Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

External Debt, NODA, and GDP Growth Nexus for South Asian and Southeast Asian Selected Economies

Muhammad Ahmad Mazher[1*], Prof. Dr. Jauhari Dahalan[2]

[1,2]Business School, University Kuala Lumpur (UniKL), Malaysia*

Email: [1]muhammad.mazher@s.unikl.edu.my*
Corresponding Email: [2]jauhari@unikl.edu.my

Received: 10 February 2022 **Accepted:** 23 April 2022 **Published:** 26 May 2022

Abstract**: The fundamental aim of this study is to fetch out the influence of NODA (net official development assistance) and EDS (external debt stock) on GDP growth in South Asian and Southeast Asian designated economies over 1971 to 2019. This study refers to the Solow-Swan model of economic growth as hypothetical framework in its elementary sort and employ factors such as NODA, EDS, savings, capital, depreciation, governance, and in addition total natural resources rent as control variable. Using panel data sourced from WDI (world development indicators). This study employed various econometric techniques comprise FEM (fixed effect model), panel cointegration, panel dynamic least square (DOLS), and Granger causality test for desired regression estimations. Empirical estimations evident that EDS has a negative and significant impact on GDP growth whereas, NODA had a negative and insignificant impact on GDP growth. A positive and significant influence of savings on GDP growth observed and estimation confirm that by increasing 1% in savings may cause an increase in GDP growth by 13.19 units. Capital has a positive and significant impact on GDP growth and estimation outcomes confirm that an increase of 1% in capital may cause an increase of 10.14 units. A negative and significant impact of depreciation on GDP growth revealed and it is intended that increasing 1% in depreciation may cause a decrease in GDP growth by 5.26 units. A positive and significant impact of TNRR on GDP growth revealed and estimations confirm that an increase of 1% in total natural resource rent may cause an increase in GDP growth by 0.099 units. While, impact of governance on GDP growth revealed insignificant. Lastly, it is also endorsed that a uni-directional Granger causality runs from GDP growth to EDS, EDS to NODA, and no causal relationship has been confirmed between NODA and GDP growth in SA and SEA designated economies over 1971 to 2019.

Keywords: External Debt, NODA, Economic Growth, Panel Analysis.

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

1. INTRODUCTION

Many developing economies experience low savings. A significant portion of the people's incomes was spent on consumption with little or no saving. As a result, investment in these countries remains low or non-existent, which transformed into low economic growth and led the nations to become poor. Hence, many of these countries rely on external debt and net official development assistance (NODA) as sources of funds for development and economic growth. Aid can be distributed bilaterally (by agreement) from lenders to receiver either via development agencies such as the World Bank (WB) or the United Nations (UN). It consists of grants, soft loans (where the 'grant' share of the loan is at least 25% of the financing amount), and technical assistance. The OECD maintains a list of developing nations and regions where aid is considered ODA. List of these nations presently more than 150 countries and regions with less per capita income than the U.S. $12,276 in 2010. According to the UN goal, developed nations must offer 0.7% of their GNI in place of ODA.

External borrowing is found to be a common phenomenon for all developing countries in their early stages of development, as they often face limited domestic capital for development and growth and may therefore borrow from developed nations to boost domestic resources and achieve high sustainable economic growth. Conversely, the issue of borrowing cannot be restricted to heavily indebted countries, as there are many Arab countries in North Africa and many Asian economies with limited domestic capital and who need to borrow from externally to plug their resource gaps. According to the World Fact Book, from the year December 2016 to December 2017, the global economy has been facing the central problem of growth of external debts [1]. It increases from USD 75.15 trillion to USD 76.61 trillion (the total external debt of the world, including public and private). The report indicates the growing trend in the external world debt with USD 2000 billion of total world debt registered in 1998, followed by USD 2700 billion in 2004 and USD 56,900 billion in 2009. The external debt has created a heavy financial burden in many developing countries and, as a result, has negatively affected the countries' health care development, living standards, education, and economic growth.

