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## THE ROLE OF PUBLIC EXPENDITURE IN PROMOTING HUMAN DEVELOPMENT INDICATORS IN IRAQ CASE STUDY IN IRAQI SANITARY SECTOR

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## Abstract:

Public expenditure is one of the important economic variables. which constitutes a vital and influential role in the economies of countries. It has a direct impact on boosting the economic condition. the sanitary sector is one of the vital sectors due to its link to the life of the citizen, and it is also one of the most important indicators of human development in addition to In terms of education and income, expenditure on this sector is necessary in terms of its impact on production and consumption indirectly and through the work of the government investment multiplier in the implementation of services related to the requirements of social life, or the needs that focus directly on the economic aspects of the life of society, and still most countries. The world is facing the phenomenon of increasing public expenditures in order to increase the state's intervention in economic life, whether to address an economic or political crisis, which needs huge sums to implement its development programs .

## The first topic // Research method

**Introduction**: The government in the Iraqi government has a problem and funding of health expenditure, because of the problem of funding from other obstacles and their contribution to poverty reduction, because the expenditure helps people to help with medical services.

**Research problem**: The study seeks to answer the axes of what is the impact of public expenditure on health services and what are its implications for human development?

**Research hypothesis**: Assuming a hypothesis that public expenditure has a positive effect on enhancing health services.

**Research Objective**: Research by achieving several objectives:

1.Knowing the concept and reasons for increasing public expenditure, as well as knowing the dimensions of human development.

2.Local developments in the overall development of the Iraqi economy and its impact on human development.

3. Knowing the impact of public expenditure on human development indicators in Iraq.

**Research:** In order to verify the research problem and test its hypothesis, it was divided into three research axes, research methodology, and the second dealt with the theoretical framework of the research, and the third topic addressed the practical aspect of the research.

#### The second topic // theoretical framework

#### First: Public expenditure

#### **1.Definition of public expenditure**

Public expenditure is defined as a monetary amount carried out by a public authority with the intention of satisfying a public need (Zughair: 2017: 8)

Public expenditures have been since ancient times, their inception until the emergence of the state, from the existence of the state in its image that used to obtain public financial resources that covered public places so that they could be viewed through multiple broadcasts in a more complete manner.

This is the prevailing concept that combines it with it, which represents its size from the government side or the public end, and thus it is one of the most important economic tools on the part of the state (Krouch and others: 2018: 159)

Financing government expenditures: financing government expenditures: financing economic projects in exchange for real estate financing, financing investment mainly on the size of the economic surplus achieved, and this financing is deducted from the gross domestic product (GDP), and turns into a total average, space, investment, investment, and Investment, investment, investment, investment, and, and,,,,, mission, and generation of energy for development.

There are two types of financing, which are( Shaker: (2001: 21-22):

The first source: financing from regular sources, which are the usual sources or sources from which the government obtains its financial resources naturally, annually, and traditionally from, for example, but not limited to, tax and fee revenues, and this is known as internal financing and that its size and any changes that occur to it affect economic activity in a way. General and the government's ability to provide goods and services needed by society.

The second source is financing from unusual sources, which are the exceptional sources that the state uses as a result of its inability to obtain financing from regular resources to finance the increase in its annual expenditure from the sources of lending from the monetary authorities in the country (deficit financing) or resorting to borrowing from abroad (from governments) Or international institutions and organizations or other banks) and through that, we can say that the government has a great influence through the decisions it makes regarding its expenditure and gets its revenues from economic activity, its growth rates, the distribution of resources between different uses and the direct and indirect effects of income distribution.

## **3.The Importance of Public Expenditure** (Krouch and others: 2018: 159)

Public expenditure represents one of the important tools of economic policy, through which the aggregate demand in the economy is influenced in order to achieve a set of economic and social goals. Therefore, the reconsideration of the method of public expenditure must take into account the effects of any measure that aims To reduce this expenditure on overall economic activity.

