Arab Journal of Administrative Sciences

2002, Vol. 9, No. 3, 419 - 439

Khalifa H. Ghali
Naief H. Al-Mutairi

Kuwait University, Kuwait

GOVERNMENT SPENDING IN A DYNAMIC MODEL OF ENDOGENOUS GROWTH, WITH APPLICATION TO THE STATE OF KUWAIT

Key Words

Endogenous Growth; Government Spending; Unit Root Testing; Cointegration; Causality; Vector Error-Correction Modeling.

Abstract

This paper extends Barro's (1990) endogenous growth model to a dynamic vector error-correction model in order to test for the existence and direction of causality between government expenditures and economic growth and, hence, discriminate between alternative theoretical hypotheses. The question that we address is whether changes in government expenditures lead to changes in economic growth or whether they are simply following the growth of output generated elsewhere. Using data on Kuwait, we were able to identify both direct as well as indirect causal links between the variables, a result that the existing literature could not achieve because of the common use of a single growth equation. In particular; we found that, while output growth has a direct impact on government expenditures, government investment has an indirect impact on economic growth manifested through its own impact on private investment.

Introduction

For almost two decades, the relationship between government spending and economic growth has been the subject of a controversial debate in the economic literature. Many development economists had the belief that, since government expenditures are a component of GDP, one would expect a positive association between government spending and economic growth. However, several theoretical and empirical studies raised doubts about this relationship and concluded that changes in govern-

Submitted December 2001, accepted May 2002 .

ment spending may have either depressing or accelerating effects on economic growth. A possible explanation was advanced by the new endogenous growth theory (Romer, 1986; Lucas, 1988; Barro, 1990). Compared to Keynesian fiscal policy, which makes no difference between government consumption expenditures and public capital expenditures, the new endogenous growth theory recognizes the likely differential impact of these two types of government spending on economic growth. This recognition follows from the fact that government purchases of consumption goods and services affect the economy primarily through aggregate demand, while government investment also affects the economy through aggregate supply. The new endogenous growth theory predicts that while government consumption affects economic growth negatively, public investment has a positive impact on long-run growth.

The empirical literature on the impact of government spending and economic growth is made up of two strands of research. One approach uses an aggregate production technology where public and private capital are treated as separate inputs. Then a structural equation is derived to estimate the contribution of public capital to private sector productivity. This approach was originally proposed in the seminal contributions of Eberts (1986) and Aschauer (1989). Other contributions using this methodology include Eisner (1991), Munnell (1990a, b; 1991), Tatom (1991), Holtz-Eakin (1994), Nourzad and Vreize (1995), and Otto and Voss (1996), among others.[1] A variant of this approach is based on duality in production and uses a cost function that includes the rental on public capital. The literature using this approach includes Berndt and Hansson (1992), Lynde and Richmond (1992), and Conrad and Seitz (1994), among others.

The alternative approach uses a reduced-form equation linking measures of output growth to measures of government expenditures and other socioeconomic, demographic and policy variables. One variant of this approach uses endogenous growth models in some form of what has become known as the "Barro regression". Another variant of this approach uses a variety of models to justify an assortment of variables in the growth equation. Contributions in this area include Kormendi and Meguire (1985), Romer (1986), Grier and Tullock (1989), and Barro (1990, 1991), among others.[2]

A common feature of the above approaches is that the impact of gov-

1. For a survey of the empirical literature see Pfahler *et al.* (1996).
2. For a survey of this literature see Levine and Renelt (1992).

ernment spending on economic growth is assessed based on the correlation between government spending and growth. As predicted by the new endogenous growth theory, the relationship between public sector activities and growth would be based on causality running from government expenditures to growth. However, a significant correlation is by itself insufficient in establishing the direction of causality between government expenditures and economic growth. This is because a significant correlation is also consistent with alternative arguments explaining the relationship between government spending and economic growth. One of these is based on Wagner s law according to which higher growth rates of GDP lead to higher government spending. Hence, according to this argument, the direction of causality would be from output growth to government spending. Consequently, the question that remains unanswered is whether changes in public spending lead to changes in economic growth or whether they are simply following the growth of output generated elsewhere. The answer to this question would provide a more reliable information on the basis of which a particular country can assess the effectiveness of its fiscal policy in targeting economic growth.

