Government spending on health and education and its impact on per capita GDP in Iraq for the period 2020–2004 (Development Vision)

الإنفاق الحكومي على الصحة والتعليم وأثره على نصيب الفرد من الناتج المحلي الإجمالي في العراق للمدة 2004-2020

(رؤية تنموية)

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Abstract:

The research aims to shed light on the analysis of government spending on economic development indicators (Education and Health) ،Measuring government spending on health and education and its impact on per capita GDP in Iraq for the period 2004–2020 ،The results of the research have shown that there is a positive impact of government spending on health and education and per capita gross domestic product, meaning that there is a balanced relationship in the short term of the variables under study ، Where the parameters were positive and statistically significant. The researchers recommend increasing interest in government spending on human development indicators in order to eliminate several problems, including the problems of poverty and unemployment.

The process of linking education outputs to markets has a major role in the success of the development process and makes countries progress faster and develop more to keep pace with developed countries or at least reach the threshold of progress.

Keywords: development vision; education; GDP; Government spending; health

Jel Classification Codes : O10

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1– Introduction:

Government spending policy is a tool of financial policy, that is, it is one of the means used by the government with the aim of achieving its role in the economic, financial and social fields, by controlling its structure and size ‹The interest of all countries in all their political and economic trends has increased in the role of government spending, as it has an impact on aggregate demand, which is the most effective tool to address macroeconomic imbalance ‹Which is reflected by providing the general needs of individuals with the aim of achieving the maximum possible collective benefit, and on the other hand it reflects the effectiveness of the government and the extent of its impact on economic activity ‹ Hence the importance of government spending on the higher education and health sectors, and that importance that began to rise day after day with the increase in the role of the government and its interference in economic life and achieving economic growth.

Sustainable development is an important factor for present generations to live in the best way without compromising the rights of subsequent generations ‹Spending on development indicators and supporting them financially, socially and economically will ultimately lead to clear economic progress, and this is what most economists emphasized ‹The limits of development and the barriers that were impeding them have become remote, especially after the introduction of the technological component that led to the continuation of the development process and that the process of increasing spending on education will lead to an increase in human capabilities and skills ‹The process of linking education outcomes in the markets has a major role in the success of the development process and makes countries progress faster and develop more to keep pace with developed countries or at least reach the threshold of progress ‹ Therefore, development is the goal and economic growth is the means to achieve it, and spending on indicators or sectors of development that serve humanity, such as the health and education sector, and this increase leads to progress and prosperity .

1.1 Search problem:

The research problem revolves around the following: that government spending is not sufficient so that it can raise the rates of development indicators (Health and Education) to desirable levels, which led to its failure to reflect positive results .

1.2 The importance of research:

The issue of government spending is a very important issue with regard to its uses and how to use the funds spent by government institutions for economic development. This importance is represented by submitting proposals and recommendations for government spending Priority sectors should be adequately funded in order to improve development indicators

Research hypothesis: The research hypothesis is that there is a positive impact of government spending on development indicators in Iraq.

1.3 Search goal :

The research aims to identify the following:

The conceptual framework for spending and development indicators

Analysis of government spending on development indicators (per capita GDP) in Iraq for the period 2020-2004.

Measuring the impact of government spending on development indicators in Iraq for the period 2020-2004.

1.4 Research method:

The descriptive analytical approach and statistical and standard methods were used to measure the relationship between government spending on development indicators and its impact on per capita GDP in Iraq for the period 2020-2004

1.5 Research structure:

To prove the hypothesis of research and reach its goals, as the topic of research was divided into three main axes, as it included the first axis: the conceptual framework for government spending and development indicators, and the second axis included : Analysis of government spending on health and education and per capita GDP in Iraq for the period 2020-2004 ‹As for the third axis, it dealt with the standard aspect of showing government spending on health and education and its impact on per capita GDP in Iraq for the period 2004-2020.

The first axis: the conceptual framework for government spending and development indicators

2– Literature Review

2.1 Study (Return, 2017) (Study and analyze the relationship between public spending and GDP and the extent of its contribution to achieving economic development in Iraq for the period (1975-2014)), The study refers to identifying the reality of government spending in Iraq in a descriptive manner, and analyzing the relationship of public spending to GDP at current prices as well as the relationship of public spending to other economic sectors, and the most important results that it has, The imbalance of the spending policy in Iraq reflected on the efficiency and effectiveness of that policy in achieving its goals, and led to the deepening of some of the problems that the Iraqi economy suffers from, such as increasing consumer demand and the disruption of the productive structure, In addition to the deterioration of the reality of the services provided by the state to individuals, The centralization method in managing the

Iraqi economy has resulted in the marginalization and exclusion of the private sector from the process of economic development and has become the public sector the leader of the process of economic development in Iraq.

