2011 International Conference on Economics and Finance Research
IPEDR vol.4 (2011) © (2011) IACSIT Press, Singapore

GOVERNMENT EXPENDITURES AND ECONOMIC GROWTH IN JORDAN

Dr. Mwafaq M. Dandan
Associate Professor
Administrative And Human Sciences College , ALJouf University
Kingdom of Saudi Arabia
E.mail:Mwafaq70@hotmail.com

Abstract —**The objective of this paper is to investigate the impact of public expenditures on economic growth using a time series data on Jordan for the period 1990-2006 using for this purpose the different regression models .The study found that the government expenditure at the aggregate level has positive impact on the growth of GDP which is compatible with the Keynesian's theory, it was also found that the interest payment is proven to have no influence on GDP growth.**

Keywords: Public Expenditure, Economic Growth

I. INTRODUCTION

Much attention has been given to the remarkable economic success of the newly developed countries, this success is often attributed to the government role of these countries, the dominant view among economists as well as public policy makers is that the government can play a very important role in economic development, as the fiscal policy is an important instrument because it enables the government to intervene in the economy. This intervention considered a short–run policy to control, the fluctuation in the real gross domestic product and unemployment rate. In a context of simple Keynesian model, an expansionary fiscal policy aims to stimulate the

economy can be done either by an increase in the government expenditure or by a tax cut or both. But, if this policy failed to achieve the desired growth rate then we expect the government will not get the desired tax revenue collection to finance the government spending in the next period.

In all economists who discussed the relation between public expenditures and economic growth Keynes was among the most noted with his apparently contrasting viewpoint on this relation. Keynes regards public expenditures as an exogenous factor which can be utilized as a policy instruments promote economic growth.

However, the impact government expenditure on economic growth is not without controversy in the empirical literature. On the one hand, Singh and Sahni (1984), Ram (1986), and Holmes and Hutton (1990) conclude that government expansion has a positive effect on economic growth. On the other hand, Landau (1983, 1986),

Barth, Keleher, and Russek (1990) find the opposite is true that government expansion tends to exert a negative impact on economic growth for many developed and less-developed countries. In another study, Ram (1986) examines 63 developed and developing countries but detects no consistent causal pattern between government expenditure and economic.

Explanations offered to account for these varied and conflicting results can broadly be divided into two categories. According to the first, it is the differences in the set of conditioning variables and initial conditions across studies that are responsible for the lack of consensus in the results (Levine and Renelt 1992). In contrast, the second category consists of a handful of studies (Helms 1985; Mofidi and Stone 1990; Kneller *et al*. 1999) that suggest this variation in the results, in part at least, reflects the wide spread tendency among researchers to ignore the implications of the government budget constraint for their regressions. In particular, the latter view emphasizes the need to consider both the sources and the uses of funds simultaneously for a meaningful evaluation of the effects of taxes or expenditures on economic. (Niloy Bose)

The purpose of this paper is to examine the relation between government expenditure and economic growth in Jordan during the period 1990-2006,the researcher choose one single country with an attempt to make a more in-depth investigation and analysis. The country of Jordan is selected for this study because it is well-documented in the literature, that the government of Jordan has played an important role in its successful economic development, despite the shortage of natural resources in the country. In addition, the Jordanian case is a special one not appropriate for generalized conclusions relating to government spending and economic growth (e.g., the kingdom of Jordan economy was deeply impacted by a major wars in the region , lost large part of its land in 1967 with Israel).

**This research has been done during the sabbatical leave from AlBalqa Applied University -Jordan*

II. MATERIALS AND METHODS

This study attempts to analyze the impact of public expenditures in economic growth in Jordan during the period 1990-2006 using for this purpose different statistical techniques

Sources of data: The study is based on the following:

1. Government of Jordan, Ministry of Finance publications
2. Central Bank of Jordan Reports.
3. The General Budget Laws

III. OBJECTIVES OF THE STUDY:

This paper aims to analyze:

1. The composition of public expenditures in Jordan during the period 1990-2006.
2. The impact of public expenditures in GDP growth Jordan.

IV. REVIEW OF THE LITERATURE

The theoretical relationship between government expenditure and economic growth is well-documented in the literature and therefore it will only be briefly discussed here. There are two major divergent theories in economics concerning the relationship between government expenditure and economic growth. While Keynesian macroeconomic theory has generally assumed that increased government expenditure tends to lead to high aggregate demand and in turn, rapid economic growth, Wagnerian theory, however, leans toward the opposite view. The latter contends that an increase in national income causes more government expenditure.

A number of studies focused on the relation between government expenditure and economic growth. Nevertheless, to pertain to the topic of this paper, we will only focus on the literatures that probe the relationship. Among the literatures, some of the studies are the case studies which focus on specific country while others target on the cross-countries research by studying panel dataset. The results varied from one study to another.