This paper extends Barro's (1990) endogenous growth model and attempts to empirically investigate the causal interaction between government expenditures and economic growth in order to discriminate between alternative theoretical hypotheses. For this, we develop a vector error-correction (VEC) model of "endogenous growth", where the output growth as well as public capital, private capital, and government consumption expenditures are endogenous. Compared to the estimation of a single "growth equation", which is a common practice in the empirical literature, the appeal of our model is its ability to capture both the direct as well as the indirect causal links between the variables. Identification and estimation of the proposed model are conducted using the Johansen (1988, 1990, 1992b) and Johansen and Juselius (1990) cointegration techniques.

We apply our methodology to time-series data from Kuwait where the government is playing a dominant role in economic activity with a government debt that has been accumulating significantly during the past ten years. In 1999/2000 government deficit reached 23% of GDP. Moreover, an ongoing debate on privatization is raising critical doubts about the role of the private sector and its ability to take the lead and compete successfully in the global economy. Therefore, a successful fiscal policy aiming at controlling the budget deficit and, at the

economic growth. All the variables are transformed into their natural logarithm so that the first difference approximates their growth rates.

Data on per capita real GDP and government consumption are gathered from different issues of the IMF publication *International Financial Statistics (IFS)*. Data on private and public investment were obtained from the Central Statistical Office at the Ministry of Planning in Kuwait.

Test Results for Unit Roots

Since the VEC specification in (8) - (11) requires that some or all the variables are integrated of order one, we herein investigate the stationarity status of the variables using both the augmented Dickey-Fuller (ADF) and the Phillips-Perron (PP) tests for unit roots. The null hypothesis tested is that the variable under investigation has a unit root against the alternative that it does not. In each case the lag-length is chosen using the Akaike Information Criteria (AIC) after testing for first and higher order serial correlation in the residuals.

Table 2 reports the results of testing for unit roots in the level variables as well as in their first difference. In the first half of the table, the null hypothesis that each variable has a unit root cannot be rejected by both tests. However, after applying the first difference, both tests reject the null hypothesis. Since the data appear to be stationary in first differences, no further tests are performed. We, therefore, maintain the null hypothesis that each variable is integrated of order one.

Test Results for Cointegration

Given the results of unit roots, we now use the Johansen (1988, 1990, 1992) and Johansen and Juselius (1990) techniques to test for cointegration between the variables within a VEC model as specified in (8) (11).

Table 2
Test Results for Unit Roots

Variable	*y*	*PI*	*GI*	*GC*	$\triangle y$	$\triangle PI$	$\triangle GI$	$\triangle GC$
ADF	-1.640	-1.008	-1.102	-1.748	-5.041	-4.893	-5.034	-4.993
PP	-1.956	-1.108	-1.203	-1.801	-6.694	-6.978	-7.043	-6.816

Notes: Variables are as defined in the text. The above tests are performed using the following regression,

$$\triangle y_t = \rho_0 + \rho_1 y_{t-1} + \rho_2 T + \sum_{s=1}^{p} d_s \triangle y_{t-s} + u_t,$$

where y_t is the relevant time series, T is a time trend, and u_t is a residual term. The time trend in this regression is allowed only when found to be significant. The lag-length p is chosen using the AIC criterion after testing for first and higher order serial correlation in the residuals. The critical values for ADF and PP are -2.966 and -2.970, respectively.

Before applying the Johansen's procedure to estimate α and β, it is necessary to determine the lag-length l in the VAR, equation (6), which should be high enough to ensure that the errors are approximately white noise, but small enough to allow estimation. Since the Johansen procedure is sensitive to the choice of the lag length, we based our decision on the Akaike's Final Prediction Error (FPE) criterion and selected $l = 3$. Using this lag-length, we tested for normality and absence of serial correlation in the residuals in VAR to make sure that none of them violates the standard assumptions of the model. The results of these tests, not reported here, indicate that with $l = 3$ the residuals in VAR are approximately independently identically normally distributed (*niid*).

