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Fiscal Policy Interaction with Private Investment: The Case of Jordan

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Abstract
The purpose of this study was to find the impact of fiscal policy on private investment in Jordan. Stepwise regression method was utilized for this purpose. The model expresses private investment (PI) as a function of various levels and components of fiscal policy that include current expenditure (CE), capital expenditure (CI), internal public debt (IPD), external public debt (EPD), and tax revenue (TR). The statistical results indicate that the most effective variable on private investment in Jordan is current expenditure. We found that the coefficient of determination $R^2 = 0.78$ which is reflect the importance of this variable on private investment in Jordan. Recommendations were given based on results.

1.1 Introduction

Jordan is an upper middle-income country with a population of 6.2 million. The country has limited natural resources. Services account for more than 70% of the gross domestic product (GDP) and more than 75% of jobs. As one of the most open economies of the region, Jordan is well integrated with its neighbors through trade, remittances, foreign direct investment (FDI), and tourism, and has special strong links with the Arab Gulf economies. The political upheaval that swept the Arab region has had a significant impact on Jordan in the form of economic shocks as well as inspiring domestic demands for stronger citizen voice, greater accountability and improvements in living conditions. The current account deficit stemmed mostly from a worsening of the trade balance as exports stalled due to the Syrian-crisis related disruption of trade routes, while imports jumped as energy and food imports surged. Inflation accelerated towards the end of 2012 to 7.25%, mostly driven by food prices, rising public sector wages, and the elimination of petroleum product price subsidies. Core inflation, nonetheless, remained stable at 3%. Jordan's external debt reached by 22% of GDP in 2012 and is projected to remain sustainable under the most adverse scenario (IMF SBA review; April 2013). A debt sustainability analysis of Jordan's public debt, however, reveals that under a number of shocks, the country's debt dynamics would not be stabilizing over the medium-term. A robust implementation of the fiscal consolidation plan under the SBA is therefore critical to rebuild buffers. Public sector debt rose sharply in 2012, reaching by 80 percent of GDP at the end of December, up from 70% of GDP at the end of 2011.

Jordan has experienced its own version of the "Arab Spring". Since February 2011, low-scale but persistent demonstrations have challenged the government to initiate political reform and address economic governance. The different Governments since have responded by embarking on a process of gradual reform. The Parliament has approved constitutional changes to strengthen the independence and integrity of Judiciary bodies thereby improving public accountability. The recent January 2013 parliamentary elections may be an opportunity for enhancing political stability and reinvigorating the reforms drive. The government is pursuing reforms in transparency and accountability, public finance management (in particular budget and debt management and public sector spending efficiency) and private sector development. Sustainable progress in the implementation of structural reforms and a supportive regional and external environment are critical for sustaining good economic performance in the period ahead (Al-Rouf, 2003, p.2).

Expenditure policy in Jordan is based on principles of economic freedom that believe in partnership between both public and private sectors and which lead to increase public sector contribution in Jordan economy. Government responsibility is specified by its public sector in providing suitable conditions and infrastructures which help to grow and expand the private sector in all productive sectors. Jordan, as other world countries, follows the economic division which divides public expenditures into two groups; current expenditures and capital expenditures.

1.2 Importance of the study

Fiscal policy has become increasingly valuable and critical to government success, starting from planning and ending with controlling, that include the task of evaluation, which is the main concern of this study. Importance of the study stems from the importance of the fiscal policy in the Jordanian economy, and accordingly it's important to study fiscal policy as it's directly affecting the overall performance of the economy. Importance comes also from the fact that the fiscal policy directly and indirectly affecting the private investment in the economy. In addition, there are very few studies that are concerned with or have considered the affect of fiscal policy on private investment in Jordanian economy.

1.3 Research methodology

This paper uses stepwise regression method to analyze the relationship between fiscal policy and private investment in Jordan. The selection of the variables is primarily guided by the results of the pervious empirical studies and the availability of data. Thus, our model expresses private investment (PI) as a function of various levels and components of fiscal policy that include current expenditure (CE), capital expenditure (CI), internal public debt (IPD), external public debt (EPD), and tax revenue (TR). Thus, the growth model is specified as:

$$PI = \beta_0 + \beta_1 CE + \beta_2 CI + \beta_3 IPD + \beta_4 EPD + \beta_5 TR$$

1.4 Objectives of the study

The main objectives of the study are:

1- To analyze and test the empirical relationship between fiscal policy and private investment in Jordanian economy.
2- To review the performance of the public sector in Jordan.
3- To analyze government revenues and expenditure in the recent years.
4- To suggest recommendations based on results.

