The Impact of Government Expenditure on the Palestinian Economy: A CGE Analysis

Hakeem A. Eltalla Alaqsa University, PO box 4051, Gaza, Palestine

Abstract

An important question in growth theory is whether government expenditure promotes economic growth. However the empirical evidence is inconclusive. This paper investigates the impact of increasing government expenditure by 25% from the base line on the aggregate Palestinian economy variables. A simulation of increasing government expenditure is carried out using a 2015 Palestinian Social Accounting Matrix (SAM) and Computable General Equilibrium (CGE). We simulate the impact of a 25% increase in government expenditure, which could come about due to the Palestinian reconciliation agreement that has ended a decade old political divide between the West Bank and Gaza Strip. The simulation results illustrate that real GDP increases by 4.73%. The real private consumption declined by 2.60%. Import and export are increased by 3.09% and 10.53% in real term respectively. Net taxes increase by 1.23%, as a percentage of GDP the trade deficit declines by 2.00 percentages. Real exchange rate appreciated by 12.9 % from the base line. In addition absorption increases by 3.12 % in real terms. **Keywords:** government expenditure, Social Accounting Matrix, Computable General Equilibrium, Palestine. **JEL Classification:** E62, H50, C23 C68, D58, E62, F15, H62, I32

Introduction

The relationship between government expenditure and economic growth has discussed between researchers and policy makers. The government expenditure is one of the most important tools of fiscal policies. Therefore, the impact of government expenditure on the economic variables has been the focus of extended debates between the supporter and the critic. The relationship between government expenditure and economic variables has been the topic of long discussions between major schools of Economics. Classical economists believe government expenditure has no impact on GDP due to crowding out between government expenditure and investment. This is strongly rejected by Keynesians economists which they emphasize a fiscal expansion policy impacts GDP. The government expenditures are one of the most important tools of fiscal policies. It assumes a growth in government expenditure increase aggregate demand. Thus when demand is excide supply in the economy, prices will rise and it leads to decline the demand till economy reach equilibrium. If government expenditure performances as a complementary influence for private investment, a rise in government expenditure will create an advance in production and employment. Government expenditure rise causes to increase demand for goods and service. The demand surge is satisfied by domestic products and import goods. Consequently, demand for domestic products and import increases. Therefore, domestic products rise leads to growth in major production factors, hence, the income of households and businesses income increase. Furthermore, while production is growing, demand for intermediate inputs grow. An increase in household's income leads to rise in consumption. Governments in the developing economies are confronted with expenditure requirements that exceed the existing resource, and regularly have narrow choices to increase extra resources domestically. For example, most developing economies have a big informal sector that in addition to inadequacies in collection tax that entail lower tax-to-GDP ratios than average. Additionally, due to the limited tax base, increasing extra tax revenues would commonly cause significant distortions and produce discouragements for the private sector to save and invest. The debt carrying ability of most developing economies is small, and external financing should often be a last resort. A different way would include producing fiscal space by reallocating government spending from the less efficient spending to the more efficient ones. Similarly, the effective expenditure of public resources for example to enhance human and physical capital which leads to improved productivity and income and therefore increase the choices for the private and public consumption chances in the future. That produces extra GDP growth and improves the revenue collections ability (World Bank, 2007).

The establishment of the Palestinian Authority (PA) following the Oslo Accords led to high expectation for an economic revival in West Bank and Gaza; free of Israeli security constraints. Unfortunately, these expectations were ruined. The continued isolation under the Israeli closures has fragmented the economy. Over that past two decade, the Palestinian economy has become reliant on foreign aids to lead its growth as the productive sectors have decreased in importance and government spending has increased. For a future viable Palestinian state, it is essential that a private sector led the Palestinian economy which will create the jobs required by a growing population. The Palestinian economy faces some very significant challenges and face political and security uncertainty. These limit the Palestinian policy makers' choices in setting up the policies required to improve the Palestinian economy. Monetary policies are not a choice because the Palestinian doesn't have their own currency. However, government spending and taxes are two instruments of fiscal policies that can be utilized to accomplish the preferred economic growth. Government spending is managed more directly by the Palestinian government than the tax tool of fiscal policy. Since big part of the taxes (clearance revenues) are collected by Israel under the Israeli control. The Palestinian economy faces a more uncertain outlook with fundamental changes: GDP is motivated by government spending and foreign aid, and there are fewer resources for investment, thereby further reducing the productive base of the economy, which is needed for a stable and viable independent Palestine (UNCTAD, 2009).