The results of testing for the number of cointegrating vectors are reported in table 3, which presents both the maximum eigenvalue (λ_{max}) and the trace statistics, the 10 percent critical values as well as the corresponding λ values. From table 3 we can see that both tests suggest the existence of a unique cointegrating vector driving the series and three common stochastic trends.

The cointegration results in table 3 are obtained using a restricted specification of the VAR model under the hypothesis of absence of a deterministic time trend in the data. Since the results of estimation and hypothesis testing are sensitive to departures from this assumption, we now check the robustness of these results by jointly testing the cointegration rank and the hypothesis of absence of a time trend.[4] For this we use the Jo-

Table 3
Testing the Rank of Π

Trace				λmax				
H_0	H_1	*Stat.*	90%	H_0	H_1	*Stat.*	90%	λ
r = 0	r ≥ 1	52.61	49.92	r = 0	r = 1	19.41	18.03	0.432
r ≤ 1	r ≥ 2	29.02	31.88	r ≤ 1	r = 2	12.70	14.09	0.355
r ≤ 2	r ≥ 3	15.46	17.79	r ≤ 2	r = 3	6.76	10.29	0.208
r ≤ 3	r ≥ 4	5.37	7.50	r ≤ 3	r = 4	2.74	7.50	0.090

4. As proved by Johansen (1991, 1992b), the intercept terms in the VEC model should be associated with the existence of a deterministic linear time trend in the data. If, however, the data do not contain a time trend, the VEC model should include a restricted intercept term associated only to the cointegrating vector.

hansen (1992b) X^2 test. The procedure of this test is as follows. Let $M_{i,j}$ denote the combination of rank and deterministic component where i is the rank (i = 0, 1, 2, 3) and j is the model, j = 0 is the model with no time trend in the data and j = 1 is the model with a time trend in the data. Using the likelihood ratio principle, the Johansen (1992b) test allows to determine the VEC specification $M_{i,j}$ that is in accordance with the data. Starting from the most restricted model $M_{0,0}$ we compare the trace test statistic to the corresponding critical value. If the model is rejected we keep the rank assumption and change the model of the deterministic trend to the next one. So we continue to model $M_{0,1}$. If this model is also rejected we change the rank to i = 1 and go through the same procedure for j = 0 and j = 1. We keep changing i and j until the first time the joint hypothesis is accepted. The results of this test are reported in table 4 where we can see that model M1,0 is the one that is consistent with the data. Hence, the test confirms that the rank is equal to one and that the data do not contain a deterministic time trend. Therefore, we will continue using a restricted intercept term in the VAR specification with one cointegrating vector. This implies that the intercept term should be associated to the cointegrating vector and not to the VEC model.

The estimates of β and α from model $M_{1,0}$ are presented in table 5. From the α vector we can see that the coefficient on the cointegrating vector in the private investment equation is small and insignificant. Testing the weak exogeneity of *PI*, that is $H_0: \alpha_2 = 0$, yields a likelihood ratio test = 0.72 which compared to the 5% critical value $X^2(1) = 3.84$ enables us to easily accept the null hypothesis. Estimates of α and β based on the weak exogeneity of *PI* are presented in table 6. The results of this table indicate that the model is now completely identified. We have estimated a vector-error-correction (VEC) model with one cointegrating vector and three common stochastic trends. The results suggest that the variables in the system have a stable long-run equilibrium relationship. Except for private investment, the short-run behavior of

Table 4
Joint Test for the Rank and the Deterministic Component

Model	Trace Statistic	90%	Decision
$M_{0,0}$	52.61	49.61	Reject
$M_{0,1}$	46.77	43.84	Reject
$M_{1,0}$	29.02	31.88	Accept

the variables is affected by the extent to which they are away from the long-run equilibrium-path. The coefficients (α) indicate the speed of adjustment of each variable to the long-run equilibrium and the vector (β) indicates the direction towards which this long-run equilibrium exists. Hence, the short-run behavior of the variables is affected by the extent to which the system is out of equilibrium. As for private investment, while it maintains a significant long-run relationship with the remaining variables, it is weakly exogenous because its short-run behavior is not adjusting to the long-run cointegrating relationship. The short-run dynamics of private investment depends only on the short-run changes in the remaining variables with causality going in either direction.

