"The role of public debt as a moderator in the relationship between revenues and capital expenditures of the Jordanian government"

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THE ROLE OF PUBLIC DEBT AS A MODERATOR IN THE RELATIONSHIP BETWEEN REVENUES AND CAPITAL EXPENDITURES OF THE JORDANIAN GOVERNMENT

Abstract

This study aims to investigate the relationship between government revenue and capital expenditures in Jordan from 2003 to 2022, with public debt as the moderating variable. Utilizing data from the Jordanian Ministry of Finance's final accounts and the Central Bank of Jordan's reports, the study employed regression analysis techniques in the statistical software E-Views to test the study's hypotheses. The findings reveal a positive relationship between revenue and capital expenditures, indicating the significance of revenue in determining the level of capital expenditures. Additionally, a positive relationship is observed between public debt and the magnitude of capital expenditures, suggesting that a portion of capital expenditures is covered by government revenues while the remaining portion is financed by public debt. Upon introducing the moderating variable (public debt) into the analysis, the impact of public debt on the relationship between revenue and capital expenditures becomes evident, indicating that public debt strengthens the relationship between revenue and capital expenditures. In light of the study's findings, the government should focus on enhancing and increasing revenue and financing sources while rationalizing expenditures. Moreover, it should strive to improve its services and infrastructure to attract more investments and reduce public debt.

Keywords	revenues, capital expenditures, public debt, government, Jordan, E-Views
JEL Classification	M2, M41, M48, G38

INTRODUCTION

Governmental revenues and capital expenditures are key factors in financial policy analysis, especially in developing economies facing economic challenges and financial resource scarcity. Capital expenditure financing relies on government revenues, and therefore, increasing government revenues can lead to higher government capital expenditures, which play a pivotal role in shaping the economic trajectory.

It is worth noting that government revenues are influenced by several factors, including economic growth, tax rates, government spending, foreign trade, and inflation (Lhutfi et al., 2020). Government capital expenditures are also affected by various factors, including the economy, government policies, foreign investment, government projects, and economic development (Al Hayek, 2018a). Additionally, investing in government capital expenditures can lead to increased government revenues in the long run (Lastri et al., 2022). Therefore, one of the pri-

mary goals of government financial management is to achieve a balance between government revenues and capital expenditures (Abdulrasheed, 2017).

In the Jordanian context, the problem lies in the exacerbation of public debt, which can have negative repercussions on capital expenditures that affect development and citizen services. This issue is considered one of the most pressing challenges likely to expand over time, given the economic conditions witnessed by the Jordanian economy, where the public debt ratio increased from 7,206.8 million Jordanian dinars in 2003 to 38,490.2 million Jordanian dinars by 2022 (Central Bank of Jordan, n.d.). In this context, understanding the relationship between government revenues and expenditures and the impact of public debt on this relationship is of importance for government accounting, bridging the gap in the literature on this topic and a matter of significance in guiding and implementing fiscal policies.

1. LITERATURE REVIEW AND HYPOTHESES

Numerous studies have been conducted within the local Jordanian context on several study variables (public debt, revenues, and expenditures). These studies collectively suggest the impact of public debt on economic growth in Jordan, prompting the state to emphasize reliance on domestic over external debt (Abdelhadi, 2013; Al-Fawwaz, 2016; Al-Refai, 2015; Alshyab, 2016; Mousa & Shawawreh, 2017; Fseifes & Warrad, 2020; Alzoubi et al., 2020). Current expenditures, capital expenditures, taxes, and foreign grants affect public debt in Jordan (Qwader & Aloshaibat, 2020). Additionally, government capital expenditures play a role in Jordan's economic growth (Al-Sharif & Bino, 2019). Furthermore, there exists a relationship between the size of actual revenues and expenditures and the result of the final account (deficit) of the Jordanian state (Al Hayek, 2018a).

Several studies conducted in environments outside of Jordan have shown a positive relationship, in most cases, between government revenues and expenditures (Abdulrasheed, 2017; Raza et al., 2019; Lastri et al., 2022; Saputri & Zulfikar, 2023). Other studies have also evidenced a relationship between public debt and government expenditures (Odo et al., 2016; Uguru, 2016; Mothibi & Mncayi, 2019).