The objective of this study is to show empirically the impact of increasing government expenditures by 25% on macroeconomic indicators such as on domestic production, imports, export, household consumption, and other related variables. To quantify the impact of increasing government expenditures on the Palestinian Economy, we constructed a general equilibrium model that captures the economic conditions and characteristics of the Palestinian economy, and we constructed a 2015 social accounting matrix for Palestine. The study focuses on the impacts of 25% increase government expenditures as relative to the baseline, which could happen due to the Palestinian reconciliation agreement that has ended a decade-old political divide between the West Bank and Gaza Strip.

Government Expenditure and GDP in Palestine

The Palestinian current budget deficit in 2015 decline by about 10.7 percent, largely due to the improvement in total government revenues (clearance revenues and domestic revenues) that was bigger than the growth in current spending and net lending. Government revenues increased by 10.2 percent. Similarly, current balance deficit (as a percent of GDP) decreased to reach 4.2 percent, compared to 5.1 percent in 2014. With this decline, the current account deficit to the budgeted target became 46.9 percent during 2015, compared to 50.5 percent for the preceding year. However, this important reduction is not a signal of how efficiently the government organizes current spending, but rather an outcome of the non-payment of a large part of government outstanding payments, mainly to the private sector, wages and salaries. Deficit in overall fiscal balance before retreated by 5.1 percent in 2015 measure up to the previous year. As such, overall deficit before grants represented about 31.0 percent of the budgeted target, related to about 49.6 percent in 2014. Overall deficit before aid as a percent of GDP was 5.6 percent, compared to 6.4 percent in 2014. This decrease is due to the great reduction in foreign aids by 29.5 percent. This is sign of the importance of foreign grants, particularly given the variations and irregularity in inflows of government revenues; largely the clearance revenue as flow is usually related to the political situation and therefore frequently interrupted by Israel. The Palestinian economy observed political and economic turmoil during the year 2015. In the first quarter of 2015, Israel delayed the transfer of clearance revenues to the Palestinian government. The Palestinian economy witnessed relative enhancement growing at 3.5 percent compared to 0.2 percent decline in 2014. Gaza Strip, economy expanded by 6.8 percent in 2015, as it declined by 15.1 percent in 2014. The events observed in the West Bank have negatively impacted its economic performance, decrease growth to 2.5 percent in 2015 compared to 5.3 percent in 2014. This different performance between the Gaza Strip and the West Bank led to a lessening of the gap in real GDP per capita, where the per capita income is USD 2,265.7, a fall by 0.2 percent in the West Bank. On the contrary, the Gaza Strip per capita income improved to USD 1,002.8, an increase by 3.3 percent. On the whole, real GDP per capita in Palestine increased by 0.5 percent in 2015 to USD 1,745.9. Noticeably, soaring unemployment continues to be one of the most important challenges to the Palestinian economy, in specific to Gaza Strip. During 2015, the unemployment rate in Palestine declined a little to 25.9 percent (PMA, 2016).

Table (1): Main economic indi	cators of the Pales	tinian economy	, 2011-201	5	
Indicator	2011	2012	2013	2014	

