

Public Debt and Government Expenditure: Applied Study on the Palestinian Environment

Bahaa Awwad

Department of Computerized Banking and Finance
Palestine Technical University – Kadoorie, Palestine.
E-mail: dr.awwadb@hotmail.com

Received March, 2021; Accepted May, 2021

Abstract. This study aims to identify the effect of public debt on Palestinian government expenditure from the year 1997-2019. An analytical descriptive approach was used. The study found that the public debt positively impacts government expenditures and current expenditure, this confirms that the largest proportion of public debt is spent on the non-productive consumer aspects without direct concern for the elements of real economic production. In addition, the public debt negatively affects the development expenditures, which are usually supported by foreign aid and grants. Based on previous results, the researcher progress with several recommendations, the most important of which are that the Palestinian Authority should rationalize public and private consumption spending, and encourage citizens to invest by making them aware of the benefits of directing savings towards investment, financing projects. That is to achieve Palestinian priorities and economic development at the national level and within the main directions of the Palestinian Development Plan while increasing the share of development expenditures.

Key words: Public Debt; Government Expenditure, Developmental Expenditure, Current Expenditure.

Type: Research paper



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

DOI: [10.51325/ijbeg.v4i2.69](https://doi.org/10.51325/ijbeg.v4i2.69)

Introduction

After World War II, the countries of the world were divided in terms of the level of economic prosperity, the degree of development and economic growth, the well-being of members of society, the level of employment of manpower, and the per capita gross domestic product into two parts, developed and developing countries, that the economic gap between developing and developed countries began to widen gradually (Al-Khasawneh, 2014; Costandi, et al., 2019).

The budget deficit problem is considered one of the main financial problems facing the public budgets of many developing countries. Whereas the index of public debt in general and domestic debt in particular is linked to strong and structural relations with the general budget and the rate of deficit in it. Therefore, it became logical to try to link and find out the influences and influences relationships between the public budget deficit and the local public debt, and to apply that to the economy (Mahmoud, 2017).

Public spending is also a natural phenomenon in public finances. The real growth of public spending considers that there is an expansion in the volume of goods and services provided by the state to society or an improvement in the level of existing public services. Thus, the real growth of public spending is the monetary expression of that increase in the volume and quality of public services. The increase in the volume of public spending with

the emergence of financial crises and economic recession in developing countries led to an increase in public debt, resorting to financial borrowing from donor countries and living on foreign aid (Al-Khasawneh, 2014).

Regarding the Palestinian situation, Palestine has lived through multiple calamities due to the brutal occupation since 1948, which made it accept aid and grants and resort to internal and external borrowing. The Oslo Agreement signed between the PLO and the Israeli occupation government granted the nascent Palestinian Authority full city powers in Area A and B and the management of economic resources in those areas, but it robbed them of a great deal of sovereignty through controlling the border crossings and the lands it used in Area C, as it includes 61% of the Palestinian lands, Moreover, the customs function and the added value on Palestinian imports remained in the hands of the Israeli occupation. The biggest evidence is what happened in 2019 when the Palestinian Authority refused to receive its dues from the clearing after the Israeli occupation government forcibly deducted part of these funds under the pretext of what is being paid to the families of the martyrs and prisoners. Depending on the economic and political conditions, some periods have passed in which the amount of public debt has increased, whether internal or external, compared to other amounts such as the gross domestic product or the amount of exports, etc. Previously, the development of public debt in Palestine can be divided into three parts: the first period witnessed an increase in the ratio of public debt to gross domestic product. The second period witnessed a decrease in the ratio of public debt to gross product compared to the first phase. However, the third phase witnessed a sharp decline in the ratio of public debt compared to the previous phases (Coalition for Accountability and Integrity - AMAN, 2019).

The research gap for this study examines the structure of the Palestinian economy that suffers from many crises. The reason for this is that the gross national product and monetary savings are largely unable to cover public expenditures, which made the Palestinian Authority resort to borrowing and obtaining internal and external aid.

Through the annual information obtained from the Palestinian Monetary Authority for the year 2019. It appears that the internal and external public debt of the Palestinian Authority amounted to (2795.2) million US dollars. While development expenditures amounted to (200) million US dollars. And current expenditures amounted to (3267.2) million US dollars. This constitutes a major problem for the Palestinian economy. It was also essential to find a solution to the problem of public debt by identifying the size of the public debt on Palestine and the size of the Palestinian government spending. It is also important to linking them to a study of the impact of the public debt on the Palestinian government spending from 1997-2019.

The study derives its importance through its contribution to the formation of information about the danger of public debt on Palestinian government spending. It contributes to presenting recommendations and suggestions to decision-makers to improve the Palestinian public budget and reduce dependence on public debt. As for the scientific aspect, this study gains its importance through its use as a reference for future studies.

This study includes five parts: an introduction, a forward to the study problem and its main issues, the theoretical framework of the subject and the construction of hypotheses, the third part details the methodology of the study, by showing the study population, its

sample. The fourth part refers to descriptive statistics and aims to test the study hypotheses. The final part summarizes the conclusions of the study, makes recommendations, and proposes future studies.