A surplus supply of labor always exists in the market, and growth is controlled only by the accessibility and efficiency of capital. Meanwhile, savings in developing economies are expected to be low to attain growth rate goals [2] and [3]. Hence, there is a demand for foreign aid or external debt to achieve the desired economic growth goals for reviving in savings constraint and escalation investment. Awareness relating to stimulation of development through financing investment [4] represented his idea based on [5] as economies boosted up by installing money from external or foreign cradles. The viewpoint of the new development model was very modest that savings are determined by investments, whereas savings are determined by per capita incomes. It is a notable theory that developing countries having a lower level of income leads to low savings, and resultantly, they are caught in a vicious circle (a country is poor because it is poor) of poverty. Therefore, it was revealed that investment in the form of foreign aid and external debt could break the vicious circle of poverty and enhance the growth level. Since the beginning of the debt crises during the 1980s, the influence of external debt on economic growth has been under discussion among the economics academics [6], [7].

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

As a dynamic participant in the economic growth process, external debt approaches to steadiness in the financial budget in any country. Foreign borrowings (ODA and external debt) take place as an essential and fundamental component in advance public finance and are deliberated as provisional but sophisticated means. The variable factor 'debt' is actually interconnected strictly with the budget deficit of an economy. Due to the inadequate stock of capital, governments borrow foreign debt during their primary stages of economic growth [8]. Borrowers may be private corporations, individuals, and governments in case of external debts. On the other hand, lenders can be private commercial banks, government, and international financial organizations like the World Bank and IMF. External debt is classified into public guaranteed debt and private non-guaranteed credit. The term 'external debt' is considered as the total private and public/government capital borrowed by a country from the rest of the entire world [9]. The external debt could be very useful as a source for economic growth and development. However, it may be very expensive for the nation because of the cost involved as debt servicing (the payment of amortization - liquidation of the principal - and accumulated interest). External debts have an effect on ranking for the economic growth in any economy. Due to high debts, economic growth will be affected very badly because it damages capital accumulation and factor of productivity.

Hence, many poor and developing countries are facing high unemployment, low level of income and investments, fewer savings, current account deficits, and a high level of inflation and poverty. Due to a lack of sufficient capital to resolve these economic concerns with efficiency, they depend on ODA and external debt to accumulation their domestic resources. Thus, the fact that external debt and ODA have significant effects on economic growth in any economy is contradictory and challenging. Therefore, the issue is widely available for discussion. Based on this evidence and facts, a precondition is to assess the effects of ODA and external debt on the prosperous context of economic growth in SA and SEA designated nations.

2. RESEARCH ELABORATIONS

Economic growth may be positive, negative, or zero [10]. When the annual average rate of economic facts is more than the rhythm of population of the country, known as "positive growth". Conversely, economic growth is known as negative when the rhythm of economic facts is less than the rhythm of the population of the country, and when both population and economic facts remain equal, it is known as zero economic growth.

The impact of foreign aid on Cambodian economic growth and findings specified that trade openness, foreign aid, and investment have positive effects on the economic growth [11]. It was also determined that ODA has a positive influence on economic growth for Bangladesh [12]. The interaction between foreign aid, external debt, and economic growth in Nigeria studied and showed some indication of the positive effect of aid on economic growth [13]. Aid with the intent of development support economic growth in the long-run and having a significant impact [14]. A positive and significant effect of ODA on economic growth revealed in Sudan during long-run period [15]. The impact of ODA on growth in Ghana was evaluated and outcomes showed a positive influence of aid on growth in the short-run [16]. Another study revealed that aid encouraged economic growth, maintained structural changes,

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

improved social indicators, and reduced poverty levels over the last 40 years [17]. A positive and significant relationship confirmed between aid and economic growth, except for the Indian economy [18]. The empirical outcomes indicated that, over the long run, foreign aid has a positive and significant impact on the economic growth of Cambodia [19]. A long-run positive correlation showed between the aid-growth relationships [20]. Another study [21] exposed that external capital flows, such as aid, had a positive impact on economic growth. Foreign aid's influence on the economic growth evaluated and outcomes indicated a positive and significant role of aid in the progression of economic growth in Vietnam [22].

