IRAQ'S PUBLIC EXPENDITURE PRODUCTIVITY DURING THE PERIOD (2006-2020)

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ABSTRACT

Public spending is an important tool within the framework of economic policy for achieving the goals of stability, growth, and economic reform. It has an impact on the entire economy through its use to meet public needs. For example, the rapid growth in oil revenues has resulted in significant increases in government expenditures, with the majority of these expenditures going to unproductive current (operating) spending that does not appear to have any clear impact left by production. Public expenditures are excessive for a variety of reasons, including a failure to manage public finances effectively and efficiently. As well as a lack of rationalization and redirection of public expenditures toward investment projects that create more income for the public budget.

Keywords: *Expenditure productivity, expenditure rationalization, general budget.*

INTRODUCTION

The government system in Iraq has had a negative impact on the productivity of public expenditures due to the weakness of government financial control as a result of financial corruption and the absence of final accounts, among other factors, which necessitates government intervention through the effective application of government financial control standards through reforming the social transfer network, rationalizing public investments, and improving infrastructure as part of the objectives of the government.

Research problem

The Iraqi economy suffers from a rentier issue, which has resulted in expansionary spending policies and inefficient expenditure of public funds throughout fiscal years. When oil revenues fell, public finances became unbalanced, and the government's capacity to fulfill critical expenditures weakened, putting pressure on the public budget and all economic factors.

Research aims:

A statement of the most important problems facing achieving the productivity of public spending in the Iraqi economy and how they affect the economic sectors.

Research Hypothesis:

The hypothesis is based on the adoption of a fiscal policy capable of achieving high productivity of public spending.

Research Methodology:

The researchers used the descriptive analytical method and the quantitative method, to know the productivity of public spending through total and partial productivity.

Research Structure:

The study was divided into two sections: the first dealt with the theoretical implications of the productivity of public spending, while the second covered the practical aspects of each of the total and partial productivity of the general agreement for the period (2006_2020), before reaching conclusions and recommendations.

THEORETICAL CONSIDERATIONS: THE PRODUCTIVITY OF GOVERNMENT EXPENDITURE

First: Productivity: Known in its simplest terms, it is the relationship between production and the inputs that are used in production (Tangen, 2002:1). It is also known as the relationship between the quantity produced of a particular commodity and the quantity of production factors used in achieving this production. It can be said that Production includes both the production of goods and services, meaning that productivity can measure the quantity of goods and services produced in a period or measure services that can be provided by a person or an institution, and productivity is measured according to the following equation (A.Oyeranti, 2015:3):

Productivity = total output / total inputs used

Productivity growth is one of the most important components that contribute to achieving sustainable and long-term economic growth.

We conclude from the preceding that the productivity of public spending is the relationship between the rate of economic growth and the rate of growth of public spending, and the productivity of spending is very important because it justifies the feasibility of the state's intervention in economic activity, as it shows us the productivity of one unit of public spending through the effect of this Unit in GDP, that is, how much output increases when spending increases. When government expenditure rises by one unit and production rises by a positive amount, we say that government spending is a product by a given amount (greater than zero) What if government expenditure increases?

The size of the output has not changed, so we say that the productivity of spending is equal to zero, that is, it is unproductive, but when public spending increases and the volume of output decreases, then we say that the productivity of spending is negative (less than zero), meaning that the output does not respond to public spending (Al-Damai, 2018: 16-17), and accordingly The government spending is described as productivity if it achieves an increase in economic growth rates, that spending that results in an increase in the ratio of public services to the money spent by the government, according to the following equation (Al-Ani, 2018: 11):

Productivity of government spending = public services / public funds expended

METHODS OF MEASURING PRODUCTIVITY OF OVERHEADS:

Governments aim to raise the level of productivity of their expenditures through the optimal use of the financial resources available to them. The process of measuring productivity must be a clear and simple process in order to achieve its objectives in detecting the movement of productivity and its stages of development and knowing the level and quality of the problems and difficulties that the state suffers from. Those responsible for fiscal policy in the state can resort to it in order to guide the measurement of the productivity of public spending and its development by specifying for all the items and branches of investment and non-investment public expenditures included in the budget, in contrast to the units constituting the structure of the public economy, performance rates specific to each of them, thus making it easier to identify what If this spending is carried out in the correct pattern consistent with economic rationality or not, and it is logical in this regard, that the selection of investment public expenditures in economies that adopt comprehensive planning, in the concept of socialist planning, or development planning, is subject to certain criteria, which are known as priorities, The choice of these criteria depends on the nature of the problems that the national economy suffers from, which means that they differ from one economy to another To another, rather to one economy from one stage to another. In addition, the importance given to each of these standards must vary according to the importance of the problem it addresses. Studies related to planning (Hashish, 1992: 83), and there are several ways to measure productivity. Alimony, including:

- Measurement of total productivity: the total productivity is defined as the relationship between the total outputs of expenditures and the total expenditures that were used to obtain them. According to this definition, the total productivity and symbolized by the symbol Tp is equal to the arithmetic ratio between the amount of total output and symbolized by (Total Output (TO) and the total input quantity Used to obtain it, and symbolized by Total Input (TI), the total productivity is an appropriate measure of the extent of progress in all economic sectors.
  Total Productivity = Total Output / Total Input (Expenditure)
  (TP=TO(GDP)/TI (TC.)
- Measurement of partial productivity: partial productivity means the quantitative relationship between outputs and one type of total expenditure. Partial measurement is intended to measure the productivity of each of the total expenditures separately. And this measurement is useful in explaining the change that occurred in the overall productivity of public expenditures, so that problems can be diagnosed more accurately. If there is a further decrease in the overall measure of the productivity of expenditures, it would be desirable in this case to know whether this is due to a decrease in the productivity of investment spending or in the productivity of consumer spending. This determination will be useful in making a plan for treatment and improvement (Al-Zahra, 2008: 43). It can be measured according to the following formula:

Partial productivity = total expenditure / one type of expenditure PP = GDP / C

FACTORS AFFECTING PRODUCTIVITY OF OVERHEADS:

The productivity of public expenditures is affected by many manifold factors of varying nature, which are characterized by overlapping and interdependence, and each of these factors has characteristics and effects that affect other factors, and the nature of these factors is that they are not characterized by stability, and these factors include:

- The set of internal and external factors: the factors affecting production efficiency are classified into two groups, internal factors, which mean those that the government can control, and external factors, meaning factors resulting from the environmental conditions surrounding the state, which it cannot control because it is outside its control and control (Sabah). 2010: 89)

Table 1. The set of internal and external factors of productivity

Internal factors	External factors
• Individuals working in the public sector • The environment and organization of work within the economic sectors • Information and control systems used • The supervision process within the economic sectors	• technology • General economic situation • Business environment • Government Legislations • Consumer requests (needs) • Structural factors • Natural Resources • Renewal and innovation • Industrial Relations

Source: Himer Sabbah, Morale and its Relationship to the Productive Efficiency of the Worker, A Field Study at the Soft Drinks Corporation - Tolka, Master Thesis (2010), Algeria, p. 99

Economic factors: The economic factors for raising productivity include the following aspects (Al-Zahra, 2008: 52)

- The degree of material and moral interest of employees in improving production efficiency
- Establishing a set of financial and psychological incentives to increase employee productivity in the public sectors. Thus, the previous classification focused on the degree of material and moral interest of employees in improving productive efficiency, as well as on psychological and financial incentives to increase productivity. And we conclude that the most important indirectly focused on the human element in the production process, when he emphasized the application of material incentives because of their great impact on increasing productivity.