Or it is the form that expresses the size of government intervention and the assumption of public burdens, whether by the central government or local governments, and aspects of the economic policy adopted by the state. (Protector: 2018: 3.(

## 4 Wagner's Law: (Ben Solomon: 2018: 95)

The German economist **Wagner** formulated a law he called the Law of Continuous Expansion of Governmental Activity that grows continuously, whether in its absolute or relative size, as a result of the development achieved in society. Government expenditure has been considered to be an internal variable and economic growth is an external variable. Wagner's law can be formulated as follows:

$$F\left(\frac{Y}{N}\right) = \frac{G}{Y} \qquad \dots \dots \dots \dots (1)$$

#### whereas

Y: national income

G: Government tunnels

N: the population

According to Wagner's Law, there are three reasons working to increase the government's role in economic activity (Abdul-Hamid: 258:(

-That the demand for commodities grows with the high rates of urbanization and industrialization and then expansion in order to ensure efficient economic performance.

Economic development results in the expansion of cultural services, social welfare, and education, and thus increased government expenditure.

Government intervention to manage and finance natural monopolies.

This hypothesis that there is a relationship between economic growth and government expenditure supports in essence the theory of demand-side economics. Supporters of this theory call for effective government intervention in the economy through expenditure, and the provision of money in order to stimulate demand for goods and services and ensure economic growth and stability. This statement contrasts with the supply-side approach to public finance, where expenditure distorts economic growth through inflation (Al-Ghalaby: 2015: 35).

# 4. The Impact of Overheads on the Multiplier (Protector: 2018: 27)

The idea of the multiplier is that the initial increase in government expenditure generates successive increases in income and expenditure, and the multiplier shows the number of times the national income increases due to the effect of doing government expenditure. To derive the multiplier algebraically, we show the model that takes the following form:

$$MU = \frac{1}{mpc}$$
$$MU = \frac{1}{1 - mps}$$

Where **MPC** is marginal propensity to consume, **MPs** is marginal propensity to save

The multiplier is the ratio between the total increase in income and the initial increase in expenditure, so the multiplier is directly related to the marginal propensity to consume, and inversely related to the marginal propensity to save, it increases with the increase in the marginal propensity to consume, and it decreases with its decrease, and vice versa with respect to its relationship to the marginal propensity to save.

The effect of the multiplier is related to the extent of flexibility and expansion of the productive apparatus, and this in turn is related to the degree of economic progress. Despite the high marginal propensity to consume, the multiplier effect is weak, due to the inelasticity of the productive apparatus and its inability to respond to the increase in consumption.

#### Second / The concept of human development

#### 1.Defining human development

Human development means human freedoms, it means capacity building, not for a small number or for a large number of people, but for each of them alike (2018) human \_development \_statistical-

It is also expressed in the expression of a higher concept, which goes back to the economist Amartiessen, who expresses the fundamental right of humans to these options (Al Rawabdeh: 2018: 128).

#### 2. Human development indicators

According to the United Nations Human Development Index, the dimensions of human development are: (2018\_ (human \_development \_statistical)

**a. Knowledge acquisition:** that is, the ability to acquire knowledge, which is measured by the average years of study and the expected number of years of study, as the average number of years of education completed by persons of the age group of 25 years and over, based on the level of educational attainment of the population calculated with the years of study that the student is supposed to spend At every stage of education.

**B.** Per capita income: the ability to achieve a decent standard of living, measured by the level of per capita gross domestic product, and this latter, although it shows a percentage of realism that the countries with the highest average per capita income are the countries with the best standard of living, but this indicator has many gaps Perhaps the most important one is that very few people have the highest percentage of incomes.

**C. Health:** meaning the ability to lead a long and healthy life, measured by life expectancy at birth, considering long life is a value in itself and that various benefits such as (adequate nutrition and health) are closely related to the high level of work at birth (Muhammad: 2011: 115).

There are a number of indicators to measure the health status in different countries, as follows: (Al-Obeidi and Al-Amiri: 2018: 446).

-Average life expectancy at birth: that is, the average number of years that a person can live, and it expresses the level of total mortality in the country for different age groups.