Revenues are the funds that the state obtains from various sources to spend on the various needs of the state (Bukhari et al., 2022), and earning revenues is critical. At the same time, directing revenues to make the right impact on the economy by achieving the desired macroeconomic goals and objectives is crucial (Onifade et al., 2020). Sources of government revenue vary from one country to another. Among the main sources that contribute to financing government spending at the global level are natural resources, taxes, including direct and indirect taxes, and government fees, such as fees for government services, registration, and licensing. They also include entrance fees to public facilities, such as public parks and museums (Yasin, 2020), donations, and grants from individuals, companies, and international institutions (Al Hayek, 2018a), in addition to government debt issued through bonds and other securities.

Therefore, governments usually rely on a combination of these sources to finance government spending and meet the general needs of citizens (Al-Fawwaz, 2016). Revenues in the Jordanian budget are divided into two parts: the first section relates to internal local sources such as taxes and fees, and the other section relates to external revenues: loans, grants, and aid.

As for capital expenditures, they are the financial allocations of the general budget that are spent on the various sectors of the state according to the needs of these sectors (Bukhari et al., 2022). Government spending represents capital expenditures undertaken by the government for a group of purposes, such as financing public facilities for education, health, transportation, and infrastructure (Ananda & Hariani, 2022), and other government expenditures (current), such as the salaries of government employees and the costs of health, education, defense, and security (Hasanuddin et al., 2021). Government spending is usually financed by collecting taxes and fees and borrowing by issuing government bonds and loans from interna-

tional financial institutions (Odo et al., 2016). In addition, a large portion of foreign loans and aid is sometimes allocated to infrastructure projects by the loan requirements of donor organizations and countries (Al-Refai, 2015). Many factors may contribute to an increase in public expenditures in many countries. Increasing sources of government revenues are considered one of the main factors that can contribute to an increase in public expenditures (Onifade et al., 2020).

The problem of public debt is considered one of the most serious problems facing countries. The majority of public debt results from seeking to borrow from local or external sources to cover the deficit in the general budget (Barsoum & Maryam, 2022). Public debt refers to the state's borrowing to finance its work due to insufficient resources to cover its expenses (Al-Fawwaz, 2016). The level of government debt is calculated by dividing the total debt by the country's gross domestic product (Qwader & Aloshaibat, 2020), and the level of government debt indicates the ability to repay debts (Matthew & Mordecai, 2016). When the level of government debt is very high, it can affect the state's public finances and make it difficult for the government to provide basic services to citizens. There are several ways to control the level of government debt, including increasing revenues from taxes and reducing government expenditures (Qwader & Aloshaibat, 2020). Governments can also implement policies that encourage investment that can lead to increased government revenues (Sánchez-Juárez & García-Almada, 2016), and governments must take precautionary measures to manage government debt effectively (Ajayi & Edewusi, 2020), as they must develop long-term plans to reduce debt and manage it well.

Providing transparency regarding government debt by presenting information correctly to citizens and stakeholders will enhance confidence in the government (Ncanywa et al., 2018). There are also many methods and tools available to manage government debt and rely on available resources instead of relying on external debt (Yasin, 2020). In general, governments must strive to manage government debt effectively and cautiously and make wise decisions to maintain stability and provide basic services to citizens (Jabber Morsi Muhammad, 2020). Debts are classified into two

parts: external debt, which is contracted outside the country, and local debt, which is described as debt resulting from internal borrowing in its various forms (Ajayi & Edewusi, 2020).

Jordan, like other developing countries, suffers from several economic problems. The deficit in the balance of payments was a major problem that led it to rely more on loans to finance this deficit in the balance of payments. This resulted in a chronic and continuous deficit in the trade balance and increased dependence on external sources of funding such as aid, grants, and loans (Al-Refai, 2015).

This study aims to analyze the relationship between the Jordanian government's revenues and capital expenditures and the moderating role of public debt in this relationship. It is intriguing to uncover the significance of revenues in determining the value of capital expenditures, the size of public debt used to finance capital expenditures, and the impact of the moderating variable (public debt) on this relationship.

Based on the literature review (Uguru, 2016; Odo et al., 2016; Abdulrasheed, 2017; Raza et al., 2019; Mothibi & Mncayi, 2019; Lastri, 2022; Saputri & Zulfikar, 2023), this study proposes the following hypotheses:

H1:   There is a statistically significant relationship between revenues and capital expenditures.

H2:   There is a statistically significant relationship between public debt and capital expenditures.

H3:   Public debt as a moderator affects the relationship between revenues and capital expenditures.