Second: Public spending effectiveness: Effectiveness is intended to direct public resources to uses that result in a mixture of outputs consistent with the preferences of community members. Measuring the extent of achieving goals, and this concept requires comparing the outputs with the goals to be achieved and the methods used to achieve them, and the effectiveness of public expenditures "is the size of the expected goals through the social and economic impacts of a specific spending program compared to the predetermined goals (Mohammed, 2010: 57) where effectiveness is related to the inputs or outputs to the ultimate goals to be achieved and the outcome is often linked to welfare or growth goals and thus may

also be influenced by multiple factors (including output as well as external "environment" factors) (Mandl &other,2008: 3).

Third: the efficiency of public spending: the relationship between cost or between inputs and outputs means the rationing of the relationship between inputs and outputs (Abu Douh, 2006: 44)

1. Output efficiency: achieving the amount of outputs with the same amount of inputs, and accordingly it is the outputs to the expected outputs at a certain amount of inputs.
2. Input efficiency: It means achieving a certain amount of less inputs, and then the actual inputs are measured, the expected inputs, at a certain amount of outputs, when the outputs of the year are measurable, but if those outputs are of a social nature, then we can rely on intermediate measures. Public spending programs start with obtaining inputs such as labor, capital, etc. to carry out certain activities such as treating children's education to obtain final outputs such as improving health and upgrading the cultural level when measuring efficiency, and it is possible to distinguish between technical and allocative efficiency. Technical efficiency measures the net relationship between inputs and outputs while taking the limits of production possibility In mind, technical efficiency is an exercise toward the limits of production possibility and not every form of technical efficiency makes economic sense (other, 2008: 4&Mandl).

It is noted from the above that this means that efficiency and effectiveness are not always easy to isolate, in addition, outputs and results may be affected by environmental factors, or may not be affected, and clarifies the conceptual framework for efficiency and effectiveness linking both between inputs and outputs and the outcome (the end result) the distribution of monetary and non-monetary resources (i.e. Inputs produce outputs and are the basic measure of efficiency compared to measuring productivity, the concept of efficiency (the more a specific input increases or the input decreases for a specific output, the more efficient the activity is. As for productivity, it is simply the ratio of outputs to the inputs used.

THE PRACTICAL ASPECT IS THE PRODUCTIVITY OF PUBLIC SPENDING IN IRAQ

The Iraqi economy is distinguished from other economies by the difference in the productivity of public spending, especially after the regime change in the beginning of the year (2003).

1- The increase in the volume of the state's public revenues due to the increase in the volume of oil exports in order to lift the economic sanctions, which led to an increase in the ceiling of government allocations to all ministries.
2- The delay in approving the general budget until the third month of the fiscal year, which leads to weak allocations for the first quarter of the fiscal year, which is reflected in the high productivity of public spending, in addition to the fact that public expenditures begin to flow in the departments of state institutions after the third month, which leads to The productivity of public spending is low per unit spent, and it is at its lowest level in the fourth quarter due to the large volume of public spending in this quarter of each year, which is reflected in the efficiency of spending and its low returns, and then its low productivity.
3- The high level of administrative and financial corruption, which leads to the inflation of the amount of funds allocated and the decrease in the amount of real expenditures from them on government

projects and activities, which is reflected in the decrease in the productivity of public spending. And as follows:

FIRST, THE TOTAL PRODUCTIVITY OF OVERHEADS:

The volume of productivity of public spending can be known through the interrelationship between the volume of inputs, which we mean by public expenditures and their impact on the volume of outputs, and we mean the country's gross domestic product and what it contains from the various production sectors. The literature indicates the importance of the overall productivity of public spending, especially in developed countries, and the need to follow up on its trends and upgrade it in developing countries, especially in Iraq. We note from Table (2) that the productivity rate of public expenditures in (2007) recorded a positive rate of (28.6%), and that As a result of the rise in oil sales and the rise in their prices in the global market, which was positively reflected on the gross domestic product as a result of proper planning and financial control of the public budget. In 2008, the productivity growth rate of public expenditures decreased by -50.1%, as a result of the global crisis and low prices Oil and its sales declined, and the percentage continued to fluctuate during the years (2009-2011) until it reached (44.8%) as a result of the improvement in oil prices, which indicates the existence of financial discipline for the Public expenditures, but soon the percentage declined during the years (2012-2013) and by (34.1%) (12.1%) respectively, and the growth rate of the productivity of public spending in the year (2014) increased by (89.0%) and continued to fluctuate until it reached the year (2018).) by (11.4%), and decreased during the years (2019-2020) by (249.6%) (-24.5%), respectively, as a result of the drop in oil prices and the confrontation of the Corona pandemic, which negatively affected the gross domestic product.

