



## THE IMPACT OF BUDGET DEFICIT ON ECONOMIC GROWTH IN JORDAN



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### ABSTRACT

*This research aims to identify the impact of Jordan's budget deficit on gross domestic product GDP, analysis the Jordanian budget to identify the most important elements and its growth and to measure the relationship between budget deficit and GDP. The study relied on annual data issued by the Central Bank and the Ministry of Finance on the government budget, GDP at market prices during the period 1990-2013.*

*The study shows that domestic revenues constitute a significant proportion of the general revenues of Jordan, and that the budget depends heavily on local revenue because of reduction of foreign aid and ending government from external borrowing, and it increased significantly after 2002. The bulk of public expenditures are current expenditures and it increased from (75.1%) in 1990 to reach (82.5%) of the total expenditure for the year 2008. While tax revenues rose from 51.47% in 1990 to reach the maximum percentage (68.93%) in 2004 and then taken back down to a rate (47.61%) of the total local revenue in 2008. It also showed that the budget deficit affects the GDP of the same year and the gross domestic product in the subsequent year and that the value of impact (10.412) units for the same year of deficit, by (8.826) for the year after.*

**KEYWORDS** : *Jordanian Budget, Tax Revenues, Customs, Public Expenditures, Final Accounts*

## **INTRODUCTION**

The government budget is the government financial plan for the coming year, it is approved by the legislature authority by a private law, which shows the estimated expenditures, and what is expected of revenues collected from various sources for the coming years, and expresses what the government plans to accomplish of programs and projects in order to achieve its economic, social and political goals within the limits of what is licensed by the legislation authority and through it, the government controlled the tax, customs, development and areas policies and other related fields, so it is the monetary plan for state that control the unity, inclusion, annual and tie principles.

The importance of the final accounts of the state rise from the possibility of investigating the efficiency and effectiveness of using financial quantities (Revenue and Expenditure) in the production of economic quantities (GDP) and to identify the fact that the financial position of the state and economic and social objectives that have been achieved through the activity of a government, and to disclose any extravagance or misuse of available resources, and then make appropriate proposals and recommendations from the executive or legislation authority to raise the efficiency of the performance of the government.

Public budget is a tool to address the economic cycles and fluctuations to achieve economic and social stability, so achieving balance between public revenue and expenditure is no longer a goal in itself, but to achieve economic balance, by increasing or decreasing aggregate demand to achieve full operation, therefore, public expenditure and revenues had become part of the actual economic variables, as it is an economic tool for the management of the national economy and directing it, it is an image of economic planning. The financial policy, taxes and government spending on goods and services as defense, health, education and other affect on the income and investment in the country.

The year 1989 is considered as a divide line between two phases experienced by the Jordanian economy, the first was characterized before that year, as big as the direct role of the public sector in economic activity and over-protection policies and providing support to producers and consumers, and the government intervention in pricing policies and heavy reliance on external funding sources, especially non-concessional external borrowing. These policies have resulted in weaken the mechanisms of competition and inefficient allocation of resources and the expansion of the public sector at the expense of the

private sector and accompanied by growing the size of government spending, which has led to many of the imbalances and the negative impact on the behavior of investment, production and consumption of private sector and weaken the entrepreneurial spirit, thus falling a severe crisis representing in a large deficit and unsustainable in the public budget and the balance of payments and the large size of the external debt and the burdens of its service and the depletion of central bank reserves of foreign currency and the deterioration of the dinar exchange rate and high levels of inflation to unprecedented levels. The second phase was what followed in the year 1989, it was the decline in real economic growth rates that the government showed general economic policies aimed at reducing and rationalizing the role of the public sector, allow the private sector to take a greater role in economic activity, the implementation of privatization program, restructuring of the public sector, the abolition of the restrictions that limit the role of the private sector, liberalization of prices, in addition to the elimination of subsidization in all its forms, activate market forces, create legislative and institutional environment to attract foreign investment and to mobilize domestic savings.

## **PROBLEM OF THE STUDY**

Jordanian budgets are characterized in general as a chronic deficit, both in numbers or as a percentage of GDP, this deficit would impact on financial stability, which is the basis of sustainable economic growth, it is also characterized by insufficient domestic revenues to meet the requirements of public spending, and due to the multiplicity of directions about the role of the budget deficit in economic development. Many debate about the budget deficit in Jordan and its increasing, especially with the increasing demand in good employment of public funds in the face of limited financial resources. Since some studies, such as Abed Al-Razzaq and Al-Zoubi (2005), Al-Khatib (2005), Barry (2001) assert that the same level of deficit could impact the economic different from one country to another according to the structure of public spending and tax structure and the various methods to finance the deficit, since there is close correlation between the way in which the deficit is financed and economic objectives that the government seek to achieve. This requires studying and analyzing the development this phenomenon and its implications for the different variables and studying the public budget and its impact on GDP in the period that followed the economic reform in Jordan, and especially the previous studies relied on data before this period and this is what this study focus

on, through the analysis of the public budget in Jordan and to find the relationship between the budget deficit on one hand and the GDP on the other hand.

### **SIGNIFICANCE OF THE STUDY**

The significance of the research rises through addressing the deficit impact on the national economy measured by GDP, especially as the government spending has the attention of many of researchers, while budget deficit doesn't have the same attention. This study also derives its importance from studying the behavior of the Jordanian budget in the phase that followed the adoption of the government's economic reform program after the economic crisis that occurred in 1989.

In practical side, the importance of this research is to provide recommendations and proposals for activating the role of the budget deficit and employ them in order to ensure the achievement of social and economic growth, especially in Jordan, and it is considering the impact of the budget deficit after the economic reform program.