2. METHOD

This study used descriptive and analytical approaches. The study variables were described through previous studies and then measured and analyzed statistically to demonstrate the role of public debt in the relationship between revenues and capital expenditures of the Jordanian government. To achieve the objectives of the study and to test the validity of its hypotheses, the research

variables were classified and identified, where the independent variable was total revenues, the dependent variable was capital expenditures, and the modified variable was public debt.

The study aggregates and utilizes secondary data for annual time series covering the period from 2003 to 2022. This actual annual data related to the study variables were obtained from the annual financial reports published by the Central Bank of Jordan and from the Jordanian Ministry of Finance's final accounts, as these relevant data are available to all users. (Central Bank of Jordan, n.d; Jordanian Ministry of Finance, n.d).

This study employed a multi-pronged statistical approach utilizing E-views and SPSS software. To assess the relationships between the independent and dependent variables, a multiple correlation test was conducted. The paper also utilized the autocorrelation test to identify and address any potential issues with autocorrelation within the error terms of the model. Furthermore, Pearson correlation analysis was employed to explore the strength and direction of the relationships between the study variables. Additionally, descriptive statistics were calculated, including means and standard deviations, to provide a comprehensive picture of the data's characteristics. Finally, these various statistical methods, including multiple and simple linear regressions, were leveraged to test the research hypotheses formulated for this study.

3. RESULTS

The practical study consists of three main axes. The first axis is to verify the validity of the data for statistical analysis through the normal distribution of the data using the multicollinearity test, the autocorrelation test, and the heteroskedastic-ity test. The second axis is to apply descriptive analysis, such as the mean, standard deviation, and maximum and minimum values, to describe the study variables in a way that reflects the reality of the data. The third and final axis is to test the hypotheses.

3.1. Data validity tests for statistical analysis

Before starting the data analysis and hypothesis testing, it is necessary to first identify the characteristics of the data to verify its suitability for hypothesis testing.

Table 1 shows that the probability of the Jarque-Bera test for all model variables is greater than 5%, indicating that the data are close to a normal distribution. The normal distribution test was conducted to ensure that the data followed a normal distribution in order to select the appropriate statistical method for hypothesis testing. Most parametric tests require that the data follow a normal distribution. To achieve this, the Jarque-Bera test was utilized, with the decision rule being to accept the hypothesis if the probability of the Jarque-Bera test is greater than 5% (Gujarati, 2013). This test was applied given the study's use of time series data, which inherently requires stability. This work employed the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests to verify this assumption. Notably, the results demonstrate that both the ADF and PP tests are statistically significant at the 5% level. This robust finding confirms the stability of the time series data spanning the period 2003–2022 (Al Hayek, 2018b).

As for testing the linear interrelation between variables, collinearity diagnostics were utilized by calculating the tolerance and variance inflation factor (VIF) for each variable. Gujarati (2013)

Table 1. Data validity tests

Variables	Normal Distribution		Time Series		Multicollinearity	
	Jarque-Bera Test		Stationarity		Collinearity Statistics	
	Prob.	–	ADF	PP	Tolerance	VIF
revenues	0.502	127.0	−3.406	−9.211	0.224	982.3
Public debt	0.432	107.0	−3.116	−9.652	0.325	402.2
Capital Expenditure	0.293	114.0	−4.22	−11.901	–	–
Autocorrelation Test	Durbin Watson Test			1.587		
Heteroskedasticity Test	White Test (Sig.)			0.036		

indicates that obtaining a VIF value higher than 5 indicates multicollinearity issues for the respective independent variable. Table 1 shows that the VIF values for the variables fall between 1 and 5. Additionally, the tolerance test values exceed 0.05.

Thus, the model does not suffer from multicollinearity issues, indicating its strength in interpreting and determining the effect on the dependent variable. Regarding verifying autocorrelation issues, which weakens the model's predictive ability, the Durbin-Watson (DW) test was employed. The values for this test range between 4 and 0. A result close to 0 indicates a strong positive correlation for consecutive residues, while a result close to 4 indicates a strong negative correlation.

The optimal result for this test ranges between 1.5-2.5 and indicates that there is no autocorrelation between adjacent values of the variables (Montgomery et al., 2001, p. 216). Table 1 notes that the D-W value is 1.587, which is an optimal result. This indicates that the study model is free of the problem of autocorrelation. Finally, with regard to the stability of the variance of random errors, the heteroskedasticity test is considered one of the important assumptions of linear regression. In the event that the variance of random errors is not constant, some statistical methods are used to overcome this problem, such as the White test, which tests, detects, and treats nonstationary at the same time. The results in Table 1 show that the probability of the White statistic is equal to 0.036, which is less than 5%, which means that the model of stability of the random error variance.