Indicator	2011 2012		2013	2014	2015		
Output and Prices (Annual percent change)							
Real GDP (2004 market prices)	12.4	6.3	-2.2	0.2	3.5		
Real Per capita GDP	9.1	3.1	-0.8	-3.1	0.5		
Inflation rate	2.9	2.8	1.7	1.7	1.3		
Unemployment Rate	(Percent of labo	r force)					
Palestine	20.9	23.0	23.4	26.9	25.9		
Consumption, Investment and	(Percent of real	l GDP)					
Saving							
Aggregate consumption	116.9	120.6	113.9	120.9	119.0		
Public	28.0	27.2	26.2	27.4	27.1		
Private	88.9	93.4	87.7	93.5	91.9		
Aggregate investment	19.3	21.6	22.0	18.3	21.7		
Public	9.2	8.7	8.4	7.5	8.1		
Private	10.1	12.9	13.6	10.8	13.6		
Public Finance	(Percent of non	ninal GDP)					
Total net revenue and foreign aid	30.2	28.2	29.5	31.6	29.1		
Tax	4.6	4.3	4.8	4.7	4.8		
Non-tax	2.1	2.1	2.0	2.1	2.0		
Clearance revenue	14.2	14.0	13.5	16.1	16.1		
Foreign aid	9.4	8.3	10.9	9.7	6.3		
Total expenditures	31.1	28.9	27.4	28.3	28.4		
Wage expenditure	16.0	13.8	14.5	14.9	13.9		
Non-wage expenditure	10.9	10.7	9.8	9.9	10.5		
Development expenditures	2.8	1.9	1.3	1.3	1.4		
Current balance	-7.5	-7.0	-7.5	-5.1	-4.2		
Overall balance (Excl. foreign aid)	-10.3	-8.9	-8.8	-6.4	-5.6		
Overall Balance (Inc. foreign aid)	-0.9	-0.6	2.1	3.3	0.7		
Government public debt	21.1	22.0	19.0	17.4	20.0		

Source: PMA 2016, Ministry of Finance Database

Table (2): Palestine: Fiscal operations (cash basis, NIS million), 2011-2015							
Items	2011	2012	2013	2014	2015		
Total net revenues and grants	11,313.2	12,235.4	13,276.2	14,353.2	14,335.4		
Total Domestic Revenue, net	2,510.9	2,747.1	3,078.6	3,114.3	3,542.2		
Clearance Revenue	5,330.5	6,096.2	6,089.0	7,317.9	7,953.0		
Grants and aid (external revenues)	3,520.3	3,586.6	4,915.1	4,402.3	3,104.7		
Total public expenditure	11,651.5	12,543.2	12,342.2	12,860.8	13,993.2		
Current expenditure and net lending	10,596.9	11,730.2	11,734.8	12,274.4	13,306.4		
Development Expenditure	1,054.6	813.0	607.4	586.4	686.8		
Current balance	-2,804.0	-3,081.4	-3,373.7	-2,323.5	-2,075.7		
Overall balance (Excl. grants and aid)	-3,858.6	-3,894.4	-3,981.1	-2,909.9	-2,762.5		
Overall balance (inc. grants and aid)	- 338.3	- 307.8	934.0	1492.4	342.2		

Source: PMA 2016, Ministry of Finance Database

Theoretical Review

Economic literature has examined the relationships between government spending and economic growth. The connection linking government spending and economic development has been a disputable subject between major schools of Economics. Wagner's law (1883) and Keynesian theory (1936) have illustrated the vital relationship between government spending and economic growth. Wagner's law emphasizes that national income instigates public expenditures. Wagner positioned government expenditure as a behavioral variable that positively dictates if there is economic growth. He suggested that economic growth influences government size. While, the Keynesian theory stress that government spending can boost economic growth and cause economic stability. The Keynesian argues that more government spending encourage economic development while the classical maintain that a negative relationship exists among government spending and economic development. The classical