1.5 Hypothesis of the study

Based on the theoretical and empirical evidence, we test the following hypotheses:

Ho1: There is a significant effect at significance level less than or equal 5% of current expenditure on private investment in Jordan.

Ho2: There is a significant effect at significance level less than or equal 5% of capital expenditure on private investment in Jordan.

Ho3: There is a significant effect at significance level less than or equal 5% of internal public debt on private investment in Jordan.

Ho4: There is a significant effect at significance level less than or equal 5% of external public debt on private investment in Jordan.

Ho5: There is a significant effect at significance level less than or equal 5% of tax revenues on private investment in Jordan.

2. Literature Review

Many studies about the relationship between the public finance and private investment have been done. These studies have differed in their explanations and conclusions when they evaluated this superiority, and we tried in this study to show the most important studies which dealt with this subject.

Fasano and Wang (2002) investigated this relationship for oil-dependent GCC countries and found evidence of unidirectional causality running from revenue to expenditure in Bahrain, the United Arab Emirates and Oman while they found bidirectional causality for Kuwait, Qatar and Saudi Arabia. They suggest that the GCC countries could enhance the effectiveness of their fiscal policy by making budget expenditure less driven by revenue availability.

Abu-AI-Foul and Baghestani (2004) investigated the causal relation between government revenue and spending for Egypt for (1977-1998) and Jordan for (1975-2001). Empirical findings for Egypt indicate unidirectional causation from revenue to spending, with higher revenue leading to higher spending and indicate bidirectional causation between revenue and spending for Jordan

Narayan (2005) reported mixed results for the relationship between government revenue and government expenditure in nine Asian countries. (a) For Indonesia, Singapore, and Sri Lanka in the short-run and for Nepal in both the short and long-run he found support for the tax-and-spend hypothesis; (b) Indonesia and Sri Lanka are in conformity with the spend-and-tax hypothesis in the long-run; and (c) for other countries there is evidence of neutrality. He used bound testing approach for co-integration and VECM for causality between the variables. However, this study found that, in three out of the nine countries government revenue and expenditure are cointegrated.

In another study, Narayan and Narayan (2006) investigated tax-and-spend hypothesis for Mauritius, El Salvador, Chile, Paraguay and Venezuela. For Haiti, there was evidence for supporting the fiscal synchronization hypothesis, while for Peru, South Africa, Guatemala, Guyana, Uruguay and Ecuador there was evidence of neutrality by application of the Toda and Yamamoto (1995) test for Granger causality.

Nyamongo *et al.* (2007) investigated the relationship between government expenditure and government revenue in South Africa within the framework of a VAR approach and found that government revenue and government expenditure have unit roots at all frequencies. The Johansen procedure test results revealed that these variables are co-integrated. It is further established that revenue and expenditure were linked bidirectional by Granger causality in the long-run, while there is no evidence of Granger causality in the short-run in South Africa.

Findings of Gounder *et al.* (2007), study showed that government revenue and government expenditure in both the aggregate and disaggregate sense were cointegrated in Fiji Islands.
Results of a study by Wolde-Rufael (2008) for 13 African countries by using Toda and Yamamoto causality test showed that the direction of causation was mixed and his empirical evidence suggests that there was a bidirectional causality running between expenditure and revenue for Mauritius, Swaziland and Zimbabwe; no causality in any direction for Botswana, Burundi and Rwanda; unidirectional causality running from revenue to expenditure for Ethiopia, Ghana, Kenya, Nigeria, Mali and Zambia; and an un-directional causality running from expenditure to revenue for Burkina Faso only.
Hong (2009) used a Johansen cointegration test and an error-correction model for causality and annual data over the period 1970 to 2007. His results showed that government revenue and expenditure were cointegrated and the spend-and-tax hypothesis was confirmed. Chaudhuri and Sengupta (2009), by using an error-correction model and Granger causality test for southern states in India reported that the tax-spend hypothesis was supported by the analysis and also the spend-tax hypothesis was valid for some states.
The study of Abu Tayeh & Marina (2011) aimed at analyzing the factors that affect the Jordanian total government expenditures. This study also employed a specific methodology to assess the nature of relationship between Jordanian public spending and its determinants. A main result of this research was that population, unemployment and inflation rates were significantly related to the public expenditures.