Table 5
The β and α Vectors

Variable	β	α
y_t	1	-0.742
		(-5.119)
PI_t	-0.505	0.046
	(-5.316)	(1.714)
GI_t	-0.243	0.609
	(-2.600)	(3.740)
GC_t	-0.127	0.640
	(-2.301)	(2.311)
Intercept	-1.026	
	(3.881)	

Notes: T-ratios are in parentheses.

Table 6
The Restricted β and α Vectors

Variable	β	α
y_t	1	-0.738
		(-5.159)
PI_t	-0.506	------
	(-5.318)	
GI_t	-0.243	0.610
	(-2.602)	(3.741)
GC_t	-0.129	0.638
	(-2.302)	(2.312)
Intercept	-1.025	
	(3.880)	

Notes: T-ratios are in parentheses.

Test Results for Granger-Causality

The results of cointegration presented above imply that the variables have a vector-error-correction representation of the form:

$$\Delta y_t = \alpha_1 \nu_{t-1} + \sum_{s=1}^{2} \gamma_{1,s} \Delta y_{t-s} + \sum_{s=1}^{2} \gamma_{2,s} \Delta PI_{t-s} + \sum_{s=1}^{2} \gamma_{3,s} \Delta GI_{t-s} + \sum_{s=1}^{2} \gamma_{4,s} \Delta GC_{t-s} + \eta_{1,t} \quad (12)$$

$$\Delta PI_t = \sum_{s=1}^{2} \theta_{1,s} \Delta y_{t-s} + \sum_{s=1}^{2} \theta_{2,s} \Delta PI_{t-s} + \sum_{s=1}^{2} \theta_{3,s} \Delta GI_{t-s} + \sum_{s=1}^{2} \theta_{4,s} \Delta GC_{t-s} + \eta_{2,t} \quad (13)$$

$$\Delta GI_t = \alpha_3 \nu_{t-1} + \sum_{s=1}^{2} \delta_{1,s} \Delta y_{t-s} + \sum_{s=1}^{2} \delta_{2,s} \Delta PI_{t-s} + \sum_{s=1}^{2} \delta_{3,s} \Delta GI_{t-s} + \sum_{s=1}^{2} \delta_{4,s} \Delta GC_{t-s} + \eta_{3,t} \quad (14)$$

$$\Delta GC_t = \alpha_4 \nu_{t-1} + \sum_{s=1}^{2} \Phi_{1,s} \Delta y_{t-s} + \sum_{s=1}^{2} \Phi_{2,s} \Delta PI_{t-s} + \sum_{s=1}^{2} \Phi_{3,s} \Delta GI_{t-s} + \sum_{s=1}^{2} \Phi_{4,s} \Delta GC_{t-s} + \eta_{4,t} \quad (15)$$

where ν_{t-1} is the error-correction term based on the results of table 6.

