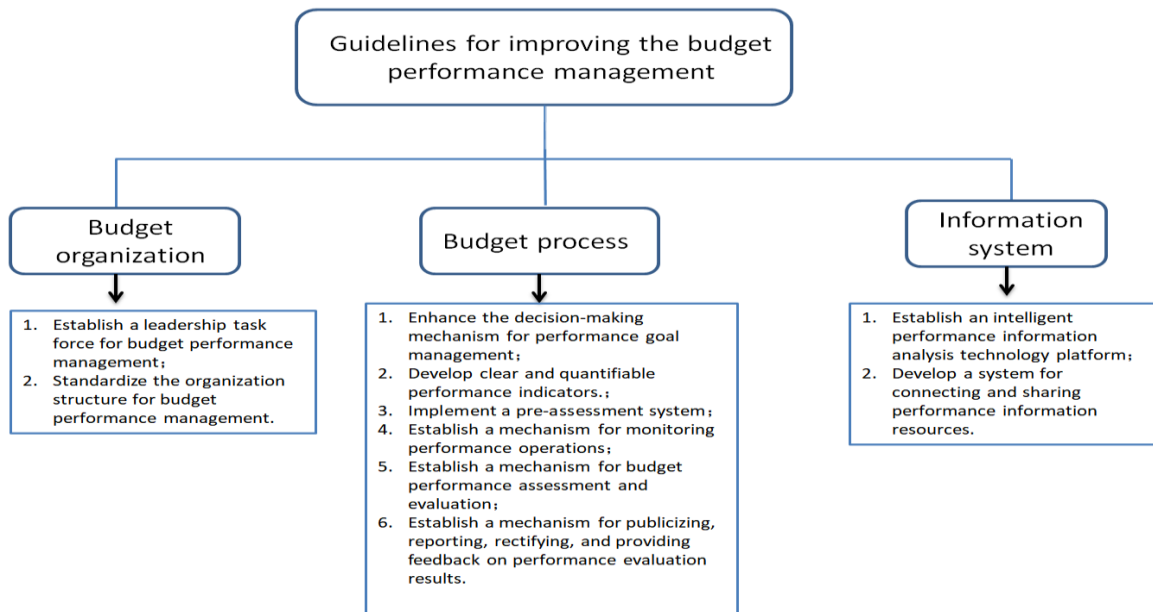


Figure 1.

Figure 1 shows that the guidelines consisted of 1) budget organization, two measurements; 2) budget process, six measurements; and 3) information system, two measurements.

Part 3: The analysis results evaluating the adaptability and feasibility of guidelines for improving the budget performance management of public universities in Guangxi were analyzed by average value and standard deviation.

Table 2. The average value and standard deviation of the evaluation of the adaptability and feasibility of guidelines for improving the budget performance management of public universities in four aspects (n =7)

| Guidelines for improving the budget performance management of universities | Adaptability |      |         | Feasibility |      |         |
|--|--------------|------|---------|-------------|------|---------|
|  | □            | S.D. | level   | □           | S.D. | Level   |
| Evaluation of scale guidelines   | 4.58         | 0.49 | highest | 4.57        | 0.51 | highest |

From Table 2, the adaptability and feasibility of guidelines for improving budget performance management in four aspects were at the highest level with values between 4.50 and 5.00, which means the budget performance management guidelines are adaptable and feasible.

#### 4. Conclusion

The research in the guidelines for improving the budget performance management of public universities in Guangdong. The researcher summarizes the conclusion into three parts, detailed as follows:

Part 1: The current situation of budget performance management of public universities in Guangdong.

The current situation of the budget performance management of public universities in Guangdong is that the overall budget performance management is a good level; the highest level was performance goal management, and performance evaluation management was the lowest.

Part 2: The guidelines for improving the budget performance management of public universities in Guangdong.

The guidelines for improving the budget performance management of universities are summarized into three aspects: budget organization, budget process, and information system.

Part 3: The adaptability and feasibility of guidelines for improving the budget performance management of public universities in Guangdong.

The adaptability and feasibility of guidelines for improving the budget performance management of public universities in four aspects were at the highest level with values between 4.50 and 5.00, which means the guidelines for improving the budget performance management are adaptability and feasibility.