3.2. Descriptive analysis

Figure 1 demonstrates a continuous increase in the growth rates of public debt volume throughout the study period, alongside fluctuations in the growth rates of revenues and capital expenditures.

For a more detailed examination of the study variables during the study period (2003–2022), the data underwent descriptive statistical analysis methods including mean, maximum, minimum, std. dev., skewness, and kurtosis. The results indicated that the skewness coefficients for the study variables fall within the acceptable range for skewness coefficients, where the values were confined between ±1, ranging from −0.172 for revenues to 0.406 for public debt (Table 2).

The arithmetic means of the total revenues amounted to 5685.33 million, with a standard deviation of 1,969.81, indicating variability in the value of revenues during the study years, ranging from a minimum value of 2,319.3 million to a maximum value of 8,897 million. Regarding public debt, it was observed that the average size of public debt increased, with an average of 19,239.74 million and a standard deviation of 10,386.62. The increase in standard deviation indicates variability in the size of public debt between study years due to the increasing growth of public debt, as the state requires large amounts for expenditures, whether current or capital expenditures, unable to be covered by revenues. Additionally, the arithmetic mean of total capital expenditures was relatively low compared to the revenues, indicating a
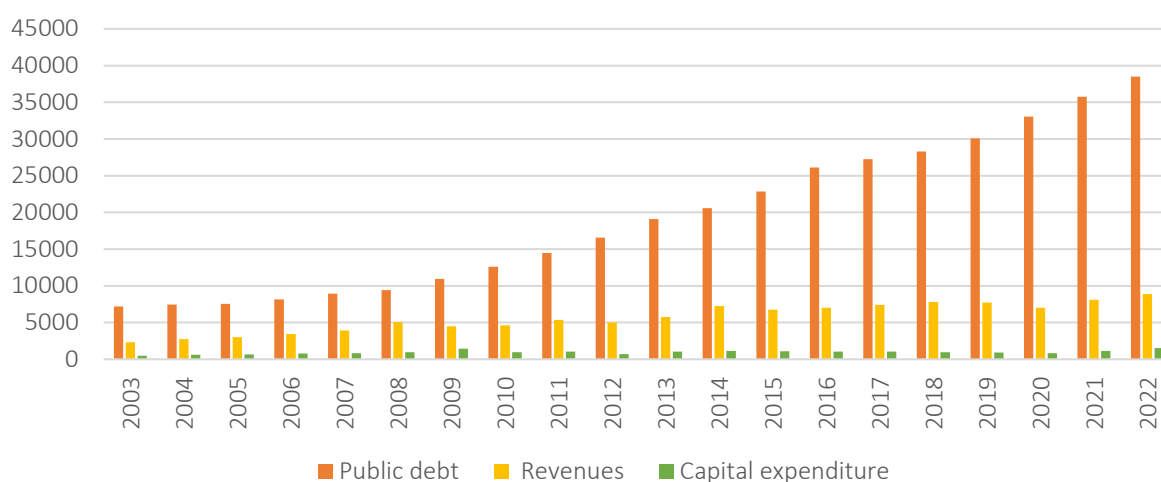
Figure 1. The evolution of variables' values during the period (2003–2022)

Table 2. Descriptive statistics

Variable	Mean	Maximum	Minimum	Std. deviation	Skewness	Kurtosis
revenues	5685.33	8897	2319.3	1969.81	−0.172	−1.176
Public debt	19239.7	38490.2	7206.8	10386.6	0.406	−1.196
Capital Expenditure	956.985	1512.3	467	257.224	0.291	0.471

decrease in capital expenditure in the Jordanian state. The average capital expenditure amounted to 956.985 million, with a standard deviation of 257.224, demonstrating variability in the size of capital expenditures during the study period due to fluctuations in annual revenues.

3.3. Hypotheses testing

After verifying the suitability of the data for statistical analysis and conducting an initial description of the study sample, the final stage of data analysis is hypotheses testing. The study model represents the relationship between the independent variable (revenues) and the dependent variable (capital expenditures), in addition to the moderator variable (public debt). It should be noted that the study data comprise cross-sectional data, indicating that observations are taken at a single point in time. However, the study data also encompass time series data, covering the period from 2003 to 2022.

To test the first hypothesis, a simple linear regression analysis was conducted, and the results of the hypotheses testing are presented in Table 3.