economists think that the government involvement causes more damage than benefit to the economy and that the private sector should bear most of the activities. Adam Smith (1776) promoted the laissez-faire economy where the profit driving force was the central basis of economic developments. According to the classical, a raise in the money supply causes a proportionate raise in prices, with no adjustment in the allocation of resources or the real GDP "money neutrality". Keynes believed government expenditure as an exogenous variable that can produce economic growth rather than an endogenous variable. Keynes assumed the responsibility of the government to evade depression by boosting aggregate demand and as a result, enhance the economy by the multiplier effect, which result in stability in the short run; however this should be done carefully as too much of public expenditure causes inflation while too little of it causes unemployment. Keynes ties a link between government expenditure and economic growth and determines that causality goes from government expenditure to income, indicating that government expenditure is an exogenous factor and a public mechanism for rising national income and enhances economic growth. The Keynesian specifies that during recession a policy of fiscal expansion should be applied to enhance the aggregate demand consequently increasing the Gross Domestic Product (GDP). This is with a view that rises in government spending improve employment in public sector. The employment increases leads to income and profits of the firms increase, and this would lead the firms employ more workers to produce the goods and services required by the government. Barro (1990) has specified a new viewpoint that the effect of fiscal expansion through public spending enhances output growth. Nevertheless, one of the restrictions of Keynesian theory is that it fails to sufficiently reflect on the problem of inflation which might be conveyed by the rise in government spending. Wagner's approach, causality proceeds from GDP growth to government expenditure, whereas Keynesian approach, causality proceeds from government expenditure to GDP growth notably during the recession times. However, Solow neo classical growth model ranted that the fiscal policy does not have any impact on the economic growth and contended that development through fiscal policy helps to enhance failure that may possibly result from the inefficiencies of the market. Higher government expenditure may reduce whole performance of the economy. For example, in an effort to finance expanding expenditure, government may increase borrowing and or higher taxes which restrain household from working long hours. This decreases income and aggregate demand. In addition, higher profit tax inclines to increase production costs and decrease investment (Mitchell, 2005).

Literature Review

The extent of government expenditures and its impact on economic growth has been a subject of continued interest for long time. Theory the empirics do not provide strong answers on how the government expenditures impact economic growth and other economic variables. Several studies have been examined the relationship between the government expenditures and the different economic variables. Prior studies find diverse empirical evidence on the relationship among government spending and economic growth. The theory creates a rationale for government delivery of goods and services based for example on the markets failure to deliver public goods and the necessity to adopt externalities. Devarajan et al. (1996) studied the relationship between government spending and economic growth. They used the data of 43 developing countries. They found that Productive expenditure has negative relationship with economic growth. While current spending lead to a higher economic growth. They demonstrated that an excessive quantity of productive spending become mostly unproductive. They affirmed that government of developing countries is misallocating the government spending. While developed economies have appropriate allocation of resources. They concluded that appropriate allocation of government resources and composition of public spending can lead the economy to grow. Some literature has maintained that government fiscal policy mitigate against failure occurred due to market inefficiencies (Nurudeen and Usman, 2010). Devarajan et al. (1993) examined the role of public expenditure in economic growth regressions. They found that government expenditure had a negative effect on developing economies but had a positive effect on developed economies. They had divided expenditure into productive and non-productive types by considering the level of resources invested and output produced by diverse programs. For example they found that government expenditure on health and transports promote growth but found no effect of education and military spending on economic growth. Barro (1990) found that government expenditure influences economic growth. Paternostro et. al. (2007) claim that the effect of public spending on economic aims such as economic growth, equity and poverty reduction is hard to evaluate because of the difficult sequence of linkages involved and the inter reliance between the goals. Olugbenga and Owoye (2007) found in their study of 30 OECD economies that for 16 countries causality proceed from government spending to economic growth, whereas causality proceed for 10 economies from economic growth to government spending. Therefore, result for 16 economies confirmed Keynes hypothesis, 10 confirmed Wagner's law and the rest 4 economies had a feedback connection among government spending and economic growth during the period of 36 years. Alexiou (2009) found that government spending (fiscal policy) had significant and positive correlation with economic growth; when he applied panel data to seven transition economies in South Eastern Europe. Computable General Equilibrium (CGE) models have been utilized to study the relationship among the government spending and economic growth and poverty reduction. Matovu and Dabla-Norris (2002) utilize a CGE model to study the

