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Article:	Dynamics of Domestic Debt and its Implications on Economic Growth: Evidence From SAARC Countries
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Abstract

Due to the fragile tax base and mounting budget deficits South Asian countries are persistently relying on both domestic and external debt which severely affects the growth performance of these countries. The external resources are not easy to get and subject to many constraints while domestic resources are easily accessible. Therefore, the budget deficit is normally financed with domestic debt. This paper examines the short-run and long-run impact of domestic debt on the economic growth of SAARC countries i.e. Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. For the sake of analysis panel data of SAARC countries from 1990 to 2020 has been used. Fixed effect model and panel ARDL econometric techniques have been applied to examine the short-run and long-run association among the variables. The natural log of GDP per capita is used as a proxy for economic growth. The other variables are domestic debt, initial GDP, foreign direct investment, trade openness, investment, and secondary school investment rate. The results of the study indicate that domestic debt has a negative impact on economic growth both in the short-run and long-run. This shows that the domestic borrowed resources have not been utilized effectively and productively. The study suggests that efforts will be made to reduce the budget deficits to minimize the reliance on domestic debt.

Keywords: SAARC, Domestic Debt, ARDL, Fixed Effect Model, Economic Growth.

Introduction

The governments in developing countries heavily rely on public debt to meet their development requirements. It is an admitted fact that if these borrowed resources are used effectively and productively then income will be generated and the country will be able to repay its debt obligations. In this case, debt will be fruitful for economic growth. But if these borrowed funds are spent on unproductive uses then they turned into a debt burden and discourage growth. Public debt is considered to be the most important problem which the governments of South Asian countries are facing. A lot of studies have been discussed the impact of foreign borrowings on growth and neglecting the effect of internal borrowings.

Like external debt, domestic debt is also very important and requires the attention of researchers and policymakers. External debt has received attention in the past it deserves. Till the end of the 1990s, in South Asian countries the most debate remained confined to external debt but later on, it had been released that domestic debt is also very much important and occupied so many risks and challenges for the economy. Like external debt domestic debt is also growing day by day. The mounting budget deficits and ever-increasing expenditures always attract domestic and foreign borrowings. To generate funds through external sources is very much expensive and subject to so many conditionality's. The major objection raises against foreign debt is that lender countries and organizations interfere in the political and economic life of the debtor country. The recipient country has to devise its economic policies according to the wishes of the lenders whether they are feasible for the country or not.

Therefore, the easiest way to generate funds for the government is borrowing through internal sources i.e. banks and non-bank sources. Debt advocates give some arguments in favor of domestic debt. Firstly, it helps to bridge fiscal deficits. Secondly, domestic debt is used to uplift and expand the financial market. Internal debt is also having a harmful impact on economic growth. Interest payments on domestic debt swallow a considerable part of

public revenues and decrease the availability of funds for development projects. Moreover, funds garnered through domestic borrowings increase the supply of money which creates an inflationary spiral in the country and sabotage the process of economic development. Growing domestic debt also increases the cost of public spending in terms of increasing interest payments. There is not much work had been done regarding the impact of internal borrowings on growth from the SAARC perspective. The study aims to fill this gap.

Table 1

Public Debt (PD), External Debt (ED) and Domestic Debt (DD) trends in SAARC Countries (US Billion \$)