Theoretical framework for the study

The political, economic and social changes that the Palestinian society witnessed have strongly affected the Palestinian economy. Palestine has suffered in many stages from financial deficit, structural distortions and economic dependence. This because Israel tightened its control over the Palestinian economy and plundered its wealth. The Israeli authorities also cut off economic ties with the outside world. Most importantly, Israel has also worked to transform the Palestinian economy into a consumer market for Israeli goods.

1. The general budget in Palestine:

The institutions of the Palestinian Authority need more effective organizational efforts. This matter only comes through appropriate tools that make them more organized and capable of successful and effective planning. The general budget of the Palestinian Authority is one of the most important tools that help facilitate the process of taking appropriate decisions for it. In preparing the budget, the budget depends on making financial estimates, which are represented in the Palestinian National Authority's revenues and operational expenditures (El-Razek, 2002).

The Palestinian Authority faces many obstacles to its inputs and outputs. Its presence under the Israeli occupation is one of the most prominent of these obstacles, which is represented in controlling many of its imports and exports, which in turn affects the state's general budget. As a result, the Palestinian Authority depends on the support of donor countries, due to the scarcity of investment projects resulting from the obstacles of the Israeli occupation (Mudalala and Al-Khudari, 2016).

In 1994 the Palestinian Authority took over, working to create financial tables that summarize revenues and expenditures. It was the first budget presented to the Legislative Council in 1997, most of which came from indirect taxes and customs fees. According to statistics, in 2000 the total public budget reached 964 million dollars, and indirect taxes constitute about 90%, and external funding for this year reached about 422 million dollars, where salaries accounted for about 60 per cent of total current expenditures from the budget of the Palestinian Authority (Sabry, 2000). The budget for the Palestinian Authority went through sequential phases, starting from 1994 to 1999. Through a phase of recession between 2000-2002 due to the second intifada, and after that the reform phase began. The arrival of Hamas and its assumption of power in 2008 AD, during which the political separation between the Palestinian political poles. As a result, the Palestinian budget suffers from randomness to some extent due to political and economic fluctuations in the region (Abu al-Qumsan, 2015)

2. The structure of the Palestinian public budget:

It is essential for any existing state to study public revenues and public expenditures due to the importance of these items in the economy of any country. The Palestinian Authority

is distinguished by that as it suffers from problems in its structure due to its difficult political and economic conditions.

3. Public revenue

Public revenues are defined as the operations carried out by one of the general government units that lead to an increase in the added value. (Palestinian Central Bureau of Statistics 2014, 2).

99

Since the implementation of the Palestinian Reform and Development Plan in 2008, the Palestinian government has focused on enhancing local revenues at the expense of external revenues (grants and aid) in financing the current budget. This means that no part of external support is allocated to support the current budget, since it is fully transferred to finance development expenditure. (Ministry of Planning, 2008).

According to funder, public revenues are divided into internal and external sources (Ebeid, 2015):

-Internal sources (local collection), which are represented as follows:

- Tax revenues: It consists of direct taxes and indirect taxes
- Non-tax revenues: It includes fees, licenses, fines, investment returns, and profits. The Authority's revenues from its own properties, internal loans, grants, and clearing revenues.

-External sources: refer to foreign loans, aid and donations from abroad

4. Public Expenditures

Public expense is defined as the operations carried out by one of the general government units that lead to a decrease in the added value (Palestinian Central Bureau of Statistics 2014, 2).

Classification of overheads

The public expenditures in the Palestinian general budget are divided into the following (Ebeid, 2015):

-Current expenses: it is what is spent on a daily and recurring basis and this includes salaries, wages, operating expenses, transfer expenses, regular capital expenditures and net lending,

-Developmental expenditures are the expenditures that the state spends to expand production, such as financial transfers for projects, such as physical infrastructure such as roads, transportation, and institutional and legal infrastructures.

Table (1, 2) shows the size of government expenditures and (current expenditures, development expenditures) in the Palestinian budget from 1997-2019.

Table 1: The volume of government expenditures and current expenditures in the Palestinian budget in the period 1997-2019 (million dollars)

years	Total government expenditures	Current expenses and net lending	Total government expenditures %
1997	1412.7	912.7	64.61
1998	1369.7	489.7	62.04
1999	1452.1	978.1	67.36
2000	1668	1199	71.88
2001	1435	1095	76.31
2002	1246	994	79.78
2003	1635	1240	75.84
2004	1528	1528	100
2005	2281	1994	87.42
2006	1707	1426	83.54
2007	2877	2567	89.22
2008	3487.7	3272.7	93.84
2009	3375.9	3190	94.49
2010	3258.3	2983.2	91.56
2011	3256.8	2960.6	90.91
2012	3258.1	3047.1	93.52
2013	3419.1	3250.7	95.07
2014	3606.9	3446	95.55
2015	3445	3268.6	94.87
2016	3661.7	3445.2	94.08
2017	3794.8	3536.9	93.20
2018	3653.8	3376.9	92.42
2019	3660.1	3460.1	94.53

Palestinian Monetary Authority, 2019

Table. 2: The volume of government expenditures and development expenditures in the Palestinian budget in the period 1997-2019 (million dollars)