#### 5. Discussion

The research in the guidelines for improving the budget performance management of public universities in Guangdong. The researcher summarizes the conclusion into three parts, detailed as follows:

Part 1: The current situation of budget performance management of public universities in Guangdong.

Part 2: The guidelines for improving the budget performance management of public universities in Guangdong.

Part 3: The adaptability and feasibility of guidelines for improving the budget performance management of public universities in Guangdong.

Part 1: The current situation of budget performance management of public universities in Guangdong.

The current situation of the budget performance management of public universities in Guangdong is that the overall budget performance management is good level; the highest level was performance goal management, and performance evaluation management was the lowest.

Firstly, the overall budget performance management of public universities in Guangdong is high, but the level of implementation could be more balanced among all dimensions. On one hand, China attaches great importance to implementing budget performance management. Directives such as "Guiding Opinions on Promoting Budget Performance Management," "Work Plan for Budget Performance Management (2012-2015)," "Methods for Performance Evaluation Management of Project Expenditures," "Interim Measures for Performance Evaluation Management of Fiscal Expenditures," the new "Budget Law of the People's Republic of China," and "Financial Rules for Institutions" have been issued. These initiatives reflect the nation's commitment and determination to promote budget performance management and vigorously transform work practices. In response to the reform of national budget performance management, the Ministry of Education has issued a series of specific policies in the education industry. For example, the Ministry of Education issued the "Opinions on Fully Implementing Budget Performance Management" in 2019. This comprehensive document integrates expert opinions from academia and practice and the actual situation of university budget work. The requirements and guidance provided are specific and targeted.

To some extent, this is beneficial for strengthening and improving the level of budget performance management in



universities.

On the other hand, there needs to be more in various aspects of development. As pointed out by some interviewees and survey participants, many drawbacks in the current budget management of universities hinder their growth. Many effective policies still need to be fully implemented. The professional knowledge level of university budget managers plays a crucial role in the effectiveness of implementation related to the concept of Lu (2019) that existing problems in current financial budget management in universities, including weak awareness of budget management, unreasonable and unscientific budget preparation, and insufficient supervision intensity over budgets related to the concept of Liu (2012) that the problems in budget management, include a lack of strictness in budget execution, insufficient budget control, and a lack of integration of budget evaluation into performance assessment mechanisms. He also mentioned the need for a comprehensive system for budget performance assessment.

Secondly, in ranking implementation levels across the four aspects, the implementation level of budget performance objectives in universities is the highest. This is because performance objective management serves as the foundation of budget performance management, encompassing the entire process and serving as a fundamental step within budget performance management. It is a primary and crucial step in the overall budget performance management process related to the concept of Jiang (2016); performance objective management is pivotal in overseeing many management factors or crucial stages of leadership. This is particularly significant in the context of budget performance evaluation. In implementing budget performance management, establishing performance objectives management plays a vital role and dramatically contributes to the quality of the process.

Thirdly, looking at the four aspects of budget performance management, it is generally perceived that the implementation level of performance evaluation management is the lowest in the budget performance management of public universities in Guangdong. On the one hand, the budget performance evaluation in higher education institutions is still exploratory and related to the concept of Lü (2020); the exploration of budget performance evaluation in Chinese higher education institutions has started relatively late, leading to a significant gap compared to developed Western countries. On the other hand, in terms of practical research, there is a scarcity of studies addressing real-world issues related to the performance evaluation indicator system for university budget management. Most research predominantly focuses on theoretical aspects, merely constructing performance evaluation indicator systems without applying them in practice.

Part 2: The guidelines for improving the budget performance management of public universities in Guangdong

The guidelines for improving the budget performance management of universities are summarized into three aspects: budget organization, budget process, and information system.

(1) Budget organization. The budget organization serves as the starting point for all activities. For the current organizational structure, involving multiple departments and establishing a three-tier framework is recommended. Personnel arrangements should include rotating key staff, research financial assistants, and an economic rotation mechanism. Ma (2011) proposed that strengthening top-level design can mobilize the enthusiasm of relevant parties and generate positive social effects.