influence of education and infrastructure on economic growth in Ghana. They find that increasing spending on education has important benefits on macroeconomic variables and poverty reduction; however these benefits arise at the expense of infrastructure investment. Jerono (2009) examined the effect of government spending on economic growth in Kenya and found that spending on education had a positive impact on economic growth; it does not spur any significant adjustment to growth. Because the increase of education is bigger than job growth in Kenya and there are quite few job opportunities outside government for university graduates therefore education have been responsible for producing excess graduates, and long waits for government jobs. Ahmad et al. (2013) investigated the role of public infrastructure on economic growth in Pakistan. By utilizing CGE model they found the negative effect of tax financed public investment on economic growth. Olulu et al. (2014) found a negative relationship between government spending and GDP growth in Nigeria during the period 1980 - 2010. Odior (2011) used a computable general equilibrium (CGE) model in examining the effect of increase in government spending on education, and its effect on economic growth in Nigeria. He found that the re-allocation of government spending to education was important in explaining economic growth in Nigeria. Lofgren and Robinson (2004) employed a CGE model to study the relationship among development and government spending on agriculture, health, education, transport, social security and defense for sub-Saharan economies. They find that more spending on agriculture and transportation generate small economic growth; nonetheless increased investment in health causes more prompt growth and substantial decreases in poverty. Jung and Thorbecke (2003) find that spending education effective for poverty reduction in Tanzania and Zambia. Nworji, et al (2012) found that capital and recurrent expenditure on services had insignificant negative impact on economic growth in Nigeria. While, spending on transfers had insignificant positive impact on growth. However capital and recurrent expenditures on social and community services and recurrent expenditure on transfers had significant positive impact on economic growth. Al bataineh (2012) examined the impact of government spending on economic growth in Jordan. He found that the government spending at the aggregate level has positive effect on the growth of GDP which is compatible with the Keynesians theory.

Methodological Framework and Data Computable General Equilibrium

Computable general equilibrium (CGE) models are economy wide models the result to which represents an instantaneous general equilibrium in all markets of the economy. Computable general equilibrium (CGE) models characterize the economy in its entirety at a high level of abstraction and aggregation, as collected of a set of interrelated markets. CGE models represent the assumption that each market clears, through the movement of prices that equate supply and demand. CGE models are computable in that they utilize equations specified with parameters that take real values. (CGE) models are widely utilized for policy analysis in many countries; when we examine the links between different sectors in the economy, and the impact of different policies and exogenous shocks on production, and household welfare. Computable general equilibrium analysis takes account of connections between a broad range of markets and presents quantitative solutions to policy questions about integration. CGE modeling presents both an economy-wide evaluation of policies and a framework in which the operational of policies can be understood. The CGE model is framed as a set of simultaneous linear and non-linear equations, which describe the behavior of economic agents and the economic environment in which the agents function. This environment is illustrated by market equilibrium conditions, macroeconomic balances. The core of the analysis is to compute prices, production, and demand quantity that make expenditures equal incomes, and supply equal demand in different markets. To compute the equilibrium, prices are adjusted until consumers have chosen a necessary basket of goods that maximize their utility given their incomes; firms have produced the quantities that maximize their profits, and the demand for factors of production equivalent to available endowments. The Palestinian model has developed from the neoclassical structuralist modeling tradition presented in Dervis et al (1982). The computable general equilibrium framework presented a theoretical quantification that combines the general equilibrium structure formalized by Arrow and Debreu with real economic data presented by a social accounting matrix to solve numerically for the quantities of supply, demand and price that maintain equilibrium across all markets. The computable general equilibrium model interprets all of the payments in the social accounting matrix. The model accordingly follows the social accounting matrix disaggregation of factors, activities, commodities, and institutions. Computable general equilibrium models are specified in a set of mathematical equations that define the behavior of the different actors (Shoven and Whalley, 1984; Lofgren et al., 2002). The Palestinian Computable general equilibrium (CGE) model has built based on the standard model used by the International Food Policy Research Institute (IFPRI) (Lofgren et al., 2002). Lofgren et al. (2002) has a complete description of the IFPRI's standard model.