2.2 Study ﴾ Alosi2020 ﴿ ﴾ Analysis of the impact of government spending on some indicators of economic development in Iraq ﴾ 2004–2018 ﴿ ﴿ The study indicates knowledge of the reality of some indicators of economic development in Iraq, the most important of which are local output and total fixed capital formation ‹In addition to studying the health and educational impact in addition to studying the reality of unemployment in Iraq as one of the social indicators for economic development, as well as studying the reality of the agricultural and industrial sector and infrastructure sectors, and the most important results were, The small percentage of the contribution of the industrial sector to the gross domestic product, as the average relative importance of the industrial sector ﴾ 2.06% ﴿ is not very different with regard to the agricultural sector, in which the average relative importance ﴾ 4,71%﴿ It is a low percentage for both sectors despite the emphasis of economic development plans on agriculture and industry, due to the openness of Iraq to global markets after the events of 2003 ‹The high cost of production at home and other problems that contributed greatly to reducing the role of the agricultural and industrial sector.

2.3 Study ﴾ Arsunet Shimon, 2015 ﴿ State of public Expenditure on Education in Nigeria Letter entitled State of Public Expenditure on Education in Nigeria for the period ﴾ 2004–2015 <TAG1, The study refers to explaining the direct and indirect effects of public spending on education as part of human development as a catalyst for economic growth, and the most important results of the study were, Redistributing public spending to the education sector increases the knowledge stock and works to address more problems facing developing countries that should be the subject of discussion as education worked as a result of rescheduling spending The year to increase productivity by ﴾ 5.3% ﴿ annually and the study indicated that increasing public spending on priority needs ﴾ Health, Agriculture and Education ﴿ will increase overall productivity and help vulnerable leaders ‹And that achieving the maximum economic growth and human development in the public spending of educational and health services and fighting poverty and the main elements of human development.

3– Research Methodology

3.1 The concept of government spending :One of the financial tools for central and local governments is government spending in both ways ﴾. Through it, desirable effects can be achieved and undesirable effects avoided by using this tool ﴿ government spending ﴾ by The Ministry of Finance in the country to achieve the government's social goals of providing public services and redistributing income between groups of society, especially for the benefit of classes with low income, as well as achieving economic goals of raising rates of economic growth and employment This is within a specified period of

time, and government spending reflects the effectiveness of the government and its impact on the country's economic activity.

Therefore, government spending is defined as (the amounts of cash approved by the legislature for a public person to spend in providing public goods and services, and achieving economic and social goals) (Al–Lawzi, 2000, p. 89) and others have defined it as (those cash amounts that are disbursed by the public authority, or that they are the cash that a public person spends with the intention of achieving a public benefit), (Mahrezi, 2003, p. 65)

3.2 Government spending in economic schools

There are many economic schools that have paid great attention to analyzing the development of government tunnels, and we can review the most important ideas that these schools have brought in this regard, as follows:

I. **Classical School** (**Neutral Finance**).

Classical thought looks at government expenditures in a neutral way, as government expenditures for classical economists are only intended for the state to spend on essential services such as defense, security, and justice (Al–Degheidy, 1980, p. 27) Therefore, the study of the nature of government expenditures at the classical school did not receive sufficient attention as a result of the unity of its goal, which is limited to carrying out these basic functions and services and in terms of classical economic thought and the basic assumptions on which this is based Thought that government tunnels are of a consumer nature, they must be in the narrowest limits, meaning that the state does not interfere in economic life, but that its role should be limited to carrying out basic functions ‹It is defense, security and justice .

Thus, the state has become a neutral stance, as it contributes and to the extent necessary to provide the framework in which individuals work without any interference in it , Every expansion of the state's powers is an evil that is not good and must be stopped , Thus, government expenditures are minimal because the state is wasteful, unlike the individual who is more productive than the state in providing services and carrying out production (Fawzi, 1970, p. 19).