On the other side, another study calculated the negative and significant impact of external aid on Ethiopia's economic growth [23]. The empirical effects of external aid on economic growth for aid liquidator countries studied [24]. Empirical estimations showed aid-growth relationship to "U-inversion," meaning a strong diminishing return relationship. More, [25], [26] revealed a negative impact of foreign aid on economic growth. The influence of foreign aid and domestic savings on economic growth in WAMZ countries was studied [27] which leads to negative impact of foreign aid on economic growth. A negative and insignificant nexus between aid and growth in Nigeria concluded [28]. The foreign aid and economic growth interactions were analysed for Morocco and revealed negative influence [29]. Does foreign aid is the source of economic growth in Ghana or not? The findings revealed a negative influence of aid on the GDP of Ghana [30]. The effectiveness of foreign aid on economic growth for South Asian and Southeast Asian economies was analysed [31] which revealed negative influence in the economy. Nevertheless, ODA and FDI indicated insignificant impacts on economic growth [32]. The effect of aid on growth for Sub-Saharan African countries was studied [33]. The consequence established that aid has no significance on economic growth, but if aid were interconnected with the policy index, it would establish a statistically significant with positive trend. It means if the policy is good, then aid tends to increase the economic growth of the economy. Whether foreign aid has any impact on the economic growth of Tanzania or not? empirical outcomes initiated the existence of the long-run relationship with growth, while in the short-run period; foreign aid does not cause economic growth [34].

The impact of short-run and long-run external debt on economic growth evaluated [35]. Results showed that decline in debt stock has substantially increased the growth performance of indebted economies. A nexus between external debt and economic growth was initiated [36] and established an empirical estimation, concluding that external debt has a positive and significant impact on economic growth. The connection between economic growth and government debt was proposed and revealed to have a positive and significant impact on GDP [37]. External debt and economic growth relationships are exposed [38] and concluded that external debt has a positive and significant impact on economic growth. The influence of public debt on economic growth analysed [39], and based on empirical outcomes, researchers revealed a positive but insignificant relationship between public debt and the economic growth of Pakistan. The connection between central government debt, external debt, household debt, and GDP was analysed [40]. A positive linear correlation was shown between external debt and GDP, while no impact was exposed between central government debt and household debt on GDP. The impact of external debt and ODA on economic growth was examined and estimation consequences stated that external debt has a positive and

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

significant effect while ODA is statistically insignificant but positively related to GDP [41]. The relationship between public debt structure and growth evaluated [42]. Based on empirical estimations, researchers revealed a positive and significant relationship between public debt and economic growth. Empirical effects of external private debt on economic growth showed a "U-shape" increasing return relationship [24]. The impact of government debt on Nigeria's economic growth was explored and outcomes revealed that external debt hampered long-term growth despite having a growth-enhancing effect in the short run [43]. Domestic debt had a large favourable long-term influence on growth while having a negative short-term impact. Debt service payments slowed growth both in the long and short term, proving the debt overhang effect. The empirical consequences of external debt on economic growth and public investment studied [44]. The outcomes revealed that a low ratio of debt-to-GDP had a positive impact on growth and public investment. Nevertheless, the high ratio showed the negative impact of external debt on economic growth and public investment. The threshold effect of external debt-to-GDP revealed that up to 57% of GDP, economic growth increased, while beyond 57% of GDP, growth declined and the impact of external debt remained negative [45].

The impact of foreign debt on economic growth was explored [46]. Both in the short and long run, foreign debt has been demonstrated to have a negative and considerable impact on economic growth. According to the analysis, foreign direct investment (FDI) boosts the economy. Foreign debt that continues to rise dramatically over time may limit economic growth, indicating that the country is under a debt overhang. The relationship between external debt and economic growth revealed a non-linear relationship [47]. An empirical study conducted [48] which revealed a negative but significant relationship between external debt and GDP ratio for the Pakistan economy from 1970 to 2017. Also, both private and public external debt showed a negative impact on economic growth. Whether government foreign debts are creditable or immoral (good or bad) for economic growth in developing and developed economies, [49] concluded a negative debt-growth nexus in the long-run while undecided with little positive sing in the short-run period. High government debt on economic growth was estimated for developed and developing countries by implying empirical analysis. It was concluded an inverse relationship between debt and economic growth [50]. The impact of trade openness and foreign debt on economic growth studied [51]. The consequences showed that there is a positive correlation between trade openness and economic growth. External debt has a negative but significant impact on growth empirically examined [52] the relationship between public external debt and poverty with economic growth for South Asian economies. The outcome indicates that public debt has a negative impact on economic growth. It is also observed that public external debt and debt servicing do not have any significant relationship with income inequality. The effects of foreign remittances, such as ODA, external debt, and FDI, on economic growth in Pakistan were examined [53]. The empirical outcomes revealed a negative impact of ODA and external debt on economic growth, while FDI showed a positive influence on economic growth, and revealed a negative and insignificant impact of debt on GDP [54]. The empirical impact of public and external debt on Nigerian economic growth was examined [55]. Based on empirical estimations, it was concluded that external debt has a negative and significant impact on growth, while domestic debt has a negative but insignificant impact on Nigerian