Government Income and Consumption in the Model

Government consumption demand, in which the main component tends to be the services provided by the government labor force, is also defined as the base-year quantity multiplied by an adjustment factor. This factor is

also exogenous and, hence, the quantity of government consumption is fixed.

$$QGc = GADJ \cdot qg_c$$

where QG is government consumption demand for commodity, GADJ is government consumption adjustment factor (exogenous variable), and qg is the base year quantity of government demand.

$$EG = \sum_{c \in C} PQ_c \cdot QG_c + \sum_{i \in INSDNG} trnsfr_{i gov} \cdot \overline{CPI}$$

Where EG is government expenditures. Total government spending is the sum of government spending on consumption and transfers. Total government revenue is the sum of revenues from taxes, factors, and transfers from the rest of the world.

$$YG = \sum_{i \in INSDNG} tins_i \cdot YI_i + \sum_{a \in A} ta_a \cdot PA_a \cdot QA_a + \sum_{c \in CMNR} tm_c \cdot pwm_c \cdot QM_c \cdot EXR + \sum_{r \in R} \sum_{c \in CMR} tmr_{cr} \cdot pwmr_{cr} \cdot QMR_{cr} \cdot EXR + \sum_{c \in CMR} tmr_{cr} \cdot pwmr_{cr} \cdot QMR_{cr} \cdot EXR + \sum_{c \in C} tq_c \cdot PQ_c \cdot QQ_c + \sum_{f \in F} YF_{gov f} + trnsfr_{gov row} \cdot EXR$$

$$\begin{bmatrix} government \\ revenue \end{bmatrix} = \begin{bmatrix} direct \ taxes \\ from \\ institutions \end{bmatrix} + \begin{bmatrix} activity \\ tax \end{bmatrix} + \begin{bmatrix} import \\ tariffs \end{bmatrix} + \begin{bmatrix} sales \\ tax \end{bmatrix} + \begin{bmatrix} factor \\ income \end{bmatrix} + \begin{bmatrix} transfers \\ from \\ RoW \end{bmatrix}$$

Where YG is government revenue (Lofgren et al., 2002).

Social Accounting Matrix

Social accounting matrix is a comprehensive, economy wide data framework, representing the economy of a country. Social accounting matrix is a square matrix in which each account is represented by a row and a column. The elements of the matrix represent the payment from the account of a column to the account of a row. A social accounting matrix accounts for the economy-wide circular flow of incomes and payments in the economy. It represents the structure, internal and external links of the economy, and the roles of agents and sectors in the economy. The source of data for the social accounting matrix comes from input-output matrix, national income, household income and expenditure data. It links the information available in the Input-output matrix to other economic and social data gathered through the use of surveys on the labor force and on household spending decisions (King, 1985; Lofgren et al., 2002 ; Roland-Holst, 2008). A social accounting matrix contains most of the data required to implement a computable general equilibrium model analysis. The computable general equilibrium model has to be based on recent relevant available data to be credible for policy analysis. A 2015 social accounting matrix for Palestine is constructed. The 2015 social accounting matrix is used as the initial data for the calibration of the Palestinian computable general equilibrium model. See table 4: Macro 2015 social accounting matrix for Palestine millions of dollars.

Simulation and Empirical Results

We simulate the impact of a 25% increase in government spending, which could come due to the Palestinian reconciliation agreement that has ended a decade-old political divide between the West Bank and Gaza Strip. The simulation results show that real GDP increases by 4.73%. The level of real private consumption declines by 2.60%. Import increases by 3.09% and export increases by 10.53% in real term. net taxes increases by 1.23%, as a percentage of GDP the trade deficit declines by 2.00 percentage points from 40.76% of GDP at base line to 38.58% of GDP after government spending increase (tables 3). The shock can considerably change the real exchange rates, which in turn affect the trade balance. Real exchange rate appreciated by 12.9% from the base line. In addition, changes to the production of domestically consumed goods; absorption (total domestic spending on a good estimated at the domestic prices) increases by 3.12% in real terms.