Marta Pascual and Santiago Álvarez-García studied the impact of government spending and economic growth in the European Union countries and the results obtained based on regressions used and panel techniques suggested that government spending is positively related with economic growth in the European Union countries.

Chih-Hung Liu and others (2008) investigated the causal relationship between GDP and public expenditures for US federal government covering the time series data 1974-2002, they found in this study that total expenditures does cause the growth of GDP, which is compatible with the Keynesian's theory, but the growth of GDP does not cause the increase in total public expenditures which is working against Wagner's law.

Jackson and Fethi (1998) target on the causal relationship between economic growth and government spending in Northern Cyprus by using the time series data from 1977 to 1996.They also found a mixed evidence on their empirical results, i.e., some results support Wagner's Law while others verify Keynesian's theory.

Benjamin and Tin Wei Lai (1997) in their study the government expenditures and economic growth in South Korea concluded that the government has played an important role in economic development of Korea.

John Loizides and Vamvoukas (2005) found that in all countries public expenditures causes growth in national income either in the short or the long run.

Niloy Bose, M Emranul Haque , and Denise R Osborn (2003)carried out a study titled "Public Expenditure and Economic Growth: A Disaggregated Analysis for Developing Countries" this study found out that the share of government capital expenditure in GDP is positively and significantly correlated with economic growth, but current expenditure is insignificant.

V. GOVERNMENT EXPENDITURES IN JORDAN

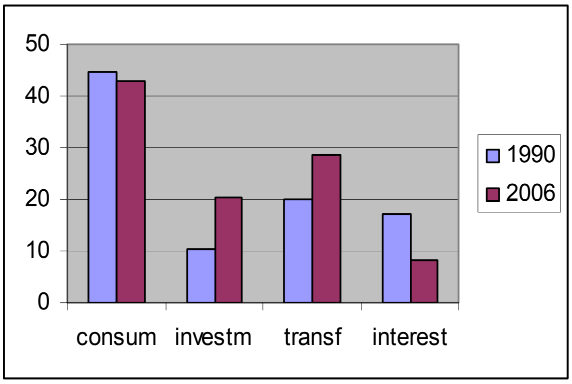
Jordan is small country with a small population and a few natural resources, In the late 1980s, Jordan was compelled to import not only many capital and consumer goods but also such vital commodities as fuel and food, the Jordanian economy flourished in the 1970s as the gross domestic product (GDP) enjoyed double-digit growth. The economy continued to fare well in the early 1980s, despite a recessionary regional environment. Indeed, by the late 1980s, Jordanians had become measurably more affluent than many of their Arab neighbors. The 2005 per capita GDP of approximately US$2533placed Jordan's citizens well within the world's upper-middle income bracket.

Economic prosperity rested on three primary bases. Jordan's status as the world's third largest producer of phosphates ensured a steady--if relatively modest--flow of export income that offset some of its high import bills. More important, Jordan received billions of dollars of invisible or unearned income in the form of inflows of foreign aid and remittances from expatriates. These financial inflows permitted domestic consumption to outpace production and caused the gross national product (GNP) to exceed the GDP. In the late 1970s and early 1980s, GNP exceeded GDP by 10 percent to 25 percent. High financial inflows from the mid-1970s to the mid-1980s allowed Jordan to maintain a low current account deficit; in some years it registered a current account surplus, without much external borrowing and despite trade and budget deficits. Jordan's economy, therefore, demonstrated many of the characteristics of wealthier and more technologically advanced rentier economies. Jordan also capitalized on its strategic geographic location, its educated work force, and its free enterprise economy to become a regional transit point for exports and imports between Western Europe and the Middle East. Because of these factors, it also became a magnet for foreign direct investment.

The three main parts, besides interest payment, of the government expenditures of Jordan are recurring, capital and transfers. Transfers payments are the reallocation of resources from the public sector to the private sector, e.g. pension system, business subsidies food and fuel subsidies.