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

economic growth. The impact of government external borrowing on economic growth was analysed [56]. A negative and significant influence was revealed between external debt and economic growth in Oman. Another study [57] revealed the significant but contradictory effect of public debt on economic growth for developed economies.

3. RESULTS OR FINDINGS

This study empirically reveals the impact of external debt and ODA on economic growth in nine South Asian and Southeast Asian countries. The annual time-series data was collected from WDI (world development indicator). The conclusions of these studies may differ from previous studies due to varied statistical and econometric methodologies and geographic and time variation. Likewise, this study makes a difference from prior studies conducted on this subject in different ways. Initially, this study employs the Solow-Swan economic growth model in its unique form and enhances it with total natural resource rent as a control variable. Also, it employs a number of techniques such as Panel Least Square, Random Effect Model, Fixed Effect Model, and the Panel Dynamic Least Square method. Moreover, this study employs distinctive variables together in a single panel model (A) such as capital, savings, governance, depreciation, external debt, official development assistance, and total natural resources rent for two regions. Major economies comprise Bangladesh, India, Nepal, Pakistan, and Sri Lanka from the South Asian region, while Indonesia, Malaysia, the Philippines, and Thailand are from the Southeast Asian region. Lastly, this study engaged 49 years of time-series data from 1971 to 2019, which also makes it a different and unique study from prior analysis.

This research reveals the consequences concerning the mutual impact of external debt and NODA on GDP growth in SA and SEA countries from 1971 to 2019. The final implications are summarized sequentially and confirm that the external debt stock has a negative and significant impact on GDP growth for selected countries. The empirical consequences confirm that a 1% increase in external debt stock may cause a 1.84-unit decrease in GDP growth in South Asian and Southeast Asian designated countries. The foremost issue in regards to external debt borrowings and net official development assistance facilities in selected countries is that they are not utilizing external debt and ODA for productive purposes such as production of goods and services, which may be used to subsidize the growth of their economies. Through capital flight, foreign direct investment, and/or dishonest political governments embezzling, capitals or funds are either misrepresented or referred back to the donor country. Even if a small amount of money remains in a country, it is invested in areas that have a minor impact on the overall level of production, such as sports.

To measure the equilibrium and growth of an economy, the production function of the neoclassical growth theory can be engaged. The neoclassical production function is defined as Y = AF (K, L), where Y represents GDP, K represents capital share, L represents labor, and A represents technology. The effect on GDP and economic equilibrium is revealed by increasing any one factor of production. Now represented in standard Cobb-Douglas form, then:

$Y_{it} = \phi_0 + \phi_1(s)_{it} + \phi_2(CS)_{it} + \phi_3(Dep)_{it} + \phi_4(G)_{it} + \phi_5(NODA)_{it} + \phi_6(EDS)_{it} + \phi_7(TNRR)_{it} + \varepsilon_{it}$ .....(A) which is our standard model for estimation in which EDS and

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

NODA both are included.