(2) Budget process. Following the budget management process, provide a detailed analysis and critical summarization for each step, emphasizing the standardization of the process. Gao (2015) posited that by progressively incorporating budget performance management mechanisms throughout the reform process of budget formulation, execution, and supervision, it is possible to standardize budget management and enhance the performance of fiscal fund utilization.

(3) Information system. Universities need to recognize the importance of information technology infrastructure development, accelerate the growth of relevant functionalities for budget performance management information systems, and contribute to enhancing budget performance management. Wang (2018) believes improving performance information utilization is a critical reform trend.

Part 3: The adaptability and feasibility of guidelines for improving the budget performance management of public universities in Guangdong.

The adaptability and feasibility of guidelines for improving the budget performance management of public universities in four aspects were at the highest level with values between 4.50 and 5.00, which means the guidelines for improving the budget performance management are adaptability and feasibility. (Give why the level is the highest and find the information from the researchers in Chapter 2 to support your findings.) such as

The level of adaptability and feasibility of guidelines for improving the budget performance management of public

universities in Guangdong was at the highest level because the guidelines for enhancing budget performance management are proposed from the perspectives of budget organization, budget process, and information systems that relate to the "Opinions on the Comprehensive Implementation of Budget Performance Management" issued by the Chinese Ministry of Education in 2019, which emphasized the need to strengthen organizational leadership, implement primary responsibilities, enhance team building, promote information technology development, ensure work assessments, and enforce strict accountability.

## 6. Recommendation

**Ministry of Education Regulatory Department:** The Ministry of Education Regulatory Department can formulate clear guidelines for budget performance management, encouraging universities to focus on performance in budget formulation and execution. Setting clear performance objectives and standards promotes effective allocation of university resources, ensuring alignment with education policies and strategic goals.

**Universities:** Universities can establish appropriate performance indicators in budget performance management to measure teaching, research, and administration performance. By collecting and analyzing performance data, universities can better understand resource utilization, optimize resource allocation, and enhance the quality of teaching and research.

**Financial Department:** The financial department can assist universities in aligning budgets with performance objectives to ensure rational fund allocation. The financial department can provide decision support by analyzing performance data and actual expenditures, ensuring that resources are maximally utilized to support universities' core missions.

**Audit Department:** The audit department can independently review universities' budget performance management practices to ensure the accuracy and reliability of performance data. Through audits, it identifies issues and potential risks in performance management, continuously providing improvement suggestions to enhance budget performance management.

In summary, when the Ministry of Education regulatory department, universities, financial department, and audit department apply budget performance management strategies, it can lead to more effective resource allocation and performance enhancement. These departments can ensure rational budget usage and drive overall university development through collaborative efforts, ultimately optimizing university resource allocation.

## 7. Future Research

(1) Studying university performance management goes beyond just budgetary aspects. The focus of this research is on budgetary performance management in universities. I have developed a strong interest in university performance management by exploring relevant theories and literature on performance management during this phase. I plan to expand the scope of my research to encompass aspects like research performance and teaching effectiveness, enabling a comprehensive study of university performance management beyond the confines of budgetary considerations if the circumstances allow for it.

(2) Conducting research that compares the situation between domestic and foreign contexts. This study did not involve a comparative analysis of budgetary performance management between domestic and foreign universities. The main reason is that the researcher's understanding of budgetary performance management models in foreign universities still needs to be improved, and relevant literature still needs to be provided in this area. There are plans to enhance this understanding through visits to foreign universities, field studies, or conducting specialized interviews with returning scholars, such as in Thailand. This will facilitate an in-depth analysis of the methods and approaches to budgetary performance assessment and evaluation in foreign universities. Moreover, a comparative study will be conducted between these approaches and Chinese universities' current performance management models, outlining their strengths and weaknesses. The aim is to provide theoretical and practical references for enhancing Chinese universities' budgetary performance management and governance capacity.

## 8. Limitations of the Study

### 8.1 Methodology

The research primarily relied on questionnaires, structured interviews, and evaluation forms, which can be subject to biases and subjective interpretations. Quantitative methods, such as percentage, mean, and standard deviation, may not capture the full complexity of budget performance management issues.

### 8.2 Subjectivity in Evaluation

The evaluation of adaptability and feasibility was conducted by a small number of high-level administrators, which may introduce a bias. A more diverse panel could have provided a more balanced evaluation.