### **PREVIOUS STUDIES**

Khatib (2005) study aimed to test the effectiveness of fiscal policies in some Arab countries (Egypt, Jordan, Morocco, Oman, Tunisia) in attracting foreign direct investment during the period of the nineties. The relations had been tested by building a mathematical model assuming the adoption of foreign direct investment on a number of variables that reflect the economic environment (the level of foreign direct investment, the real growth rate in GDP, the level of economic openness) in addition to a set of variables that reflect the fiscal policies in the economy (import duties, taxes on the profits of corporations, capital spending, government spending), the results showed ineffectiveness of fiscal policies in attracting foreign direct investment during the period of the study, and showed the different models that have been estimated with a great convergence of results.

The study of Abed Al-Razzaq and Al-Zoubi (2005) aims to test the GDP in government spending in Jordan during the period 1980-2001, the method of error correction model were used to determine the nature and direction of the relationship between public spending and GDP, so that policy-makers know the impact and direction of each of the variables in each other, and therefore they have the ability to increase or reduce expenditures according to pursued fiscal policy objectives, the results showed that there is a one-direction relationship from GDP to government spending, this result is consistent with Wagner hypothesis, but differ from what was called by the Keynesian theory that the expenditure as part of the effective demand is affecting the GDP and can be

explained by this finding of the study from the practical reality that whenever the nation's wealth has increased (Increase GDP) the government spending on infrastructure projects and social programs will also increase and reflect the standard of living of citizens. The results of this study mean that the government spending is no longer an important tool of fiscal policy and the decision-makers should search for other alternatives.

Khsharma (2002) studied the development of budget in Jordan since 1950, and to identify the factors that influenced its development through using the descriptive and analytical method, depending on the laws and regulations, statistics and the interviews with some of the experts in the Ministry of Finance and the general budget. It has been reached that the general budget of Jordan passed into several developments since 1950 which aimed at increasing the effectiveness of the state to coordinate all programs and activities of government, and collect, review and monitor them and direct a number of factors that influenced its development, including tax legislation and regulations in the financial and corporate laws and Trade and the Audit Bureau and the International Accounting Standards, which recommended the need to continue to make improvements on the general budget, in order to keep up with economic and international financial developments.

Barry (2001) study aimed to determine the relationship between government spending, particularly government final consuming spending, and the gross domestic product (GDP) in the Kingdom of Saudi Arabia, and determine the optimal size of government spending, to know how productive this spending, by using a model through it we can test the "Barrow" law, which states that the value of government spending is at the optimal level when the value of the marginal productivity of this spending is equal to one. The study made it clear that government spending in Saudi Arabia is productive that the value of the marginal productivity of this spending is positive and greater than it should, since the value of the marginal productivity of this spending is less than one, and that the optimal size of government spending is 29% in relative to GDP, which is a similar proportion to the average optimal size globally which amounted to 23%, according to estimations brought by others.

Guseh 1997 used Cobb Douglas production with fixed effects model for 59 States with medium income for the period 1960 to 1985, and enter some political determinants such as democracy as one of the factors that affect economic growth, and despite that this factor used by (Barro 1991 (F) Pourgerami 1998) as a criterion

for economic growth but the model used by Guseh took into account the dynamic impact of this factor and this in contrast to the presumption of fixed influence for this factor in studies of Barro and Pourgerami. The most important motivations given by him to consider the political factor in its dynamic situation rather than constant which is the change that occur for many systems, also found out that the degree of democratic progress have a statistically significant impact in determining the degree of economic growth and that there is a negative and moral impact for the growth of public spending on economic growth in all countries included in the study, and getting such a negative impact whenever we moved from the most applied states of the principles of democracy to the least applied states.

The model presented by (Karrs 1996) is similar to the model used by (Barro 1990), but that the way in which it was submitted in this form make it possible to reach for some conclusions on the size of government spending on one hand and the extent of the productivity of this spending on the other, Karrs studied the relationship between public spending and economic growth in 118 developed and developing countries that are divided by continents for the period from 1960 to 1985, he based on his analysis the findings of what became known as the "Barro Law" in relation to the standards set by Barro, which provides the appropriate size of government spending that becomes on its optimal limit, when the value of the marginal product of that spending equal one, Karrs reached that the government spending consumption in general is produced significantly and this is normal and expected as this kind of government spending contains security and defense sectors expenses, and that on average more than it should be in Africa, and less than it should be in Asia and it is provided with a suitable size in the rest of the continents, and that the best suited size for government spending, on average, and that as a proportion of GDP which is 23%, this average increases from 14% in European countries to 23% on average in the countries of South America, and that the public sector is more productive when the size of the sector is getting smaller, where The marginal productivity of public spending consumer is smaller as the size of the spending is larger.

(Bairam1990) claims that the model of Ram, which depends on the production function in which it had some of the limitations statistically, so he used a model which based on the classic demand theory to study the impact of the increase in government spending on economic growth for a time series for the period from

1960 - 1985 for twenty African countries, the most important thing was a positive relationship with a statistically significant between public spending and economic growth in nine countries, and the existence of a negative relationship between these two variables for the rest of the countries under study. (Carrs 1989) explained using the standard model form used by Ram that the findings of Ram suffer from a statistical problem, though there is clear bias in the findings of Ram as a result of the classification of certain government goods of moderation within the final goods making statistical biased positive and therefore give positive results when estimating the relationship between government spending and economic growth.

(Rao 1989) studied the model used by Ram and its findings that he reached that there is no basis for Ram to separate the impact of government spending to the impact of production and the external impacts so the equations in the model are based on assumptions are not based on a strong foundation and that the positive impact of public expenditure according to the cross study was biased as a result of an assumption problem and that the impact of the strong and positive results that have been obtained from the models using the time series had a limited meaning, because the causal relationship was into two-directions in some countries included in the study and that there is no strong evidence to support a causal relationship in the form of RAM.

(Ram 1986) used two equations to determine economic growth, the first, using the government spending and the second is used as a criterion for private spending growth and data of (115) countries for the period 1960-1980, to study the relationship between the variables in question for each country included in the study separately and cross-sectional of the concerned states. He concluded that the positive impacts of public spending on economic growth in all cases experienced by the study and the marginal increase of government spending for economic growth was positive.