Table 7
Estimates of the VEC Model

Variable	ΔY_t	ΔPI_t	ΔGI_t	ΔGC_t
ν_{t-1}	-0.738	-------	0.610	0.638
	(-5.159)		(3.741)	(2.312)
Δy_{t-1}	-0.315	0.110	0.522	-0.344
	(-2.788)	(1.661)	(2.662)	(-0.081)
Δy_{t-2}	0.017	0.088	0.407	0.453
	(0.116)	(1.077)	(2.011)	(2.013)
ΔPI_{t-1}	0.327	0.628	0.082	0.089
	(2.770)	(2.801)	(1.308)	(0.337)
ΔPI_{t-2}	0.219	0.431	0.009	0.045
	(3.101)	(1.701)	(0.421)	(0.116)
ΔGI_{t-1}	0.261	0.531	0.233	-0.241
	(1.202)	(3.705)	(2.104)	(-1.443)
ΔGI_{t-2}	0.065	0.466	-0.118	-0.070
	(0.790)	(3.253)	(-1.012)	(-0.844)
ΔGC_{t-1}	-0.007	-0.036	-0.107	-0.221
	(-1.113)	(-0.559)	(-0.718)	(-0.340)
ΔGC_{t-2}	-0.216	0.018	-0.032	0.019
	(-0.768)	(0.027)	(-0.334)	(0.104)
R^2	0.78	0.32	0.49	0.18
σ	0.0139	0.0510	0.0677	0.0994
TSC(10)	4.66	2.332	6.408	3.221
N(2)	2.026	1.601	0.866	1.304
RESET(1)	0.426	0.650	2.111	1.733

Notes: T-ratios are in parentheses. TSC(10) is a test for up to the tenth-order serial correlation, N(2) is the Jarque and Bera test for normality, and RESET(1) is a test for parameter instability.

Table 8
Testing for Granger-Causality

Variable	y	PI	GI	GC
y	-------	1.68	6.26*	5.54*
PI	8.45*	-------	2.01	1.87
GI	1.82	5.67*	-------	2.05
GC	0.36	1.07	0.92	-------

Notes: The flow of causality in the table is from the variables in the first column to the variables in the first row. Tests of Granger-causality are performed using the joint F-statistic for the exclusion of the variable in the first column in the equation of the variable in the first row. The star "*" indicates that the null hypothesis of non-causality is rejected at the 5% significance level.

This term does not figure in the *PI* equation because private investment is weakly exogenous.

Before testing for Granger-causality between the variables we first need to estimate the model in (12)-(15). Table 7 reports the OLS estimates of the model along with the results of diagnostic tests on the residuals from each equation. The first test, TSC(10) is a test for up to the tenth order serial correlation in the residuals, which is distributed $X^2(10)$. The second test, N(2), is the Jarque & Bera (1980) normality test which is asymptotically distributed $X^2(2)$. The third test, RESET(1), is the RESET test for parameter instability which is asymptotically distributed $X^2(1)$. As can be seen, the residuals from all equations pass the tests at the 95% significance levels and, hence, there is no significant departure from the standard assumptions.

Table 8 reports the results of the Granger-causality tests. The flow of causality in this table is running from the variables in the first column to the variables in the first row. These tests are conducted using a joint F-statistic for the exclusion of one variable from one equation as illustrated above. The main conclusions from this table can be summarized as follows:

(i) There is a unidirectional flow of causality running from economic growth to both types of government expenditures. This result suggests that government consumption and investment expenditures are following rather than anticipating the growth of output.

(ii) Concerning the relationship between economic growth and private investment, the flow of causality seems to be running in only one direction, from private investment to growth. This means that changes in the rates of private investment lead to changes in future rates of output growth.

(iii) The results in table 8 indicate that public investment Granger-causes private investment, which means that public capital is having spillover effects on private-sector capital in Kuwait. This result seems to be consistent with theoretical arguments explaining the impact of public capital on the productivity of private sector capital. For example, Aschauer (1989a) suggests that public capital has direct and indirect effects on the productivity of private sector capital. The direct effect on private sector output growth arises from the availability of public capital to support private sector production. The provision of public infrastructure such as roads, highways, and airports allow the distribution of goods and services throughout national and international markets. The indirect effects evolve from the complementary nature between private and public capital in private-sector productive activity. For instance, an increase in the stock of public capital raises the return to private capital which, in turn, serves to spur the rate of expansion of the private-sector capital stock.

(iv) While the results in (i) indicate that government investment has no direct causal impact on output growth, the results in (ii) and (iii) together suggest that government investment has an indirect causal impact on economic growth and that through its impact on private investment. Since government investment Granger-causes private investment which, in turn, Granger-causes growth, then public investment impacts economic growth indirectly through this two-link chain.