### 8.3 Implementation Barriers

The study concludes that the adaptability and feasibility of the guidelines are at the highest level but needs to explore potential barriers to implementation, such as organizational resistance or the need for change management.

### References

- Fu, X. (2019). Exploring the Management of Special Financial Funds in Universities. *Finance and Economics*, 2019(12), 47-48.
- Guo, M. (2019). Foreign Experience and Enlightenment of Financial Budget Performance Goal Management in Universities. *Educational and Financial Research*, 30(1), 68-72.
- Gao, Z. (2015). From "Budget Performance" to "Performance Budget": Practice and Reflection on Performance Budget Reform in Hebei Province. *Financial Research*, 2015(8), 57-64.
- Hu, S., & Ou, Y. (2018). Deepening the Reform of Government Budget Performance Management: Problems, Ideas, and Strategies. *Contemporary Finance & Economics*, 31(3), 81-92.
- Jiang, Z. (2016). The Dominance of Goal Management in Performance Budget Evaluation. *Economic Research Reference*, 2016(31), 57-61.
- Li, W. (2016). Problems and Countermeasures of Financial Budget Performance Goal Management. *Economists*, 2016(6), 96-97.
- Ling, Y. (2018). Research on Performance Evaluation Indicator System of Budget Management in Universities. *Contemporary Accounting*, 2018(11), 74-75.
- Liu, M., & Ouyang, H. (2010). Deepening the Reform of Government Budget Performance Management: Problems, Ideas, and Strategies. *Contemporary Finance & Economics*, 2010(4), 35-41.
- Liu, T. (2012). Problems and Countermeasures of Current University Budget Management in China. *Accountant's Friend*, 2012(32), 20-21.
- Lu, X. (2019). Main Problems and Countermeasures of Financial Budget Management in Colleges and Universities. *Taxation*, 13(2), 153.
- Lü, J. (2020). *Research on Performance Evaluation of Budget Management in Universities* (Master's thesis). Qingdao University.
- Ma, G. (2005). A Study on the Principles of Government Performance Management. *Journal of Taxation College of Yangzhou University*, 10(2), 1-5.
- Ma, G. (2019). Research on Budget Performance Evaluation and Performance Management. *Financial Supervision*, 2019(1), 18-22.
- Mo, J., & Peng, S. (2018). Research on Budget Slack and Control in University Internal Budget Management. *Accountant's Friend*, 2018(9), 129-133.
- Sun, K. (2009). Game Analysis of Department Budget Performance Management. *Journal of Nanjing University of Finance & Economics*, 2009(2), 52-55.
- Tian, J. (2012). Discussion on Performance Goal Management of University Project Expenditure. *Finance and Accounting Monthly*, 2012(21), 53-56.
- Wang, Z. (2018). Budget Performance Management: The Implementation Path of Comprehensive Performance Management in the New Era. *China Public Administration*, 2018(04), 6-12. <https://doi.org/10.22140/cpar.v0i0.155>
- Xiao, Z., & Duan, L. (2002). Reflection on the Current Problems and Strategies in University Budget Management. *Economists*, 2002(7), 104-105.
- Yang, X., Yin, X., & Wang, Y. (2018). Construction of Performance Evaluation Indicator System for University Budget Management. *Hebei Enterprise*, 2018(12), 11-13.

- Zhang, B., & Wei, L. (2019). Exploring the Path of Comprehensive Implementation of Budget Performance Management in Universities. *Science and Technology Economic Guide*, 2019(27), 245.
- Zhang, J. (2004). Current Problems and Strategies in University Budget Management. *Educational and Financial Research*, 2004(2), 14-16.
- Zhang, S. (2019). Research on Performance Evaluation Indicator System of Budget Management in Universities. *Business Accounting*, 2019(12), 92-94.
- Zhou, Y. (2019). Analysis of Strategic Map-Based Budget Performance Management in Universities: A Case Study of Universities. *Economists*, 2019(9), 202-203.
- Zhuo, Y. (2017). Reflection on Improving the Performance Management of Central Financial Special Funds in Universities. *Modern Commerce & Industry*, 2017(29), 122-123.

### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).