Years	Total Government Expenditures	Development Expenditures	Total Government Expenditures %
1997	1412.7	500	35.39
1998	1369.7	520	37.96
1999	1452.1	474	32.64
2000	1668	469	28.12
2001	1435	340	23.69
2002	1246	252	20.22
2003	1635	395	24.16
2004	1528	0	0.00
2005	2281	287	12.58
2006	1707	281	16.46
2007	2877	310	10.78
2008	3487.7	215	6.16
2009	3375.9	185.9	5.51
2010	3258.3	275.1	8.44
2011	3256.8	296.2	9.09
2012	3258.1	211	6.48
2013	3419.1	168.4	4.93
2014	3606.9	160.9	4.46
2015	3445	176.4	5.12
2016	3661.7	216.5	5.91
2017	3794.8	257.9	6.79
2018	3653.8	276.9	7.57
2019	3660.1	200	5.46

Palestinian Monetary Authority, 2019

Tables 1, 2 shows that public expenditures during the year 1997 were approximately (1412.7) million dollars. It also shows that current expenditures and net lending during that year were (912.7) million dollars, or 64.61% of the total public expenditures. The current expenditures during that year, were (500) million dollars which represent (35.39%) of the total public expenditures. Expenditures increased at an annual rate of 14%

during the period of 1997-2000. During the period of 2000-2002, public expenditures decreased by 14% in 2001 compared to 2000, and decreased by 13% in 2002 compared to 2001. This deterioration was due to the outbreak of the Al-Aqsa Intifada (PMA, 2010). It is noted that the current expenditures dominate public expenditures as they represent three quarters of public expenditures and the rest are developmental expenditures and were current expenditures and net lending of the year. 2004-2019 current expenditures and net lending exceeded 80% of total public expenditures. In 2004, current expenditures accounted for 100% of public expenditures, and development expenditures represented 0% of the total public expenditures.

5. Public debt

The issue of public debt is considered as one of the most important economic problems afflicting the economies of many countries, especially developing countries. Due to the financial imbalances, its causes may deepen the structural imbalances that the economies suffer from. Adopting economic programs that affect the quality of life and the economic and social well-being of the majority of the population as a result of the austerity policy that both the International Monetary Fund and the World Bank demand from the debtor countries that these programs lead most of the time to economic and political instability. As a result of the deterioration in overall demand to reduce government expenditures. Freezing salaries, wages, and canceling the reduction of government support for many basic commodities leads to a deterioration in the levels of economic and social life of the poor and middle income classes (MAS Institute for Economic Research and Policy, 2005).

Al-Mishaal (2018) defined it as "the size of the state's debt to lenders outside and within the country itself. These lenders can be either individuals, companies, and even other governments."

-The reality of public debt in Palestine:

The Oslo agreement, which was signed between the PLO and the Israeli occupation government, granted the nascent Palestinian Authority full civil powers in Areas (A and B). The management of economic resources in those areas, but it robbed it of a large amount of sovereignty by depriving it of control over the crossings, borders, lands and most of the natural resources. Moreover, the customs function and the added value remained in the hands of the Israeli occupation, which subjected its transfer to the PNA's treasury to arbitrary security and political considerations. As happened in February of the year 2019, when the Palestinian Authority refused to receive its dues from the clearing after the Israeli occupation government deducted part of these funds forcibly under the pretext of what is paid to the families of martyrs and prisoners. The amount deducted from the monthly dues is estimated at 41 million shekels. Clearing transfers are about 700 million shekels per month (National Team to Support Transparency and the Public Budget, 2019).

-Periods that show the reality of public debt in Palestine:

Palestine has gone through many periods that clarify the public debt in Palestine, including (The National Team for Supporting Transparency and the Public Budget, 2019):

•The period from 2000-2010:

The problem of borrowing arose in 1995 when the Palestinian Authority needed a huge amount of expenditures to build institutions, increase the number of employees, and improve the poor infrastructure inherited from the occupation. This has led to an acceleration of the public debt to GDP ratio to about 8.3%, and the public debt ratio began to rise or reach in 2000 to 863 dollars, or about 20% of the gross domestic product. This gradual rise continued to reach the end of 2004 to one billion dollars, about 23% of the total product. It was the first time that the public debt reached this amount and this is due to the occupation practices after the Palestinian uprising and the invasion Palestinian cities and the destruction of Palestinian service infrastructure and institutions. The amount of public debt during this period continued to rise, so the public debt in 2007 was the highest percentage of GDP and reached 26%. This is about one and a half billion dollars. In 2010, the ratio of public debt to GDP decreased by 23%, which is a slight decrease. The reason for this is the growth of GDP and not the decrease in public debt.

•The period from 2011 to 2013:

Public debt continued to rise, but at a slower pace, reaching about 2376 million dollars at the end of 2013, or about 19% of the gross domestic product. This period witnessed a fluctuation in the amount of public debt, in increase and decrease compared to the previous quarter. The third quarter of 2011, the third quarter of 2012, the first quarter of 2012, and the third quarter of 2013 witnessed a decrease compared to the previous quarter. This is due to Paying part of the due domestic debt. The internal public debt decreased from 1123 to 827 in just one quarter. According to which about \$ 296 million was paid, or 27% of the total domestic debt.