In case, if we do not add the NODA (foreign aid) in our standard model equation (x), then

$Y_{it} = \phi_0 + \phi_1(s)_{it} + \phi_2(CS)_{it} + \phi_3(Dep)_{it} + \phi_4(G)_{it} + \phi_5(EDS)_{it} + \phi_6(TNRR)_{it} + \varepsilon_{it}$ .....(B)

In case, if we do not add EDS (external debt stock) in our standard model equation (x), then

$Y_{it} = \phi_0 + \phi_1(s)_{it} + \phi_2(CS)_{it} + \phi_3(Dep)_{it} + \phi_4(G)_{it} + \phi_5(NODA)_{it} + \phi_6(TNRR)_{it} + \varepsilon_{it}$ .....(C)

Where 't' denote to time and 'i' denote country and 'ϕ_0' is constant. The parameters ϕ is the coefficient of variables accordingly. Y representing to GDP growth (annual %), s is saving rate or gross domestic savings, CP as capital share or gross fixed capital formation (current US$), Dep as depreciation or adjusted savings: consumption of fixed capital (current US $), G as governance or general government final consumption expenditure (current US$), NODA as net official development assistance, EDS as external debt stock, TNRR as total natural resources rent (% of GDP), and 'ε as error term.

Fixed Effect Model (FEM)

Table1 : FEM Estimations for Equation A, B, and C

Variable	**Coefficient /Prob./SE**	**Coefficient /Prob./SE**	**Coefficient /Prob./SE**
EDS	-1.840468	-1.889062	-
	(0.0058)	(0.0040)	-
	[0.663141]	[0.652482]	-
NODA	-0.058065	-	-0.132102
	(0.7140)	-	(0.4015)
	[0.158351]	-	[0.157314]
GDS (s)	-0.021637	-0.020129	-0.067079
	(0.9437)	(0.9475)	(0.8278)
	[0.306161]	[0.305643]	[0.308124]
GFCF (capital)	10.14385	10.12381	8.756216
	(0.0000)	(0.0000)	(0.0000)
	[1.459824]	[1.456982	[1.382307]
Governance (G)	-2.362591	-2.345129	-2.879799
	(0.1465)	(0.1485)	(0.0773)
	[1.624022]	[1.620255]	[1.625967]
Depreciation (D)	-5.265519	-5.238854	-5.112233
	(0.0000)	(0.0000)	(0.0000)
	[1.121044]	[1.107947]	[1.128477]
TNRR	0.099222	0.096795	0.127604
	(0.0193)	(0.0216)	(0.0021)
	[0.042242]	[0.041987	[0.041307]
Effects Specification - Cross-section fixed (dummy variables)			
$R^2 = 0.7510$		$R^2 = 0.751271$	$R^2 = 0.746566$

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

Adj. R^2 = 0.7422	Adj. R^2 = 0.743097	Adjusted R^2 = 0.738218
F-statistic=85.29433	F-statistic = 91.90769	F-statistic = 89.42624
Prob.(F-statistic) = 0.000	Prob.(F-statistic) = 0.000	Prob.(F-statistic) = 0.000
D/W stat = 1.6	D/W stat = 1.5941	D/W stat = 1.584278

4. CONCLUSIONS

This research study attempts to examine the impact of external debt stock and net official development assistance on GDP growth in selected South Asian and Southeast Asian countries over the period of 1971 to 2019. Through employing the Solow growth model and total natural resource rent as control variables, the study engages various econometric techniques for empirical analysis, such as panel least square, fixed effect model, random effect model, and dynamic panel least square model. The findings confirm that there is a negative and significant impact of external debt stock on GDP growth, while there is an insignificant impact of net official development assistance on GDP growth in South Asian and Southeast Asian select economies over the period of 1971 to 2019. According to the outcomes of panel equation model (x), it is revealed that external debt stock (EDS) has a negative and significant impact on economic growth (GDP growth) in designated South Asian and Southeast Asian economies from 1971 to 2019. The empirical consequences show that a 1% increase in external debt stock may cause a decrease of 1.84 units in designated SA and SEA economies.