II. **The Keynesian School** (**The Offline Finance**)

As a result of the events witnessed by the capitalist world, especially in the late twenties and early thirties of the twentieth century, which are called the Great Depression ‹And the inability of the automatic system (natural) called by the classics to make any change in the economy and return it to the stage of recovery ‹The result of this was the emergence of the Keynesian theory in (Use, Interest, and Money. The General Theory of Employment, Interest and money) The compensated finance appeared as a treatment and to save the capitalist economy from the major crisis it suffers from , The Keynesian theory revealed the contradiction between traditional economic thought, capitalist reality, and the

illusion that surrounded economic thinkers in the capitalist world that traditional economic thought is valid for the capitalist system , To remedy this, Keynes took the task and initiated, through his general theory, the reform of the capitalist economic system in order to confront unemployment, its high rates and idle production capacity, as hidden hands were unable to return the economy to a state of recovery ، Keynes' treatment came to bring the economy back to full operation .

Keynes has focused his handling of the Great Depression on the aggregate demand side, as it defines aggregate supply in contrast to the classic theory that supply creates demand , Keynes stressed the need for the state to interfere in economic activity in order to achieve full employment, and the state's intervention through financial policy is using its tools, which are public spending and taxes separately or both . (Al-Mawla, 1975, p. 40).

The Keynesians prefer that the state resort to increasing government expenditures rather than resorting to reducing taxes, as they find that increasing public expenditures is the primary tool of economic policy in achieving ideal growth rates in the long run

III.   Analysis of the new classics :

There have been wide developments and changes in the pattern of capital production, especially after the Second World War, and unemployment has appeared again in conjunction with the phenomena of inflation and stagnation at the same time, which was called (stagnant inflation) where school ideas were incapable Keynesian from finding appropriate solutions to get out of this new crisis on the capitalist system, and the emergence of this crisis was appropriate and an incentive for the new classics to emerge from the modern classical school and their theories , Where they criticized the Keynesian school for the inability of their analyzes to find a real way out of the economic system from this crisis and other crises that are worsening on the capitalist countries ،Most of the difficulties experienced by the capitalist system after the thirties of the twentieth century are due to the great leniency of the Keynesian school analysts towards public expenditures and budget deficits ،Many modern classical economists also stressed the need to return to the theories of traditionalists from letting the economy achieve balance automatically and the state not interfering in economic life and exercising its traditional duties in defense, security and justice, i.e. reducing expenditures The public through the decline of the role of the state , They put before the state a specific task, which is to maintain a balance between profits and wages, and the updated classic opinion that the Keynes Public Expenditure Growth Program linked to the growth of tax volumes restricts individual freedom advocated by the first classics and an assault on Monopolies Interests (Irinam, 1979, pp. 12–34).

IV.   Supply–side economists:

Supply-side economists have criticized Keynes and his ideas for his interest in aggregate demand without paying attention to the supply side, and the supply-side economics philosophy stems from the

fact that increasing aggregate supply is best suited to ensure adequate economic performance ‹They also called for an end to the state's interference in economic activity and the elimination of the role it plays by increasing effective demand. They also stress the need to reduce public spending and adopt expansionary monetary policies to restrict aggregate demand ﴾Edgman, 1987, p. 345﴿.

After our brief review of the most important and important analysis of public spending by economic schools, the most important thing to note is the evolution of the state's role in economic life from a guard to an interventionist and then a producer ‹This development was reflected in the financial policy of the state, and it changed from neutrality to net to planned. This means that this change in the nature of the role of the state and its financial policy is due to the opinions and ideas of economists, their theories and their vision to motivate individuals On production and raising the rates of economic growth and their difference between one period and another, it reflects the importance of research to create economic policies for each economic system in order to set the appropriate policy for the reality and nature of the prevailing economic system.

4- Government spending on health and education

Government spending on the health and education sectors is one of the most important pillars of any country in the countries of the world, given that these two sectors enjoy great importance ‹As most countries place the importance of the two sectors at the top of their priorities when allocating the country's financial resources, as spending on them is the key and the main driver for achieving economic development goals.