Even though our study focuses on only one country, the results in (iv) can in part explain the conflict that exists in the empirical literature investigating the relationship between public investment and economic growth, in particular those studies using a single growth equation. For instance some studies such as Barro (1990, 1991), and Levine and Renelt (1992) found no significant correlation between public investment and economic growth. Others such as Easterly and Rebelo (1993), Haque and Montiel (1993) found that government investment has a positive impact on growth.

Based on our results, reconciliation between the two findings would be possible if we consider the relationship between government investment and economic growth from a causality point of view. In this context, findings of no significant correlation between government investment and growth do not necessarily imply absence of causality. As noted earlier, government investment may influence the growth process indirectly through its

effects on an intermediate variable such as private investment. However, these effects which are consistent with our specification and with Aschauer's arguments cannot be detected in the context of single equation estimation.

As far as economic policy in Kuwait is concerned, the empirical findings above suggest that the Kuwaiti government should be able to control its budget deficit without causing any harm to growth simply by reducing its consumption expenditures. Over the last ten years, government consumption spending represented an average of 85% of total government expenditures (about 27% of GDP) and, hence, its reduction would substantially alleviate the burden of the budget deficit.

Given the nature of the relationship between public investment, private investment and output growth, the Kuwaiti government can promote economic growth by encouraging the private sector to have a greater role in economic activities. Given the nature of the Kuwaiti economy, which is dominated by the oil sector, a major reason for encouraging the private sector would be also to diversify the economy and reduce its vulnerability to fluctuations in oil prices. Over the past ten years the share of private investment has averaged about 9% of GDP, which is relatively low. Therefore, the government should change the country's overall development strategy to rely more on the contribution of the private sector. In this context, the Kuwaiti government has to adopt policies that create a favorable environment where the private sector can compete successfully in a global market economy.

One of these policies is to increase public investment in infrastructure. The rationale for public provision of infrastructure is based on the conventional public-goods argument that the private sector is either unable or unwilling to invest in projects that increase the core infrastructure base. Moreover, given the economic consequences of public investment in infrastructure discussed earlier, the availability of an adequate infrastructure base would support private sector production. The current situation in Kuwait is characterized by the existence of a small infrastructure base that is typically outdated. Government investment in infrastructure over the past ten years has averaged about 1% of government investment. This rate is very low and, hence, the Kuwaiti government should redirect its investment in public capital towards the provision of an adequate infrastructure in order to promote economic growth.

An additional policy measure is the privatization and deregulation of public monopolies in order to create profitable opportunities for the private sector

Growth Regressions. *The American Economic Review*, 82:943-963.

Lucas, R. J. 1988. On the Mechanics of Economic Development. *Journal of Monetary Economics*, 22:43-70.

Lynde, C. and Richmond, J. 1992. The Role of Public Capital in Production. *Review of Economics and Statistics*, 74:37-44.

Muneell, A. H. 1990a. How Does Public Infrastructure Affect Regional Economic Performance? *New England Economic Review*, September/October 11-32.

Munnell, A. H. 1991. Why Has Productivity Growth Declined? Productivity and Public Investment. *New England Economic Review*, January/February 3-22.

Munnell, A. H. 1991. Is There a Shortfall in Public Capital Investment? An Overview. *New England Economic Review*, May/June 23-35.

Nourzad, F. and Vreize, M. D. 1995. Public Capital Formation and Productivity Growth: Some International Evidence. *Journal of Productivity Analysis*, 6:283-295.

Otto G. D. and Voss, G. M. 1996. Public Capital and Private Production in Australia. *Southern Economic Journal*, 62:723-738.

Pfahler, W., Hofmann, U. and Bonte, W. 1996. Does Extra Public Infrastructure Capital Matter? *Finanzarchiv*, 53:68-112.

Rebelo, S. 1991. Long-run Policy Analysis and Long-run Growth. *Journal of Political Economy*, 99:500-521.

Romer, P. M. 1986. Increasing Returns and Long-run Growth. *Journal of Political Economy* 94:1002-1037.

Romer, P. M. 1990. Endogenous Technological Change. *Journal of Political Economy*, 98:71-102.