We notice of these studies mentioned above that they focused on the study of the effectiveness of fiscal policies in some Arab countries, including Jordan and to attract foreign direct investment, such as the study of Al-Khatib (2005), or they tested GDP in government spending in Jordan during the period 1980 - 2001, such as the study of Al-Abed Al-Razzaq and Al-Zoubi (2005) and the study of Barry (2001) in Saudi Arabia, or it studied the evolution of the budget in Jordan since 1950, and to identify the factors that influenced the development of such a study of Khsharma (2002), and some of these studies used the

descriptive analytical method or “Barro” law or Cobb Douglas production function with fixed impacts model, or (Ram model 1986) which used two equations to determine economic growth, the first used government spending and the second used the private spending as a determinate for growth or using a method as error correction model to know the nature and direction of the relationship between public spending and GDP to see the impact and direction of each of the variables in each other, as is in the case study and Al-Razzaq and Al-Zoubi (2005).

But in this study, it was addressed in more than one method, the first represented in the presentation of the development of the general budget of Jordan and the development of total expenditures and current expenditures and revenues of capitalism and the evolution of its various types, and the second represents the direction in the study of the impact of the budget deficit in the year in which it declared the budget on the GDP, as to the response of the national economy of the general budget and also study the response of the national economy of Jordan to budget data in the year following the issuance, and so, in the second case, it neutralize an element of transparency in the publication of the general budget and modifications made during the year.

## DATA AND STUDY MODEL

Percentages and indicators had been used for the analysis of the general budget and acknowledge its components and development during the period 1990-2008, the study relied on the annual data issued by the Central Bank and Ministry of Finance for the government budget, and the gross domestic product (GDP) and the analysis of the general budget speeches presented by Finance Minister to achieve the consent of the House of Representatives on the budget.

Where the classification of Jordanian budget passed through several stages, public budgets Tab have been unified before 2004 to be compatible with the used tab after 2004 to facilitate the comparison and analysis process, also it used the regression analysis for the impact of the deficit data on the GDP and the dependent variable was the GDP, while the independent variable was the budget deficit, where it was used the following models:

$$Y_{it} = f(x_{it})$$

$$Y_{it+1} = f(x_{it})$$

Where

(Y): The Jordanian GDP in the market prices:

(X): Jordan's public budget deficit

(t): <sub>t</sub> The year that the budget bill issued.

(ti+1): The year following the issuance of the Budget Law

## GOVERNMENT'S ROLE IN THE NATIONAL ECONOMY

The government has several functions in the national economy to achieve the objectives of the public interest, price stability, an appropriate rate of economic growth and the balance of payments which are the specialized, distributed, regulative, legislative and macroeconomic stability functions. The specialized function includes failure treatments of the market mechanism and the imbalance in its performance, including tax policies, support and prices, while the distributional function represented in influencing the distribution of income in society to fight poverty and prevent the disparity between the classes of society, through tax policies, social security, insurance, restructuring services and public spending, while the primary function represents in regulating and legislative provision and protection of the legislations environment through issuing appropriate legislations, respect and apply them, the economic stability policies include fiscal and monetary policy, employment policy and foreign trade (Bailey, 1999).

From here, the governments conduct different economic and development activities, they involved in the activities of the production of goods and services, which include security and order services and enact laws, health care, education, and others, as well as facing the negative indicators in the market and the production of goods that enjoy natural monopoly feature, which is characterized by size savings to the extent that it can be for a single facility to cover the entire market or mostly, and its existence on a non-profit basis and the production of goods with an impact on national security and the fight against poverty.

To make a sustainable development, the state must provide the public goods, the legal structure, ensure the freedom of the judiciary, the protection of freedom of association and respect the separation of powers and work to achieve economic stability by using the optimal fiscal and monetary policies and other policies (World Bank 1997). The government exercises those activities in a form of policies, procedures, legislations or trade policies, trade agreements, control the size of government spending, tax policies and government revenues.

Perhaps the most important tools in building these policies represented in general budget, as it includes economic, political and social indications with multiple dimensions that have a direct or indirect impact for society situations and its different groups and segments, in addition to the changes which may cause in the short term, through quantitative change for the economic and social conditions or through a quality changes in a long term.



The public finance policy for any government can be expressed through the Annual Budget Law draft, which submitted by the Legislative Authority for its approval as a Law force to be implemented. The budget as a government tool in the execution of development plans on its different types and schedule, the size of the budget and its structure's revenue and expenses affect in the macroeconomic performance and affected by it, and the budget's variables form the fiscal policy tools, which seeks to achieve the general and detailed goals for the economic and social development plans.

The general budget must not reflect the expenditures and revenues only, but express the approach which sponsored by the government about the public affairs management on a different aspects, and reflect the developments which arise into the financial government performance and the macroeconomic performance from one hand, and shape the trends and the economic, social and future policies on the other hand (Abdul Karim and others, 2002).

The budgets aim to achieve the following main objectives: (Daoud, 2002)

- Distribution of the resources in line with the efficiency principle, this budget role related to the government conducting the role of producing public commodities which the market fails to produce, as parks, roads and defense missions and so on, as the government also perform the role of the organizer, where it enact laws related to support some activities and impose taxes to other activities.

-Distribution of income in accordance with justice principle, this role related mostly in revenue side, where it designs a tax system which depends on revenues that fit in with income.

- Achieving the economic stability and that is done by the budgets status that fit with macroeconomic variables that are the unemployment considerations, inflation and economic growth.

The success of budget in achieving the desired objectives depends on the level of practicing democracy in political rule regime and the level of durability and the readiness of regulatory and institutional construction of the Judgment administrative and executive rule devices, where the allocation of the financial resources are not enough for the success of projects or activities, but these resources should manage in a high efficient technically, effectively and professionally to ensure their optimal use, and overlap or integrate in powers of public executive and legislative devices in adjust the budget management in their different stages, as well as the degree of the

participation of the civil society institutions and the private sector in the discussions of their dimensions and structures and their potential impacts (Karim et al 2005).