Table 3 shows that the regression model is highly significant, with an F-value of 13.264, indicating statistical significance at the $\alpha \leq 0.05$ level. This demonstrates the significance and explanatory power of the model statistically. The correlation coefficient value was 0.651, indicating a strong positive relationship and highlighting the importance of revenues in influencing capital expenditures. A 1% increase in revenues leads to approximately a 65% increase in capital expenditure. This suggests that increased revenue leads to expansion in capital expenditure, thereby contributing to the improvement of services provided. This aligns with accounting theory, which posits a positive relationship between revenues and expenditures. This is further supported by the T-Statistic value (3.642), which is statistically significant at a 95% confidence level, with a probability of less than 5%

Table 3. Simple regression for the effect of revenues on capital expenditure

Independent variable	Coefficient	Std. error	T-Statistic	Prob.
(Constant)	473.42	140.144	3.378	0.003
revenues	0.651	0.023	3.642	0.002
R	0.651			
R-squared	0.424			
Adjusted R Square	0.392			
F-statistic	13.264			
Prob. (F-statistic)	0.002			

Note: Dependent variable: Capital Expenditure.

Table 4. Simple regression for the effect of actual revenues on capital expenditure

Independent Variable	Coefficient	Std. Error	T-Statistic	Prob.
(Constant)	711.306	108.733	6.542	0
public debt	0.516	0.005	2.553	0.02
R	0.516			
R-squared	0.266			
Adjusted R Square	0.225			
F-statistic	6.519			
Prob (F-statistic)	0.02			

Note: Dependent variable: Capital Expenditure.

(0.002). As for the ability of revenues to explain variance in the dependent variable, the Adjusted *R*-Square coefficient indicates that approximately 39.2% of the variance in the dependent variable can be explained by the independent variable. This means that nearly 39% of the changes in capital expenditures are attributable to changes in revenues, indicating a statistically significant relationship between revenues and capital expenditures.

A simple linear regression analysis was conducted to test the second hypothesis, and the results of the hypothesis test are presented in Table 4.

Table 4 indicates that the regression model is highly significant, with an *F*-value of 6.519, indicating statistical significance at the α ≤ 0.05 level. This demonstrates the significance and explanatory power of the model statistically. The correlation coefficient value was 0.516, indicating a positive relationship and highlighting the importance of public debt in influencing capital expenditures. A 1% increase in public debt leads to approximately a 51% increase in capital expenditure. This suggests that increased public debt opens up avenues for expansion in capital expenditures to improve the services provided. This aligns with accounting theory, which posits a relationship between debt and expenditures. This is further supported by the *T*-Statistic value (2.553), which is statistically significant at a 95% confidence level, with a probability of less than

5% (0.020). As for the ability of public debt to explain variance in the dependent variable, the Adjusted *R*-Square coefficient indicates that approximately 22.5% of the variance in the dependent variable can be explained by the independent variable. This means that nearly 23% of the changes in capital expenditures are attributable to changes in public debt, indicating a statistically significant effect of public debt on the capital expenditures.

To test the third hypothesis, simple regression analysis was used to determine the role of public debt in this relationship.

Table 5 shows a statistically significant effect of public debt on the relationship between revenues and capital expenditures at a significance level of 0.05 ≥ α. The correlation coefficient between revenues and capital expenditures increased from 65.1% to 71.6%, with an increase of 6.5% upon introducing the variable (public debt) into the regression model. This indicates that public debt has altered the relationship between revenues and capital expenditures. Additionally, the value of the coefficient of determination (*R*-square) increased from 42.4% to 51.2%, with a change rate (*R2* Change) of 8.8%. This also indicates that public debt contributed to improving this relationship, as the degree of explanation of the changes in capital expenditures increased by 8.8%, raising the overall explanatory power to 51.2%.

Table 5. Impact of public debt on the relationship between the volume of revenues and capital expenditures.

Independent Variable	Coefficient	T-Statistic	Prob.
(Constant)	473.42	3.378	0.003
revenues	0.651	3.642	0.002
R	0.651		
R2	0.424		
Statistic (F)	13.264		
Prob.	0.002		
(Constant)	274.034	1.567	1.567
revenues	1.492	2.93	39.2
Public debt	−0.364	−3.801	−3.801
R	0.716		
R2	0.512		
R Square Change	0.088		
Statistic (F)	8.924		
Change (F)	3.064		
Prob.	0.002		

Note: Predictors: (Constant), revenues. Predictors: (Constant) revenues, Public debt. Dependent Variable: Capital Expenditure.