3.1 Public sector in Jordan

Most of developing countries are facing severe disfunctionality and decline in their economies; therefore many of them focus on increasing investment in public productive expenditure. A sluggish economic growth and the result weaker revenues as well as rising subsidies were again felt on Jordan's accounts despite efforts initiated towards mid – year to set a range of austerity measures in the aim to reduce the deficit. Accordingly, such actions didn't contain fiscal vulnerabilities as the shortfall of 6.8% of GDP in 2011 rose to a ratio of 8.2% in 2012, the highest level seen since 2009, as per IMF data. In absolute terms, the shortfall reached $ 2.5 billion in 2012, up by 30.2% from 2011, during which it had increased by 32.9% (CBJ, annual report, 2013). Indeed, the authorities' effort to contain leakages at the level of fiscal accounts was met with obstacles impeding revenue – raising measures and consequently, the deficit sank to a new high placing again the fiscal constraint at the forefront of Jordan's economic issues.
As a matter of fact, fiscal resources attained $ 7.1 billion in 2012, down by 6.6% from 2011. A break down by type shows that domestic revenues fell short of budgeted figures nearly by 5.6% while foreign grants declined from the exceptional amount seen in 2011. Tax and non- tax revenues have declined as a proportion of GDP from 2005 – 2008 averages of about 20% and 9.5%, respectively, to around 15% and 6 % during 2011 and 2012. With regards to foreign grants, Jordan had received an exceptional amount of $ 1.7 billion in 2011 to curtail the adverse economic impact of the regional turmoil. In 2012, foreign grants were weaker by nearly 23% (World Bank, 2013).
Within public expenditures, the year 2012 was one of a dual nature for the government, since 2012, authorities have taken substantial measures of tighten outlays in the aim to rein in the deficit within the context of a sluggish economic environment. These austerity measures include reductions in capital spending cuts in fuel subsidies and a rise in electricity prices. Fiscal expenditure totaled $ 9.7 billion in 2012, remaining practically unchanged from 2011, during which they had risen by 19.2%. The government managed to tighten capital expenditure when compared to the 2011 levels and to the pre – set budgeted figures. Department of Statistics (DOS) figures revealed that they were down by 28.7% from 2011 and 24% lower than the 2012 budget. Conversely, current spending was still up by nearly 9% from the 2011 level coming from higher – than – expected fuel subsidy reflecting a large hike of oil prices at the beginning of 2012, a higher wage bill as a result of a civil service reform expected to yield savings in the medium term, higher pensions and health outlays and spending on housing and medical assistance of Syrian refugees. It is worth recalling that in November 2012, the government announced the end of fuel subsidies support in the kingdom which sparked wide spread protests. According to the announcement, there will be a 50% increase in the price of bottled gas, a 33% rise for diesel and kerosene and a 14% increase in the price of lower – grade petrol. A combination of weaker – than – expected revenues and a higher increase of expenditure led to a further widening of fiscal imbalances. This has pushed the government's indebtedness ratio up in 2012, adding to additional borrowing from own budget agencies. As, such, the government's debt –to- GDP ratio rose from 70.7% in 2011 to 79.6% in 2012, nearing the 80% mark and almost twice the emerging markets average (DOS, annual report, 2013).
For 2013, Jordan's government approved a US10.5 billion budget with an estimated gap of $ 1.8 billion or 5.4% of GDP. The draft budget sets current spending at $ 8.7 billion, down by 2.1% from 2012 and capital expenditure at $ 1.8 billion, up by 76.6%. Revenue is forecast at $ 8.7 billion, of which nearly 10% would stem from foreign grants. The budget deficit would reach US 3 billion without foreign grants and $ 1.8 billion after adding foreign

aid. On the over all, the budget deficit remains a constant challenge for Jordanian government which, caught between external factors beyond its control and internal political constraints, is still having little success in plugging its deficit. Indeed it's fiscal and debt ratios remain amongst the highest when compared to countries within the MENA geography, and exceed the region's average as well as that of the emerging world. (Bank Audi, Report, 2012).