•The period from 2014 to 2018:

Public debt in the first quarter of 2014 amounted to \$2330 million. It increased and decreased in that period reaching nearly the same amount at the end of 2018 reaching \$2370 million. The highest percentage of public debt to GDP was in 2016 reaching 19%. Year 2018 witnessed the lowest percentage of public debt to GDP since the establishment of the Palestinian Authority reaching 16%. The average time period has reached \$2421 million.

Table 3: the size of the public debt in Palestine during the period 1997-2019 (million dollars):

years	public debt	External debt	Internal debt
1997	403.3	148.8	254.5
1998	548.3	223.7	324.6
1999	648.5	293.5	355
2000	863	520.1	342.8
2001	872.6	559.7	312.9
2002	749.1	597.2	151.9

2003	849.7	611	238.7
2004	1002.3	611	391.2
2005	1196.9	624.3	572.6
2006	1092	629.4	462.6
2007	1451.4	1034.4	417
2008	1557.4	1034.4	523.1
2009	1736.1	1086.9	469.2
2010	1882.8	1043.3	839.6
2011	2212.9	1114.3	1098.6
2012	2482.6	1097.9	1384.7
2013	2376.3	1108.7	1267.6
2014	2216.9	1088.9	1128
2015	2537.3	1070.8	1466.5
2016	2483.7	1043.9	1439.8
2017	2543	1041.9	1501.1
2018	2369.5	1031.7	1337.8
2019	2795.2	1218	1577.2

Palestinian Monetary Authority, 2019.

6. The impact of public debt on government spending

Public debt is one of the major negative risks that affect the economies of countries, especially in developing countries. Because it works to put debtor countries at the disposal of creditor countries, especially the economic and political life of those countries, and countries work to borrow from economic countries to fill the deficit in their budgets. The deficit that arises in the budgets of developing countries is the real reason for the decrease in the gross domestic product and the increase in public expenditures, whether in current or developmental expenditures.

Through, the theoretical study from the research, it was found that there is a significant impact of the public debt on government spending, especially current expenditures. This is because public debt comes mostly to pay the wages and salaries of the employees of these countries and largely ignores development expenditures. According to the practical side of the study, hypotheses can be constructed as follows:

"There is no significant statistical effect of Public debt on development expenditures in Palestine in the period between 1997 and 2019".

"There is no significant statistical effect of Public debt on current expenditures in Palestine in the period between 1997 and 2019".

"There is no significant statistical effect of public debt on government expenditures in Palestine in the period between 1997 and 2019".

Literature Review

Empirical studies on public debt and its relationship to various economic indicators have found wide resonance among academics and professionals as well as those interested in public finance. Results differed in some economic settings. This may be due to the different structure of the economic environment in each country.

105

Al-Wahidi (2017) analysed the impact of the relationship between government spending and economic growth in Palestine during the period 1994-2015. The results showed that government spending and foreign investment have a positive effect on economic growth. The results also showed that foreign aid, population size and inflation had a negative impact on economic growth. On the other hand, Obeid (2015) conducted a study that aimed at determining the size of the public debt, both internal and external, and identifying indices of indebtedness in Palestine. The results of the analysis generally showed that the higher the ratio of the size of public debt to the gross domestic product, the higher the volume of current expenditures as a percentage of the gross domestic product.

The examination of analyzing the reality of public debt in Jordan, measuring its sustainability, and knowing the effect of macroeconomic changes on it was one of the most important objectives of the study carried out by (Al-Hazaimah, 2015). The analysis showed that there is a weak possibility to achieve the sustainability of public debt in Jordan in the long term, and that all the economic variables used are not static Whereas the results confirmed that the coefficient of speed of adjustment in public debt was negative and significant, which confirms the existence of a long-term equilibrium relationship between the economic variables used in public debt.

Al-Shammari and Kazem (2015) examined the indicators of public debt and the resulting effects in Egypt Where the results summarized the positive effect of the internal debt in strengthening public spending and thus the increase in the level of domestic credit, which was reflected in the increase in investment rates and the achievement of growth in the domestic product at acceptable rates, which reflects the rationality of using the internal debt. As for the impact of external debt service, it was negative for exports and was reflected in a slight decrease in the current account position.

Abu Mudalala and Al-Ajlal (2013) also aimed to analyze the size of the public debt, its developments and its effects on the financial situation in Palestine During the period 2000-2011. This period witnessed important developments in the size of public debt, as the size of the debt increased at a rate of change of 178% and an average increase of 14% annually. The internal debt is considered the most burden, whether in terms of interest or instalments, and its burden from the burden of public debt reaches 92% Of the total burden. The study recommended that there is a need for the Palestinian Authority to seek to develop an integrated strategy for managing public debt, including a clear methodology for borrowing in a manner consistent with the expected financial capabilities. It is also assist in searching for new sources to finance the deficit instead of the local debt, especially the activation and strengthening of the role of local revenues and related laws and policies, and access to a budget surplus.