4.1 Government spending on education

Government spending on education is an investment in human capital, which has positive revenues at the economic, social and political level ‹On individual and national incomes, and despite the importance of education, the issue of financing remains one of the topics that limits the achievement of its development goals ﴾Arhim, 2015, p. 445﴿Therefore, education is an essential component of economic development and an important goal of sustainable development, as it aims to develop a person with broad development and well-being for life in society ‹And to train manpower to participate in the production process and to perform its basic functions in order to reach the success of social and economic development plans, so education is shown, As an amendment in behavior that helps the learner to solve all the problems and obstacles facing him and achieve many adaptation to the environment, and for this the educational situation is aimed at compatibility between the individual and the external environment, So education gives importance to the learner to acquire many skills, customs and traditions ﴾ Abed and others, 2021, 141 ﴿, and it can be defined as a "development and training process for knowledge, skills and ideas", In addition to education, therefore, educational activities contain the production and

distribution of knowledge, whether it occurs in regular educational institutions or elsewhere (periodic, 2015, 39-40) :

4.2 Government spending on health

Government spending on health is one of the primary and important means of the process of economic, social and human development. Health is an integral part of that process ‹And because the progress and development of countries is measured by the extent of what the government spends on health compared to the gross domestic product, therefore health was the primary goal of development goals ‹And because the capacity of development and development itself depends on health and all its social, economic and environmental determinants, so it is not surprising that most of the Millennium Development Goals are health-related ‹The access of health services to all individuals in society is a primary goal of any government and in any society, regardless of the nature of the existing economic system of this community.

Therefore, we note that health cannot be isolated from the elements of development, for the close relationship and dynamic interaction between human health, the development maker, and development as a goal (Al-Abidin Ilham Ahmed Ibrahim and Maslama, 2021, p. 142). The unique economist Marshall defines health as: represents the physical, mental and psychological strength of the individual, and this health level of individuals is related to levels that include (education, food, housing ‹Environment level) and available health services and accessibility. (Muhammad, 2018, p. 9)

4.3 The concept of GDP: The concept of gross domestic product

GDP is defined as "the monetary value group (market) for all final goods and services produced in an economy during a certain period, usually a year," as it was defined as "The value of all goods and services produced within the geographical borders of the country is represented by the citizens of the country or foreigners (Sahnoun, 2010, p. 86).

The gross domestic product is at the forefront of macroeconomic concepts, because it is the most comprehensive and used criterion in calculating the country's economic growth rate ‹GDP is defined as the market value of all final goods and services produced by the local economy within a certain time period

The gross domestic product represents an accurate standard measure for assessing economic performance in countries, as it includes the final values of the goods and excludes the values of the raw materials used in their production and excludes the values of used goods, paper exchanges and other values as.

5– The reality of spending on health and education and per capita GDP in Iraq for the period 2004–2020

It is noted from the data of ﴾ 1 ﴿ that government spending on education during the study period was relatively different, as it was the highest value in 2018 by ﴾ 453461.981 ﴿ million dinars ،The lowest value for it was in 2005 at ﴾ 2125235.496 ﴿ million dinars, while the time series of government spending on health was also mixed during the study period ،Having reached its highest value in 2019 by ﴾ 9053.0638 ﴿ million dinars due to the provision of the necessary supplies to combat the Corona virus ،The lowest value was in 2004 at ﴾ 1406.5152﴿ million dinars .

On the other hand, it is clear from the above table the evolution of GDP during the time series ﴾ 2004– 2020 ﴿ ،Because the value of the gross domestic product in 2004 ﴾ 53235358 ﴿ million dinars, then it decreased in 2009 to become ﴾ 130642187 ﴿ million dinars, due to the global financial crisis ،In 2014, it continued to decline to ﴾ 266420384 ﴿ million dinars, due to the deteriorating economic situation and the crisis of ﴾ ISIS ﴿, and the output decreased in 2020 by ﴾ 19874325 ﴿ million dinars ،Because of the Corona virus crisis .

As for the per capita ﴾ GDP ﴿, it is similar to the changes in the gross domestic product, as it results from dividing ﴾ GDP ﴿ by the population ،It turns out that the lowest value per capita of ﴾ GDP ﴿ was in 2004 ﴾ 1.96158141 ﴿, but its highest value was in 2013, reaching ﴾ 7.79062698 ﴿ .