Furthermore, the impact of other variables such as savings, capital, depreciation, governance, and total natural resource rent on GDP growth for SA and SEA selected economies was also analysed. The estimation results of panel model equation (A) validate that an increase of 1% in GDS (savings) may cause an increase in GDP growth by 13.19 units. According to the panel equation model (B), increasing 1% in GDS (savings) will result in an increase of 12.36 units in SA and SEA selected countries from 1971 to 2019.While panel model equation (C) showed an insignificant influence on GDP growth. Capital (GFCF) has a positive and significant impact on GDP growth. The estimation outcomes of all three panel model equations confirm that an increase of 1% in capital may cause an increase in GDP growth of 10.14 units, 10.12 units, and 8.75 units in SA and SEA selected countries from 1971 to 2019 respectively. The FEM estimation outcomes confirm that there is a negative and significant impact of depreciation on GDP growth in SA and SEA selected countries. It is intended that increasing 1% in depreciation may cause a decrease in GDP growth by 5.26 units, 5.24 units, and 5.11 units in panel models (A), (B), and (C) accordingly. Based on the FEM technique, our results confirm the insignificant impact of governance on GDP growth in SA and SEA over the 1971–2019 period. According to FEM outcomes, there is a positive and significant impact of TNRR on GDP growth in SA and SEA designated economies from 1971 to 2019. The results confirm that an increase of 1% in total natural resource rent may cause an increase in GDP growth in SA and SEA economies by 0.099 units, 0.096 units, and 0.12 units in our three panel model equations (A), (B), and (C) accordingly.

Acknowledgment
I wish to extend my special thanks to my kind supervisor Prof. Dr. Jauhari Dahalan to

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

accomplish my PhD thesis goals.

5. REFERENCES

1. CIA, "The World Factbook — Central Intelligence Agency," CIA, 2012. .
2. R. Harrod, "An essay in dynamic theory," J. Econ., vol. 49, pp. 14–33, 1939.
3. E. D. Domar, "Capital expansion, rate of growth, and employment," Econom. J. Econom. Soc., pp. 137–147, 1946.
4. G. M. Meier and J. E. Stiglitz, Frontiers of development economics: the future in perspective. World Bank Publications, 2001.
5. J. M. Keynes, "Economic possibilities for our grandchildren," Essays Persuas., pp. 358–373, 1930.
6. J. Sachs, "The Debt Overhang of Developing Countries," 1989.
7. P. Krugman, "Financing vs. forgiving a debt overhang," J. Dev. Econ. Econ., vol. 29, no. 3, pp. 253–268, 1988.
8. A. M. Mazher and J. Dahalan, "Effects of External Debt, Interest Payments and Export Earnings for Economic Growth of Pakistan," Int. Res. J. Mark. Econ., vol. 6, no. 3, pp. 16–31, 2019.
9. M. P. Todaro and S. C. Smith, Economic development, 11th ed. Pearson, 2012.
10. A.-P. Haller, "Concepts of Economic Growth and Development. Challenges of Crisis and of Knowledge," 2012.
11. S. Sothan, "Causality between foreign direct investment and economic growth for Cambodia," Cogent Econ. Financ., vol. 5, no. 1, p. 1277860, 2017.
12. B. Hossain, "The Effect of Foreign Aid on the Economic Growth of Bangladesh," J. Econ. Dev. Stud., vol. 2, no. 2, p. 13, 2014.
13. P. N. Mba, M. A. Bell-Gam, and P. S. Ubi, "Interplay of Foreign Aid, External Debt and Economic Growth: The Nigeria Experience," J. Res. Econ. Int. Financ., vol. 4,no. 1, pp. 1–12, Feb. 2015.
14. C. Minoiu and S. G. Reddy, "Development aid and economic growth: A positive long-run relation," Q. Rev. Econ. Financ., vol. 50, no. 1, pp. 27–39, 2010, doi: 10.1016/j.qref.2009.10.004.
15. M. E. Mustafa, M. M. Elshakh, and E. M. Ebaidalla, "Does Foreign Aid Promote Economic Growth in Sudan ? Evidence from ARDL Bounds Testing Analysis The theme of International Economics," ERF' 24th Annu. Conf. 2018, pp. 1–25, 2018.
16. S. Adams and F. Atsu, "Aid dependence and economic growth in Ghana," Econ. Anal. Policy, vol. 44, no. 2, pp. 233–242, 2014, doi: 10.1016/j.eap.2014.05.001.
17. C. Arndt, S. Jones, and F. Tarp, "Assessing Foreign Aid's Long-Run Contribution to Growth and Development," World Dev., vol. 69, pp. 6–18, May 2015, doi: 10.1016/j.worlddev.2013.12.016.
18. M. Chowdhury and A. Das, "Aid-Growth Nexus in South Asia: Evidence from Time Series and Panel Cointegration," Res. Appl. Econ., vol. 3, no. 1, p. 3, 2011, doi: 10.5296/rae.v3i1.601.
19. H. Hokmeng and P. Moolio, "The Impact of Foreign Aid on Economic Growth in Cambodia: A Co-integration Approach," KASBIT Bus. J., vol. 8, no. 1, pp. 4–25,