Picarelli et al., (2019) which aimed to answer the following question "Does Public Debt Produce a Crowding Out Effect for Public Investment in the EU?" on a sample of 26 European Union countries, between 1995 and 2015. It concluded that there is a negative impact of debt on investment to a lesser extent in the euro area than in the entire European Union; as such the influx of public debt also plays a role in limiting public investment.

While a study linked (le van, van, Gauchard& Anhle, 2018) between (Government spending, public debt) and taxes, the most important results of the study. The relationship between public spending and the tax rate has a bell shape so that the domestic debt increases unequivocally with taxes while the external debt displays an inverted U-shaped curve and the higher tax rate leads to the reallocation of the public debt in favour of the domestic debt (at the expense of the external debt).

Mehta (2018) aimed to analyse public debt asymmetry: the impact of taxes and government spending on public debt in India during the period 2002-2013. The study relied on a multiple linear regression model to analyze the effect of the independent variables represented in government spending and tax revenues on the dependent variable represented by public debt. The results indicate that increasing tax revenues and government spending will reduce the debt-to-GDP ratio as both criteria are inversely related to public debt. It also suggests the importance of directing spending effectively and productively, with the support of relevant economic Organizations.

Alawneh (2017) examined the impact of capital spending, current spending, and external and internal public debt on taxes in Jordan during the period 2001-2014. Multiple linear regression method was adopted by E-views to study the effect of independent variables (represented by capital expenditure, current spending, external and internal public debt) on the dependent variable (taxes). The statistical analysis showed a positive, statistically significant effect of both capital spending and current spending on taxes. The study also found a positive statistically significant relationship between the external and internal public debt for taxes in Jordan. The researcher recommended the necessity of using non-traditional alternatives to finance capital expenditures instead of external public debt and internal sources.

Yasin (2015) examined the behaviour of seven developing Asian countries and analyzed the impact of public external debt on social sector spending, as it included a data set from several countries (Pakistan, India, Bangladesh, Sri Lanka, Nepal, Philippines, Indonesia). During the period from 1980-2010, the results of the study confirm the common wisdom that the principal and service of the due external debt have a negative impact on public spending, especially on social sector spending. This indicates that developing countries need to mobilize their own resources and reduce their dependence on external borrowing as much as possible.

Methodology

1. Study sample and time series:

The financial information on both public debt and government spending in Palestine from 1997-2019 was used. This means that the time series for these variables were used. The financial information and data were taken from the Palestinian Monetary Authority.

2. Descriptive analysis of the study variables:

Descriptive analysis of the independent variables and dependent variables was made. Table 4 shows the details, as the average total public expenditures during the years (1997-2019) amounted to 2629.99 ± 204.74 million US dollars, while the average development expenditures amounted to 281.23 ± 26.03 million US dollars at the time the average Current expenditures 2305.98 ± 233.7 million US dollars, while public debt has averaged over the years since (1997-2019) 1603.08 ± 162.79 million US dollars.

Table 4: Descriptive analysis of variables

Variables	Std. Deviation	Standard error	Mean	Maximum	Minimum	N
Total Public Expenditures	981.917	204.74	2629.99	3795	1246	23
Development expenses	124.811	26.03	281.23	520	0	23
Current expenses	1120.838	233.7	2305.98	3537	313	23
Public debt	780.732	162.79	1603.08	2795	403	23

3. Applied Study and Hypothesis testing

Modal one "There is no significant statistical effect of Public debt on development expenditures in Palestine in the period between 1997-2019".

- **The normal distribution of the standard residuals of a simple linear regression model (The impact of public debt on development expenditures):**

To ensure that the remainder of the regression model follows the curve of the normal distribution, the remainder of the regression model was preserved. Kolmogorov Smirnov test was applied. Based on Table 5, the value (P value) of the test is equal to $0.2 < 0.05$, which makes it possible to accept the null hypothesis and therefore the variable follows the normal distribution.

Table 5: Examination of the normal distribution of the remainder of the regression of development expenditures

	Shapiro-Wilk			Kolmogorov-Smirnova		
	Sig.	Df	Statistic	Sig.	Df	Statistic
Standard residues	.007	23	.872	.200*	23	.120
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

- **Autocorrelation:**

The independence of the residues is examined by the Durbin Watson parameter as shown in Table 6. By reference to the value of the Durbin Watson test parameter, the value is close to 2.0, which means that the residuals are independent, meaning that the simple regression conditions are all fulfilled.

Table 6: Summary of the linear regression model for development expenditures

Model Summary					
Model	Durbin-Watson	Std. Error of the Estimate	Adjusted R Square	R Square	R
1	1.494	102.444	.326	.357	.597a
a. Public debt Predictors: (Constant),					
b. Dependent Variable: Development expenses					

Table 6 shows the model can predict a good portion of the dependent variable, as the three correlation coefficients have reached the values of the simple correlation coefficient ($R = 0.597$), the determination coefficient ($R^2 = 0.357$) and the corrected determination coefficient ($R^2 * = 0.326$), which means The public debt was able to explain 32.6% of the changes in development expenditures, and the rest was attributable to other factors.

The impact of public debt on development expenditures:

The correlation test was relied upon to examine the existence of a linear relationship between the two variables. Table 7 shows the existence of a linear medium-impact relationship with a negative trend between public debt and development expenditures, where the correlation coefficient reached -0.597.