Regarding the ability of public debt to represent revenues in influencing capital expenditures, the results indicate that public debt partially represents revenues. The statistical significance of the impact of revenues changed after introducing the moderator variable. Its effect increased from 65.1% in the first model to 1.492 in the second model. This underscores the importance of considering the level of public debt as it plays a moderating role in influencing the relationship between revenues and capital expenditures.

Furthermore, the change in the value of *F* Change was statistically significant at a significant level of $0.05 \geq \alpha$, reaching 3.064. This confirms the statistical significance of the regressions for both models at a 5% level, indicating a statistically significant effect of public debt on the relationship between revenues and capital expenditures.

4. DISCUSSION

This study addressed the moderating role of public debt in the relationship between revenues and capital expenditures, and the results supported the assumed relationship. The analysis showed a relationship between revenues and expenditures, with a high total correlation coefficient between them reaching 0.651. Approximately 39.2% of the variance in capital expenditures was explained by variance in total revenues, highlighting the importance of total revenues in determining the value of capital expenditures. These results are consistent with Abdulrasheed (2017), Raza et al. (2019), Lastri et al. (2022), and Saputri and Zulfikar (2023).

Furthermore, the study found a positive relationship indicating the importance of public debt in influencing the size of capital expenditures, with a correlation coefficient of 0.516. Approximately 23% of the variance in capital expenditures was explained by variance in public debt. These findings are consistent with Uguru (2016), Odo et al. (2016), and Mothibi and Mncayi (2019).

When introducing the moderator variable (public debt) into the analysis, an effect of public debt on the relationship between revenues and capital expenditures was observed. The correlation coefficient between revenues and capital expenditures increased to 71.6%, with an increase of 6.5%, indicating that public debt modified the relationship between revenues and capital expenditures. The results also showed that public debt partially represents actual revenues in influencing capital expenditures, indicating that a portion of capital expenditures is covered by general state revenues while the remaining portion is covered by public debt. This conclusion is what distinguishes this study from previous studies, it highlights the importance of studying the moderating role of public debt on the relationship between revenues and capital expenditures of the Jordanian government, previous studies only addressed the relationship between revenues and capital expenditures (Abdulrasheed, 2017; Raza et al., 2019; Lastri, 2022; Saputri & Zulfikar, 2023) and between public debt and capital expenditures (Uguru, 2016; Odo et al., 2016; Mothibi & Mncayi, 2019). In addition, the moderating role of public debt in the relationship between revenues and capital expenditures has not been addressed.

CONCLUSION

This study investigated the relationship between revenues and capital expenditures of the Jordanian government and the impact of public debt on this relationship. The data were retrieved from the annual reports of the Jordanian Ministry of Finance's final accounts and the relevant reports of the Central Bank of Jordan, using annual time series data covering the period 2003–2022. The results showed the direct and indirect relationships, the degree of influence, and the relevant trends of the impact of public debt in the relationship between the independent and dependent variables, as the variable of public debt influenced the relationship between the size of revenues and capital expenditures.

The theoretical contribution of this study lies in highlighting the importance of taking public debt into account when studying the relationship between revenues and capital expenditures. The results indicate that public debt is one of the crucial variables that affect the study variables.

The practical contribution of this study is insights for governments, policymakers, and stakeholders regarding the importance of public debt in the relationship between revenues and expenditures. The results can be used to develop strategies and policies that enhance the financial sustainability of the government in Jordan. For example, the government can benefit from its accumulated experience and expertise to increase revenues and rationalize expenditures to reduce public debt. Governments should seek to improve their services and infrastructure to attract more investment, which could lead to increased revenues and reduced public debt.

Interestingly, there is a need to conduct more studies related to the impact of public debt on the relationship between other variables in Jordanian government accounting. Future studies should take into account other variables such as governance, leadership, and institutional factors that can affect government financial performance.

AUTHOR CONTRIBUTIONS

Conceptualization: Mohammad Ali Al Hayek.
Data curation: Mohammad Ali Al Hayek.
Formal analysis: Mohammad Ali Al Hayek.
Funding acquisition: Mohammad Ali Al Hayek.
Investigation: Mohammad Ali Al Hayek.
Methodology: Mohammad Ali Al Hayek.
Project administration: Mohammad Ali Al Hayek.
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Software: Mohammad Ali Al Hayek.
Supervision: Mohammad Ali Al Hayek.
Validation: Mohammad Ali Al Hayek.
Visualization: Mohammad Ali Al Hayek.
Writing – original draft: Mohammad Ali Al Hayek.
Writing – review & editing: Mohammad Ali Al Hayek.