In Jordan, the goals of the Jordanian general budget are consistent with the aforementioned objectives, through the extrapolation of the Jordanian budget speeches during the last two decades; it can specify the objectives of the Jordanian general budget, including the following: (Jordanian budget speeches, different years):

1. Combat poverty and unemployment.
2. Government support presented to certain institutions and economic sectors and poor social classes, as is the case in support of food supplies that were practiced by the government and fuel subsidies and support the development of social policy, health and education and secure the central and local services.
3. Tax reform.
4. Avoid unwanted inflation.
5. Good distribution of national income that is conducted through supporting some sectors of the economy and social development.
6. Impact on the structure of the development and increase self-reliance and the quest for the development of local resources.
7. Contribute in composing GDP through government spending, both current and investment.
8. Promote infrastructure investment and the completion of the necessary infrastructure to provide a favorable climate for investment and strengthen the productive base of the national economy.
9. The gradual reduction of the deficit of the state budget by working on the development of local resources and the growing set of public expenditure and rationalization, leading to narrowing the gap between the uses of the general budget and resources.
10. Secure the expenditure requirements for this service and growing the core functions of the state, especially in the areas of education and health.
11. Meet the requirements of national security.

Based on the foregoing, the financial policies in Jordan reflect negatively on the general budget included into two key points that are:

- A. The challenges and difficulties faced by the financial management in Jordan.
- B. Direct causes of budget deficit in Jordan.

## **A. CHALLENGES AND DIFFICULTIES FACED BY THE FINANCIAL MANAGEMENT IN JORDAN**

The financial management is facing the following challenges and difficulties: (Ministry of Finance, 2005):

- ☛ Method of preparing and implementing the general budget, where the government follows a traditional method which is based on the historical standard and hard negotiation in allocation of public expenditure of the ministries and government departments, it doesn't mention the medium range of financial planning, and there are exaggeration in the governmental ministries and departments' demands for spending allocations and non-observance of national priorities and lack of coverage for all state revenues and expenditures as incomes of some grants and expenditures of some programs and non-observance of linking the public expenditures allocation in the general budget with the target results and the lack of a comprehensive and updates database on capital projects.
- ☛ The complexity of some tax and non-tax systems and their procedures, which make it difficult to manage and open the door to corruption and evasion, and the inadequacy of the service provided to taxpayers and the lack of effective measures to raise the efficiency of collection and combat tax evasion and the lack of adequate coordination between the various tax departments.
- ☛ High external debt burdens and difficulties to reduce the burden of its services to cope with the Public Debt Law of 2001, and risks resulting from fluctuations in foreign currency exchange rates on the outside debt balance and the multiplicity of government open accounts in the banking system and the mismatch between the cash flows and the actual needs of borrowing.
- ☛ Lack of qualified human talent working in the public financial sector and lack of training programs for workers in the administrative and financial areas and the difficulty of attracting and maintaining talent and lack of appropriate organizational structures and administrative requirements of the current financial reform and

not keeping up with the applicable administrative legislation to the requirements of development.

- ☛ The lack of an integrated computerized financial system that serves the government, clients and investors to optimize the absence of a database and computerized information that covers all activities relating to the financial sector and not to flow of information automatically easily and smooth between the Ministry of Finance and their constituencies and between the ministry and the ministries and other government departments
- ☛ The weakness of private sector participation in the influential financial decisions and keep up with the lack of published financial statements with international evidence that take into account the principles of inclusiveness, transparency and clarity.

## **B. THE DIRECT CAUSES OF THE BUDGET DEFICIT**

We can limit the direct causes of the budget deficit in Jordan based on a review of the budget speeches during the study period, including the following:

- Increasing of the security, defense and protection expenses which causes beyond the control of the state.
- Increasing the size of the public sector and the establishment of the state spending on this sector.
- Spending on infrastructure projects (electricity, telecommunications, water, education, etc.).
- Increasing the size of employment in the public sector and increase the size of the decline in wages compared to productivity.
- Multiple accounts and methods of financial revenues in addition to the tax credits increased.
- Focus on indirect taxes, which in turn lead to increase costs and reduce the size of the profits and decline share of direct taxes to public finance spending.
- Price supports and supply fuel in order to encourage the production and maintenance of price stability and alleviate the burden on the poor and low-income.

## **DATA ANALYSIS AND DISCUSSION FIRST: THE DEVELOPMENT OF GDP IN JORDAN**

Jordan has taken firm steps in terms of integration into the global economy and promotes its openness to global markets based on a system of unified

standards and specifications in the economic, political, cultural, humanitarian and legislative areas. Dealing in foreign currencies has been liberated, fully and announced the dinar as a convertible currency for the current and capital purposes in 1997. At the same framework, the liberalization of foreign trade through the abolition of quantitative restrictions and tariff reductions, as Jordan joined several international conventions, as well as the

start of some ambitious projects declaration, as the declaration of Aqaba as a special economic zone, the initial results were positive and encouraging; it has been achieving real growth rates, where the notes of the scale (1) that the GDP grew an annual growth rates volatile, amounted to a minimum of 3.1% in 1999, and a maximum of 22.5% for 2008.

**Table 1: The Development of GDP for the Period 1990-2013**

Year	The Value of the Gross Domestic Product (Million Dinar)	Record	The Annual Growth
1990	2463.7	100.0	
	2632.6	106.9	6.9
1992	3129.1	127.0	18.9
	3334.5	135.3	6.6
	3691.2	149.8	10.7
1995	4019.1	163.1	8.9
	4143.5	168.2	3.1
	4451.2	180.7	7.4
	4720.2	191.6	6.0
	4865	197.5	3.1
2001	5153.6	209.2	5.9
		222.0	6.1
	5849.4	237.4	6.9
	6301.3	255.8	7.7
	7195	292.0	14.2
	7991.9	324.4	11.1
	9151.4	371.4	14.5
	10169.8	412.8	11.1
	13971.2	505.7	22.5
	15044.5	610.6	7.7
	16417.2	666.4	9.1
	17987.7	730.1	9.6
	19298.2	783.3	7.3
20981.4	851.6	8.7	

Source: Calculated from data of the Central Bank of Jordan

As noted from the table that the GDP has increased five-fold from what it was in 1990, where it reached (12458) million Jordanian dinars in 2008, as an annual growth rate of (9.4%) during the period 1990-2008, the reason for this is the package of the financial and economic policies adopted by the government in this period.