Solow, R. M. 1956. A Contribution to the Theory of Economic Growth. *Quarterly Journal of Economics*, 70:65-94.

Tatom, J. A. 1991. Public Capital and Private Sector Performance. *Federal Reserve Bank of St. Louis Review*, 73:3-15.

الملخص

الإنفاق الحكومي في نموذج متحرك للنمو التبعي مع تطبيق على دولة الكويت

خليفة بن الحبيب الغالي
نايف حمد المطيري
جامعة الكويت

تقدم هذه الدراسة تطويراً لنموذج بارو (١٩٩٠) الخاص بالنمو التبعي من نموذج ساكن إلى نموذج متحرك لتصحيح الخطأ، وذلك من أجل اختبار العلاقة السببية بين الإنفاق الحكومي والنمو الاقتصادي، ومن ثم التمييز بين الفروض النظرية البديلة في هذا المجال. والسؤال الذي تحاول الدراسة أن تجيب عنه هو ما إذا كان التغير في الإنفاق الحكومي يؤدي إلى التغير في النمو الاقتصادي أو العكس. وقد توصلت الدراسة باستخدام بيانات عن الاقتصاد الكويتي إلى وجود تأثير مباشر وغير مباشر للإنفاق الحكومي على النمو الاقتصادي، وهي النتيجة التي لم تتمكن الأدبيات في هذا المجال من إثباتها، بسبب استخدامها لنماذج ذات معادلة واحدة. وعلى وجه التحديد توصلت الدراسة إلى إثبات وجود تأثير غير مباشر للإنفاق الحكومي على النمو الاقتصادي، وذلك من خلال تأثيره على الاستثمار في القطاع الخاص.

Khalifa H. Ghali (Ph.D. in Economics, University of Southern California, U.S.A. 1991) Associate Professor, Department of Economics, Kuwait University, also Professor of Economics at the University of Tunis, His major research interests focus on applied economic growth and development, and macroeconomic dynamics.

Naief H. AL-Mutairi (Ph.D. in Economics, George Washington University, U.S.A., 1991), Associate professor, Department of Economics, Kuwait University. Teaching and Research Interests: Macroeconomics, Applied Econometrics, and Applied Econometrics.

حوليات الآداب والعلوم الاجتماعية

ANNALS OF THE ARTS AND SOCIAL SCIENCES

سجلة فصلية محكمة.

تصدر عن مجلس النشر العلمي - جامعة الكويت.

صدر العدد الأول سنة ١٩٨٠م.

تنشر الموضوعات التي تدخل في مجالات اهتمام الأقسام العلمية لكليتي الآداب والعلوم الاجتماعية.

تنشر الأبحاث والدراسات باللغتين العربية والإنجليزية شريطة أن لا يقل حجم البحث عن ٦٠ صفحة وأن لا يزيد عن ٢٠٠ صفحة مطبوعة من ثلاث نسخ.

لا يقتصر النشر في الحوليات على أعضاء هيئة التدريس لكليتي الآداب والعلوم الاجتماعية فحسب بل يشمل ما يعادل هذه التخصصات في الجامعات والمعاهد الأخرى داخل الكويت وخارجها.

الاشتراك السنوي لعدد (١٢) رسالة

نوع الاشتراك	الكويت	الدول العربية	الدول الأجنبية
أفراد	٤ دنانير	٦ دنانير	٢٢ دولاراً
المؤسسات	٢٢ ديناراً	٢٢ ديناراً	٩٠ دولاراً

ثمن الرسالة للأفراد (٥٠٠فلس)

جميع المراسلات توجه إلى رئيسة تحرير حوليات الآداب والعلوم الاجتماعية

ص.ب: ١٧٣٧٠ الخالدية - الرمز البريدي 72454 الكويت - هاتف وفاكس : ٤٨١٠٣١٩

ISSN 1560-5248 Key title : Hawliyyat Kulliyyat Al-adab

http://pubcouncil.kuniv.edu.kw/aass E-mail: aotfoa@kuc01.kuniv.edu.kw