Table 1. Expenditure on health, education and per capita (GDP) in Iraq for the period 2004–2020 (at current prices) (million dinars)

Years	spending on education	spending on health	GDP	population (Million People	GDP per capita
2004	2670534.667	1406.5152	53235358	27139	1.96158141
2005	2125235.496	1448.695	73533598	27963	2.62967486
2006	2613903.565	1576.388	95587954	28810	3.31787414
2007	2728653.143	2762.8307	111455813	29682	3.75499673
2008	2990909.823	4001.0656	157026061	30577	5.23543059
2009	3435895.411	4209.5066	130642187	31664	4.12589019
2010	4066955.987	4386.8891	162064566	32481	4.98951898
2011	5461358.403	5182.425	217327107	33330	6.52046526
2012	4356134.258	5864.2538	254225490	34208	7.43175544
2013	4413147.499	6616.7916	273587529	35095	7.79062698
2014	3797992.288	6395.648	266420384	36063	7.38763786
2015	4032113.293	5236.7036	207876191	36933	5.62846752
2016	4237836.392	5381.2446	196536350	36169	5.43383422
2017	4233836.971	7873.5972	225995179	37139	6.08511750
2018	4533461.981	8724.3792	251064480	38124	6.58547057
2019	4267480.289	9053.0638	262917236	39127	6.71958586
2020	3376045.273	7391.3008	198774325	40221	4.94205328

Source: From the numbers of researchers, based on :Ministry of Planning, Central Statistical Organization, National Accounts 2004–2020

6– Results and Discussion

Results of the test of the relationship between government spending on health and education and per capita GDP in Iraq for the period(2004-2020)

Description of variables:

To estimate the relationship between government spending on health and education and per capita GDP in Iraq for the period (2020-2004) based on the methodology of joint integration and the extent of their impact on each other according to economic theory Where the dependent variable represents the per capita GDP of PCG) and the independent variable Education EDU and Health HR This can be illustrated by the equation below and Table 2

$$HDG = F(HR.EDU) \ldots\ldots\ldots\ldots\ldots\ldots\ (1)$$

Table 2 . Standard Model Variable Characterization

Model variables	Variables
PCG	Per Capita GDP
HR	Health
EDU	Education

Source 1: Prepared by researchers based on the results of the statistical program (Eviews10)

We first appreciate the regression equation to obtain the initial form of the relationship between the variables, and as in the equation below through which we note their compatibility with the search hypothesis ‹Through the impact of the relationship between government spending on health and education and the average per capita share in Iraq during the study period.

$$PCG = a + HR\ B_1 + EDU B_2 + \varepsilon_i \ \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Table 3. Phillips–Brown Test Results (Unit Wall Test)

Degree of integration	(st difference1)			(Level)			Variables
	Without a fixed limit or general direction	Fixed limit and general direction	Fixed limit only	Without a fixed limit or general direction	Fixed limit and general direction	Fixed limit only	
I(I)	p-value	p- value	p-value	p-value	p-value	p-value	
I(I)	0.0044	0.1076	0.279	0.8949	0.6949	0.5959	HR
I(1)	0.0084	0.0099	0.0247	0.8944	0.8765	0.5371	EDU
I(I)	0.0005	0.0187	0.0039	0.8558	0.5600	0.6113	PCG

Source 1: Prepared by researchers based on the results of the statistical program (Eviews10)

Note from Table (3) Results of (Phillips–Brown) which shows that time series are not still at the level (Level) for the dependent variable (Average per capita) and the independent variable (Government spending On health and education) because the value of Prob is greater than 5%, that is, it is not moral, so we accept the hypothesis of non–existence (HO :: P = 1) which states that the root of the unit exists , We reject the alternative hypothesis (H0: P < 1) which required taking the first difference of time series in order to avoid the problem of false slope , The hypothesis was achieved after the results showed that the value of porb)) is less than (5%) Whether it is with a fixed limit, a fixed limit, a general direction, or without a fixed limit or a general trend, and thus we reject the hypothesis of non–existence and acceptance of the alternative hypothesis in which data stillness is achieved at the degree of integration (1) I ‹This allows us to apply the model according to the self–decline method for the distributed slowdown periods (ARDL) .