## SECOND: THE ANALYSIS OF THE GENERAL BUDGET IN JORDAN

### 1.The Development of Public Expenditure:-

The Jordanian financial by-law no. (4) for the year 1994 defined the expenses as all funds allocated to meet the achieved commitments under the existing

legislation, and include the government expenditures, transfer payments and government spending on goods and services.

Table (2) indicates that the total public expenditure has dramatically increased during the period 1990 to 2008, where the total public expenditure that arrived in 2008 to (5431) million dinar, as (484.9%) than it was in 1990, and it is noted that the total expenditures have increased with increasing frequency after 2000, where it doubled twice during the period from 2001 to 2008, the reason may be due to increase in current expenditure, where current expenditures have increased to reach (4481) Million dinar in 2008, as (532.6%) than it was in 1990, and also that there are big leaps in the budget in the expenditure side after 2005 this could due to the rising



prices of oil and food and the government forced to adopt policies to decrease the impacts of high prices on the citizen.

It is noted that capital expenditure has tripled over the past two decades, reaching (949.6) million dinar in 2008, as (340.7%) than it was in 1990, as the capital expenditure has witnessed a remarkable growth after

2000, where it doubled twice, where the index rose from (178.1%) in 2002 to (340.7%) in 2008, and it is noted that the increase in current expenditure is greater than the increase in capital expenditure that any government spending focused on current expenditure operational goal in salaries and support and not on capital spending.

**Table 2: The Development of Public Expenditure in Jordan for the Period 1990-2013**

Year	The Value of Expenditures in Millions			Percentage of Current Expenditures to Gross	The Value of Expenditures in Millions			The Proportion of Expenditure to GDP
	Total	Ongoing	Capitalism		Total	Ongoing	Capitalism	
1990	1120.1	841.4	278.7	75.1	100	100	100	45.5
1991	1234.3	904	330.3	73.2	110.2	107.4	118.5	46.9
1992	1372.5	1019.8	352.7	74.3	122.5	121.2	126.6	43.9
1993	1411.6	1119.4	292.2	79.3	126	133	104.8	42.3
1994	1587.8	1211.6	376.2	76.3	141.8	144	135	43
1995	1693.9	1309.5	384.4	77.3	151.2	155.6	137.9	42.1
1996	1789.6	1379.3	410.3	77.1	159.8	163.9	147.2	43.2
1997	1952	1524.8	427.2	78.1	174.3	181.2	153.3	43.9
1998	2087.7	1644.6	443.1	78.8	186.4	195.5	159	44.2
1999	2039.5	1643.1	396.4	80.6	182.1	195.3	142.2	41.9
2000	2187.1	1851.3	335.8	84.6	195.3	220	120.5	42.4
2001	2316.3	1912.5	403.8	82.6	206.8	227.3	144.9	42.3
2002	2396.2	1899.9	496.3	79.3	213.9	225.8	178.1	41
2003	2809.8	2163.7	646.1	77	250.9	257.2	231.8	44.6
2004	3180.5	2377.8	802.7	74.8	283.9	282.6	288	44.2
2005	3538.9	2908	630.9	82.2	315.9	345.6	226.4	44.3
2006	3912.2	3118.1	794.1	79.7	349.3	370.6	284.9	42.7
2007	4586.5	3743.9	842.6	81.6	409.5	445	302.3	45.1
2008	5431	4481.4	949.6	82.5	484.9	532.6	340.7	43.6
2009	6030.5	4586	1444.5	76.0	538.4	545.0	518.3	43.2
2010	5708	4746.6	961.4	83.2	462.4	525.1	291.1	37.9
2011	6801.8	5743.3	1058.5	84.4	495.6	563.2	300.1	41.4
2012	7455.7	6202.8	675.4	83.2	528.2	554.1	231.1	41.4
2013	7065.4	6050.4	1015	85.6	445.0	499.4	269.8	36.6

Source: Calculated from data of the Central Bank of Jordan,

It is noted from a table (2) that the current expenditures constitute the bulk of expenses, which rose from (75.1%) in 1990 to reach (82.5%) of the total expenditure for the year 2008, this reflected negatively on government spending on investment as the capital expenditure of less than 18% during the last years of the period under study, as the table indicates that the percentage of total expenditures ranging between 41-46.9%) of GDP.

## 2.The Development of Public Revenues in Jordan:-

The financial by-law (4) for the year 1994 defined revenues that are all taxes, fees, royalties, profits, surpluses, aid and other funds to respond to any department of the state. Depending on the general budget classification, central bank data and the division of public revenues to local revenues, foreign aid, loan installments recovered and internal and external loans.

The following is a presentation of the development of items of income during the study period.

### A. The Development of Local Revenues:-

It consists of tax revenues and non-tax revenues, tax revenues include taxes on income and corporate profits and individuals, and tax on dividends and on domestic transactions, general sales tax, other taxes such as taxes on foreign trade, they consist of customs taxes, fines, forfeitures and surcharges, while non-tax revenues include licenses, fees, mail, interests, dividends and other income.

It is noted from table (3) that there is a significant increase in the revenues that keep pace for the development and growth of the Jordanian economy, as the total public revenues increased from (1169.7) million dinar in 1990 to reach (2092) million dinars in 2001 and about (4374.6) million dinars in 2008, as an increase of

(200.9%) as it's about double of (435%) than it was in 1990.