YEAR	BANGLADESH			BHUTAN			INDIA			NEPAL		
	PD	ED	DD	PD	ED	DD	PD	ED	DD	PD	ED	DD
1990	15.80	10.61	5.19	0.15	0.08	0.07	226.34	83.80	142.54	0.07	0.06	0.01
1995	18.59	16.77	1.82	0.12	0.11	0.02	247.77	93.73	154.04	0.19	0.15	0.04
2000	24.76	16.21	8.55	0.18	0.12	0.06	340.14	96.39	243.75	0.25	0.20	0.05
2005	32.57	19.29	13.28	0.79	0.25	0.54	654.40	134.00	520.40	0.43	0.36	0.07
2010	37.24	20.34	16.90	1.06	0.84	0.22	1118.22	260.94	857.28	1.27	0.92	0.36
2015	54.04	23.90	30.14	2.04	1.50	0.54	1461.16	474.68	986.49	1.96	0.97	0.99
2016	61.33	26.31	35.02	2.62	1.90	0.72	1582.86	485.83	1097.03	2.37	1.16	1.21
2017	67.68	28.57	39.11	2.73	2.26	0.47	1784.48	495.70	1288.78	2.71	1.19	1.52
2018	89.50	54.73	34.77	3.08	2.67	0.41	2009.48	529.70	1479.78	3.01	1.30	1.71
YEAR	MALDIVES			PAKISTAN			SRI LANKA					
	PD	ED	DD	PD	ED	DD	PD	ED	DD			
1990	1.91	1.63	0.28	32.75	15.20	17.55	7.76	5.87	1.89			
1995	2.91	2.41	0.50	47.31	21.74	25.57	12.40	8.40	4.01			
2000	3.49	2.88	0.61	59.13	28.46	30.66	15.82	9.25	6.57			
2005	4.17	3.19	0.98	70.77	34.18	36.60	22.11	11.30	10.81			
2010	5.36	3.79	1.57	105.71	51.08	54.63	40.62	21.68	18.93			
2015	5.42	4.14	1.28	169.13	50.42	118.70	62.59	43.93	18.67			
2016	5.43	4.25	1.18	187.82	57.76	130.07	64.45	46.61	17.84			
2017	6.56	5.95	0.61	203.00	62.13	140.87	67.65	47.80	19.85			
2018	8.77	8.09	0.68	212.89	95.10	117.79	69.70	53.50	16.20			

Source: International Debt Statistics, various databases.

Objectives of the Study

The main objectives of the study are

- To examine the dynamics of domestic debt and its implication on economic growth in SAARC countries
- To give some policy recommendations based on the findings.

Theoretical Issues

To attain sustainable economic growth is the ultimate goal of every government. Economic growth is a long-run phenomenon and depends on different socio-political and economic factors. To examine the negative and positive effects of domestic debt on economic growth two different views had been presented in economic literature i.e. traditional view and the Ricardian proposition. According to the traditional view regarding debt, any reduction in tax that is bridged through public borrowing has a deleterious effect on growth. Its immediate effect would be to stimulate private spending. The increased expenditures have a SR and LR impact on the economy. It increases the demand and ultimately level of output and employment in the country. When demand for money increases the interest rate also increases.

The increase in interest rate increases the flow of foreign capital through FDI. In the LR, the increased interest rate crowds out private investment. Therefore, lower investment decreases capital accumulation and output. Thus, the overall effect of debt considering both short and long-run impacts is ultimately a decrease in consumption and economic welfare. As per the Ricardian viewpoint, public debt is equal to future taxes (Barro, 1974). A rational consumer considers the present tax cut equal to the future tax. It will bring a temporary increase in income which is taken away by the government in the future to finance the budget deficits. So consumption is insensitive to growing government debt.

Literature Review

Fry (1997) examined the effect of domestic borrowings on economic performance in 66 low-income countries. For this purpose 15 years of data from 1979 to 1993 had been used. The results indicated that domestic debt was a cheaper source of financing budget deficits than external debt. The study concluded that all the methods of financing fiscal deficits discourage growth, domestic savings, and generated inflation. Singh (1999) examined the debt growth relationship in India. The 36 years of data from 1959 to 1995 had been used. Cointegration and Granger Causality tests had been used for the estimation of results. The results obtained indicated that domestic debt and economic were not cointegrated with each other in India. Kemal (2001) saw the association among internal debt, growth, and poverty in Pakistan. The results showed that both external and domestic debt adversely affected growth and the poor. Uzochukwu (2003) investigated the impact of internal and foreign borrowings on the growth and poverty in the Nigerian economy from 1970 to 2002. Results obtained indicated that both domestic and external debt retarded growth and increased poverty. Schlarek (2004) found an association between public debt and growth. For this purpose sample of 24 developed industrial countries had been taken. No significant relationship had been witnessed between public debt and growth in these economies. Maana et al (2008) analyzed the impact of internal borrowings on the economic performance of Kenya. The data for the period of 12 years from 1996 to 2007 had been used. The results exhibited that internal borrowings did not crowd out private investment. Muhdi and Sasaki (2009) analyzed the debt and growth relationship in Indonesia. For this purpose, 16 years of data from 1991 to 2006 had been used. The outcomes indicated that domestic debt had become a central policy to bridge fiscal deficits. They further explained that the policy of financing budget deficits led to currency depreciation. Consequently, domestic debt crowd out private investment and decreased stock of capital and productivity. Adoufu and Abula (2009) examined the debt and