Table 7: examining the linear correlation between public debt and development expenditures

	Public debt	Development expenses	
Public debt	Pearson Correlation	-.597**	1
	Sig. (2-tailed)	.003	
	N	23	23
Development expenses	Pearson Correlation	1	-.597**
	Sig. (2-tailed)		.003
	N	23	23
**. Correlation is significant at the 0.01 level (2-tailed).			

As for the simple linear regression analysis of variance test table 7, it shows a value of (P-Value = .003) which is less than 0.05. This confirms that the model in general is able to predict the value of the dependent variable (developmental expenditures) with a high explanatory strength at the level of confidence. = 95%.

Table 8 shows the values of the regression coefficients for the estimates and tests of the statistical significance of these coefficients. It concludes that there is a statistically significant relationship at a statistical significance level of 0.05 between development expenses and public debt. Therefore, the model is: Development expenditures = 434.332 -0.096 (public debt)

Table 8: regression coefficients for estimates of development expenditures

Model 1	Coefficients			T	Sig.
	Standardized Coefficients	Unstandardized Coefficients			
	Beta	Std. Error	B		
(Constant)		49.674	434.332	8.744	.000
Public debt	-.597	.028	-.096	-3.414	.003

Modal two "There is no significant statistical effect of Public debt on current expenditures in Palestine in the period between 1997-2019"

- **The normal distribution of the standard residuals of a simple linear regression model (The impact of public debt on current expenditures):**

To ensure that the remainder of the regression model follows the curve of the normal distribution, the remainder of the regression model was preserved, and then a Kolmogorov Smirnov test was performed. According to table 9, the value (P) of the test is equal to 0.124 < 0.05, which lead to accept the null hypothesis and therefore the variable follows the normal distribution.

Table 9: Examination of the normal distribution of the remainder of the regression of current expenditures

	Shapiro-Wilk			Kolmogorov-Smirnova		
	Sig.	Df	Statistic	Sig.	Df	Statistic
Standard residues	.238	22	.944	.124	22	.165
a. Lilliefors Significance Correction						

- **Autocorrelation:**

The independence of the residuals is checked by examining the Durban Watson parameter as shown in table 10. By reference to the value of the Durban Watson test parameter, the value is 0.903, which means that there is a lack of independence in the residuals, which may be due to the use of one independent variable in the model for a matter that may affect the deviation. The values of the forecast coefficients from their real values. It is good to rely on the statistical significance of the relationship, taking into account the existence of non-independence of residues when generalizing the results.

Table. 10; Summary of the linear regression model for current expenditures

Model Summary					
Model	Durbin-Watson	Std. Error of the Estimate	Adjusted R Square	R Square	R
2	.901	377.742	.886	.892	.944
a. Public debt Predictors: (Constant),					
b. Dependent Variable: current expenditures					

Tables 10 shows the model can predict a good portion of the dependent variable, as the three correlation coefficients have reached the values of the simple correlation coefficient (R = 0.944), the determination coefficient (R² = 0.892) and the corrected determination coefficient (R² * = 0.886), which means that the public debt was able to explain 88.6% of the changes in current expenditures, and the rest was attributable to other factors.

The impact of public debt on development expenditures:

The correlation test was relied upon to examine the existence of a linear relationship between the two variables. Table 11 shows the existence of a strong linear relationship with a positive trend between public debt and current expenditures, as the correlation coefficient reached +0.944, which means that current expenditures increase with the increase in public debt in a clear linear fashion.

Table 11: Examining the linear correlation between public debt and current expenditures

	Public debt	Development expenses	
Public debt	Pearson Correlation	.944**	1
	Sig. (2-tailed)	.000	
	N	23	23
current expenditures	Pearson Correlation	1	.944**
	Sig. (2-tailed)		.000
	N	23	23
**. Correlation is significant at the 0.01 level (2-tailed).			

As for the simple linear regression analysis of variance test table 11. It shows a value of (P-Value = .00) which is less than 0.05, which confirms that the model in general is able to predict the value of the dependent variable (current expenditures) with a high explanatory strength at the level of confidence. = 95%.

Table 12 shows the values of the regression coefficients for the estimates and tests of the statistical significance of these coefficients. It can be concluded that there is a statistically significant relationship at a statistical significance level of 0.05 between current expenditures and public debt.

Therefore, the model is current expenditures = 132,895 +1,356 (public debt)

Table 12; regression coefficients for estimates of current expenditures

Model	Coefficients ^a			T	Sig.
	Standardized Coefficients	Unstandardized Coefficients			
	Beta	Std. Error	B		
2					
(Constant)		183.163	132.895	.726	.476
Public debt	.944	.103	1.356	13.14	.000

111

Modal three "There is no significant statistical effect of public debt on government expenditures in Palestine in the period between 1997-2019"

- The normal distribution of the standard residuals of a simple linear regression model (The impact of public debt on government spending):

To ensure that the remainder of the regression model follows the curve of the normal distribution, the remainder of the regression model was preserved, and then a Kolmogorov Smirnov test was performed. Table 13 identifies the value (P value) of the test is equal to $0.2 < 0.05$, which leads to accept the null hypothesis and therefore the variable follows the normal distribution.