Table 2. The productivity of the college for public expenditures in Iraq for the period (2006-2020)

Years	input (overhead)	output (Gross domestic product)	Total productivity expenditures	Overall productivity growth rate for overhead %
2006	37,494,608	95587954	0.39	
2007	39,307,836	111455813	0.35	-0.03
2008	67,277,181	157026061	0.42	0.07
2009	55,589,062	130643200	0.42	-0.002
2010	70,134,201	162064565	0.43	0.007
2011	78,757,665	217327107	0.36	-0.07
2012	105,139,574	254255490	0.41	0.05
2013	119,127,555	273587529	0.43	0.02
2014	83,556,226	266332655	0.31	-0.12
2015	70,397,515	194680971	0.36	0.04
2016	67,067,437	196924141	0.34	-0.02
2017	75,490,115	225722375	0.33	-0.006
2018	80,873,189	251064479	0.32	-0.012
2019	111723522	67955292.6	1.64	1.32
2020	146,626,788	53223927.8	2.75	1.11

Source: From the researcher's work based on:
- Central Bank of Iraq, Directorate General of Statistics and Research, Annual Economic Report, different years.
Republic of Iraq, Ministry of Planning, Central Bureau of Statistics, miscellaneous annual statistics.

SECOND, PARTIAL PRODUCTIVITY OF PUBLIC EXPENDITURES

Partial productivity is simple and easy to measure, but it does not give highly accurate results, because it shows the existence of a causal relationship between the output and the item to be measured, while it is only a quantitative relationship and the partial productivity of public expenditures can be measured separately (Hanieh, 2005: 76). , where it is noted from Table (3) the growth rate of partial productivity through the quantitative relationship between the output represented by (GDP) and the input represented by (investment expenditures), where the productivity recorded in (2007) a negative rate of (1794.49-) which indicates that The partial productivity of expenditures decreased, while the percentage continued to be negative during the study period, meaning that it did not record a positive percentage. This is evidence of the inability of investment expenditures to positively affect the components of GDP, and this indicates the weakness of the production structure in Iraq and the inflexibility of the production system towards the expenditures generating sectors All economic.

Table 3. The growth rate of the partial productivity of the public expenditures of Iraq for the period (2006-2020)

Years	**output (Gross domestic product)**	**investment expenses**	**Partial productivity overhead**	**partial productivity growth rate**
2006	95587954	5,277,000	18.11407	_
2007	111455813	6,588,000	16.918	-1794.49
2008	157026061	14,976,000	10.48518	-1681.32
2009	130643200	9,648,000	13.54096	-1034.98
2010	162064565	15,553,341	10.41992	-1343.68
2011	217327107	17,832,112	12.1874	-1029.8
2012	254255490	29,350,951	8.662598	-1210.08
2013	273587529	40,380,749	6.775197	-859.485
2014	266332655	24,930,767	10.68289	-666.837
2015	194680971	18,564,676	10.48663	-1057.8
2016	196924141	15,894,009	12.38983	-1036.27
2017	225722375	16,464,461	13.70967	-1225.27
2018	251064479	13,820,333	18.16631	-1352.8
2019	67955292.6	24422590	2.782477	-1813.85
2020	53223927.8	35,295,675	1.507945	-276.74

Source: From the researcher's work based on:

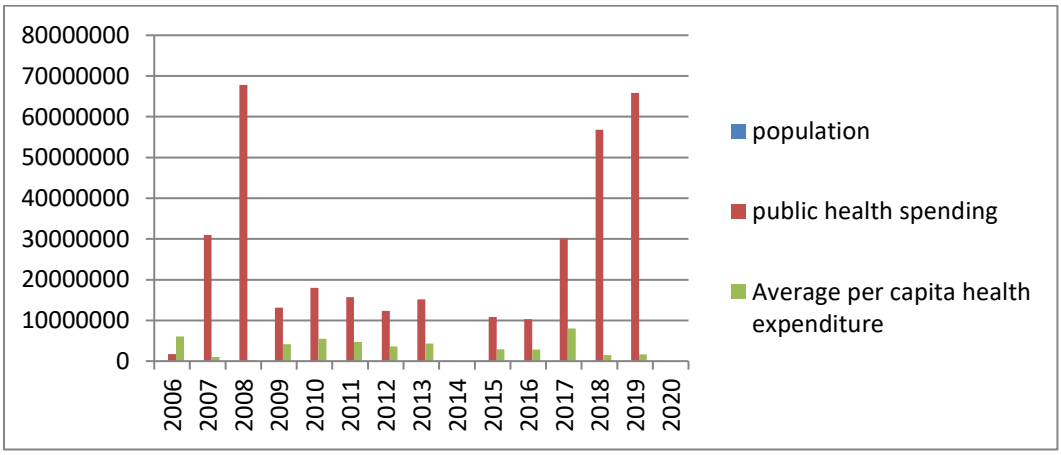
- Central Bank of Iraq, Directorate General of Statistics and Research, Annual Economic Report, different years.
- Republic of Iraq, Ministry of Planning, Central Bureau of Statistics, miscellaneous annual statistics.

THIRD: MEASURING THE PRODUCTIVITY OF SOME IRAQI MINISTRIES' EXPENDITURES:

The ministries, through the public expenditures allocated to them, aim to achieve sustainable productivity through local development aimed at enhancing economic productivity through the development of economic programs for capacity-building and creating the appropriate and necessary economic environment for development, capable of bringing about positive change in various circumstances according to the foundations and standards of financial control and based on productivity and sustainability in the use of public expenditure.

First: The productivity of the Ministry of Health expenditures for the period (2006-2020):
Through Figure (1), the indicator shows the average per capita share of public health spending through what the individual receives from health care, and thus the extent to which the health sector is able to provide health services with high productivity and efficiency for the individual, and there is no doubt that progress and development in the productivity of the health sector leads To achieve economic growth, the average per capita share of public health spending was recorded in (2006) at a value of (607,1125) thousand dinars, until it reached in (2013) a value of (432,1117) thousand dinars, and these values are much lower than what was determined by the World Health Organization, amounting to (487 dollars, with a value of (584) thousand Iraqi dinars, and the value continued to fluctuate until it reached the year (2019) with a value of (1682,675).