growth relationship in Nigeria from 1986 to 2005. The result obtained indicated that mounting fiscal deficits, low productivity, increased public expenditures, rising inflation, and low revenues were the factors that caused domestic debt to increase. The results further revealed that domestic debt discouraged growth. Abbas and Christensen (2010) analyzed debt and growth nexus in 93 low- income countries from 1975 to 2004. Granger Causality test had been applied to obtain the results. The results showed that a reasonable level of domestic borrowings had stimulated growth but when the debt level exceeded 35% of bank total deposits, its effect became negative. Checherita and Rother (2012) investigated the debt and growth relationship in 12 euro area countries from 1970 to 2009. The study results revealed that domestic debt had a mixed impact on economic growth. Izedonmi and Ilaboya (2012) examined the debt and growth relationship in Nigeria from 1980 to 2010. For analysis Johanson Cointegration and error correction (EC) econometric techniques had been applied. The results exhibited a negative affiliation between debt and growth. Umaru et al. (2013) examined the impact of external and domestic borrowings on the economic performance of Nigeria from 1970 to. For the sake of analysis, the OLS method had been applied. Results obtained indicated that both foreign borrowings and domestic borrowings stimulated growth. Hassan et al. (2015) found debt and growth association in Nigeria from 1986 to 2013. For the sake of estimation, the OLS method was applied. The results obtained indicated that debt had a negligible effect on growth. Titus et al. (2016) saw the effect of domestic borrowings in Nigeria from 1980 to 2015. To estimate the model, ECM had been applied. The result obtained indicated that both domestic and external loans positively influenced growth. Fernando et al. (2017) explored how public indebtedness affected growth in Sri Lanka from 1960 to 2015. The study had used the ARDL approach to estimate the results. Public debt was found to have been negatively associated with growth. Isibor (2018) explored the impact of public indebtedness on the growth performance of Nigeria from 1982 to 2017. For analysis

of data, two-stage least square (2SLS) method had been applied. The result exhibited a negative association between debt and growth. Moses (2019) empirically investigated the factors contributing to rising domestic debt in Nigeria from 1970 to 2015. The results indicated that bi-directional causality existed among internal debt and fiscal deficits, internal debt and foreign debt and internal debt and economic performance.

Model Specification

In the model real GDP per capita is used as a proxy to measure economic growth. This proxy to measure economic growth is used by (Barro, 1991; Pervaiz & Chaudhary, 2015; Matandare & Tito, 2018; Herndon et al., 2014; Mencinger et al., 2014). The initial level of income is included in the model as an explanatory variable to check the convergence among countries. The initial GDP is used as a proxy to check the convergence among countries (Caselli et al., 1996; Del Bo et al., 2010; and Levine and Renelt, 1992). Investment proxies by gross fixed capital formation is taken as an independent variable. Gross fixed capital formation as a proxy for investment is used by (Munnell, 1992; De Long & Summers, 1991; and Nazmi & Ramirez 1997). Secondary school enrollment rate (SSER) is used as a proxy for human capital. This proxy for human capital is used by (Levine & Renelt, 1992; Mankiw et al., 1992; and Abbas & Nasir, 2001). FDI is used as an independent variable in the model.

Trade openness measures as export plus import divided by GDP is also included in the model to see the impact of trade liberalization on growth. Financial development measures as domestic credit as a share of GDP is used as an independent variable in the model. Financial development increases the returns from capital by enhancing the efficiency of investment. Domestic debt is used as an independent and major policy variable in the model. Domestic debt also has a deleterious effect on economic growth. Domestic debt

consumes a significant part of government revenues. It compels the government to spend less on development activities which deter growth (Sheikh et al. 2010; Maana et al., 2008).

The Model

$$EG_{it} = \beta_0 + \beta_1 Initial\ GDP_{it} + \beta_2 INV_{it} + \beta_3 SCH_{it} + \beta_4 FDI_{it} + \beta_5 OPENN_{it} + \beta_6 FD_{it} + \beta_7 DOMESTIC\ DEBT_{it} + \mu_{it} \text{ -----(1)}$$

Where

α_0 = Intercept

i = Cross section dimensions.

t = Time-series dimensions.