Table 13; Examination of the normal distribution of the remainder of the regression of government expenditures

	Shapiro-Wilk			Kolmogorov-Smirnova		
	Sig.	Df	Statistic	Sig.	Df	Statistic
Standard residues	.074	23	.922	.200*	23	.118 ^a
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

- **Autocorrelation:**

The independence of the residuals is checked by examining the Durban Watson parameter in the table 14, by referring to the value of the Durban Watson test parameter. The value is 1.115, which means that there is a lack of independence in the residuals and this may be due to the use of one independent variable in the model. Therefore, statistical significance can be relied on. Relation to the fact that there is a lack of independence of residues when generalizing the results.

Table 14: Summary of the linear regression model for government expenditures

Model Summary					
Model	Durbin-Watson	Std. Error of the Estimate	Adjusted R Square	R	R Square
3	1.115	347.326	.875	.881	.938 ^a

	a. Public debt Predictors: (Constant),
	b. Dependent Variable: government expenditures

Tables 14, the model can predict a good portion of the dependent variable, as the three correlation coefficients have reached the values of the simple correlation coefficient ($R = 0.938$), the determination coefficient ($R^2 = 0.881$) and the corrected determination coefficient ($R^2_{adj} = 0.875$), which means that the public debt was able to explain 87.5% of the changes in government expenditures, and the rest was attributable to other factors.

The impact of public debt on government expenditures:

The correlation test was relied on to examine the existence of a linear relationship between the two variables. Table 15 shows the existence of a strong linear relationship with a positive trend between public debt and government expenditures, as the correlation coefficient reached +0.938.

Table 15: examining the linear correlation between public debt and government expenditures

	Public debt	Government expenditures	
Public debt	Pearson Correlation	.938**	1
	Sig. (2-tailed)	.000	
	N	23	23
government expenditures	Pearson Correlation	1	.938**
	Sig. (2-tailed)		.000
	N	23	23
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 15 shows a value of (P-Value = .00) which is less than 0.05, which confirms that the model in general is able to predict the value of the dependent variable (government expenditures) with a high explanatory strength at the level of confidence. = 95%.

Table 16 shows the values of the regression coefficients for the estimates and tests of the statistical significance of these coefficients. It concludes that there is a statistically significant relationship at a statistical significance level of 0.05 between government expenditures and public debt. Therefore, the model is government expenditures = 738.039 +1.180 (Public Debt).

Table 16; regression coefficients for estimates of government expenditures

Model	Coefficients ^a			T	Sig.
	Standardized Coefficients	Unstandardized Coefficients			
	Beta	Std. Error	B		
3					
(Constant)		168.414	738.039	4.382	.000
government expenditures	.938	.095	1.180	12.443	.000

Concluding and recommendation

In theory, to conclude this, the Palestinian public budget suffers from weakness due to the increase in public expenditure and public debt in addition to the continuous exacerbation of the financial crisis due to the Israeli occupation and its control over the Palestinian natural and economic resources. The problem of the public debt of the Palestinian Authority lies in the ability to serve the burdens of this debt in any direction and how to employ it, which leads to an increase in public expenditures and in conjunction with the decrease in public revenues, the budget deficit increases, forcing the government to resort to borrowing again.

In practice, it be noticed that there is a positive impact of public debt on both current and government expenditures in the period between 1997-2019. This confirms that the largest proportion of public debt is spent on non-productive consumer aspects without direct concern for the elements of real economic production. In addition to existence of a negative impact of the public debt on development expenditures, which are usually supported by foreign aid and grants.

As stated earlier, this study greatly recommends that the Palestinian Authority should rationalize public and private consumption spending. This can be executed by encouraging citizens to invest and making them aware of the benefits of directing savings towards investment, financing projects. According to Palestinian priorities and economic feasibility at the national level and within the main directions of the Palestinian Development Plan while increasing the share of development expenditures. In the Palestinian budget for the sake of advancing the Palestinian economy and stimulating investment to avoid unemployment, in a way that violates the balance between Expenditure and public debt.

Lastly, future research can look at public debt service and its classifications (internal and external debt) and link them to the public budget surplus or deficit. The future study can also look at ways to rationalize public spending and increase domestic revenues and the effects of this on the components of the public budget.