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

2015.
20. Y. M. Jones, "Testing the Foreign Aid-Led Growth Hypothesis in West Africa,"
a. Work. Pap. Manag., no. April, pp. 1–34, 2013.
21. H. Balcioglu, "Foreign Aid and Economic Growth : A Panel Cointegration for Selected Turkic Republics," Int. J. Bus. Soc. Res., vol. 06, no. 06, pp. 17–23, 2016.
22. T. Trinh, "Foreign aid and economic growth: The impact of aid on determinants of
a. growth - The case of Vietnam," p. 87, 2014.
23. H. Girma, "The impact of foreign aid on economic growth:Emperical evidence from Ethiopia (1974-2011) using ARDL approach," J. Res. Econ. Int. Financ., vol. 04, no. 01, pp. 1–12, 2015, doi: 10.14303/jrief.2014.044.
24. S. Bandyopadhyay, S. Lahiri, and J. Younas, "Financing growth through foreign aid and private foreign loans: Nonlinearities and complementarities," J. Int. Money Financ., vol. 56, pp. 75–96, 2015, doi: 10.1016/j.jimonfin.2015.04.005.
25. M. Azam, "Foreign aid and economic growth: Lessons for Pakistan," J. Appl. Econ. Sci., vol. 9, no. 2, pp. 165–180, 2014.
26. A. MM, "What are the Impact of Foreign Aid to the Economic Growth? Time Series Analysis with New Evidence from Tanzania," Bus. Econ. J., vol. 7, no. 3, 2016, doi: 10.4172/2151-6219.1000237.
27. D. F. Arawomo, A. A. Badejo, O. S. Oshota, D. F. Arawomo, A. A. Badejo, and O. S. Oshota, "Complementarity of Foreign Aid and Domestic Savings as Drivers of Economic Growth : Evidence from WAMZ 1 Countries," J. Econ. Bus. Res., vol. XXI, no. 2, pp. 159–171, 2015.
28. S. Mbah, D. Amassoma, and D. Studies, "The Linkage between Foreign Aid and Economic Growth in Nigeria," Int. J. Econ. Pract. Theor., vol. 4, no. 6, pp. 1007– 1017, 2014.
29. K. Aghoutane and M. Karim, "The Impact of Foreign Aid on Economic Growth in Morocco: Econometric Analysis Using VECM," Int. J. Econ. Financ., vol. 9, no. 5, p. 87, 2017, doi: 10.5539/ijef.v9n5p87.
30. P. Appiah-Konadu, F. S. Junior, A. Eric, and D. K. Twerefou, "The Effect of Foreign Aid on Economic Growth in Ghana," African J. Econ. Rev., vol. 4, no. 2, pp. 248–261, Apr. 2016.
31. S. Liaqat, T. Kifle, and M. Alauddin, "Aid-Macroeconomic Policy Environment-Growth Nexus : Evidence from Selected Asian Countries," Discuss. Pap. Ser. 565, Sch. Econ. Univ. Queensland, Aust., 2016.
32. C. N. Nkalu, R. K. Edeme, and I. A. Ifelunini, "Development Interventions, Foreign Capital Inflows and Growth of Nigerian Economy," Int. J. Soc. Sci. Econ. Res., vol. 01, no. 06, p. 12, 2016.
33. K.-B. Tang and D. Bundhoo, "Foreign Aid and Economic Growth in Developing Countries: Evidence from Sub-Saharan Africa," Theor. Econ. Lett., vol. 07, no. 05, pp. 1473–1491, 2017.
34. A. A. Ramadhan, Z. H. Jian, and Y. K. T. Pacific, "Impact of Foreign Aid onTanzania Economic Growth: Time Serices Approach," Innov. Journal, Acad. Soc. Sci.J., vol. 1:6, pp. 89–94, 2016.
35. A. Siddique, E. A. Selvanathan, and S. Selvanathan, "The impact of external debt on