EG_{it} = Real GDP Per Capita

Initial GDP_{it} = Initial level of income

INV_{it} = Investment as a share of GDP

SCH_{it} = Secondary school enrollment rate

FDI_{it} = Foreign direct investment as a share of GDP

OPENN_{it} = Trade openness as a share of GDP

FD_{it} = Financial development

DOMESTIC DEBT_{it} = Domestic debt to GDP ratio

Methodology

The study uses the following methodologies

1. Hausman Test
2. Fixed Effect Model
3. Panel Unit Root Test
4. Panel ARDL Approach

Data Source

For analysis 31 years of data SAARC countries from 1990 to 2020 has been used. The data has been taken from IMF, WDI, and International debt statistics (IDS) various databases.

Empirical Findings and Interpretation of Results

Hausman Test Results

The results given in Table 2 reject the null hypothesis and conclude that the fixed effect model is appropriate for the estimation of the model.

Table 2

Hausman Test Results

Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
21.356755	7	0.0033***

***Null Hypothesis rejected at 1%.

Fixed Effect Model (FEM) Results

The results given in Table 3 show that the initial GDP has a negative relationship with economic growth (EG) which indicates convergence among countries. Investment increases EG in the economy. The variables schooling, FDI, and Openness stimulated growth positively.

Table 3

Target Variable: Economic Growth (EG)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Initial GDP	-1.211796	0.251953	-4.809620***	0.0000
INV	0.264691	0.130585	-2.026961**	0.0442
SCH	0.005030	0.002026	2.482281***	0.0140
FDI	2.327677	1.628195	1.429606	0.1547
OPENN	0.000589	0.000202	2.908187***	0.0041
FD	1.293219	0.197553	6.546195***	0.0000
DOMESTIC DEBT	-0.076756	0.020870	-.3.677711***	0.0135
C	4.458991	0.640768	6.958821***	0.0000

*** Significant at 1%. ** at 5%. *

Domestic debt has an adverse association with economic growth. Internal debt servicing swallows a significant share of government receipts and squeezes the availability of funds for the government to finance its development expenditures. Reduction in development expenditures discourages growth in the economy (Abbas & Christensen 2010); Charles 2012) and Alshyab 2016).

Panel Unit Root Test Results

The results presented in Table 4 indicate that Economic growth, Initial income, Schooling, FDI, and FD are stationary at the level. The other variables like Investment, openness, and Domestic debt are at first difference.