3.2 Government Expenditures in Jordan

Compensation of Employees consists of salaries, wages and social security. Its ratio was 20.4% of total current expenditures in 2003 and declined by 19% in 2012 (see table 1). This decline is due to the government's attempt to control public expenditures and reduce all sorts of incentives because of the tough economic conditions in Jordan. Defense and Security shared in average 35% of total current expenditures in the study years. It reached the highest ratio in 2009 and 2010 by 35.8%. Through table (1), it is found that defense and security constituted about one third of total current expenditures because of unstable political conditions in the region as Jordan is one of the Middle East countries.

Table (1) shows the percentage of loan interest of total current expenditures; it declined from 14.2% in 2000 to reach 1.6% in 2012. This decline is due to government attempts to reduce external public debt as loan interest has a bad effect on the economy in two ways; firstly, part of current expenditures leaks outside the economy, which reduces internal expenditure that create suitable conditions for private sector. Secondly, these interests are paid in foreign currencies which mean decrease foreign currencies in the economy thus it affects the reserve of foreign currencies in the economy. As for internal interest payments, they are looked at as they generate incomes. Economists believe that internal interest payment moves towards consumption and investment. Internal interest payments rose from 2.8% in 2000 to 7.8% in 2012 which implies that the government depends more on the internal sources than the external sources.

Table 1. Components of current expenditures in Jordan and its share from total

Years	Compensation of Employees	Purchases of Goods& Services	Internal Interest Payments	External Interest Payments	Defense and Security	Pensions and Compensation
2000	21.3	4.2	2.8	14.2	30.9	15.6
2001	21.4	4.1	3.2	12.3	30.0	16.2
2002	22.1	4.2	3.1	10.1	29.0	16.8
2003	20.4	4.0	2.8	9.6	29.0	15.9
2004	18.6	4.4	2.7	6.9	27.4	15.8
2005	19.0	3.8	3.2	5.9	24.0	14.3
2006	17.4	3.7	4.2	5.9	25.3	15.7
2007	16.1	3.7	4.5	5.3	30.0	13.8
2008	17.1	6.0	5.5	2.3	33.1	14.6
2009	17.9	7.0	6.6	1.9	35.8	15.4
2010	18.6	6.5	6.5	1.8	35.8	15.6
2011	17.6	4.6	5.8	1.7	31.3	18.2
2012	19.0	3.8	7.8	1.6	28.2	15.8

Source: Department of Statistics, Yearly statistical bulletin, various issues.

Pensions and compensation includes retirement expenses, grants and subsidies provided by the government to individuals and some civil society institutions. Table (1) shows that Pensions and compensation shared almost the same average during the years under the study.

In Jordan, the share of current expenditure from total expenditure is 80% in years under the study. It is noted that the government increases currant expenditures as a tool of public finance to push the economy out of the recession. However, as current expenditure increases more demand and as a result more investment will be in the economy (see table 2).

Table (2) shows that capital expenditures ratio to total expenditures reached 20% in average during the study years. The ratio fluctuated till it reached 15.5% in 2011. Government tried by capital expenditure to compete the private sector in its productive projects and government also tried to invest in basic infrastructure to create favorable conditions for increasing investment in the economy.

Table 2. Current expenditures and capital expenditures and their ratios to total expenditures

Years	Current Expenditures	Capital Expenditures	Total Expenditures	Current Expenditures Ratio to Total Expenditures %	Capital Expenditures Ratio to Total Expenditures %
2000	1718.3	35.8	2054.1	83.6	16.4
2001	1788.5	403.8	2192.3	81.6	18.4
2002	1899.9	496.3	2396.2	79.3	20.78
2003	2163.7	646.1	2809.8	77.1	22.9
2004	`2377.8	802.7	3180.5	74.8	25.2
2005	2908.0	630.9	3538.9	82.2	17.8
2006	3122.8	789.5	3912.3	79.9	20.1
2007	3743.9	842.6	4586.5	81.6	18.4
2008	4473.4	958.5	5431.9	82.4	17.6
2009	4586.0	1444.5	6030.5	76.1	23.9
2010	4746.6	961.4	5708.0	81.2	19.8
2011	5739.5	1057.1	6796.6	84.5	15.5
2012	6186.2	675.9	6696.6	92.3	7.7

Source: Department of Statistics, Yearly statistical bulletin, various issues.