6.1 The natural distribution of the remains

This test depends on the probability value of the statistic (Jarque–Bera) as we accept the non–existence hypothesis that indicates that the remainder of the model is naturally distributed if the probability value is greater than (0.05), We accept the alternative hypothesis that indicates that the remainder of the model is not naturally distributed if the probability value is less than (0.05), and the result shown in the figure (1) ‹Where the results indicate that the remainder of the study model is distributed naturally because the probability value is greater than (0.05).
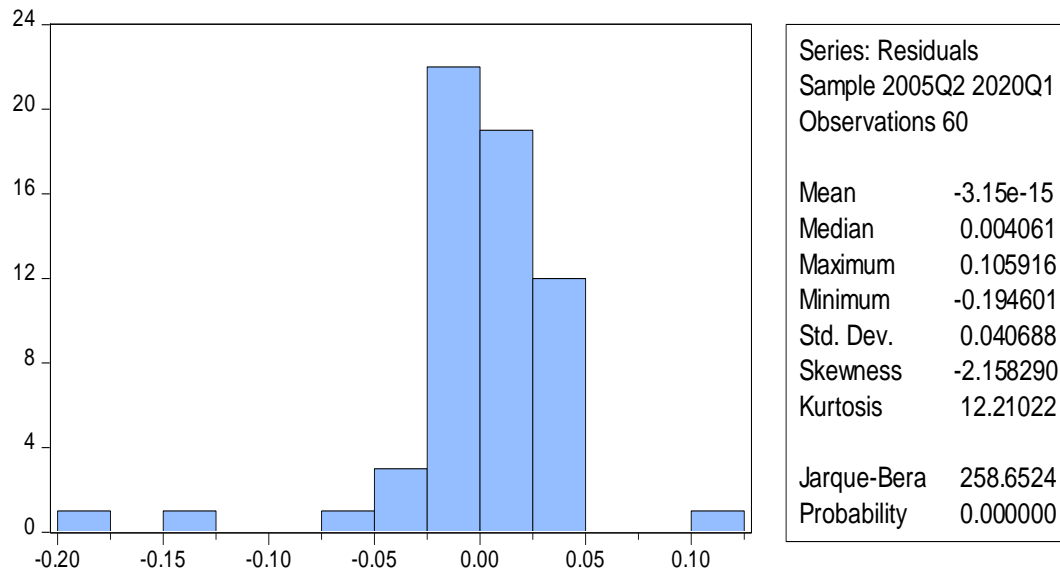
Figure 1. Natural distribution of the remainder of the model

Source: E–Views10 outputs

6.2 Estimate the model according to the method of self–decline for the distributed slowdown periods ARDL:

The first step represents the model (ARDL) to estimate the relationship between the dependent and independent variable where it is noted from the table (4) that the statistical results have explained that the value of (R–Squared) is high and amounted to (99%) In the change in the dependent variable either (Adjusted R–Squared) which confirmed that (99%) in the change in the dependent variable is due to the change in the independent variable , As for (F-statistic), it is statistically significant because the value of 1 (prob) is less than (5%) has reached (0.0000) which explains that the model as a whole is moral , As for (Durban – Watson stat) its value (1.829992) Thus the estimated model is free from the problem of self–engagement 1

Table 4. Estimation of the decline of joint integration using the (ARDL) form

Variables	coefficients	Std. Error	t-statistic	p-value
PCG(-1)	1.704944	0.134617	12.66513	0.0000
PCG(-2)	-0.718230	0.270097	-2.659154	0.0104
PCG(-3)	-2.00E-11	0.287876	-6.95E-11	1.0000
PCG(-4)	-0.311919	0.280199	-1.113204	0.2707
PCG(-5)	0.328234	0.154155	2.129251	0.0380
EDU	3.96E-08	1.31E-08	3.018351	0.0039
HR	-1.47E-05	7.52E-06	-1.948565	0.0568
C	-0.072223	0.067252	-1.073906	0.2878
R-squared	0.996818	Mean dependent var	4.718145	
Adjusted R-squared	0.996390	S.D. dependent var	0.721292	
S.E. of regression	0.043340	Akaike info criterion	-3.315905	
Sum squared resid	0.097676	Schwarz criterion	-3.036659	
Log likelihood	107.4771	Hannan-Quinn criter.	-3.206676	
F-statistic	2327.072	Durbin-Watson stat	1.829992	
Prob(F-statistic)	0.000000			

Source: Prepared by researchers based on the outputs of the statistical program (Eviews 10)

6.3 Remaining Diagnostic Tests (Residual Diagnostic Tests)

The results of (Residual Diagnostics Test) appear in Table (5) if it is noted that the value of (p–value) in the natural distribution test is greater than (5 %) of (0.750363) Thus we accept the hypothesis of non–existence that indicates that the rest are naturally distributed and we reject the alternative hypothesis, but for the self–engagement test and its value (prob) is greater than (5%) Moral and (0.1013) This indicates that the model is free of the problem of self–engagement, as well as the value of (prob)

for the heterogeneity test of variance is greater than (5%) of (0.4069) This indicates that the model varies naturally (Heteroscedastiy) Thus the statistical model (ARDL) is free of standard problems