Table 4

Panel Unit Root Test Results

Variables	ADF - Fisher Chi-square & PP - Fisher Chi-square				Levin, Lin & Chu Unit Root Test & I'm, Pesaran & Shin Unit Root Test			
	I(0)		I(1)		I(0)		I(1)	
	Intercept	Intercept & Trend	Intercept	Intercept & Trend	Intercept	Intercept & Trend	Intercept	Intercept & Trend
EG	15.3408	34.1173*	101.951**	80.6862**	-0.42124	-0.61898	-9.24543**	-7.21780**
	(0.3553)	(0.0020)	(0.0000)	(0.0000)	(0.3368)	(0.2680)	(0.0000)**	(0.0000)
	45.4848*	89.7759*	285.529**	1280.84**	-0.57002	2.24759*	-9.99173	-5.55664**
Initial GDP	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.2843)	(0.0123)	(0.0000)	(0.0000)
	2.25745	28.1475*	64.7321**	98.8194**	3.97954	-0.89090*	-10.9359**	-10.0583**
	(0.9998)	(0.0136)	(0.0000)	(0.0000)	(1.000)	(0.1865)	(0.0000)	(0.0000)
INV	3.27814	25.7654	135.134**	375.271**	4.97456	-0.83238	-9.13817**	-9.02429**
	(0.9985)	(0.0277)	(0.0000)	(0.0000)	(1.0000)	(0.2026)	(0.0000)	(0.0000)
	14.3569	10.7768	58.0380**	41.8792**	-0.93251	0.19471	-3.36381**	-1.82436**
SCH	(0.4235)	(0.7035)	(0.0000)	(0.0001)	(0.1755)	(0.5772)	(0.0004)	(0.0340)
	11.0762	6.07604	98.0147**	80.9612**	0.10167	-0.84977	-5.63140**	-4.15617**
	(0.6800)	(0.9645)	(0.0000)	(0.0000)	(0.5406)	(0.1977)	(0.0000)	(0.0000)
FDI	8.48107	18.5705	46.8601**	35.9731**	-0.61701	-0.19714	-2.41953**	-1.63831**
	(0.8628)	(0.1820)	(0.0000)	(0.0011)	(0.2686)	(0.4219)	(0.0078)	(0.0507)
	7.17715	43.3847*	79.6024**	311.025**	2.11146	0.34865	-4.13785**	-1.16291**
FDI	(0.9277)	(0.0001)	(0.00000)	(0.0000)	(0.9826)	(0.6363)	(0.0000)	(0.1224)
	39.9213*	33.9051*	106.797**	83.0056**	-2.12924*	-1.43917*	-6.86023**	-5.68908**
	(0.0003)	(0.0021)	(0.0000)	(0.0000)	(0.0166)	(0.0751)	(0.0000)	(0.0000)
OPENN	46.1231*	47.8958	177.022**	550.030**	-3.12094*	-5.3434*	-9.83286**	-5.24242**
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0009)	(0.0002)	(0.0000)	(0.0000)
	12.5340	17.6877	73.9535**	55.9845**	0.68512	-0.49804	-7.92743**	-7.00138**
FD	(0.5635)	(0.2214)	(0.0000)	(0.0000)	(0.7534)	(0.3092)	(0.0000)	(0.0000)
	12.4420	10.1667	109.979**	98.2954**	0.7559	-0.07977	-7.01743**	-4.80455**
	(0.5709)	(0.7499)	(0.0000)	(0.0000)	(0.7751)	(0.4642)	(0.0000)	(0.0000)
FD	39.9213*	33.9051*	106.797**	83.0056**	-2.12924	-1.43917*	-6.86023**	-5.68908**
	(0.0003)	(0.0021)	(0.0000)	(0.0000)	(0.0166)	(0.0751)	(0.0000)	(0.0000)

	46.1231*	47.8958*	177.022**	550.030**	-3.12094*	-3.53434*	-9.83286**	-8.18007**
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0009)	(0.0002)	(0.0000)	(0.0000)
DOMESTIC DEBT	16.1067	7.63073	64.3910**	51.0048**	-0.20243	0.63739	-2.81548**	-1.54016**
	(0.3069)	(0.9077)	(0.0000)	(0.0000)	(0.5802)	(0.7381)	(0.0024)	(0.0618)
	18.6592	12.7434	131.685**	132.982**	-0.11036	1.41776	-5.98026**	-4.90776**
	(0.1784)	(0.5468)	(0.0000)	(0.0000)	(0.4561)	(0.9219)	(0.0000)	(0.0000)

Values in Parentheses are p-values. * Stationary at a level. ** At first difference

Panel ARDL Results

The Panel ARDL results given in Table 5 explain that the coefficient of initial GDP is negative and significant which reflects convergence among countries. Investment stimulates economic growth in the long-run. The variable schooling has a positive association with economic growth. Foreign direct investment also enhances economic growth.

Trade openness also accelerates economic growth, which indicates that the more open economies enjoy a higher growth rate. Financial development has a positive but insignificant relation with EG in the LR. Domestic borrowings have been negatively related to economic growth in SR and LR. Initial GDP deters economic growth in SR. Investment also stimulates economic growth in SR. Schooling, and FDI exhibit insignificant relation with economic growth in SR.

Table 5

Target Variable: Economic Growth (EG)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Long Run Equation				
Initial GDP	-2.053561	0.398913	-5.147889***	0.0000
INV	0.137060	0.207222	-0.661415	0.5098
SCH	0.005343	0.002154	2.479860***	0.0147
FDI	5.200617	2.033337	2.557676***	0.0119
OPENN	-0.003444	0.001321	-2.607839***	0.0104
FD	0.143501	0.280752	0.511131	0.6103
DOMESTIC DEBT	-0.208781	0.254908	-8.190445***	0.0146
Short Run Equation				
COINTEQ01	-1.002967	0.132853	-7.549463***	0.0000
D(Initial GDP)	-0.001371	1.392110	-0.000985	0.9992
D(INV)	1.455649	0.799276	1.821210*	0.0714
D(SCH)	0.006780	0.016388	0.413711	0.6799
D(FDI)	-2.994687	4.627208	-0.647191	0.5189
D(OPENN)	0.519592	0.561335	0.925637	0.3567
D(FD)	-2.783660	1.267744	-2.195759**	0.0303
D(DOMESTIC DEBT)	-1.515031	0.903540	-1.676772**	0.0550
C	6.678686	0.880453	7.585514***	0.0000