The public revenue has risen significantly after 2002; the reason may be due to an increase in local revenues, where the base of general tax has been expanded on sales and raise its upper limits and the inclusion of new categories of goods and services and those who are subject to this tax.

As for the local revenues, the table indicates that Jordan relies heavily on local revenues, which come in, mostly from tax revenues, as the importance of local

revenues increased from (63.6%) of the total revenue to reach (85.9%) of the total revenue and the reason may be due to the contraction of foreign aid and loans, as we will see when we talk about them later, the value of local revenues has reached to approximately to (91.4%) of the general revenues of the state in 2006-2007, also, there is a significant increase of the relative importance of local revenues after 1992, due to a policy of self-reliance pursued by the government.

**Table 3: The Development of the Total and Local Revenues in Jordan for the Period 1990-2013**

Year	Revenues in Millions		The relative importance of local revenues	The proportion of tax revenues from local	Record revenues	
	Total	Local			Total	Local
1990	1169.7	744	63.6	51.47	100	100
1991	1451	828.8	57.1	48.44	124	111.4
1992	1358.6	1221.2	89.9	54.69	116.1	164.1
1993	1406.3	1208.6	85.9	54	120.2	162.4
1994	1537.3	1296.1	84.3	55.71	131.4	174.2
1995	1620	1404.3	86.7	52.24	138.5	188.8
1996	1748.8	1431.9	81.9	58.78	149.5	192.5
1997	1620.8	1378.3	85	57.2	138.6	185.3
1998	1732.1	1474.5	85.1	56.15	148.1	198.2
1999	1815.9	1497.1	82.4	54.67	155.2	201.2
2000	1983.3	1592.1	80.3	59.74	169.6	214
2001	2092	1658.6	79.3	63.05	178.8	222.9
2002	2136	1644.1	77	68.14	182.6	221
2003	2613	1675.6	64.1	67.42	223.4	225.2
2004	2958.5	2147.2	72.6	68.93	252.9	288.6
2005	3062.1	2561.8	83.7	66.54	261.8	344.3
2006	3469	3164.4	91.2	64.65	296.6	425.3
2007	3971.5	3628.1	91.4	46.83	339.5	487.6
2008	5092.8	4374.6	85.9	47.61	435.4	588
2009	4521.2	4187.8	92.6	68.8	386.5	562.9
2010	4662.8	4261.1	91.4	70.1	398.6	572.7
2011	5413.9	4198.9	77.6	72.9	462.8	564.4
2012	5054.3	4726.9	93.5	70.9	432.1	635.3
2013	5758.2	5119.1	88.9	71.3	492.3	688.1

Source: Calculated from data of the Central Bank of Jordan

Public revenues in the state also show a remarkable development represented in a decline in non-tax revenues rate of the total GDP from 12% in 1999 to 8% in 2003 as a result of the privatization of some governmental facilities, especially communications, while the ratio of tax revenues maintaining their rate (about 15%) as a result of the economic reform program that has been applied and increase the sales tax and breadth of its scope of application to include most goods and services,

in addition to increase the efficiency of tax collection process, where the total of general sales tax has increased to 372 million dinars in 1999 to 596 million dinars in 2003, thus becoming the most important resource for the public finances.

It is noted from table (4) that the tax revenues rose from 51.47% in 1990 to reach the maximum rate of (68.93%) in 2004 and then took back down to a rate of (47.61%) of the total domestic revenues in 2008.

**Table 4 Ratio of Tax Revenue to GDP in Jordan, 2001-2013**

Category	Local Revenue	Income tax	Taxes on Income and Profits	Taxes on Financial Transactions	Taxes on Goods and Services	General Tax on Goods and Services	Taxes on Trade and International Transactions	Other Addition al Taxes
2001	29.1	18.2	3.6	10.1	9.2	0	0.9	4.2
2002	28.4	17.1	3.4	9.7	8.7	0	0.9	3.8
2003	26.6	17.2	3	0.5	9.6	9.5	3.7	0.4
2004	29.8	19.9	3	0.6	11.7	11.5	4.1	0.4
2005	32.1	22.1	3.5	1	12.9	12.8	4.2	0.4
2006	34.6	23.3	4.5	1.1	13.5	13.3	3.8	0.4
2007	35.7	24.3	4.9	1	14.6	14.4	3.5	0.4
2008	35.1	22.1	4.8	0.8	13.6	13.4	2.5	0.4
2009	30.0	20.6	5.5	0.6	12.2	12.0	2.1	0.6
2010	28.3	19.8	4.2	0.5	13.3	13.2	1.9	0.0
2011	25.6	18.7	4.1	0.5	12.4	12.4	1.7	0.0
2012	26.3	18.6	3.8	0.6	12.6	12.6	1.6	0.0
2013	<b>26.5</b>	<b>18.9</b>	<b>3.5</b>	<b>0.6</b>	<b>13.1</b>	<b>13.1</b>	<b>1.7</b>	<b>0.0</b>

Source calculated from the data of the Central Bank

### B. The Development of Foreign Aids:-

Jordan relies on foreign aids as a source of public revenues, which start with the founding of the state, where the British aids were applied by virtue of its state mandated, and after the abolition of the British Jordan Treaty, it replaced by Arab aids, then the U.S. and European

aids. Arab aids have become acknowledged in Baghdad summit, the main sources of public revenues during the period 1978 - 1989, despite the failure to meet the obligations of some Arab countries, and then the Iraqi aids came through trade protocol signed between the two sides and the grant oil.