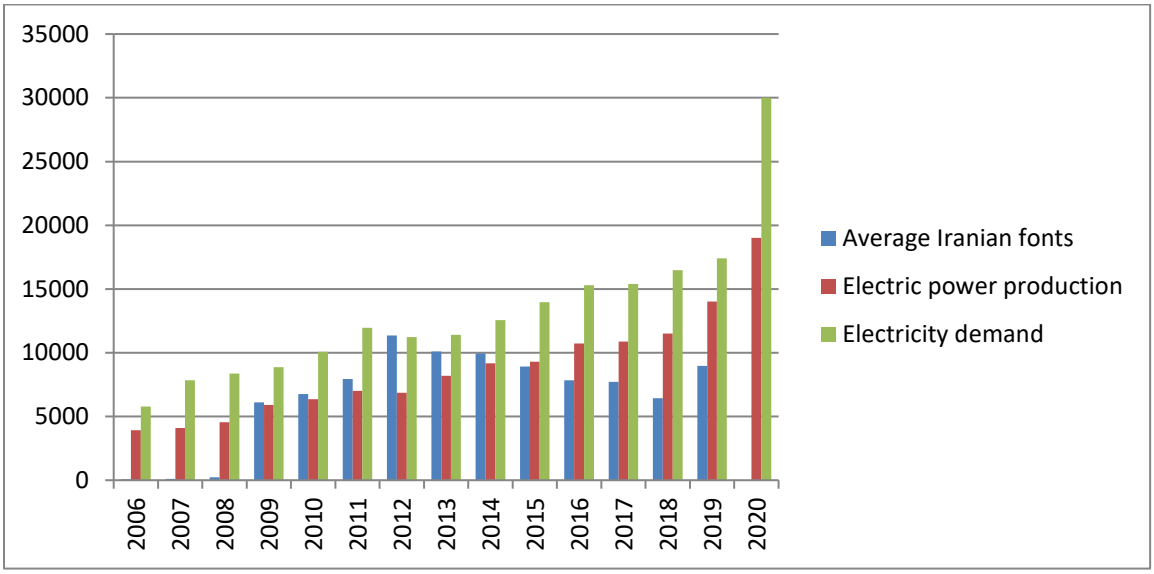
Figure 1. the indicator shows the average per capita share of public health spending through what the individual receives from health care



SECOND: THE PRODUCTIVITY OF THE MINISTRY OF ELECTRICITY EXPENDITURES FOR THE PERIOD (2006-2020):

Iraq has been suffering from a shortage of electric power for several decades, despite the presence of natural and human resources that can help it provide and even export the surplus, but that did not happen, as the total dependence on electric power is imported from abroad to fill the deficit in the production of electric power locally. , which means that the expenditures allocated to the production of electrical energy are transferred abroad. Figure (2) shows the amount of production in (2006) (3913) megawatts, corresponding to a demand for electrical energy (5776), where a deficit of (1863-) megawatts was recorded, and this deficit continued for the length of the period The study until the year (2019) reached megawatts.

Figure 2. The annual rate of production, demand and import of electric energy for the period (2006-2020) / (MWh)



Source: From the researcher's work based on the data of the Ministry of Electricity

CONCLUSIONS:

1. The negative growth rate of productivity of public expenditures has declined in most years of the study period, as a result of the global crisis, the drop in oil prices and the decline in its sales.
2. The weakness of the production structure in Iraq and the inflexibility of the production system towards the expenditures generated by all economic sectors, which caused a decrease in the partial productivity of expenditures, as the percentage continued to be negative during the study period (2006_2020), meaning that it did not record a positive percentage, and this is evidence of the inability of investment expenditures to affect positively on the components of GDP.

3. It also shows that there is a weakness in the rationalization of public expenditures through the low rates of implementation and the failure to direct them in the investment direction, and most of the expenditures are directed in the operational direction, as a result of the poor management of funds by the ministries and the failure to exploit the expenditures allocated to them to establish efficient investments and projects.
4. The high volume of administrative and financial corruption, which led to the inflation of the volume of allocated funds and the decrease in the volume of real expenditures on government projects and activities, which was reflected in the decrease in the productivity of public spending.

RECOMMENDATIONS:

1. It is necessary to advance the reality of public spending in Iraq, as it requires restructuring public spending and building policies that prioritize expanding the volume of investment spending for its important role in expanding productivity in all economic sectors.
2. Improving and increasing the productivity and efficiency of public spending allocated to ministries by preparing efficient executive plans capable of setting programs that determine spending priorities in a manner that serves the goals. Among these goals are the productivity of spending, financial control and economic growth.
3. The necessity of establishing control over the implementation of public expenditures in order to combat financial and administrative corruption, and work to increase the rates of completion and implementation through improving competencies and optimizing the use of financial resources.
4. The necessity to reconsider the investment allocations and work to increase them in a thoughtful manner, such as the allocations for health, electricity, and work to make them within the development plan, because they are considered the basis for building the economy.

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