References

- Abbas, Ali, (2013). International Business Administration, Public Entrance, 3rd Edition, Dar Al Masirah for Publishing, Distribution and Printing, Amman, Jordan.
- Abu Al-Qumsan, Abdullah Hussein, (2015). Economic Factors Affecting the Financial Deficit in the General Budget of the Palestinian Authority (1995-2013), Unpublished Master Thesis, Islamic University, Gaza, Palestine. https://iugspace.iugaza.edu.ps/bitstream/handle/20.500.12358/16926/file_1.pdf?sequence=1&isAllowed=y
- Abu Mdallala, Samira, and Al-Ijla, Mazen (2013). The Evolution of Public Debt in the Palestinian Territories (2000-2011), Journal of the Islamic University for Economic and Administrative Studies, Gaza, Palestine, 21 (1), 263-292.
- Abu Sharar, Ali Abd Al-Fattah, (2010). International Economics, Theories and Policies, second Edition, Dar Al-Masirah for Publishing, Distribution and Printing, Amman, Jordan.
- Alawneh, Ateyeh, (2017). The Impact of Public Expenditure and Public Debt on Taxes: A Case Study of Jordan, Accounting and Finance Research, 6(3), 10-23. <https://doi.org/10.5430/afr.v6n3p10>
- Al-Hazaimeh, Najah Hikmat (2015). Public debt in Jordan: the extent of its sustainability and analysis of macroeconomic variables, an unpublished master's thesis, University of Jordan, Jordan.
- Al-Khasawneh, Muhammad (2014). Public Finance: Theory and Practice, Dar Al-Manhal Publishing, Amman, Jordan.
- Al-Mishaal, Youssef Hamed (2018.) The Concept of Public Debt, Watan Newspaper, available: <https://alwatannews.net/article/802713/Opinion>
- Al-Razek, Omar Abd, (2002). The Structure of the Palestinian General Budget. The Palestinian Economic Policy Research Institute (MAS), Ramallah, Palestine.
- Al-Shammari, Mayih Kadhim, Haider (2016). Analysis of the impact of public debt on some economic variables in the State of Egypt: A study of the period from (2001-2011), Al-Ghary Journal of Administrative and Economic Sciences, 35 (12), 1-17. <https://www.iasj.net/iasj/download/5181a6432b69bfe0>
- Al-Wahidi, Sarin Jamil Hassan, (2017). Government spending and its impact on the Palestinian economy: a standard study, unpublished master's thesis, Al-Azhar University, Gaza, Palestine.
- Asfour, Muhammad Shaker, (2008) The Origins of the General Budget, Dar Al-Masirah for Publishing, Distribution and Printing, Amman, Jordan.
- Asise Halima, and Jaafari, Fawzia, (2018) The Problem of External Debt in the Arab Countries, the Case of Algeria (2000-2016), Unpublished Master Thesis, Ahmed Deraya Adrar University, Algeria.
- Costandi, S., Hamdan, A., Alareeni, B., & Hassan, A. (2019). Educational governance and challenges to universities in the Arabian Gulf region. Educational Philosophy and Theory, 51(1), 70-86. <https://doi.org/10.1080/00131857.2018.1434621>
- Coalition for Integrity and Accountability - AMAN, (2019). the Reality of Public Debt and Private Sector Arrears in Palestine, Ramallah, Palestine. https://www.aman-palestine.org/cached_uploads/download/migratedfiles/itemfiles/4194cc2f055de6b7ce859145349f2f65.pdf
- Khudair, Khudair Hussain, (2002). First Edition, External Debt Crisis in Arab and African Countries, Emirates Center for Studies and Research, Abu Dhabi, UAE.
- Le Van, C., Nguyen-Van, P., Barbier-Gauchard, A., & Le, D. A. (2019). Government expenditure, external and domestic public debt, and economic growth. Journal of Public Economic Theory, 21(1), 116-134. <https://doi.org/10.1111/jpet.12324>

- Mehra, R., & Mehta, S.R. (2018). Analysing Public Debt Asymmetries: Effect of Taxation and Government Spending on Public Debt in India between 2002-2013, *IOSR Journal of Humanities and Social Science*, 23(4), 102-130. <https://www.semanticscholar.org/paper/Analysing-Public-Debt-Asymmetries-%3A-Effect-of-and-Mehra-Mehta/b2ed1a77a3871b31ffcaf721c18220517507bff3>
- Mudalala, Samar, and Al-Khudari, Iman, (2016). Palestinian Public Revenues and Public Expenditures: Problems and Solutions, Field Study, *Journal of Economic and Financial Research, Palestine*, 2 (3), 219-235 <https://www.asjp.cerist.dz/en/article/4731>
- Obaid, Azizah Muhammad Abdullah (2015). The Impact of Public Debt on Governmental Expenditure: An Applied Study on the Public Debt of the Palestinian Authority for the Period 1997-2013, Unpublished Master Thesis, Islamic University, Gaza, Palestine. https://iugspace.iugaza.edu.ps/bitstream/handle/20.500.12358/17043/file_1.pdf?sequence=1&isAllowed=y
- Palestinian Central Bureau of Statistics, 2019.
- Palestinian Monetary Authority, 2019.
- Picarelli, Mattiam Vanlaer, Willem Marufueff, Wim, (2019). Does Public Debt Produce a Crowding Out Effect for Public Investment in the EU? , *European Stability Mechanism, Working Paper Series*, 1(36), 1-43. <https://doi.org/10.2139/ssrn.3376471>
- Shabbir, sadia,. Yasin,. M,. Hafiz, (2015). Implications of Public External Debt for Social Spending: A Case Study of Selected Asian Developing Countries, *The Lahore Journal of Economics*, 20(1), 71–103. <https://doi.org/10.35536/lje.2015.v20.i1.a3>
- Tahmeh, Yahya, Ayed Hussein, (2018). The Role of the General Budget of the Palestinian Authority as a Tool for Planning and Control in Rationalizing Financial Decisions, Unpublished Master Thesis, Hebron University, Hebron, Palestine.