**Table 5 The Development of Foreign aids to Jordan and the Increase of Public Revenues and GDP during the Period 1990-2013**

Year	Foreign Aids	Aids proportion from the revenues	Aids proportion from the GDP	Record
1990	197.9	16.9	8	100
1991	336.7	23.2	12.8	170.1
1992	137.4	10.1	4.4	69.4
1993	197.7	14.1	5.9	99.9
1994	241.2	15.7	6.5	121.9
1995	215.7	13.3	5.4	109
1996	316.9	18.1	7.6	160.1
1997	242.5	15	5.4	122.5
1998	257.6	14.9	5.5	130.2
1999	318.8	17.6	6.6	161.1
2000	391.2	19.7	7.6	197.7
2001	433.4	20.7	7.9	219
2002	491.9	23	8.4	248.6
2003	937.4	35.9	14.9	473.7
2004	811.3	27.4	11.3	410
2005	500.3	16.3	6.3	252.8
2006	304.6	8.8	3.3	153.9
2007	343.4	8.6	3.4	173.5
2008	718.2	14.1	5.8	362.9
2009	333.4	7.4	2.4	168.5
2010	401.7	8.6	2.7	203.0
2011	1215	22.4	7.4	613.9
2012	327.3	6.5	1.8	165.4
2013	<b>639.1</b>	<b>11.1</b>	<b>3.3</b>	<b>322.9</b>

Source calculated from the data of the Central Bank

We note from Table (5) that the value of foreign aid has increased from (197.9) million dinar in 1990 to reach (718.2) million dinar in 2008, the lowest value of the aid has reached (137.4) million dinar in 1992, also the reduced of the relative importance of foreign aid from about (16.9%) of the total state revenues in 1990 to about (14.1%) in 2008, rising exceptionally to (35.9%) which is the proportion of (14.9%) of GDP in 2003, as a result of U.S. aid to Jordan in order to help it to overcome the impacts of the war on Iraq, which is the largest proportion in the period 1990-2008, as noted that the aid was the least in 2008 and 2007 and with a percentage of (8.8%) and (8.6%) of the total revenues of the state and (3.3%) and (3.4%) of GDP, as the foreign aid accounted for about (14.9%) of GDP in 2003.

### C.The Development of Internal and External Loans:-

The Jordanian government began the internal borrowing in 1969 and the value of the unpaid balance has increased to (8.4) million dinars in 1969 to (1656)

million dinars in 2002, and it is worth mentioning that the government has stopped the local and external borrowing after 1991, in the wake of the economic crisis experienced by Jordan, also, the government did not resort to external borrowing after the financial crisis and to follow the program of economic reform, it made efforts to reschedule the external debts and buy some soft loans, and so as to reduce the burden of this debt on the national economy and to stimulate the growth and advancement, the item of the internal and external loans does not appear in the general budget for Jordan after 1991.

### 3.The Development of the Budget Deficit in Jordan:-

It is noted from table (7) that the budget of Jordan suffers from chronic deficit and the budget deficit has risen to (682.9%) and (501.8%) than it was in 1990, calculated on an accrual basis and on a cash basis and that starts to work after 1992. It is worth mentioning that the deficit as measured by the GDP fluctuates from year to year.

**Table 6: The Development of the Budget Deficit and the Jordanian Rate of GDP for the Period 1990-2013**

Year	Deficit Value on the Basis of (Million)		Deficit Ratio from GDP%		Record	
	Cash	Due	Cash	Due	-	100
1990	-	49.6	0	2	-	436.9
1991	-	216.7	0	8.2	100	-28
1992	67.4	-13.9	2.2	-0.4	103.6	-10.7
1993	69.8	-5.3	2.1	-0.2	66.2	-101.8
1994	44.6	-50.5	1.2	-1.4	22.6	-149
1995	15.2	-73.9	0.4	-1.8	24.6	-82.3
1996	16.6	-40.8	0.4	-1	-390.8	-667.7
1997	-263.4	-331.2	-5.9	-7.4	-440.1	-716.9
1998	-296.6	-355.6	-6.3	-7.5	-208.3	-450.8
1999	-140.4	-223.6	-2.9	-4.6	-177.7	-410.9
2000	-119.8	-203.8	-2.3	-4	-230.7	-452.2
2001	-155.5	-224.3	-2.8	-4.1	-215.7	-444
2002	-145.4	-220.2	-2.5	-3.8	-144.2	-396.8
2003	-97.2	-196.8	-1.5	-3.1	-228.6	-447.6
2004	-154.1	-222	-2.1	-3.1	-618.4	-961.3
2005	-416.8	-476.8	-5.2	-6	-580.7	-893.5
2006	-391.4	-443.2	-4.3	-4.8	-843.9	-1239.9
2007	-568.8	-615	-5.6	-6	-501.8	-681.9
2008	-338.2	-338.2	-2.7	-2.7	-2734.0	-3043
2009	-1842.7	-1509.3	-13.2	-10.8	-2072.9	-2110
2010	-1446.9	-1046.4	-9.6	-7.0	-5836.1	-2798
2011	-2602.9	-1387.9	-15.9	-8.5	19039.5	3677
2012	2894	1824	16.1	10.1	15448.8	2635
2013	2564.5	1307.2	13.3	6.8		

Source: calculated from the data of the Central Bank

Through a review and analysis of the budgets of Jordan, we can limit the causes of the budget deficit, including the following:

- Increasing security, defense and protection expenses which causes beyond the control of the state.
- Increasing the size of the public sector and the establishment of the state spending on this sector.
- Spending on infrastructure projects (electricity, telecommunications, water, education, etc.).
- Increasing the size of employment in the public sector and increase the size of the decline in wages compared to productivity.
- The multiplicity of accounts and the financial methods of revenues in addition to the increased tax credits.
- Focus on indirect taxes, which in turn lead to increase in costs and reduce the size of the profits and decline share of direct taxes to finance public spending.
- Price supports and supply fuel in order to encourage the production and maintenance of price stability and alleviate the burden on the poor and low-income.

### THIRD: THE IMPACT OF THE BUDGET DEFICIT TO GDP

To measure the impact on the budget deficit on the dependent variable which is GDP and using simple regression analysis, as it extracted correlation coefficient to see how much the relationship between them and their direction and value of transactions to determine the value of the impact of the budget deficit to GDP and the value of (t) for these transactions and the value of coefficient ( $R^2$ ) to see how much is explained by the model and the values of the error (F) to see the validity of the model to explain the relationship between them.

