# The Role of Contractual Budgeting as a Tool for Planning and Control in Investment Budgeting: A Field Study in Iraqi Universities

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## Abstract

This study aimed to identify the extent of the possibility of developing the state's general budget by stating the availability of the necessary components for the contractual budget method in the investment aspect of the budgets of Iraqi universities. And to determine the importance and advantages of the contractual budget method as a tool for planning and controlling the investment budget in Iraqi universities in the opinion of the sample members studied. The study methodology relied on the descriptive and analytical approach. The researcher used the questionnaire as the main tool for this study. The study community consisted of employees of Iraqi universities, as the number of Iraqi universities reached (36) universities. A sample consisting of workers in planning and budgeting, the financial manager, the investment accountant, and the internal control manager was selected to conduct the study on them. A sample of the study community, which numbered (194) people, was taken, and this type of community was tested for their specialization in the contractual budget. The questionnaire was distributed to the sample members, as (188) questionnaires were retrieved, and after examining them, (8) questionnaires were excluded for their unsuitability for analysis purposes. Thus, the number of questionnaires valid for analysis reached (180), using the statistical program (SPSS). The results showed that there are advanced legislative and regulatory capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities. There are also planning and contractual capabilities applied when setting the estimated budgets for investment projects when preparing and implementing the budgets of Iraqi universities. There are advanced accounting and control capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities. There are also advanced human and material capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities. The study recommended the necessity of using the contractual budget in preparing and implementing the investment budget of Iraqi universities due to its advantages and the importance of qualifying and training workers in the field of planning, finance and budgets on modern methods in preparing the contractual budget.

Keywords: Contractual Budget, Planning and Control, Investment Budget, Iraqi Universities.

# Introduction

The general budget system of the state in Iraq suffers from a structural defect that lies in the composition of the applied method, which is the traditional system (item budget), in terms of the difficulty of identifying the project programs that the government will implement, and thus it is difficult to measure the efficiency of the performance of government units, in addition to the fact that it depends on preparing estimates based on previous years and in light of the expenditures of the previous fiscal year, which makes it difficult to finance expenditures during the budget period and limits oversight, so it is limited to accounting oversight, i.e. not exceeding the allocated appropriations in a way that may conflict with the development plan and its goals .

Many studies have addressed the subject of contractual budgeting from several aspects, such as the study (Shakara, 2010), which presented a clear strategy for applying the contractual budgeting method in Baghdad Governorate, and concluded that its application in local governments is appropriate due to the positive impact achieved in reducing the cost of government programs and implementing them with the highest quality and at the appropriate time. As for the study (Wiley, 2012), it aimed to identify the challenges and risks that accompany the process of contracting to provide external advice in reforming the general budget. The study (Al-Bakri and Shakara, 2013) confirmed that contractual budgeting is the optimal method for planning and implementing investment budget projects. As for the study (Jadoua, 2015), it aimed to identify

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the possibility of applying this method in preparing the Jordanian general budget and reached the most important components, advantages and obstacles in the application. The study (Al-Rikabi, 2017) aimed to clarify the importance of using the contractual budgeting method in preparing the general budget of the Iraqi state from the operational and investment aspects and reducing its deficit and getting rid of Wasting public money by relying on service contracts and participation contracts . Therefore, it was necessary to search for developmental methods for the budget system that are compatible with the nature of the activity of local administration units. In light of the expansion of government responsibilities and the demand of society to provide services and development in a situation characterized by scarcity of resources, it has led them to turn to participatory methods with the private sector to provide services using the contractual budget as a tool for managing public money. Based on the numerous attempts to apply this method in several surrounding countries that may be somewhat similar in the current environment and conditions in Iraq, the current study attempted to present a vision of the possibilities that help to apply this method in the investment aspect of Iraqi universities, considering that their work contributes to a large part of the infrastructure of any country, as a basic and preliminary step for the possibility of applying it to the general budget of the state in full .

#### Chapter one

#### First: The Research Problem

The main problem of the research lies in the weakness of the methods used in preparing and implementing the state's general budget in its current and investment aspects, especially since the largest spending is represented in the investment aspect in local administration units, and on the other hand, directing investment operations in local administration units requires rational decisions to achieve the optimal investment of available resources in light of the current economic conditions and the scarcity of government resources, so it was necessary to adopt participatory methods with the private sector.

The contractual budget method is one of the advanced methods in preparing and implementing budgets on a participatory basis that helps in planning and monitoring budgets, and through the above, the following research question can be raised

To what extent is the contractual budget possible to apply as a tool for planning and monitoring the investment budget in Iraqi universities

#### Second: The Purpose of the Research

The current research aims to determine the extent of interest of government agencies in developing the process of setting budget estimates and implementing them, and clarifying the components of applying the contractual budget method in Iraqi universities with the aim of moving to applying this method. To achieve this goal, the following will be done:

Determine the extent of the possibility of developing the state's general budget by stating the extent of the availability of the necessary components for the contractual budget method in the investment aspect of the budgets of Iraqi universities

Determine the extent of the importance and advantages of the contractual budget method as a tool for planning and controlling the investment budget in Iraqi universities in the opinion of the sample members studied

#### Third: Importance of the Research

The importance of the scientific study comes from the necessity of research into developing and improving the methods of the state's general budget. The contractual budget method is one of the modern methods for developing budgets that has not been given its due research. As for the practical importance, it stems from the importance and necessity of developing the state's general budget and emphasizing the effectiveness of planning and control in estimating and implementing expenditures in a directed manner away from waste and enhancing interest in managing and directing the government investment budget in Iraqi universities to improve government financial performance in light of the current economic conditions and as a step to apply this method in the state's general budget.

# Fourth: Research Hypotheses

It is based on the following two main hypotheses

The contractual budget method cannot be applied in preparing the investment budget for Iraqi universities due to the lack of the components for its application. The following hypotheses branch out from it

2 - The contractual budget method does not achieve advantages in preparing and implementing the investment budget in Iraqi universities in the opinion of the individuals of the studied sample?

# Fifth: Research Methodology

The descriptive approach was used with the aim of describing the case studied accurately and testing the study hypotheses by reviewing the most important findings of scientific studies on the studied variables, and by relying on the primary data collected by a questionnaire that will be distributed to employees in Iraqi universities. The questionnaire was distributed to employees in planning and budgeting, the financial manager, the investment accountant, and the director of internal control. The proposed research hypotheses will be tested using the SPSS statistical program.

# Sixth: Research Community and Sample

The study community consisted of employees of Iraqi universities, as the number of Iraqi universities reached (36) universities. A sample was selected consisting of workers in planning and budgeting, the financial manager, the investment accountant, and the internal control manager to conduct the study on them. A sample was taken for the study community, which numbered (194) people, and this type of community was tested for their specialization in contractual budgeting. The questionnaire was distributed to the sample members, as (188) questionnaires were retrieved. After examining them, (8) questionnaires were excluded for their unsuitability for analysis purposes. Thus, the number of questionnaires valid for analysis reached (180).

# Seventh: Sources of Data and Information Collection

In order to achieve the study objectives, information was collected using the following methods:

First aspect: The theoretical and academic aspect: We can rely on all available local, Arab and foreign sources that include scientifically validated research and studies, books and a number of published research on the study topics.

Second aspect: Practical and applied: Statistical equations were used to identify the importance of the study topic, and the statistical method was used through the program (V26 SPSS), (Amos), (Microsoft Excel 2010), to reach the results.

# Theoretical Review

# First: The Concept of Contractual Budgeting

The first attempt to implement contractual budgeting appeared in the New Zealand Ministry of Finance in 1996, which is an attempt to reshape the general budget as a system of contracting deals between an implementing agency and the central government, meaning that the government puts forward its future projects and programs for the purpose of winning contractors to implement those projects and programs

at the lowest possible cost in a timely manner, provided that those projects and programs achieve their planned goals (Taha, 2021).

(Saloum, Al-Mahani, 2007) defined contractual budgeting as: "A contractual relationship between government agencies and executive agencies in order to implement a specific project or matter, to be measured quantitatively in exchange for an amount paid by the government before, after and during the implementation of the project in order to obtain the implementation of the project at the appropriate time and at the lowest possible cost, provided that the planned goals are achieved." It is also known as an attempt to find public benefits and long-term assets such as: infrastructure projects such as hospitals, educational institutions, etc., i.e. it provides details of the needs for long-term development and creates a unified process for developing a plan for several years and converting it into programs and then into projects offered as bids. (Irelan & Cleland, 2006).

## Second: Contractual Budget Implementation Mechanisms

The contractual budget is based on the relationship between the cost and the services provided, and therefore the planned programs are classified functionally and not economically, i.e. all expenses required for a specific program constitute the cost of that program regardless of whether they are current or investment, and their implementation depends on converting government programs into activities and then into projects whose work specifications, estimated cost, and the timing required for their implementation by the contracting parties have been determined. (Al-Bakri and Shakara, 2013). In the opinion of (Al-Rikabi, 2017), the contractual budget contributes to reducing the state's general budget deficit, so it is necessary to prepare the general budget in accordance with the contractual budget mechanisms by concluding service contracts, partnerships with the private sector (p3s) and contracts (B.O.T) with foreign companies, in order to eliminate the waste of public money in operation and investment.

## Third: Components of Implementing the Contractual Budget

The implementation of the contractual budget requires a number of components, the most important of which are (Jadoua, 2015)

Legislative and regulatory components: Availability of legislative, regulatory and executive aspects: Using the contractual budget requires advanced legislation and laws appropriate to regulate the antagonistic relationship. Such as - supporting legislation and laws - management interest - an integrated control system.

Planning and contractual components: There must be capabilities and standards to evaluate project alternatives and implementation alternatives by conducting sufficient studies of investment projects - conducting feasibility studies for each project - comparing projects according to their importance to society and the least expensive and highest quality - relying on P3S, POT projects.

Accounting and control components: Relying on an advanced accounting system when preparing and evaluating feasibility studies and determining the cost of alternatives, in order to prevent exaggeration in allocations in the general budget.

The importance of the accounting information system comes from the link it achieves between the party benefiting from the project and the party that refers the project for implementation and monitors its implementation, and this represents a significant reduction in time and cost. (Shakara, 2010). 4. Material and human components: It depends on advanced and sound financial management, providing workers with the culture and awareness of the importance of contractual budgeting on the one hand, and this depends on conducting qualification courses in the field of budgets and developing them, and on the other hand the party can bear the high costs of implementation.

## Fourth: The Concept of Investment Budget

It is defined as a budget that focuses on planning and managing investments in new projects or expanding existing activities, and aims to achieve long-term growth and profitability goals (Al-Wardat, 2021).

It is also defined as determining what investment expenditures should be spent, represented by long-term commitments or commitments with significant and large amounts of resources that are made within the framework of the long-term strategic policy (Yassin, 2018).

It was defined by Stojanovic (2013) as the process of analyzing long-term alternative investments and making a decision to accept or reject them. These decisions include developing a new product, purchasing a new machine, or constructing a new building. The goal of these decisions is to obtain profitable investment returns.

Accordingly, the investment budget is considered a detailed estimated plan that includes data on how to exploit the resources owned by the institution over a number of years in projects included in its investment policy to achieve specific goals that are reflected in achieving its general goal.

## Chapter Three: The Practical Aspect

## First: Stability of The Study Tool

The stability coefficient of the study tool was calculated using Cronbach's alpha coefficient for each of the questionnaire axes by using the SPSS statistical packages, which is shown in the following table

Questionnaire axes	stability coefficient
Cognitive, legislative and regulatory capabilities	0.90
Planning and contracting strategies	0.93
Advanced accounting and control capabilities	0.90
Advanced human and material capabilities	0.88
Advantages of applying the contractual budgeting method	0.85
The tool as a whole	0.92

#### Table No. (1) Calculating the Stability Coefficient for the Questionnaire Axes

It is clear from Table No. (1) that the questionnaire axes are characterized by a statistically significant degree of stability, and the stability coefficients ranged between 0.93-0.85.

#### Second: Suitability of The Study Model to The Statistical Methods Used

The study model suitability test aims to ensure the suitability of the study data and its validity for conducting laboratory statistical tests and regression analysis. To achieve this, a set of tests were conducted.

#### Linear Correlation Coefficient Test

Multicollinearity Test, as this test aims to verify the independence of the variables. Which is one of the basic assumptions that make the study model valid for application, and suitable for the parameter estimation process.

The problem of multicollinearity appears when there is a large overlap between the study variables, meaning the presence of a high linear correlation (complete or almost complete) between the dimensions of the independent variable, which negatively affects the accuracy of the measurements. It works to inflate the value of the coefficient of determination R2 so that its value exceeds the actual value, and the absence of the problem of multicollinearity was verified by calculating the Pearson correlation coefficient, for the study variables.

	variables			Inde	pendent variable
		Cognitive,	Planning and	Advanced	Advanced
		legislative and	contracting	accounting	human and
		regulatory	strategies	and control	material
		capabilities		capabilities	capabilities
Independent	Cognitive,	1.00			•
variable	legislative and				
	regulatory				
	capabilities				
	Planning and	0.734**	1.00		
	contracting				
	strategies				
	Advanced	0.662**	**0.684	1.00	
	accounting				
	and control				
	capabilities				
	Advanced	0.715**	**0.456	**0.546	1.00
	human and				
	material				
	capabilities				

#### Table No. (2): Correlation Matrix for Pearson Correlation Coefficient Values for the Independent Variable

(\*\*) At a significance level of 0.01

The results of Table (2) show that the data are free from the problem of multicollinearity, as the values of the Pearson correlation coefficient for the independent variable ranged between (0.456-0.734), which is less than the value (0.80), as the Pearson correlation coefficient indicates that the data are free from the problem of multicollinearity if the value of the correlation between two or more independent variables does not exceed the value(0.80)

To confirm the previous result, the variance inflation factor and the permissible variance were calculated, as the variance inflation factor (VIF)) indicates that the data are free from the problem of multicollinearity if the values of the coefficient range between (1-10) and the permissible variance factor (Tolerance) indicates that the data are free from the problem of multicollinearity when the values of the coefficient range between (0.1 - 10.0). The following are the results of the variance inflation factor and permissible variance test for the dimensions of the independent variable:

variable		Dimensions	VIF	Tolerance
Independent variable	Cognitive,	legislative	3.398	0.294
	and	regulatory		
		capabilities		
	Planning	and	3.580	0.279
	contracting strategies			
	Advanced	accounting	1.985	0.504
	and control	ol capabilities		
	Advanced	human and	2.075	0.482
	materia	l capabilities		

It is clear from the results of Table (3) that the data is free from the problem of multicollinearity, as the values of the variance inflation factor (VIF) between the dimensions of the independent variable ranged between (1.985 - 3.580) and are between (1.0 - 10.0), and the values of the permissible variance (Tolerance) ranged between (0.279 - 0.504) and between (0.1 - 1.0).

Third: Testing the study hypotheses: Results of testing the main hypothesis

This hypothesis states that: "The contractual budget method cannot be applied in preparing the investment budget for Iraqi universities due to the lack of the components for its application"

To test this hypothesis, multiple linear regression analysis was used, and the results appeared as follows

Dependen			Model	Summary		Analysi	s of variance
t Variable							ANOVA
	Correlatio	coefficient of	Modified	Standar	degrees	Value of	significanc
	n	determinatio	coefficient of	d	of	F	e level (Sig
	coefficient	n	determinatio	mistake	freedo	Calculate	F*)
	(R)	(R <sup>2</sup> )	n	of the	(DF) m	d	
			(R <sup>2</sup> )	model			
			Adjusted				
Preparing	0.820	0.672	0.666	0.356	3	120.050	0.000
the							
investmen							
t budget							

Table No. (4): Summary of the Model and Regression Variance Analysis for the Main Hypothesis

\* The effect is statistically significant at the significance level ( $\alpha \le 0.05$ )

It is clear from Table (4) that there is a strong correlation between the application of the contractual budgeting method in preparing the investment budget for Iraqi universities, as the value of the correlation coefficient reached (0.820R=), and the value of the coefficient of determination reached (0.672R2=), which indicates that the application of the contractual budgeting method explained (47.2%) of the change in preparing the investment budget for Iraqi universities, with other factors constant .

The table also shows the significance of the model, as the calculated F value reached (120.050) and at the significance level (SigF=0.000) which is less than 0.05, which indicates the existence of a statistically significant effect of applying the contractual budgeting method on preparing the investment budget for Iraqi universities at the significance level ( $\alpha \le 0.05$ ), and at 3 degrees of freedom.

Accordingly, the hypothesis is accepted, which states: "The contractual budget method can be applied in preparing the investment budget for Iraqi universities due to the lack of the components for its application"

Results of testing the hypotheses branching from the main hypothesis

To test these hypotheses, simple linear regression analysis was used. The following are the results of testing the hypotheses branching from the first main hypothesis

Results of testing the first sub-hypothesis

The first sub-hypothesis states that: "There are no advanced legislative and regulatory capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities." The results appeared as follows:

					-		
Dependent			Model	Summary	Analy	sis of varian	ce ANOVA
Variable	Correlatio	coefficient	Modified	Standar	degrees	Value of	significanc
	n	of	coefficient	d	of	F	e level (Sig
	coefficient	determinatio	of	mistake	freedo	Calculate	F*)
	(R)	(R²) n	determinatio	of the	m (DF)	d	,
			n	model			
			(R <sup>2</sup> )				
			Adjusted				
Preparing	0.685	0.469	0.466	0.450	1	157.483	0.000
and							
implementin							
g budgets							
for Iraqi							
universities							

Table No. (5): Summary of The Model and Regression Variance Analysis for the First Sub-Hypothesis

\* The effect is statistically significant at the significance level ( $\alpha \le 0.05$ )

Table (5) shows the existence of a strong positive correlation between the availability of advanced legislative and regulatory capabilities and the preparation and implementation of budgets of Iraqi universities, where the value of the correlation coefficient reached (0.685R=), and the value of the coefficient of determination reached (0.469R2=), which indicates that the variable of the availability of advanced legislative and regulatory capabilities explained (46.9%) of the change in the preparation and implementation of budgets of Iraqi universities, and the rest is attributed to other factors.

As shown in the table, the significance of the model is evident, where the calculated F value reached (157.483) at the significance level (SigF=0.000) which is less than 0.05, which indicates the existence of a statistically significant positive effect of the variable of the availability of advanced legislative and regulatory capabilities on the preparation and implementation of budgets of Iraqi universities at the significance level ( $\alpha \le 0.05$ )), and at 1 degree of freedom.

Accordingly, the hypothesis was accepted, which states that: "There are advanced legislative and regulatory capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities".

Results of testing the second sub-hypothesis

The second sub-hypothesis states that: "There are no planning and contractual capabilities applied when setting the estimated budgets for investment projects when preparing and implementing the budgets of Iraqi universities." The results appeared as follows:

Dependent			Analy	sis of varian	ce ANOVA		
Variable	Correlatio	coefficient	Modified	Standar	degrees	Value of	significanc
	n	of	coefficient	d	of	F	e level (Sig
	coefficient	determinatio	of	mistake	freedo	Calculate	F*)
	(R)	n (R2)	determinatio	of the	m (DF)	d	
			n	model			
			(R2)				
			Adjusted				
Preparing					1		
and	0.786	0.618	0.616	0.382		287.547	0.000
implementin							

a budgete				,
g budgets				
for Iraqi				
universities				

\* The effect is statistically significant at the significance level ( $\alpha \le 0.05$ )

Table (6) shows the existence of a strong positive correlation between the existence of applied planning and contractual capabilities when setting the estimated budgets for investment projects when preparing and implementing the budgets of Iraqi universities, where the value of the correlation coefficient reached (0.786R=), and the value of the coefficient of determination reached (0.618R2=), which indicates that the variable of the existence of applied planning and contractual capabilities explained (61.8%) of the change in the preparation and implementation of the budgets of Iraqi universities, and the rest is attributed to other factors .

As shown in the table, the significance of the model, where the calculated F value reached (287.547) and at the significance level (SigF=0.000) which is less than 0.05, which indicates the existence of a statistically significant positive effect of the variable of the existence of applied planning and contractual capabilities on the preparation and implementation of the budgets of Iraqi universities at the significance level ( $\alpha \le 0.05$ )), and at 1 degree of freedom. Accordingly, the hypothesis was accepted, which states: "There are planning and contractual capabilities applied when setting estimated budgets for investment projects when preparing and implementing the budgets of Iraqi universities".

Results of testing the third sub-hypothesis

The third sub-hypothesis states that: "There are no advanced accounting and control capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities." The results appeared as follows:

Dependent		Model Summary Analysis of varian					
Variable	Correlatio	coefficient	Modified	degrees	degrees	Value of	significanc
	n	of	coefficient	of	of	F	e level (Sig
	coefficient	determinatio	of	freedo	freedo	Calculate	F*)
	(R)	n (R2)	determinatio	m (DF)	m (DF)	d	
			n				
			(R2)				
			Adjusted				
Preparing							
and							
implementin	0.707	0.500	0.497	0.437	1	177.820	0.000
g budgets	0.707	0.500	0.777	0.437	1	177.020	0.000
for Iraqi							
universities							

Table No. (7): Summary of the Model and Regression Variance Analysis for the Third Sub-Hypothesis

\* The effect is statistically significant at the significance level ( $\alpha \leq 0.05$ )

Table (7) shows the existence of a strong positive correlation between advanced accounting and control capabilities for applying the contractual budgeting method when preparing and implementing the budgets of Iraqi universities, as the value of the correlation coefficient reached (0.707R=), and the value of the coefficient of determination reached (0.500R2=), which indicates that the variable of advanced accounting and control capabilities explained (50%) of the change in the preparation and implementation of the budgets of Iraqi universities, and the rest is attributed to other factors.

As shown in the table, the significance of the model, as the calculated F value reached (177.820) at the significance level (SigF=0.000) which is less than 0.05, which indicates the existence of a statistically significant positive effect of the variable of advanced accounting and control capabilities on the preparation and implementation of the budgets of Iraqi universities at the significance level ( $\alpha \le 0.05$ )), and at 1 degree of freedom.

Accordingly, the hypothesis was accepted, which states: "There are advanced accounting and control capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities".

Results of testing the fourth sub-hypothesis

The fourth sub-hypothesis states that: "There are no advanced human and material capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities".

The results appeared as follows:

Dependent			Model	Analy	sis of varian	ce ANOVA	
Variable	Correlatio	coefficient	Modified	degrees	degrees	Value of	significanc
	n	of	coefficient	of	of	F	e level (Sig
	coefficient	determinatio	of	freedo	freedo	Calculate	F*)
	(R)	n (R2)	determinatio	m (DF)	m (DF)	d	
			n				
			(R2)				
			Adjusted				
Preparing							
and							
implementin	0.707	0.500	0.497	0.437	1	177.820	0.000
g budgets	0.707	0.300	0.477	0.437	1	177.020	0.000
for Iraqi							
universities							

#### Table No. (8): Summary of the Model and Regression Variance Analysis for the Fourth Sub-Hypothesis

\* The effect is statistically significant at the significance level ( $\alpha \leq 0.05$ )

Table (8) shows the existence of a strong positive correlation between advanced human and material capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities, where the value of the correlation coefficient reached (0.707R=), and the value of the coefficient of determination reached (0.500R2=), which indicates that the variable of advanced human and material capabilities explained (50%) of the change in the preparation and implementation of the budgets of Iraqi universities, and the rest is attributed to other factors.

The table also shows the significance of the model, where the calculated F value reached (177.820) and at the significance level (SigF=0.000) which is less than 0.05, which indicates the existence of a statistically significant positive effect of the variable of advanced human and material capabilities on the preparation and implementation of the budgets of Iraqi universities at the significance level ( $\alpha \le 0.05$ )), and at 1 degree of freedom.

Accordingly, the hypothesis was accepted, which states: "There are advanced human and material capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities".

## **Chapter Four: Conclusions and Recommendations**

## **First: Conclusions**

The results showed that there are advanced legislative and regulatory capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities, as well as planning and contractual capabilities applied when setting estimated budgets for investment projects when preparing and implementing the budgets of Iraqi universities, and there are advanced accounting and control capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities, as well as advanced human and material capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities, as well as advanced human and material capabilities to apply the contractual budgeting method when preparing and implementing the budgets of Iraqi universities.

#### Recommendations

The necessity of using the contractual budget in preparing and implementing the investment budget of Iraqi universities due to its advantages and importance.

Qualifying and training workers in the field of planning, finance and budgets on modern methods in preparing the contractual budget.

Providing the necessary material capabilities for implementation, especially in the beginning, as it requires large costs.

That Iraqi universities seek to increase the components for applying the contractual budgeting method and complete the requirements of this method and remove obstacles.

#### References

- Al-Bakri, Riyad; Shakara, Muwaffaq. (2013) Contractual budgeting is the optimal method for planning and implementing investment budget projects. Journal of Accounting and Financial Studies. Volume 18, Issue 24
- Jadou, Yasser (2015). The extent of the possibility of applying the contractual budgeting method in preparing the Jordanian budget, Master's thesis, Faculty of Economics and Business, Jadara University, Jordan
- Hababa, Saad Fouad (2018) Governmental Accounting, Dar Al-Ibtikar for Publishing and Distribution, Jordan.
- Al-Hussein, Mahdi Mamoun (2017) Governmental Accounting, Dar Al-Asar Al-Ilmi for Publishing and Distribution, Jordan.
- Rahahleh, Nadine Imad (2019) The role of success factors for planning budgets in improving the financial performance of private organizations operating in the telecommunications sector in Jordan for the year 2013-2015, Arab Journal of Management, Volume 39, Issue 2, pp. 3-28.
- Al-Rikabi, A.M. Dr. Naji Shaib (2017). Contractual budgeting is a tool for development in light of the scarcity of economic resources, Iraq: Baghdad College, Journal of Economic Sciences University.
- Shakara, Muwaffaq. (2010), Strategy for preparing the contractual budget for the local government of Baghdad. Unpublished doctoral thesis, University of Baghdad, Iraq.
- Al-Mahaini, Muhammad Khalid; Saloum, Hassan (2007) The State's General Budget between Preparation, Implementation and Control, A Field Study of the Iraqi General Budget, Journal of Administration and Economics, Issue 64, pp. 92-119.
- Naoush, Sabah (2005) "The State's Financial Budget in the Iraqi Constitution" Al-Ma'rifah Special Files 2005 via the Internet www.aljazeera.net.
- Al-Wadani, Halima Khamis (2022) The Impact of Financial Planning on Preparing the State's General Budget, An Applied Study of the Libyan Budget, Journal of Human and Society Studies, Issue 17, 1-14.
- Al-Wardat, Khalaf Abdullah (2021) Government Accounting and Preparing the Program and Performance Budget, Al-Warraq Foundation for Publishing and Distribution, Jordan.
- Yassin, Ayyam (2018) The possibility of using contractual budgeting as a tool for planning and control in the investment budget "A field study in Lattakia City Council", Hama University Journal, Volume 1, Issue 5.
- "Federal Budget Law of Iraq" for the year 2006.
- Second: Foreign sources
- Arefmanesh, Zohreh Panahi, Mehrdad asadi, Iman Bani (2021) Analysis the Relationship between Budgetary Planning and Resource Allocation: the Emphasis Moderating Role of Performance Management (Case Study: Municipality of Isfahan), biannual journal of governmental accounting, Volume 7, Issue 1 - Serial Number 13, Pp 177-192.
- Ireland, Lewies. & Cleland, David, (2006), Project Management Strategy Design and Implementation, 5th Edition, New York, USA, Graw Hill.

- Nafisatu, Amida Daboh(2018) Effect of Budget and Budgetary Control on Firms Performance: A Case Study of the East African Portland Cement Company Limited, Masters in Business Administration, United States International University ,Africa.
- Schubert, H., & Kirsten, S. M. (2021). Effect of Budgeting Control on the Financial Performance of SMEs in Germany. Journal of Finance and Accounting, 5(2), 1-9. Retrieved from https://stratfordjournals.org/journals/index.php/journal-of-accounting/article/view/812.

Stojanovic ,C.(2013). Evaluting Investment Projects in industry By Combining Discount Method And Real Option Valution", work peper.

Wiley, Blackwell. (2012). Pitfalls of contracting for policy advice preparing performance budgeting reform in Estonia. Journal of policy administration. Vol 26, no 4, 606-623.