*** Significant at 1%. ** at 5%. * at 10%.

Conclusion and Policy Recommendations

The prime objective of the study is to examine the impact of domestic debt on economic growth in SAARC countries from 1990 to 2020. The study finds that domestic debt has a negative impact on economic growth both in the LR and SR. It indicates that the borrowed funds have not been utilized properly and productively. Growing domestic debt increases government expenditures in the form of domestic interest payments, squeezing the availability of resources for development needs which in turn depresses economic growth. Investment accelerates economic growth in the economy. Human capital has a positive impact on economic growth. Openness and FDI also stimulate economic growth. The study recommends that efforts will be made to minimize the fiscal deficits. For this purpose tax based should be extended and non-development expenditures will be curtailed. The government should make efforts to settle down domestic debt. It will help in using monetary and fiscal policies effectively in the economy.

References

- Abbas, Q., & Nasir, Z. M. (2001). Endogenous Growth and Human Capital: A Comparative Study of Pakistan and Sri Lanka. *The Pakistan Development Review*, 40(4), 987-1007.
- Abbas, S. A., & Christensen, J. E. (2010). The Role of Domestic Debt Markets in Economic Growth: An Empirical Investigation for Low-Income Countries and Emerging Markets. *IMF Staff Papers*, 57(1), 209-255.
- Abbas, S. A., & Christensen, J. E. (2010). The Role of Domestic Debt Markets in Economic Growth: An Empirical Investigation for Low-Income Countries and Emerging Markets. *IMF Staff Papers*, 57(1), 209-255.
- Adofu, I., & Abula, M. (2010). Domestic debt and the Nigerian economy. *Current Research Journal of Economic Theory*, 2(1), 22-26.
- Alshyab, N. (2016). Domestic versus External Public Debt in Jordan: An Empirical Investigation. *Jordan Journal of Economic Sciences*, 3(1), 81-98.
- Barro, R. J. (1991). Economic Growth in a Cross-Section of Countries. *The Quarterly Journal of Economics*, 106(2), 407-443.
- Caselli, F., Esquivel, G., & Lefort, F. (1996). Reopening the Convergence Debate: a New Look at Cross-Country Growth Empirics. *Journal of Economic Growth*, 1(3), 363-389.
- Charles, O. (2012). Domestic Debt and the Growth of the Nigerian Economy. *Research Journal of Finance and Accounting*, 3(5), 45-56.
- Checherita-Westphal, C., & Rother, P. (2012). The Impact of High Government Debt on Economic Growth and its Channels: An Empirical Investigation for the Euro Area. *European Economic Review*, 56(7), 1392-1405.
- De Long, J. B., & Summers, L. H. (1991). Equipment Investment and Economic Growth. *The Quarterly Journal of Economics*, 106(2), 445-502.