Table 3 Effects of a 25 percent increase in government spending millions USD As % of GDP Base line % Change Base line Change Change Absorption 10847.159 11185.441 3.12 140.76 138.59 Private consumption 7099.800 6915.482 -2.6092.13 85.68 Gov. consumption 2090.400 2613.000 25.00 27.1332.38 Investment 1656.959 1656.959 21.50 20.53 21.55 22.75 Exports 1660.900 1835.856 10.53 Imports 4801.900 4950.310 3.09 62.31 61.34 19.48 Net Taxes 1501.052 1519.469 1.23 18.83 GDP 100.00 100.00 7706.159 8070.987 4.73 76.89 GDP at factors cost 6205.107 6205.814 0.01 80.52 Trade Deficit 3141.000 3114.454 7.669 40.76 38.58

Source: Authors' calculations.

Table 4: The macro 2015 social accounting matrix of Palestine

	1	2	3	4	5	6	7	8	Total
1-Activities		13522.80	5		c	Ũ	,	0	13522.80
2-Commodities	7064.60	3129.10		7099.80	2090.40	1656.96		1660.90	22701.76
3-Factors	6205.11								6205.11
4-Households			6205.11		484.77			1064.17	7684.62
5-Government							1939.41	732.07	2699.66
6-Saving-Invest.				146.47	124.48			1344.76	1656.96
7-Taxes	253.10	1247.96		438.35					1939.41
8-ROW		4801.90							4801.90
Total	13522.80	22701.76	6205.11	7684.62	2699.66	1656.96	1939.41	4801.90	

Source: Authors' calculations.

Conclusion

This paper quantified the impacts of government expenditure in the Palestinian economy by using a computable general equilibrium model. The simulation results illustrate that real GDP increases by 4.73%. The real private consumption declined by 2.60%. Import and export are increased by 3.09% and 10.53% in real term respectively. Net taxes increase by 1.23%, as a percentage of GDP the trade deficit declines by 2.00 percentages. The empirical results of the study confirm the existence of positive relationship between government expenditure and economic growth which demonstrate that this study in line with the Keynesian theory. The implication from these results is that expenditure is an important tool for enhancing growth in Palestine. Therefore, the Palestinian policy makers put more importance on the task of public sector expenditure as a tool which the **government** can use to solve various economic problems, influence the performance of the economy and boost the economic growth. For this purpose, there is a need to implement policies that may increase the efficiency of government expenditure. Otherwise, if government spending patterns are not well designed to suit the economy's requirements it could negatively affect the economy and the society endures the costs.

References

Ahmed, V., Abbas, A., & Ahmed, S. (2013). Public infrastructure and economic growth in Pakistan: a dynamic CGE-microsimulation analysis. In Infrastructure and Economic Growth in Asia (pp. 117- 143). Springer International Publishing.

Al Bataineh, I. M. (2012). The impact of government expenditures on economic growth in Jordan. Interdisciplinary Journal of contemporary research in business, 4(6), 1320-1338.

Alexiou, C. (2009). Government spending and economic growth: Econometric evidence from the South Eastern Europe . Journal of Economic and social research, 11(1), 1.

Barro R, Martin I (1992) Public Finance in Models of Economic Growth. Review of Economic Studies 3: 645-661.

Devarajan, S., Swaroop, V., & Zou, H. F. (1993). What Do Governments Buy? (No. 513). China Economics and Management Academy, Central University of Finance and Economics.

Devarajan, S., Swaroop, V., & Zou, H. F. (1996). The composition of public expenditure and economic growth. Journal of monetary economics, 37(2), 313-344.

Eltalla, H., & Hens, L. (2010). The Economic Impact of Donor Aid to Reconstruct Gaza. In GARNET Conference" The European Union in International Affairs (pp. 22-24).