#### 1.The Impact of the Budget Deficit to GDP for the Same Year:-

Table (8) indicates that the value (F) which reached to (27.6) are statistically significant at the level of significance of (0.05), which shows that the linear model fit to explain the relationship between the budget deficit and GDP, and that the model explains (59.6%) of views, which is reflected in the value of the ( $R^2$ ).

**Table 7: The Results of the Regression Analysis of the Deficit to GDP for the Same Year**

Variable	Factor (B)	t Stat	F	Adjusted $R^2$	R
Fixed	3575.166	6.43	27.6	0.596	0.772
The Budget Deficit	-10.412	-5.25			

As the table indicates that the value of the correlation coefficient and the amount of (0.772) indicates the presence of an inverse relationship between GDP and the budget deficit, and where the data the budget deficit, which was used in the analysis is negative, it means that if the absolute value of the deficit has increased, GDP is increased, and to know the value of this impact, which is expressed as a (B) value, we find that the (B) value is (-10.412), and where the (T) value that reached to (-5.25) which is statistically significant at the level of significance (0.05), which means that there is a negative impact to the value of the budget deficit to GDP for the same year. In other words, the increase of one unit in the budget deficit (in absolute value) will lead to a decrease in the gross domestic product by the value of (10.412) unit, that is, the relationship between them is counterproductive.

#### 2. The Impact of the Deficit on the GDP in the Following Year:-

Table (9) indicates the value of (F) which reached (29.66) is statistically significant at the level of significance of (0.05), indicating that the linear statistical model fit to the interpretation of the relationship between the budget deficit and GDP, as much it explains the model (62.8%) of views, which is reflected in the value of ( $R^2$ ), and the value of the correlation coefficient which amount of (-0.792) indicate the presence of an inverse relationship between the budget deficit and gross domestic product in the year subsequent to the deficit, where the data of the budget deficit, which was used in the analysis is negative, it means that if the absolute value of the deficit is increased, the local output is increased.



**Table 8: The Results of the Regression Analysis of the Deficit to Gross Domestic Product in the Previous Year**

Variable	Factor (B)	t Stat	F	Adjusted R Square	R
Fixed	3390.682	7.28	29.66	0.628	0.792 -
The Budget Deficit	-8.826	-5.45			

To find out the value of this impact, which is expressed by the value of (B), we find that the value of (B) is (-8.826), and where the value of (T) for the coefficient of the budget deficit, amounting to (5.45) are statistically significant at the level of significance equal to (0.05), which means that the value of the subsequent impact on the budget deficit of the gross domestic product is (-8.826), and any increase in one unit in absolute value in the budget deficit will lead to a decrease in GDP for the year by the subsequent (8.826), and largely due to the adoption of the budget primarily on the local revenue tax and the large size of the public sector being the largest consumer of services and goods, as demonstrated in the Jordanian budget analysis item, the reduction of taxes on sales and production inputs in order to encourage investment and stimulate growth leads to reduced domestic tax revenue and thus increase the budget deficit on one hand and on the other hand, the increased spending in the budget means increasing in the government consumption of goods and services and thereby increasing the GDP, which means that an increase in the budget deficit comes from two sides, the first cut taxes, and the second increased government spending and both lead to an increase of the gross domestic product, both in the same year or in the year that followed.

**RESULTS AND RECOMMENDATIONS**

**Results**

1. Domestic revenues constitute a large proportion of public revenues to Jordan, where Jordanian budget relies heavily on local revenues due to shrinking of foreign aids and stop the government’s external borrowing, especially after the financial crisis in 1989.
2. The current expenditures constitute total expenses, which rose from (75.1%) of the total expenditures value in 1990 to reach (82.5%) of the total expenditure for the year 2008, that any capital expenditures are spent on productive projects of the government do not exceed 18% in recent years, the reasons for the increase of the current spending is the increase value of direct and indirect support for some commodities, especially fuel prices, which have risen dramatically in recent years.

3. Public revenues have risen significantly after 2002, and may be due to an increase in local revenues, where they have been expanding the base of the general sales tax and raise the upper limits and the inclusion of new categories of goods and services that are subjected to this tax.
4. The tax revenues have increased from 51.47% in 1990 to reach the maximum rate of (68.93%) in 2004 and then took back down to a rate of (47.61%) of the total domestic revenues in 2008. The reason for that is due to the amendments of tax legislation and especially law income tax.
5. The budget deficit affect the GDP for the same year and the gross domestic product in the subsequent year, and the impact value has reached (10.412) unit for the same year of the deficit, by (8.826) for the year subsequent to it, and the reason for this due to the adoption of the budget primarily on the local revenues tax and the large size of the public sector being the largest consumer of services and goods, the reduction of taxes on sales and production inputs with the aim to encourage investment and stimulate growth lead to reduce the local tax revenue and thereby increase the budget deficit on one hand, and the increased spending in the budget on the other hand means the increased of the government consumption of goods and services and thereby increasing the GDP, which means that an increase in the budget deficit comes from two sides, first tax cut, and the second increase the government spending and both lead to increase in the GDP, either in the same year or in the year that followed, this is consistent with some previous studies such as the study of Abed Al-Razzaq and Al-Zoubi (2005), Al-Khatib (2005), Barry (2001).

**Recommendations**

1. The government shall follow the economic policies that balance between spending and encourage investment and stimulate the national economy in order to ensure the achievement of economic and social security and access to the appropriate level of the budget deficit.



2. The government shall work to increase capital expenditure, which lead to increase government investment in infrastructure and other necessary services for investment.
3. The government shall work to avoid unjustified spending and directing government activities so as to be in accordance with the principles of economic, efficiency and effectiveness, supervisory policies reduce wastage, misuse of public money and fight corruption.
4. Reconsider the method and methodology of preparing the budget so as to take into account the economic and social policies in the medium to long term, which should be based on scientific grounds and not on the basis of estimations as is the case currently, and one of the methods that may be employed is programs and performance budget and zero budget method that the American experience has shown its success.

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