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

growth: Evidence from highly indebted poor countries," J. Policy Model., vol. 38, no. 5, pp. 874–894, 2016, doi: 10.1016/j.jpolmod.2016.03.011.
36. S. Korkmaz, "The Relationship Between External Debt and Economic Growth in Turkey," in Proceedings of the Second European Academic Research Conference on Global Business, Economics, Finance and Banking, 2015, pp. 3–5.
37. S. Spilioti and G. Vamvoukas, "The impact of government debt on economic growth:
a. An empirical investigation of the Greek market," J. Econ. Asymmetries, vol. 12, no. 1,pp. 34–40, 2015, doi: 10.1016/j.jeca.2014.10.001.
38. V. U. Ijirshar, F. Joseph, and M. Godoo, "The Relationship between External Debtand Economic Growth in Nigeria," Int. J. Econ. Manag. Sci., vol. 06, no. 01, pp. 1–5, 2016, doi: 10.4172/2162-6359.1000390.
39. A. A. Khan, D. A. Rauf, D. M.- haq, and N. Anwar, "The Impact of Public Debt on Economic Growth of Pakistan," Int. J. Acad. Res. Econ. Manag. Sci., vol. 5, no. 2, pp. 46–56, 2016, doi: 10.6007/ijarems/v5-i2/2211.
40. A. Khursheed and F. Siddiqui, "Do Debt Boosts Economic Growth? A Study of the South Asian Countries," Int. J. African Asian Stud., vol. 22, pp. 1–13, 2016.
41. I. . Okafor, S. Ugochukwu, Ugwuegbe, and H. E. Chijindu, "Foreign Capital Inflows and Nigerian economic growth nexus: A Toda Yamamoto approach," Eur. J. Accounting, Adutiting Financ. Res., vol. 4, no. 3, pp. 16–26, 2016.
42. L. E. Ujuju and G. O. Oboro, "THE NIGERIA DEBT STRUCTURE AND ITS EFFECTS ON ECONOMIC PERFORMANCE," Int. J. Bus. Manag. Rev., vol. 5, no. 10, pp. 79–88, 2017, Accessed: Dec. 12, 2021. [Online]. Available: www.eajournals.org.
43. A. Yusuf and S. Mohd, "The impact of government debt on economic growth in Nigeria," Cogent Econ. Financ., vol. 9, no. 1, pp. 1–19, 2021.
44. M. Epaphra, W. Mesiet, M. Epaphra, and W. Mesiet, "The external debt burden and economic growth in Africa: a panel data analysis," Theor. Appl. Econ., vol. XXII(2021), no. 2(627), Summer, pp. 175–206, 2021, Accessed: Dec. 12, 2021.[Online]. Available:
a. https://econpapers.repec.org/RePEc:agr:journl:v:2(627):y:2021:i:2(627):p:175-206.
45. B. T. Mazorodze, "Trade and wage disparities in South Africa," http://www.editorialmanager.com/cogentecon, vol. 9, no. 1, 2021, doi: 10.1080/23322039.2021.1915516.
46. E. P. Kurniasih, "The Effect of Foreign Debt on the Economic Growth," J. Ekon. Malaysia, vol. 55, no. 3, pp. 125–136, 2021.
47. I. A. Odusanya and A. E. Akinlo, "Growth effect of income inequality in sub-Saharan Africa: exploring the transmission channels," Int. J. Manag. Econ., vol. 56, no. 2, pp. 176–190, Jun. 2020, doi: 10.2478/IJME-2020-0012.
48. M. A. Mazher and J. Dahalan, "Effects of external debt, interest payments and export earnings for economic growth of Pakistan.," Int. Res. J. Mark. Econ., vol. 6, no. 3, pp. 16–31, 2019.
49. N. Mhlaba and A. Phiri, "Is Public Debt Harmful Towards Economic Growth? New Evidence From South Africa," Munich Pers. RePEc Arch. Pap. No. 83157, p. 23, 2017.
50. J. Woo and M. S. Kumar, "Impact of high public debt on long run economic growth for a panel of advanced economies (1970-2007)," Thesis Publ. Pakistan, 2010.
51. M. Zafar, P. Sami, U. Sabri, M. