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The role of productive university in supporting the budget and educational process development

Abstract. The study aims to clarify the role of other sources of funding in the educational institutions in 2021 by finding alternatives that contribute to meeting some of the expenses of educational institutions due to a decrease in the financial allocation by the state observed in the recent years with regard to the circumstances that Iraq is going through, namely low world oil prices and a lack of other revenues in universities. The research consists of five subjects: the University Office of the Higher Education Fund, the Institute of Management of Rusafa, Technical Institute of Kut, Technical Institute Baquba, Technical College Baghdad and is based on data of the 2019-2021 period. It has been proven that the increasing requirements regarding the development of the educational process in terms of technology, as well as the urgent need for laboratories and other educational institutions to enhance their budgets to meet those requirements, become a burden for those institutions. Hence, the productive university should help find ways to match actual revenues in order to eliminate the observed budget deficit.

Keywords: Productive University; Current Budget; Educational Process

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Роль продуктивного університету в розвитку бюджету та підтримці навчального процесу

Анотація. Метою дослідження є визначення того, яку роль відіграють альтернативні джерела фінансування в навчальних закладах до 2021 року шляхом пошуку альтернатив, які сприяють

задоволенню витрат навчальних закладів у зв'язку зі зменшенням фінансових асигнувань з боку держави, що спостерігається останнім часом через обставини, які склалися в Іраку, а саме: низькі світові ціни на нафту та відсутність фінансових надходжень до університетів. Дослідження охоплює п'ять інституцій: Фонду вищої освіти, Інститут менеджменту Русафа, Технічний інститут Ель-Кута, Технічний інститут Бакуба, Технічний коледж Багдада за період 2019-2021 років. У результаті проведеного дослідження було доведено, що зростаючі вимоги щодо освітнього процесу через розвиток технологій, а також неспроможність виконати ці вимоги через брак коштів у бюджеті, стали тягарем для навчальних закладів. У зв'язку з цим формат продуктивного університету повинен допомогти знайти способи отримати доходи для подолання бюджетного дефіциту в галузі освіти.

Ключові слова: продуктивний університет; бюджет; навчальний процес.

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Роль продуктивного университета в поддержке бюджета и развитии учебного процесса

Аннотация. Целью исследования является определение того, какую роль играют альтернативные источники финансирования учебных заведений в 2021 году, которые способствуют покрытию расходов учебных заведений, связанных с уменьшением финансовых ассигнований со стороны государства, наблюдающегося в последнее время из-за обстоятельств, в которых оказался Ирак в связи с падением мировых цен на нефть и отсутствием других поступлений. Исследование охватывает пять институций: Фонд высшего образования, Институт менеджмента Русафа, Технический институт Эль-Кута Технический институт Бакуба, Технический колледж Багдада с учетом данных 2019-2021 годов. В результате проведенного исследования было доказано, что растущие требования образовательного процесса, связанные с развитием технологий, из-за неспособности покрыть эти потребности за счет бюджетных средств, стали бременем для учебных заведений. В связи с этим формат продуктивного университета должен помочь найти пути получения доходов с целью преодоления бюджетного дефицита в сфере образования.

Ключевые слова: продуктивный университет; бюджет; учебный процесс.

1. Introduction

As a result of the decline in sources of funding through (the current budget) in our educational institutions in all aspects, the obligation was on the educational units to search for sources of funding that would strengthen the current budget for the purpose of spending on various doors and support the physical and human potential in the educational units as well as work on the development of the educational process, In all its material aspects represented by (commodity and service inputs) and educational through working on the development of practical and scientific curricula and the establishment of projects envisaged based on the development and support of scientific research (Kibe et al., 2020; Singh et al., 2021). As for the purpose of reaching the research objectives and solving the problem, the research summarizes the first axis, which represents the methodology of the research, its problematic and its hypotheses. The second maba-hith discusses the theoretical framework of the current budgets and their types (Lee, 2020). The third axis dealt with the university producing its meaning, its requirements, the determinants of the producing university, the fourth axis includes (the practical side) and reviewed the types of revenues and expenses and how to prove the hypothesis of research the fifth axis included the most important conclusions and recommendations reached by the researcher (Msallam et al., 2020; Schembri et al., 2020).

Demonstrate the effective role played by the productive university in supporting the budget through the provision of revenues outside the allocations of the general budget of the state, which are spent by the units that contributed to the achievement on both sides (commodity and service).

The importance of research is through finding alternatives that contribute to filling some of the operational expenses in the higher education institutions due to lack of financial allocations monitored by the Ministry of Finance because of the circumstances experienced by the country of low world oil prices.

The research aims to: 1 - Statement of the contribution of the Higher Education Fund and evening studies and advisory offices in support of budgetary allocations. 2 - Reducing the total

dependence on the operational budgets in the institutions of higher education. 3 - Statement of the contribution of the productive university in the development of the learning process and society (Kibe et al., 2020; Schlegel et al., 2021).

The research was based on a main hypothesis that «the productive university has a role to play in bridging the deficit in budget allocations and in the development of the educational process in institutions of higher education» (Lee, 2020; Schembri et al., 2020).

In the composition of the theoretical side of the research, reliance is placed on the relevant sources and references. The practical side was chosen as the research sample. The accounts of the Higher Education Fund, evening studies and advisory offices in the Central Technical University and some of its formations.

2. Methods

2.1. The theoretical framework of the public budget

First - the concept of the state budget

The general budget of the state is an indispensable necessity for any country in the world, whatever the nature of its political system and the form of government in it. It is not the general budget is not possible for ministries to conduct their work and achieve its goals and plans set for them. Without it, the state cannot carry out the functions entrusted to it, and it is difficult to manage the national economy and guide it in the planned direction (Kibe et al., 2020). The general budget is the axis on which all the state's activities are conducted. And a tool for translating the policies of the executive branch. The importance of this is derived from the need of governments in their various political systems to reverse their philosophy of governance and the development of society in all economic and service fields. This document is no longer merely a list of figures that are deaf, but numbers that meet specific goals that are planned in advance (Lee, 2020; Msallam et al., 2020; Schlegel et al., 2021).

Second - Budget definition

The definition of the general budget of the state varies according to the function it exercises or the legal framework that governs the effects and the relations it engenders. The budget was defined under the amended Iraqi Public Accounts Act (Article II / paragraph 1): «As a table containing the estimate of imports and expenditures for one fiscal year specified in the budget law». Under modern thought, it has been defined as the government's financial plan for the next fiscal year, including an estimate of state revenue and public expenditure, and approved by the legislative authority, which reflect or reflect the policies of the state and its economic, social and political choice.

Third - Types of public budgets

The general budget passed during its development in several stages, and the intellectuals knew and distinguished several types of them, the most important of which are:

- 1) Traditional Budget (budget items): The traditional budget is the first model of the public budget and is the oldest type of government budgets known and widely spread in the countries of the world and England is the first to use this type of budgets and then spread to other countries and still many countries use this type of budgets, especially (Iraq, Jordan, Lebanon, Etc.). The balance of items is the document in which all state revenues and expenditures are detailed and obtained by the legislative authority and control of revenue sources and objects of expenditure (Lee, 2020; Singh et al., 2021).
- 2) Performance Programming Budget: This type of budget has emerged as a result of the shortcomings of the traditional budget, which shows the objectives for which the appropriations and the costs of the proposed programs are required to achieve these goals (O'Kane et al., 2020). The performance budget is the result of the first attempts to reform the traditional budget system, focusing particularly on administrative efficiency. The efficiency of government agencies in the execution of projects. The performance budget is defined as the budget tab which focuses on the actions of the government and not on the items and items purchased. Thus, the performance balance shifts from the means of doing the work to the work itself (Msallam et al., 2020; Schlegel et al., 2021).

- 3) **Planning Programming Budget:** It is one of the latest public budgets of the state, and the first used in America in 1968 and then moved to France and Britain and the rest of us, and combines this type of budgets between planning and programming so that the planning process to formulate goals and alternative ways to evaluate and help programming in the choice between means, This type of budget is a scientific translation to choose between alternatives in the form of an executable spending program, and there are two fundamental reasons that determine the main philosophy on which to base the idea of budget planning and programs. The first is the scarcity of resources available to the government in the face of demand to satisfy the pilgrim The second is the need for the government to choose between alternatives in the interest of the public (Kibe et al., 2020; Singh et al., 2021).
- 4) **Zero budget (Zero-Base Budget):** This method reviews and evaluates all aspects of expenditure starting from zero. It does not assume that current programs should continue but are likely to be reduced or canceled if proven inefficient or viable. This requires discussion and justification of all expenses included in departments and administrative units operating in Economic units each time the budget is prepared, and as if the item of expenditure is presented for the first time in accordance with the zero budget method, each department or administrative unit in the economic unit is required to determine the duties and tasks to be implemented during the coming period as well as the expenses of each activity expected To be carried out by that department or administrative unit, with the order of those activities according to the degree of importance in achieving the general objectives of the economic unit and then the budget committee to study these activities and their costs and the allocation of available funds based on the degree of importance of each activity (Msallam et al., 2020; Schlegel et al., 2021).
- 5) **Citizen budget:** The budget of the citizen is the document that summarizes the policies and directions of the government for the coming year, and the development programs of each ministry and its beneficiaries. This enables citizens to learn about the distribution of public expenditures and the revenues allocated to implement each ministry plan. And simplified, and stems the importance of the citizen's budget that it is issued by the ministries most closely related services directly provided to citizens and classified under the name of the social sector (Lee, 2020; Jameel & Ahmad, 2020).

Fourth - General Expenditure of the State

Public expenditure is the tool that helps the state and its public bodies to carry out their financial activity aimed at satisfying public needs. It is also the tool that plays with other financial instruments its prominent role in achieving economic stability and contributes to the financing of investment spending. And that what distinguishes the public budget in Iraq and many years ago is the high proportion of the allocation of operational expenses, and that the increase is the result of the large size of the public sector in Iraq and the return of this magnitude to several factors, the most important dependence of the Iraqi economy on oil revenues exported abroad, On the revenues of oil in its financing, where the proportion of more than 90% of the revenues of the general budget, which in this case reflects the image of the rent of the Iraqi economy, which led to the budget to be affected by fluctuations in oil prices from time to time, any drop in oil prices will be reflected on the buffer Which is a result of the lack of coverage of operating expenses as the state begins to reduce operating expenses (Arqawi et al., 2018; Kibe et al., 2020; O'Kane et al., 2020).

Fifth - The concept and definition of revenue

Public revenues and public expenditures are indispensable tools of the financial policy of any country. As a result of the development of the prevailing economic thought and the role of the State in various stages, it was not only public expenditure and the development of its concept, but reflected on the level of the concept and role of public revenues at each stage, From the fact that public revenues and public expenditures are complementary to each other. When the state provides public expenditure for the purpose of achieving some of its various objectives, public funds are needed to cover this expenditure (Msallam et al., 2020; Singh et al., 2021). The income can be defined in IAS 18: the total inflows of economic benefits during the period resulting from the normal activities of the entity that result in an increase in equity other than the increase resulting from contributions made by the equity holders. While

Shirazi defined revenue as the inflow to the unit, any increase in its assets or payment of its liabilities (or both) arising from the production and sale of goods, the rendering of services to others or any other activities, which constituted the usual and continuing main business (Schlegel et al., 2021).

For the purpose of the University producing its objectives, a set of requirements must be met: A - Infrastructure requirements, B - Financial resources requirement.

A - Infrastructure requirements:

- 1) Provide highly trained professionals with experience in field work and practical and applied experience to contribute to knowledge production and use it in the development of economic development.
- 2) Try to reduce the differences between the functions of the university (teaching, scientific research, community service) and consider it an integrated system affect and influence each other so that openness to society.
- 3) Preparation of the student and composition through the integration of the process of preparation of the comprehensive and specialization through the provision of knowledge and applications linked to a range of disciplines and the exact specialization of the student (O’Kane et al., 2020; Jameel & Ahmad, 2020).
- 4) Provide centers for training, consultation and policy and the preparation of training courses for continuing education and the adequacy of the labor force according to the needs of the labor market and the provision of advisory services.
- 5) The productive university shall achieve the scientific and economic efficiency of the available resources to ensure the distinguished performance of all the activities carried out by the university to achieve the objectives.
- 6) Open channels of communication with the community to find out the problems and issues of society, whether related to production processes or service, while finding flexibility and freedom in the laws and regulations governing the work.
- 7) The university’s keenness to know the needs of the community of specialties and qualifications.
- 8) Developing the policies and regulations of the university in accordance with its objectives and principles of productivity and the integration of the curriculum in theory and applied to suit the labor market.
- 9) Providing and developing sources of scientific research.
- 10) Enhance the partnership between universities and civil society institutions for the purpose of achieving sustainable development and upgrading the economy (Kibe et al., 2020; Lee, 2020; Schlegel et al., 2021).

B - Financial Resources Requirements:

The work of the productive universities requires the adoption of self-financing through the investment of human and material expertise and potential in the university with the public and private sectors. For the purpose of achieving its tasks:

- 1) Identification of sources of income through the investment (facilities and assets of the university).
- 2) To enter into economic projects in the market in accordance with the conditions of the free economy.
- 3) Partnership with the production and services sectors of society.
- 4) Competition with other local and scientific universities.
- 5) Marketing research and holding training conferences related to the needs of work, production and services.
- 6) University administration in the manner of business management of companies and goods (Arqawi et al., 2018; Msallam et al., 2020; Jameel & Ahmad, 2020).

3. Results and Discussion

Five samples were approved (the accounts of the university office of the Higher Education Fund, the Rusafa Institute of Management, the Technical Institute of Kut, the Technical Institute of Baquba, the Technical College of Baghdad), where the university office began to open the accounts of the Fund Higher Education since the beginning of 2019 as the presidency of the university is one of the new formations (established by the technical education), unlike the formations of the university, which is one of the institutions of old establishment. At the beginning of 2019, the formations began to send the middle university’s share of the revenues of the evening studies,

the revenues of the scientific and advisory services offices, the direct investment revenues, the revenues of the cooperation mechanism, and the contribution of the students. The total income from the University's share for the year 2019 amounted to 599116831 dinars. While the share of the Presidency of the University of those revenues referred to above for the year (2020) total (1018656203) billion and eighteen million six hundred and fifty-six thousand two hundred and three dinars. [Tables 1](#) and [Tables 2](#) shows the distribution of these revenues and their rates of disbursement.

[Tables 2](#) shows the details of the revenues achieved for the year 2020 of the Higher Education Fund in the presidency of the university.

The expenses of the Presidency of the University on the accounts of the Higher Education Fund for the year 2019 amount to 598764941 dinars, while the expenses for 2020 amount of 992648193 dinars and [Table 3](#) shows the details.

The researchers would like to refer to the names of the accounts included in the accounting tab of the goods and service inputs and [Table 4](#) showing these details. [Table 4](#) shows the names of expenses included in the account of goods inputs and service requirements.

The Institute of Administration Rusafa: The Institute has achieved various revenues within the accounts of the Higher Education Fund, which was the total amounts achieved in 2019 amounted to 107413405 dinars. While the Institute achieved within the year 2020 revenue 105148319 dinars. The Institute achieved revenues from evening studies in the year 2019, 468852706 dinars, while the income of the year (2020) amount of 536317655 dinars and [Table 5](#) and [Table 6](#) show the details of those revenues. [Table 5](#) shows the details of the 2019 revenues of the Higher Education Fund at the Rusafa Institute of Management.

[Table 6](#) shows the details of the revenues achieved for 2020 of the Higher Education Fund at the Rusafa Institute of Administration.

The total expenses during the year 2019 amounted to 109961622 dinars.

Table 1:
The revenues achieved in 2019 for the Higher Education Fund in the Presidency of the University (in Iraqi dinars)

Account name	The amount	Mechanism of disbursement of funds		
		30% bottlenecks	35% reward	35% incentives
Direct investment income	956,774,51.5	287,032,35.5	334,871,08.03	334,871,08.03
Evening studies	127,813,702.5	149,115,986.25	149,115,986.25	1491,159,86.25
Cooperation mechanism revenue	354,232,00	106,269,60	123,981,20	123,981,20
Revenue of consulting offices	357,459,2	107,237,7.6	125,110,7.2	125,110,7.2
Income of students	383,958,92.5	115,187,67.75	134,385,62.38	134,385,62.38
Total sum	599,116,831	179,735,042.85	209,690,883.83	209,690,883.83

Source: Compiled by the authors based at own study

Table 2:
The revenues achieved for the year 2020 of the Higher Education Fund in the presidency of the university (in Iraqi dinars)

Account name	The amount	Mechanism of disbursement of funds		
		30% bottlenecks	35% reward	35% incentives
Direct investment income	909,434,53	272,830,35	318,302,09	318,302,09
Evening studies	741,429,713	222,428,914	259,500,400	259,500,400
Cooperation mechanism revenue	998,808,25	299,642,48	349,582,88	349,582,88
Revenue of consulting offices	296,385,6	889,157	103,735,0	103,735,0
Income of students	834,383,56	250,315,07	292,034,24	292,034,24
Total sum	101,865,620,3	305,596,816	356,529,671	356,529,671

Source: Compiled by the authors based at own study

Table 3:
Details of the expenses of the Presidency of the University on the accounts of the Higher Education Fund (2019-2020) (in Iraqi dinars)

T	The details	Expenses of 2019	Expenses of 2020
1	Incentives	419,381,782	713,059,342
2	Commodity inputs	473,354,79	115,658,10
3	Service requirements	132,047,680	163,943,041
	Total	598,764,941	992,648,193

Source: Compiled by the authors based at own study

Table 4:
Expenses included in the account of goods inputs and service requirements

T	Account name	Expense name
1	Commodity inputs	Fuel and oils Materials and supplies Stationery Water and electricity Backup tools
2	Service requirements	Building Maintenance Maintenance of machinery and equipment Maintenance of furniture Printed and published hospitality Celebrations Transfer of employees Transportation of goods and goods Travel and dispatch Rewards for non-employees legal services Banking Services Training and rehabilitation Miscellaneous service expenses

Source: Compiled by the authors based at own study

Table 5:
The details of the 2019 revenues of the Higher Education Fund at the Rusafa Institute of Management

T	Account name	The amount
1	Revenue of telecommunication services	145,125
2	Maintenance and repair services	917,383,20
3	Income from consultancy and technical services	156,934,6
4	Income from social services	371,280,1
5	Rental income of fixed assets	102,478,13
	Total revenue	107,413,405

Source: Compiled by the authors based at own study

Table 6:
The details of the revenues achieved for 2020 of the Higher Education Fund at the Rusafa Institute of Administration

T	Account name	The amount
1	Maintenance and repair services	927,429,69
2	Income from consultancy and technical services	120,670,5
3	Rental income of fixed assets	111,986,45
	Total revenue	105,148,319

Source: Compiled by the authors based at own study

4. Conclusions

1. The productive university provides a variety of sources of funding to support the educational process the risk of sudden changes in the decline of the traditional sources of funding represented by the public budget of the State.
2. The productive university provides the opportunity for the largest groups of society to obtain university education through the opening of evening studies, while at the same time taking into account the lack of affordability of the beneficiaries of large financial burdens, especially for people with limited income.
3. The transformation towards the productive university is not intended to achieve profits, but the aim is to find another source of financing the university with its various scientific and service facilities, because good funding will be reflected directly on the quality of education as well as at the level of scientific research.
4. The results were compared with the revenues achieved by the university (the sample of the research) and with the observatory of the allocations of the general budget of the State for the years 2019-2020, where the proportion of expenditure to the allocation (253.24%) in 2019 and in 2020 was the percentage (160.37%), which is a large proportion exceeded the double for the two years' sample research.

References

1. Arqawi, S., Al Hila, A. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The Degree of Employee Awareness of the Reality of Excellence in Performance at the Technical University of Palestine (Kadoorei). *International Journal for Academic Development*, 2(9), 27-40. https://www.researchgate.net/publication/327904540_The_Degree_of_Employee_Awareness_of_the_Reality_of_Excellence_in_Performance_at_the_Technical_University_of_Palestine_Kadoorei
2. Jameel, A. S., & Ahmad, A. R. (2020). Factors impacting research productivity of academic staff at the Iraqi higher education system. *International Business Education Journal*, 13(1), 108-126. <https://ssrn.com/abstract=3614806>
3. Kibe, L. W., Kwanya, T., & Owano, A. (2020). Relationship between big data analytics and organisational performance of the Technical University of Kenya and Strathmore University in Kenya. *Global Knowledge, Memory and Communication*, 69(6-7), 537-556. <https://doi.org/10.1108/GKMC-04-2019-0052>
4. Lee, Y. H. (2020). Determinants of research productivity in Korean Universities: the role of research funding. *The Journal of Technology Transfer*, 1-25. <https://doi.org/10.1007/s10961-020-09817-2>
5. Msallam, A. A., Al hila, A. A., Al Shobaki, M. J., & Abu Naser, S. S. (2020). The Reality of Achieving the Requirements of Total Quality Management in University Colleges. *International Journal of Academic Management Science Research*, 4(8), 67-90. <http://dstore.alazhar.edu.ps/xmlui/bitstream/handle/123456789/637/IJAMSR200809.pdf?sequence=1&isAllowed=y>
6. O'Kane, C., Mangematin, V., Zhang, J. A., & Cunningham, J. A. (2020). How university-based principal investigators shape a hybrid role identity. *Technological Forecasting and Social Change*, 159, 120179. <https://doi.org/10.1016/j.techfore.2020.120179>
7. Schembri, J. A., Chester, D. K., Gauci, R., Speake, J., Duncan, A. M., & Deguara, J. C. (2020). Durham University and its role in Malta's development planning during the 1950s through applied research. *Land Use Policy*, 96, 104705. <https://doi.org/10.1016/j.landusepol.2020.104705>
8. Schlegel, T., Pfister, C., Harhoff, D., & Backes-Gellner, U. (2021). Innovation effects of universities of applied sciences: an assessment of regional heterogeneity. *The Journal of Technology Transfer*, 1-56. <https://doi.org/10.1007/s10961-020-09839-w>
9. Singh, R. K., Singh, A., Zander, K. K., Mathew, S., & Kumar, A. (2021). Measuring successful processes of knowledge co-production for managing climate change and associated environmental stressors: Adaptation policies and practices to support Indian farmers. *Journal of Environmental Management*, 282, 111679. <https://doi.org/10.1016/j.jenvman.2020.111679>

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