3.3 Government Revenues in Jordan

Tax revenues provide governments with the funds they need to invest in development, relieve poverty, deliver public services and build the physical and social infrastructure for long-term growth. However, many developing countries face challenges in increasing their revenue from domestic sources. These challenges include a small tax base, a large informal sector, weak governance and administrative capacity, low levels of per capita income, domestic savings and investment and possibly tax avoidance by elites.

Revenues in Jordan consist of many sections one of them is taxes. Taxes in Jordan divided into two parts; direct taxes and indirect taxes which include customs taxes, sales taxes, additional taxes and income and profit taxes.

Table 3. Size of tax revenues and its ratio to total domestic revenues

Years	Direct Taxes	Indirect Taxes	Total Revenues of Taxes	Total Domestic Revenues	Tax Revenues Ratio to Domestic Revenues %
2000	117.0	844.9	961.9	1610.1	59.7
2001	102.6	893.8	996.4	1718.6	57.9
2002	55.7	944.6	1000.3	1644.1	60.8
2003	155.8	927.4	1083.2	1675.6	64.6
2004	553.1	895.7	1428.8	2147.2	66.5
2005	804.0	961.8	1765.8	2561.8	68.9
2006	820.9	1312.6	2133.5	3164.4	67.4
2007	1145.8	1326.3	2472.1	3628.1	68.1
2008	1135.9	1622.2	2758.1	4375.4	63.0
2009	1012.2	1867.7	2879.9	4187.8	68.9
2010	641.2	2344.8	2986.0	4261.1	70.1
2011	458.4	2596.8	3055.2	4198.9	72.7
2012	475.5	2875.8	3351.3	4727.3	70.9

Source: Department of Statistics, Yearly statistical bulletin, various issues.

Taxes affect investment in many ways; direct taxes affect investment through affecting consumption, saving and prices. Direct taxes reduce owners' income, so they sacrifice some goods, especially luxury ones. Therefore, demand on these goods decreases and this decrease pushes investors to stop or reduce their investments in producing these goods and services. Moreover, demand reduction on these goods will push their prices to

decrease and, as a result, reduce investment opportunities in front of investors. About 65% of Jordanian government revenues comes from taxes (see table 3).

3.4 Public Debt

Jordan's public debt rose 7 % to be 14.3 billion dinars ($20.2 billion) in the first quarter of 2013(Ministry of finance, annual report, 2013). External debt reached 4.6 billion dinars and internal debt was 9.7 billion dinars at the end of March. Jordan, one of the smallest economies in the Middle East, imports more than 90 percent of its oil and relies on foreign investment and grants to support its budget and current-account deficits. The kingdom's power plants have had to switch to more expensive fuels such as diesel after repeated interruptions in natural-gas supplies caused by sabotage on the export pipeline in neighboring Egypt.

Table (4) shows that an external public debt is 80.4% of total public debt in 2000. This ratio reduced in 2012 to reach 28.1% because the government attempts to reduce burdens of these debts in the process of interests and loan assets payment. High ratio of external public debt in Jordan was because the government tried to create suitable conditions to attract foreign direct investment, on one hand and expand in the development of infrastructure, which is one of the helping factors in enlarging private investment. As for internal public debt ratio, it is increasing continuously. For example, the ratio rose from 19.6% in 2000 to reach 71.9% of total public debt in 2012. However, the reason for this is that the government increases internal debt instead of external debt to reduce risk. Compound growth ratio of internal public debts was 19.9% during years under the study.