-Infant mortality rate: This indicator shows the number of deaths of children under the age of two years who were born alive, and according to this indicator, for every thousand live births for a certain period of time, such as one year.

-Maternal mortality ratio: It is an indicator of the number of mothers dying during or after pregnancy by 42 days, regardless of the period and place of pregnancy, and that indicator is for every 100,000 live births during a certain period of time such as one year.

-The number of health centers index: It shows the availability of health care centers of all kinds (educational, main, model, emergency halls, maternity halls) and this indicator is per 100,000 of the population.

-Average number of doctors: This rate refers to general and specialized doctors per (1000) of the population, and the increase of this rate indicates the strength and sobriety of the health system in the country, because of its very important role in health awareness and the high quality of the necessary health care.

-Rate of people with chronic disease: It includes the number of people suffering from any chronic disease, and this indicator is per 10,000 of the population.

-The number of beds in government and private hospitals: This indicator measures the capacity in governmental and private hospitals of the number of sick and injured, and this indicator is per 10,000 of the population.

-Percentage of health expenditure: that is, the expenditure on the health center, hospitals and family planning to total government expenditure (gesture: 2018: 277).

## The third topic / Public expenditure and its role in improving sanitary sector indicators:

Health services in Iraq witnessed a deterioration during the nineties and after 2003 after it was one of the best health services available in the region. Among the factors that led to this serious deterioration were the reduction in expenditure, lack of maintenance, investment and mismanagement. The situation was exacerbated by the looting and destruction that occurred After the war, as the sanitary sector in Iraq faces tremendous challenges, the health care system for the citizens suffered a major deterioration, which led to a significant increase in infant, child and maternal mortality rates, as well as a decrease in life expectancy rates.

The country faces a double disease burden: on the one hand, communicable diseases still constitute a major cause of disease and death, while non-communicable diseases have become the main cause of death. There is no doubt that the sanitary sector in Iraq, like other service sectors, has suffered a lot of neglect in all its aspects since 1991. To this day, whether on the part of human resources such as doctors, nurses, etc., or the infrastructure of buildings, medical equipment and laboratories, in addition to the decline in the efficiency of the medical staff's work as a result of the decline in the quality of preparation for this important layer in society, and this is confirmed by the Corona crisis, COVID19, which was evident through it. All faults and demonstrated the fragility of the sanitary sector and its inability to face any health challenge, and it showed that it is not possible to maintain such a low level of health services, and all efforts must be made to avoid such problems and calamities in the future.

The main factors behind this situation are the continuous deterioration in the level of public health over the past two decades, the steady increase in poverty and unemployment levels, poor nutrition, poor sanitation services, problems providing safe drinking water, declining levels of education, as well as the spread of unhealthy lifestyles. There is no doubt that dealing with these effects and results will take a long time. To find out the relationship of expenditure with the quality of health services, we must first understand the development of expenditure as it becomes clear to us through the follow-up of the state budget for the year 2010 through Table (1) the evolution of public expenditure in relation to the gross domestic product on the impact The rise in oil prices through an increase in oil revenues, as they rose by (31.9%), while the ratio of

public revenues to gross domestic product (40.4%) was recorded (Central Bank of Iraq: 2010: 36).

Yers	total public	relative
	expenditure	to
		output
2009	65658	37.7
2010	83823	37.4
2011	78758	37.3
2012	90375	36.9
2013	119128	43.9
2014	83556	32.1
2015	70397.51	33.6
2016	67067.43	34.1
2017	75490.1	33.4
2018	80873.2	32.2

Table (1) Evolution of public expenditure (billion dinars)

**Source**: From the work of researchers based on data from the Ministry of Planning, the Central Bureau of Statistics, years from (2012-2018).

The apparent instability in crude oil prices in global markets, as well as political instability, high expenditure on the side of operational expenditures, and low investment expenditure have negatively affected projects in general and health projects in particular, as we can note the volume of expenditure on the sanitary sector through Table (2).