REFERENCES

1. Abdelhadi, S. A. (2013). External debt and economic growth: Case of Jordan (1990–2011). *Journal of Economics and Sustainable Development, 4*(18), 26-32. Retrieved from https://iiste.org/Journals/index.php/JEDS/article/view/8834

2. Abdulrasheed, B. (2017). Causality between government expenditure and government revenue in Nigeria. *Asian Journal of Economics and Empirical Research, 4*(2), 91-98. https://doi.org/10.20448/journal.501.2017.42.91.98

3. Ajayi, I., & Edewusi, D. (2020). Effect of public debt on economic growth of Nigeria: An empirical investigation. *International Journal of Business and Management Review, 8*(1), 18-38. https://doi.org/10.37745/ijbmr.vol8.no1p18-38.2020

4. Al Hayek, M. A. (2018a). The relationship between revenues size and actual expenditures through the closing account result of the Jordanian government. *International Journal of Business and Management, 13*(2), 1-40. https://doi.org/10.5539/ijbm.v13n2p40

5. Al Hayek, M. A. (2018b). The relationship between sales revenue and net profit with net cash flows from operating activities in Jordanian industrial joint stock companies. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 8*(3), 149-162. http://dx.doi.org/10.6007/IJARAFMS/v8-i3/4757

6. Al-Fawwaz, T. M. (2016). Determinants of external debt in Jordan: An empirical study (1990–2014).

International Business Research, 9(7), 116-123. https://doi.org/10.5539/ibr.v9n7p116

7. Al-Refai, M. F. (2015). Debt and economic growth in developing countries: Jordan as a case study. *International Journal of Economics and Finance, 7*(3), 134-143. http://dx.doi.org/10.5539/ijef.v7n3p134

8. Al-Sharif, B., & Bino, A. (2019). The role of government capital expenditures in economic growth in Jordan. *International Journal of Business and Economics Research, 8*(2). https://doi.org/10.11648/j.ijber.20190802.15

9. Alshyab, N. (2016). Domestic versus external public debt in Jordan: An empirical investigation. *Jordan Journal of Economic Sciences, 3*(1), 81-98. http://dx.doi.org/10.12816/0029858

10. Alzoubi, W. K., Khasawneh, S. N., & Alzoubi, O. M. (2020). The relationship between public debt and economic growth in Jordan for the period (1990–2018). *Journal of Economics and Sustainable Development, 11*(12), 62-71. https://doi.org/10.7176/JESD/11-12-09

11. Ananda, F., & Hariani, D. (2022). The effect of special allocation funds, profit sharing funds and rest of budget calculations on capital expenditures in district and city governments in West Sumatra Province. *Jurnal Ekonomi Dan Bisnis Dharma Andalas, 24*(1), 110-129. https://doi.org/10.47233/jebd.v24i1.327

12. Barsoum, M. W., & Maryam, W. (2022). Studying some economic variables and their impact on the size of domestic public debt in Egypt during the period from 2006/2007–2017/2018. *Journal of the Faculty of Economics and Political Science, 23*(3), 135-156.

13. Bukhari, A. A., Halawani, A. A., & Bajaber, N. A. (2022). Enhancing domestic revenues to reduce the budget deficit in Saudi Arabia: An empirical study (1992–2020*). Journal of Economic, Administrative and Legal Sciences, 6*(22), 93-113. https://doi.org/10.26389/AJSRP.Y120522

14. Central Bank of Jordan. (n.d.). *Annual Report.* Retrieved from https://www.cbj.gov.jo/EN/List/Annual_Report

15. Fseifes, E. A. K., & Warrad, T. M. (2020). The nonlinear effect of public debt on economic growth in Jordan over the period 1980–2018. *International Journal of Business and Economics Research, 9*(2), 60-67. https://doi.org/10.11648/j.ijber.20200902.11

16. Gujarati, D. N. (2013). *Basic econometrics* (7th ed.). McGraw-Hill.

17. Hasanuddin, R., Elpisah, E., & Muslim, M. (2021). The influence of financial performance dimensions on local government capital expenditure allocation. *ATESTASI: Jurnal Ilmiah Akuntansi, 4*(2), 291-300. Retrieved from https://jurnal.feb-umi.id/index.php/ATESTASI/article/view/545

18. Jabber Morsi Muhammad, M. (2020). The impact of external debt on economic growth in Egypt: A standard study. *Journal of Politics and Economics, 9*(8), 1-40.