Table 4. Size of external and internal public debt and their ratio to public debt

Years	Internal public debt	External public debt	Public debt	Internal public debt ratio to total debt %	External public debt ratio to total debt %	Gross domestic product
2000	1235	5043.5	6278.5	19.6	80.4	5998.6
2001	1397	4969.8	6366.8	21.9	78.1	6363.7
2002	1656	5350.4	7006.4	23.6	76.4	6794.0
2003	1815	5391.8	7206.8	25.2	74.8	7228.8
2004	2082	5348.8	7430.8	28.0	72.0	8090.7
2005	2467	5056.7	7523.7	32.8	67.2	8925.4
2006	2961	5186.5	8147.5	36.3	63.7	10675.4
2007	3695	5253.3	9048.3	40.8	59.2	12131.4
2008	5754	3640.2	9394.2	61.2	38.8	15593.1
2009	7086	3869.0	10955.0	64.6	35.4	16912.2
2010	7980	4610.8	12590.8	63.3	36.7	18762.0
2011	9996	4486.4	14482.4	69.0	31.0	20476.5
2012	12678	4932.4	17619.4	71.9	28.1	21965.5

Source: Department of Statistics, Yearly statistical bulletin, various issues.

3.5 Capital formation

Private investment covers gross outlays by the private sector in addition to its fixed domestic assets. Table (5) shows that the contribution ratio of the private sector in capital formation in Jordan economy sector reached 56.4% in 2000 and increased to 86.4% in 2012. These ratios reflect the importance of the private sector in Jordan economy.

Table 5.Capital formation in public and private sector

Years	Capital formation of public sector	Capital formation of private sector	Gross Capital formation in domestic economy	Capital formation of public sector ratio to gross capital formation%	Capital formation of private sector ratio to gross capital formation%
2000	552.7	713.9	1266.6	43.6	56.4
2001	523.3	712.5	1235.8	57.6	42.4
2002	551.5	735.9	1287.3	42.8	57.2
2003	719.4	771.4	1490.8	48.21	51.8
2004	672.1	1333.3	2005.4	33.5	66.5
2005	856.2	1877.5	2733.7	31.3	69.7
2006	707.1	2010.0	2717.1	26.0	74.0
2007	835.7	2498.4	3334.1	25.1	74.9
2008	1083.4	3578.2	4661.6	23.2	76.8
2009	1632.7	2815.2	4447.9	36.7	63.3
2010	1086.7	3340.8	4427.5	24.5	75.5
2011	1194.8	3842.4	5037.2	23.7	76.3
2012	764.0	4856.3	5620.3	13.6	86.4

Source: Department of Statistics, Yearly statistical bulletin, various issues.

4. Research results

Statistical methods are suitable for all studies in generals and economic studies in particular. They are concerned in measuring quantitative relation among economic variables and their effect on each other. Additionally, their importance stems from the importance of these methods' results in helping the government to draw accurate economic policies that agree with its social and economic issues. It is aimed through this analysis to know the impact of fiscal policy tools on private investment in Jordan. As a result, private investment is adopted as a dependent variable (PI), which is the private capital formation in Jordan. Current expenditure (CE), capital expenditure (CI), internal public debt (IPD), external public debt (EPD), and tax revenue (TR) are the independent used in this study. Thus, the growth model is specified as:

$$PI = \beta_0 + \beta_1 CE + \beta_2 CI + \beta_3 IPD + \beta_4 EPD + \beta_5 TR$$

And, in order to be familiar with the actual reality of private investment in Jordan, the function was estimated in current prices and step wise regression was used. The results were as follow:

1- Current Expenditure (CE):

Table (6)

Variable	Beta	Calculated T	Sig
CE	0.984	18.46	0.000
	0.78		
Calculated F	340.99		
Sig	0.000		

$$PI = -865.34 + 0.88\ CE$$

The estimated function results agree with the economic theory logic since its signal is positive. This means that the relationship between private investment and current expenditure is positive. T-test indicates that the estimated parameter is significant within significance level less than or equal 0.05. In addition, F-test indicates that the parameter of the model is significant and the coefficient of determination R^2 indicates that 78% of changes in private investment in Jordan are due to current expenditure whereas 18% are due to other factors.