- Del Bo, C., Florio, M., & Manzi, G. (2010). Regional Infrastructure and Convergence: Growth Implications in a Spatial Framework. *Transition Studies Review*, 17(3), 475-493.
- Fernando, P. J. S., De Silva, H. N., Naranpanawa, A., & Gunasinghe, C. (2017). Revisiting the Debt-Growth Nexus: Empirical Evidence from Sri Lanka. Griffith University, Department of Accounting, Finance and Economics. ISSN 1837-7750.
- Fry, M. (1997). *Emancipating the Banking System and Developing Markets for Government Debt*. Routledge.
- Hassan, O. M., Sule, A., & Abu, J. (2015). Implications of External Debt on the Nigerian Economy: Analysis of the Dual Gap Theory. *Journal of Economics and Sustainable Development*, 6(13), 238-248.
- Hausman, J.A. (1978). Specification Tests Econometrics. *Econometrica: Journal of the Econometric Society*, 46(6) 1251-1271.
- Herndon, T., Ash, M., & Pollin, R. (2014). Does High Public Debt Consistently Stifle Economic Growth? A Critique of Reinhart and Rogoff. *Cambridge Journal of Economics*, 38(2), 257-279.
- Isibor, A. A., Babajide, A. A., Akinjare, V. A., Oladeji, T., & Osuma, G. (2018). The Effect of Public Debt on Economic Growth in Nigeria: An Empirical Investigation. *International Business Management*, 12(6), 436-441.
- Izedonmi, F. I. O., & Ilaboya, O. J. (2012). Public Debt-Growth Dynamics: The Nigerian Experience. *Journal of Research in National Development*, 10(3), 252-260.
- Kemal, A. R. (2001). Debt Accumulation and its Implications for Growth and poverty. *The Pakistan Development Review*, 40(4), 263-281.
- Levine, R., & Renelt, D. (1992). A Sensitivity Analysis of Cross-Country Growth Regressions. *The American Economic Review*, 83(4), 942-963.

- Maana, I., Owino, R., & Mutai, N. (2008). Domestic Debt and Its Impact on the Economy—The Case of Kenya. In *the 13th June Annual African Econometric Society Conference in Pretoria, South Africa*.
- Maana, I., Owino, R., & Mutai, N. (2008, June). Domestic Debt and its Impact on the Economy—The Case of Kenya. In *13th Annual African Econometric Society Conference in Pretoria, South Africa from 9th to 11th July*, (Vol. 40, No. 346-598).
- Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A Contribution to the Empirics of Economic Growth. *The Quarterly Journal of Economics*, 107(2), 407-437.
- Matandare, A.M., & Tito, J. (2018). Public Debt and Economic Growth Nexus in Zimbabwe. *Journal of Economics and Sustainable Development*, 9(2), 84-89.
- Mencinger, J., Aristovnik, A., & Verbic, M. (2014). The Impact of Growing Public Debt on Economic Growth in the European Union. *Anfiteatro Economic Journal*, 16(35), 403-414.
- Moses, A. A. (2019). Determinants and Analysis of Domestic Debt in Nigeria: 1970-2015. *Acta Universitatis Danubius: Oeconomica*, 15(2), 275-287.
- Muhdi & Sasaki, K. (2009). Roles of External and Domestic Debt in Economy: Analysis of a Macro Econometric Model for Indonesia. *Interdisciplinary Information Sciences*, 15(2), 251-265.
- Munnell, A. H. (1992). Policy Watch: Infrastructure Investment and Economic Growth. *Journal of Economic Perspectives*, 6(4), 189-198.
- Nazmi, N., & Ramirez, M. D. (1997). Public and Private Investment and Economic growth in Mexico. *Contemporary Economic Policy*, 15(1), 65-75.
- Pervaiz, Z., & Chaudhary, A. R. (2015). Social Cohesion and Economic Growth: An Empirical Investigation. *Australian Economic Review*, 48(4), 369-381.

- Schclarek, A. (2004). Debt and Economic Growth in Developing Industrial Countries, Mimeo, available on-line http://www.nek.lu.se/publications/workpap/Papers/WP05_34.pdf
- Sheikh, M. R., Faridi, M. Z., & Tariq, K. (2010). Domestic Debt and Economic Growth in Pakistan: An Empirical Analysis. *Pakistan Journal of Social Sciences (PJSS)*, 30(2), 373-387.
- Singh, charan (1999). Domestic Debt and Economic Growth in India. *Economic and Research Journal of Economic Theory*, 2(1), 22-26.
- Titus, O. A., Chidi, O. T., Tochukwu, O. R., & Babatunde, O. O. (2016). Domestic debt and Economic growth in Nigeria: Data-based Evidence. *Greener Journal of Economics and Accountancy*, 5(1), 1-12.
- Umaru, A., Hamidu, A., & Musa, S. (2013). External Debt and Domestic Debt Impact on the Growth of the Nigerian economy. *International Journal of Educational Research*, 1(2), 70-85.
- Uzochkwus, Amakom (2003). Nigeria Public Debt and Economic Growth: An empirical Assessment of Effects on Poverty. *African Institute for Applied Economics Enugu Nigeria*.