Recurring expenditures (government consumption) is for instance, salaries paid to government employees and the purchase of goods and services. Capital expenditures (government investment) are concerned with acquiring and constructing long term assets such as roads, building, and machinery. While interest payments are mainly interest on the government internal and external debt, but also interest subsides for loans given to certain sectors. Government revenues are made up from internal and external sources. internal sources are mainly made of income and sales taxes, while external sources are loans and assistance. Figure No-1 shows government of Jordan expenditures by economic category for the financial year 2005

Figure1. Government of Jordan Expenditures by Economic Category For the Financial Years1990 and 2006



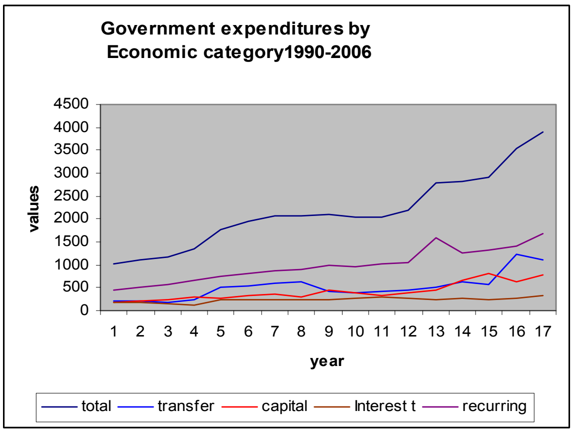
Source: Directory of General Budget
The General Budget Law 2005

Recurring expenditures accounted for 44.56 percent of total government expenditures in Jordan in 1990 while in 2006 declined to 43 percent, capital expenditures increased form 18.52 percent in 1990to 20.5 percent in 2006 similarly transfer expenditures rose to 28.5 percent in 2006 from19.95 percent in 1990, the proportion of expenditures devoted to interest payment declined to 8.0 percent in 2006 from 17 percent in 1990 of the overall expenditures of the government of Jordan 2005.it is clear that the highest change occurred in the proportion of transfer expenditures in Jordan during the study period.

VI. THE GROWTH OF GOVERNMENT EXPENDITURES IN JORDAN

The size of the government of Jordan as well as the Jordanian economy has increased significantly through out the last decades. The growth of public expenditures in Jordan is to a large extent due to increased income redistribution which is clear from the increase in the share of transfer payments. Figure No-2 depicts how government expenditures and the four different categories, consumption, investment, transfer and interest payment have changed during the study period, The curve of total expenditures and transfer payments are highly correlated specially in the recent years which gives further evidence that most of the changes in total expenditures are due to increase in transfer payments .which is due to the social reforms that are supposed to secure a material well-being for all the citizens . In 1990, the total government expenditures was 1032.6 million Jordanian Diners which or 37.4 percent of GDP of these 205.9 million transfer payment which counted for 19.92% of total government expenditures. In 2006 total expenditures had increased to 3912.2 millions while its share of national income has reached to 39.1%. Transfer expenditures share out of the total government expenditures rose to 28.52%.

Figure 2.



1 stands for the year1990

In order to analyze the impact of government expenditures in Jordan the data on the government expenditures economic category and the GDP given in Table 1 is used.

VII. DISCUSSION

Many types of studies were under taken by different authors in order to understand the impact of government expenditures at the aggregate and disaggregate level on the economic development and many methods and variables were used for this purpose. Some of these studies focused on the study of impact of government expenditures on different sectors of the economy, GDP growth etc. while some other researchers paid much attention to study the role of economic growth on government expenditures.

It is difficult to analyze the effect of government expenditures on all the sectors and variables as described above in a single study. There for, I narrow down my analysis to the impact of government expenditures on GDP growth.

TABLE1. GOVERNMENT OF JORDAN EXPENDITURES BY ECONOMIC CATEGORY AND

GDP (At Current Jordanian Dinar)

year	recurring	Interest	capital	transfer	total	GDP
1990	460.2	175.3	191.2	205.9	1032.6	2760.9
1991	518.2	180.1	195.6	205.8	1099.7	2958.0
1992	582.5	155.8	248.2	191.2	1177.7	3610.6
1993	674.2	122.0	292.3	248.1	1336.6	3884.3
1994	738.2	234.5	272.7	514.5	1759.9	4358.3
1995	822.4	247.6	333.8	534.4	1938.2	4714.6
1996	864.7	235.6	363.6	597.8	2061.7	4912.2
1997	897.0	238.0	287.0	637.0	2059	5137.5
1998	987.2	247.7	443.1	409.4	2087.4	5609.8
1999	973.3	278.1	396.4	391.7	2039.5	5778.1
2000	1016.8	293.1	335.8	408.4	2054.1	5998.6
2001	1058.0	278.0	403.8	452.5	2192.3	6363.8
2002	1584.9	251.4	438.8	519.3	2794.4	6794.0
2003	1249.4	270.3	646.1	644.6	2810.4	7228.7
2004	1308.5	229.0	802.7	577.9	2918.1	8090.7
2005	1396.6	267.1	630.9	1244.3	3538.9	8941.5
2006	1684.5	317.8	794.1	1115.8	3912.2	9997.4

Source: Directory of General Budget, Government of Jordan The General Budget laws 1990-2006

The regression model is fitted to the data. The quadratic model is given as:

GDP = $\alpha + \beta_1 1$ re + β_2 cap + β_3 tra + β_4 int

Where GDP: Gross Domestic Product

α: Constant

Re: Recurring expenditures

cap: Capital expenditures

tra :Transfer payment

int: Interest payment

The result of the estimated model is given as:

GDP= 1.414 + 2.067re + 4.331cap + 1.339 tra + 4.992int

Coefficient data:

Overall significance of model (F) =144.992

α = 1.414

β_1 = 2.067 (t statistic = 3.724) sig. (.003)

$\beta 2$ = 4.331 (t statistic = 4.894) sig. (.000)

$\beta 3$ = 1.339 (t statistic = 2.831) sig. (.015)

$\beta 4$ = 4.992 (t statistic = 2.001) sig. (.069)

R^2 = 0.980

Standard Error = 334.64319

Correlation Coefficient (r) = 0.990 = 99%

The result shows the positive effect of government expenditures on the GDP during the period 1990-2006 as the $\beta 1$, $\beta 2$ and $\beta 3$ have a positive sign showing that the GDP increases as government expenditures increase. But $\beta 4$ sig. is (.069) which indicates that it has no impact on GDP growth.

The entire coefficients are significant. The value of R-Squared is 98% variation s in GDP explained with the help of government expenditures. And there is 99% correlation between government expenditures and GDP in Jordan.

VIII. CONCLUSION

The main aim of this study was to study the impact of government expenditures on economic growth in Jordan, during the period 1990-2006.By testing the related data of government expenditures and GDP of Jordan at the aggregate level, it was found that government expenditures does cause the growth of GDP, which is compatible with the Keynesian's theory. The discovery of statistical analysis may provide insight in to several aspects of policy implications.

Firstly: the more government expenditure does lead to the growth of the Jordanian economy, which seems consistent with the Keynesian's theory of fiscal policy.

Second : taking a micro viewpoint of each item of government expenditures ,interest payments is proven to have no influence on GDP growth .possible explanation could be a huge amount of money paid as external debt services which makes no contribution to domestic economy.

Third: government consumption expenditure does promote economic growth on Jordan, but less than the impact of government investment expenditures or transfer payments, as the investment expenditure for many years has been promoted by institutional economists as a development strategy in developing country, especially investment in human resources.

Policy recommendations that could be reasonably made from this study include that investment expenditures in particular investment in human resources should be prioritized than all other item of spending assuming economic growth is the most urgent goal of Jordanian government .

REFERENCES

[1] Benjamine S. Cheng and Tin Wei Lai, 1997. Government Expenditures and Economic Growth in South Korea: A VAR Approach. Journal of Economic Development, Volume 22, number 1, June 1997.

[2] Niloy Bose, M Emranul Haque and Denise R Osborn. Public Expenditure and Economice Growth Disaggregated Analysis for

Developing Countries. Available at: http://www.ses.man.ac.uk/cgbcr/DPCGBCR/dpcgbcr30.pdf

[3] John loizides and George Vamvoukeas. Government Expenditures and Economic Growth: Evidence from Trivariate Causality Testing .Journal of Applied Economics, vol.VIII, NO.1 (MAY 2005), 125-152. Available at: http://www.cema.edu.ar/publicaciones/download/volume8/loizides.pdf

[4] Mara Pascual and Santiago Alvares. government spending and economic growth in the European Union countries Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=914104

[5] Louise Chih-hung Lio, Chiehwen Ed Hsu , and Mustafa Z. Younis. The Association Between Government Expenditures and Economic Growth : Granger Causality Test of US Data,1947-2002. Available at: http://works.bepress.com/cgi/viewcontent.cgi?article=1020&context=edhsu

[6] Manh Vu Le and Terukazu Suruga. The effects of FDI and Public Expenditures on Economic Growth: From Theoretical Model to Empirical Evidence. GSICS Working Paper Series NO.2 November 2005. Available at:

[7] http://www.research.kobe-u.ac.jp/gsics-publication/gwps/2005-02.pdf

[8] Seymour Douglas and Oral Williams. The Impact of Government Expenditures and Economic Growth in the OECS: A Disaggregated Approach. Available at: www.geocities.com/CollegePark/Library/3954/oral.pdf

[9] Junko Koeda and Vitali Kramarenko. Impact of Government Expenditures on Growth :The case of Azerbaijan, IMF woking paper WP/02/115 Available at:

[10] http://www.imf.org/external/pubs/ft/wp/2008/wp08115.pdf

[11] NAIL Awamleh, 1996.analyzing Public Expenditure Policy in Jordan during the period 1984-1993. Journal of King Saud University ,Vol 8 NO.1 PP85-81.1996

[12] The general Budget lows 1990-2005.directory of General Budget, Ministry of Finance. Government of Jordan.