2- Capital Expenditure (CI):

Table (7)

Variable	Beta	Calculated T	Sig
CI	-0.59	2.45	0.032
	0.35		
Calculated F	6.03		
Sig	0.032		

$$PI = 434.74 + 2.4\ CI$$

The estimated function result is negative. This means that the relationship between private investment and capital expenditure is inversely. T-test indicates that the estimated parameter is significant within significance level less than or equal 0.05. Moreover, F-test indicates that the parameter of the model is significant and the coefficient of determination R^2 indicates that 35% of changes in capital investment in Jordan are due to capital expenditure whereas 65% are due to other factors.

3- Internal Public Debt (IPD):

Table (8)

Variable	Beta	Calculated T	Sig
IPD	-0.945	9.62	0.000
	0.89		
Calculated F	92.52		
Sig	0.000		

$$PI = 593.25 - 0.35\,IPD$$

The sign of the estimated function is negative. This means that the relationship between private investment and internal public debt (IPD) is adversely. T-test indicates that the estimated parameter is significant within significance level less than or equal 0.05. In addition, F- test indicates that the parameter of the model is significant and the coefficient of determination R^2 indicates that 89% of changes in private investment in Jordan are due to internal public debt whereas 11% are due to other factors.

4- External Public Debt (EPD):

Table (9)

Variable	Beta	Calculated T	Sig
CE	0.578	2.34	0.039
	0.33		
Calculated F	5.5		
Sig	0.039		

$$PI = 9133.88 + 1.42\,EPD$$

The estimated function result is positive. This means that the relationship between private investment and external public debt is positive. T-test indicates that the estimated parameter is significant within significance level less than or equal 0.05. Moreover, F-test indicates that the parameters of the module are significant and the coefficient of determination R^2 indicates that 33% of changes in private investment in Jordan are due to external public debt whereas 67% are due to other factors.

5- Tax Revenues (TR):

Table (10)

Variable	Beta	Calculated T	Sig
TR	-0.97	13.27	0.000
	0.94		
Calculated F	176.14		
Sig	0.000		

$$PI = 835.88 - 1.48\,TR$$

The estimated function result is negative. This means that the relationship between private investment and tax revenues is adversely. T-test indicates that the estimated parameter is significant within significance level less than or equal 0.05. In addition, F- test indicates that the parameter of the model is significant and the coefficient of determination R^2 indicates that 94% of changes in private investment in Jordan are due to taxes whereas 6% are due to other factors.

5. Conclusion

1- Results of the study reveal that current expenditure affects significantly private investment in Jordan. The relationship between them is direct, i.e., as current expenditure increase, private investment will increase. Fiscal policy in Jordan attempts to increase current expenditure to increase total consumption in economy and, as a result, increases aggregate demand which encourages private investment in Jordan.

2- The results also indicated that capital expenditure significantly affect private investment in Jordan and related with it inversely, as capital expenditure increases, private investment will decrease. This indicated that the public sector is a competitor of the private sector in Jordan.

3- Statistical analysis indicated that internal public debt significantly affects private investment and related with it inversely. This indicated that when the government increases internal borrowing less money will available for the private sector, as a result, private investment will decrease in Jordan.
4- The estimated function indicates that external public debt significantly affects private investment and related with it directly. As government Increases external borrowing means an additional money available for public projects, as a result, positive effect on the private investment in Jordan as part of these public projects are done by the private sector.
5- It is found that taxes significantly affect private investment and related with it inversely. Tax revenue is the main source for the budget in Jordan. However, as government increases its taxes means less investment in the country.
6- By using stepwise regression analysis, it was found that the most effective variable on private investment in Jordan is current expenditure. We found that the coefficient of determination $R^2 = 0.78$ which is reflect the importance of this variable on private investment in Jordan.

6. Recommendations

1- Jordan economy is considered as one of small economies and therefore its market is relatively narrow. As a result, the government should help the private sector to open new markets through bilateral agreements with different countries.
2- By relaxing the rules and regulations of the government the fiscal policy can facilitate investment on the private sector and Central Bank of Jordan (CBJ) should decreases interest rate which will directly increases private investment in the country.
3- Government should encourage private sector's organizations to integrate, as result, private sector can benefit from the advantages of economies of scale which will reduces the cost per unit. Finally these institutions can be able to compete with global products internally and externally.
4- By uniting the efforts of various government departments, it is possible to make a map of Jordan that includes projects which could be held in all regions. This map reveals for the private sector investment opportunities which can be held anywhere in Jordan.

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