Table 5. Remaining Diagnostic Tests

Histogram– Normality Tests	**P–Value = 0.750363**
Serial Correlation LM Test	**P– Value =0.1013**
Heteroscedasticity Test	**P– Value =0.4069**

Source: Prepared by researchers based on the outputs of the statistical program (Eviews 10)

6.4 Boundaries test for common integration Bounds, wald Test

In order to verify the existence of a joint integration between the dependent and independent variables, we resort to the border test, where it is noted from the results of the table (6) (F calculated (F–statistic (of) 3.133233 (‹It is less than the value of the upper and lower bound which amounted to (5) and (4.13) at (1%) respectively, and the economic interpretation indicates that there is no joint integration ‹ That is, it does not conform to economic assumptions, and that this result will lead us to apply the error correction model in the short term only due to the lack of a long-term relationship due to the lack of joint integration.

Table 6. Border Test Results

Test statistic	Value	K
F–statistic	3.133233	2

Critical Value   Bounds

Significance	0Bound	Bound1
10%	2.63	**3.35**
5%	3.1	**3.87**
2.5%	3.55	**4.38**
1%	4.13	**5**

Source: Prepared by researchers based on the results of the statistical program (Eviews10)

6.5 **Estimated parameters 1 (Short–term) (Estimated Short Run Coefficients)**

It is noted through Table No. (7) that there is a direct relationship between the independent variable (PCG) and the dependent variables (EDU) (in the short term i.e. an increase of) PCG (%) leads to an increase of (HR) by (3.256676) and the value of Prob is less than% 5 0.000 (, and an increase of) EDU%) of (0.0064) That is, the increase in government spending on health and education led to a rise in per capita GDP in Iraq during the study period ‹Likewise, 1 parameter error threshold showed its value (0.853492-) which is negative and moral (prob = 0,0003) This indicates the existence of a balanced relationship in the short 1 between the studied variables 1.

Table 7.Estimated short–term parameters

Variable	Coefficient	t–statistic	Prob
D(EDU) (–1)	0.847484	6.836616	**0.0064**
D(HR)	–0.986979	–3.084799	**0.0539**
D(HR) (–1)	2.979779	6.499627	**0.0074**
D(HR)(–2)	3.256676	7.558382	**0.0048**
D(PCG)	0.492140	8.659574	**0.0032**
D(PCG)(–1)	–0.588911	–8.649968	**0.0033**
D(PCG)(–2)	–0.319215	–7.970504	**0.0041**
Coint Eq(–1)	–0.853492	–8.097143	**0.0039**

Source: Prepared by researchers based on the results of the statistical

7– **Conclusions**

I. Iraq faces major challenges and difficulties in the field of education, including increasing the population, lack of buildings and educational institutions, and failure to direct the amounts allocated to education that affected the continuation of the process of growth and sustainable development .

II. A deterioration in the allocations of government spending on health, which affected the lack of adequate health care for patients, and because of the lack of medical staff and low salaries, we find many citizens heading to the private sector for treatment.

III.   The spending on the health and education sectors in Iraq has not achieved the required level and for several reasons, including the spread of financial and administrative corruption throughout the country.

IV.   The numbers of schools were not commensurate with the rapid increases in population growth, which led to investment in education through the increase in private schools, as well as for institutes and universities.

8- Recommendations

I.   There is a positive impact of government spending on health, education, and per capita GDP, meaning that there is a balanced relationship in the short term of the variables under study, where the parameters were positive and statistically significant .

II.   Introducing new methods and gains for the education and health sectors to try to increase efforts and improve the quality of health and education.

III.   Increasing the care of the medical staff in the government sector through salaries and incentives that encourage work, training and rehabilitation, as well as providing available job opportunities and educational incentives for learners and publishing research to benefit from them.

IV.   The health services provided by the government are less good than the services provided by the private sector, so the researcher recommends improving the quality of this service in order to be competitive and good.

V.   Adjusting government spending to reduce the deficit in the public budget in light of declining income levels and increasing poverty, which leads to the inability of some individuals to spend on education and health .

VI.   Increasing interest in government spending on indicators of economic development in order to eliminate the problems of poverty and unemployment, through the establishment of local and international research, seminars and conferences.

9– References

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