 Table (2): The ratio of expenditure on the sanitary sector to government expenditure

Year	public expenditure At current prices Million )	expenditure on the sanitary sector At current prices (million	he proportion of expenditure on the sanitary sector out of general government
	(dinars	dinars)	%expenditure
2010	70,187,223	5,759,417	8.20
2011	99,697,657	5,469,974	5.48
2012	102,326,897	5,676,930	5.54
2013	119,296,668	6,787,781	5.68
2014	139,640,625	5,800,931	4.15
2015	94,048,364	5,404,272	5.74

**The source** is from the researchers' work based on Munim Ahmad Khudair, Burhan Shiaa Mari Hasan, measuring and analyzing the impact of health services indicators on the human development index in Iraq for the period (2005-2015), Tikrit Journal of Administrative and Economic Sciences, Issue - 8, p 300.

By displaying the above table, it becomes clear that the volume of expenditure on the sanitary sector is not up to the level that can develop this important sector and cannot be compared even with its counterparts in neighboring countries, and this was clear in light of the Corona pandemic if the various health capabilities could not address this epidemic at the required level.

Therefore, redoubled efforts must be made by those in charge of this sector, including improving the management of financial materials and expenditure allocated to this sector to promote the declining health situation, especially with the financial crisis caused by the Corona pandemic, COVID19, from a decrease in the level of global demand for oil and then the decline of the country's financial resources The financial allocations for the sanitary sector should not be compromised, but rather increased in any way.

The impotence of government institutions, neglect, corruption, inadequate health care systems, and political turmoil have led most of the injured Iraqis to refrain from going to government hospitals and choose home quarantine as the only means of survival, and the Iraqi street has come to view state hospitals as endemic places that multiply the danger (Salem, Abbas Abboud)

One of the most important indicators of human development in Iraq, which is the sanitary sector, can be shed light on by studying the dimensions of this indicator and knowing the pros and cons surrounding it, during the studied period and as follows:

# **1.** Number of hospitals, health centers, and medical and nursing staff

By looking at the number of hospitals and health centers in Iraq for the year 2017, it becomes clear that they are not consistent with the growing population, which is approaching 40 million people, as the total hospitals and health centers in Iraq reached about 994, 400 hospitals and 37 popular medical clinics collapsed, in addition to 216 centers. The number of primary health care centers reached 1295, 16 public health laboratories, and 180 specialized health centers, while immediate aid centers reached about 225, health homes reached 502, and the number of sectors reached 135, while the total of medical professions reached 10939 and the nursing staff reached about 64297, And those with health professions 59961.

## 2. Malnutrition and deaths under 5 years old

The infant mortality rate from 1000 in 2015 was about 19.7% and decreased to 18.1% in 2016, but it increased again to reach 18.6% in 2017 for infants, and about 25.2% for children under 5

years old, which decreased to about 22.7 in 2016, to rise after About 23.1 in 2017 (the official website of the Ministry of Planning).

While the maternal mortality ratio per (100,000) live births for the years 2015-2016-2017 was about (32, 36.1, 31%), respectively (the official website of the Ministry of Planning).

•The average life expectancy at birth is 6.73 years for both sexes in 2018, and the same rate is 6.75 years for women and 7.71 years for men in Iraq, which indicates an improvement of about 6.3 years compared to about 0.69 years in 2011. (The first voluntary report: 2019 : 39)

years	Males	Females	Total
2014	67.7	70.9	69.3
2015	71	74.9	73
2016	71.3	75.2	73.2
2017	71.5	75.4	73.4
2018	71.7	75.6	73.6

Table (3)	) Life expectancy at birth	2014-2018
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Source :Ministry of Planning, First voluntary report on the Sustainable Development Goals 2019, Baghdad, 2019, p. 39.

#### Conclusions

#### The study has conclude to these outcomes:-

1. The sanitary sector is one of the most important indicators of human development, and its development reflects the real level of development of the rest of its indicators.

2. Recent years have witnessed a slight increase in the volume of public expenditure on the sanitary sector in Iraq, but this has not been reflected in the development of the level and quality of the services provided or the infrastructure.