19. Jordanian Ministry of Finance. (n.d.). *Official Site.* Retrieved from https://www.mof.gov.jo/Default/En

20. Lastri, S., Marlizar, M., & Maidar, M. (2022). The role of mediation capital expenditures on the relationship between regional original income and regional financial performance growth: Empirical evidence panel data in Aceh. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal), 5*(2). Retrieved from https://www.bircu-journal.com/index.php/birci/article/view/5273

21. Lhutfi, I., Ritchi, H., & Yudianto, I. (2020). Do the growth of original local government revenues and the growth of capital expenditure affect fiscal stress? *Journal of Economics, Business, & Accountancy Ventura, 23*(1), 1-11. http://doi.org/10.14414/jebav.v23i1.1727

22. Matthew, A., & Mordecai, B. D. (2016). The impact of public debt on economic development of Nigeria. *Asian Research Journal of Arts & Social Sciences, 1*(1), 1-16. https://doi.org/10.9734/ARJASS/2016/27263

23. Montgomery, D. C., Peck, E. A., & Vining, G. G. (2001). *Introduction to liner regression analysis* (3rd ed.). New York, N Y: John Wiley & Sons.

24. Mothibi, L., & Mncayi, P. (2019). Investigating the key drivers of government debt in South Africa: A post-apartheid analysis. *International Journal of eBusiness and eGovernment Studies, 11*(1), 16-33. https://doi.org/10.34111/ijebeg.20191112

25. Mousa, T. A., & Shawawreh, A. M. (2017). The impact of public debt on the economic growth of Jordan: An empirical study (2000–2015). *Accounting and Finance Research, 6*(2), 114-114. https://doi.org/10.5430/afr.v6n2p114

26. Ncanywa, T., Masoga, M. M., & Nsiah, Ch. (rev. ed.). (2018). Can public debt stimulate public investment and economic growth in South Africa? *Cogent Economics & Finance, 6*(1), Article 1516483. https://doi.org/10.1080/23322039.2018.1516483

27. Odo, S. I., Igberi, C. O., & Anoke, C. I. (2016). Public debt and public expenditure in Nigeria: A causality analysis. *Research Journal of Finance and Accounting, 7*(10), 27-38.

Retrieved from http://eprints.gouni.edu.ng/id/eprint/1591

28. Onifade, S. T., Çevik, S., Erdoğan, S., Asongu, S., & Bekun, F. V. (2020). An empirical retrospect of the impacts of government expenditures on economic growth: New evidence from the Nigerian economy. *Journal of Economic Structures, 9*(1), Article 6. https://doi.org/10.1186/s40008-020-0186-7

29. Qwader, A. S., & Aloshaibat, S. D. (2020). Components of the public budget and their effects on public debt in Jordan. *International Journal of Economics and Financial Issues, 10*(3), 88-96. https://doi.org/10.32479/ijefi.9717

30. Raza, S. A., Hassan, S. Z., & Sharif, A. (2019). Asymmetric relationship between government revenues and expenditures in a developing economy: Evidence from a non-linear model. *Global Business Review, 20*(5), 1179-1195. https://doi.org/10.1177/0972150919846800

31. Sánchez-Juárez, I., & García-Almada, R. (2016). Public debt, public investment and economic growth in Mexico. *International Journal of Financial Studies, 4*(2), Article 6. https://doi.org/10.3390/ijfs4020006

32. Saputri, L. D., & Zulfikar. (2023). The effect of local government revenue on capital expenditures with economy growth as moderating. *Proceeding of International Conference on Accounting and Finance* (Vol. 1, pp. 84-92). Retrieved from https://journal.uii.ac.id/inCAF/article/view/27426

33. Uguru, L. C. (2016). The link between public debt and government expenditure pattern: The Nigeria experience. *IOSR Journal of business and management, 18*(1), 37-41. Retrieved from https://api.semantic-scholar.org/CorpusID:204858583

34. Yasin, M. (2020). Analysis of regional original revenues and routine expenditures on regional financial performance in East Java regencies and cities: Analysis of regional original revenues and routine expenditures on regional financial performance in East Java regencies and cities. *Jurnal Mantik, 3*(4), 64-69. Retrieved from https://iocscience.org/ejournal/index.php/mantik/article/view/507/312