- Eltalla, Hakeem (2016). The Economic Impact of Constructing a Gaza Seaport: Evidence from a Computable General Equilibrium model. Journal of Economic Cooperation & Development, 37(2), 35.
- Jerono, C. R. (2009). Government Expenditure Components on Economic Growth in Kenya. International Journal of Business and Social Science Vol 4 No, 4.
- Jung, H. S., & Thorbecke, E. (2003). The impact of public education expenditure on human capital, growth, and poverty in Tanzania and Zambia: a general equilibrium approach. Journal of Policy Modeling, 25(8), 701-725.
- Kemal, D., De Melo, J., & Robinson, S. (1982). General equilibrium models for development policy. A World Barok Research Publication, 204-33.
- Keynes JM (1936) General Theory of Employment, Interest and Money, London: Palgrave Macmillian, UK.
- King, B. (1985). What is SAM? In Social Accounting Matrix: A Basis for Planning. Pyatt, G. and Round, J. (eds.). Washington D.C: The World Bank.
- Lofgren, H., Harris, R. and Robinson, S. (2002). A Standard Computable General Equilibrium (CGE) Model in GAMS. Trade and Macroeconomics, International Food Policy Research Institute, Washington, DC.
- Lofgren Hans, Robinson Sherman. (2004). Public Spending, Growth, and Poverty Alleviation in Sub-Saharan Africa: A Dynamic General Equilibrium. Washington, DC: International Food Policy Research Institute.
- Mitchell, D. J. (2005). The impact of government spending on economic growth. The Heritage Foundation, 1813, 1-18.
- Matovu, M. J., & Dabla-Norris, M. E. (2002). Composition of government expenditures and demand for education in developing countries (No. 2-78). International Monetary Fund.
- Nworji, I. D., Okwu, A. T., Obiwuru, T. C., & Nworji, L. O. (2012). Effects of public expenditure on economic growth in Nigeria: A disaggregated time series analysis. International Journal of Management Sciences and Business Research, 1(7), 1-15.
- Nurudeen, A., & Usman, A. (2010). Government expenditure and economic growth in Nigeria, 1970-2008: A disaggregated analysis. Business and Economics Journal, 2010, 1-11.
- Odior, E. S. O. (2011). Government spending on education, economic growth and long waves in a CGE microsimulation analysis: The case of Nigeria. British Journal of Economics, Finance and Management Sciences, 1(2), 74-87.
- Olugbenga, A. O., & Owoye, O. (2007). Public expenditure and economic growth: New evidence from OECD countries. Business and Economic Journal, 4(17).
- Olulu, R. M., Erhietovwe, E. K. & Adrew, U. (2014). Government Expenditures and Economic Growth: The Nigerian Experience. Mediterranean Journal of Social Sciences, 5(10), 89-94.
- Palestine Monetary Authority (PMA) 2016, Annual Report 2015.
- Paternostro, S., Rajaram, A., and Tiongson, Erwin R., (2007). Does the Composition of Public Spending Matter? Oxford Development Studies, (35) 1, 47-82.
- Roland-Holst, D. (2008). Social Accounting Matrix for Pakistan, 2004-5. Berkeley: University of Berkeley. Roland-Holst, D. (2008). Social Accounting Matrix for Pakistan, 2004-5. Berkeley: University of Berkeley.
- Solow R (1956) A Contribution to the Theory of economic growth. Quarterly Journal of Economics 70: 65-94.
- Solow R (1957) Technical Change and Aggregate production function. Review of Economics and Statistics 39: 748-62.
- Stiglitz, J. E. (2000). Economics of the Public Sector. W.W. Norton and Company.
- Shoven, J. and Whalley, J. (1984). Applied general equilibrium models of taxation and international trade: an introduction and survey. Journal of Economic Literature, 22(3): 1007-1051.
- Thurlow, J. (2004). A dynamic computable general equilibrium (CGE) model for South Africa: Extending the static IFPRI model. Trade and Industrial Policy Strategies, Johannesburg.
- UNCTAD (2009). Policy Alternatives for Sustained Palestinian Development and State Formation. UNCTAD/GDS/APP/2008/1, New York and Geneva.
- Wagner, A. (1958). The Nature of Fiscal Policy. In R. A. Musgrave, & A. T. Peacock, Classics in the Theory of Public Finance (pp. 1-8). London: Macmillan
- Wagner, A. (1883) Three Extracts on Public Finance, in R. A. Musgrave and A. T. Peacock eds 1958. Classics in the Theory of Public Finance, London: Macmillan
- World Bank (2007). Fiscal policy and economic growth: lessons for Eastern Europe and Central Asia. World Bank Publications.