3. Despite the increase in the number of health institutions and medical personnel, this was not sufficient in relation to the increasing size of the population and the geographical area, and this increase did not come close to the indicators of the World Health Organization and the United Nations in terms of human development.

4. Corona COVID-19 pandemic demonstrated the fragility of the sanitary sector in all its joints in Iraq, as the health institution was unable to provide adequate services and treatment for it and was unable to establish hospitals for the epidemic far from public hospitals.

#### **References :**

- Zghair, Iktifa, 2017, the relationship between public expenditure and overall and sectoral growth rates in Iraq, Iraq, Ministry of Planning, Department of Economic Sectors.
- Al-Dabbash and Al-Nasser, Abdullah Hamad, Maysoon Majeed, an economic study of some factors affecting the financial deficit in the Iraqi budget 2003-2016, Cihan University-Erbil Scientific Journal, Issue 6, Part c, September 2018.
- Krouch Salah El-Din and others, on economic inflation using the causation model of Granger in Algeria during the period 1970-2016), Journal of Research and Business Studies, Volume 03, Issue 02 September 2018.
- Shakir, Hamdiyeh, The causal relationship between GDP and public expenditure in Iraq for the period from 1970-1995, a master's thesis submitted to the College of Administration and Economics - University of Baghdad in 2001, pp. 21-22.
- Hami, Karima, The relationship between government expenditure and economic growth - a standard study during the period 1970-2016, Master Thesis, Akli University, Algeria 2018.
- Benslimane, Yahya, Measuring the impact of government expenditure on economic growth in Algeria, 1980-2014, Al-Badeel Economic Magazine, Volume 5, Issue 1, 2018
- Abdel Hamid, Khaled Abdel Hamid Hassanin, an analytical study to measure the impact of economic growth on investment expenditure in Egypt, Middle East Research Journal, issue forty-fourth.
- Al-Ghalibi, Karim Salem, Government expenditure and the Wagner law test in Iraq for the period 1975\_2010 Al-Ghari Journal of Economic and Administrative Sciences, Eighth Year, Issue 25.

human\_development\_statistical\_update\_en.pdf 2018.

- Al Rawabdeh, Shatha Musa, Human Development Indicators: A comparative study between positive and Islamic economics, Global Journal of Economics and Business Vol. 5, No. 2, 2018.
- Muhammad: Mukhaif Jasim, The Reality of Human Development in Iraq in Light of Quantitative Measurement Indicators of the Human Development Index, Tikrit Journal of Administrative and Economic Sciences, Volume 7, Issue 22, 2011.
- Al-Obaidi and Al-Amiri, Saeed Ali Muhammad, Abdul-Qader Fakhry Hindi Al-Ameri, Human Development Indicators in

Iraq for the period 200-2014, Reality and Challenges, University of Erbil Scientific Journal, Issue 2, Part C 2018.

- Laftah, Amira Khalaf, Sustainable Health Development and its Impact on Human Resource (Iraq Case Study), Journal of Engineering and Technology, Volume 63, Special Issue 6 2018.
- General Directorate of Statistics and Research, Annual Economic Report of the Central Bank of Iraq 2010, Central Bank, Republic of Iraq.
- Ministry of Planning, Central Bureau of Statistics, years from (2012-2018).
- Khader and Hassan, Munim Ahmed, Burhan Shiaa Mari, Measuring and Analyzing the Impact of Health Services Indicators on the Human Development Index in Iraq for the Period (2005-2015), Tikrit Journal of Administrative and Economic Sciences, Issue - 8.
- Salem, Abbas Mahmoud, Iraq faces Corona with empty treasury and a deteriorating health system, The Washington Institute for Middle East Policy:
- https://www.washingtoninstitute.org/en/fikraforum/view/iraqcoronavirus-corona-covid-covid19-health
- The official website of the Iraqi Ministry of Planning. Directorate of Statistics and Research, Human Development.
- Ministry of Planning, The First Voluntary Report on the Sustainable Development Goals 2019, Baghdad, 2019.
- The official website of the Ministry of Planning, the Central Bureau of Statistics, the most important indicators of human development.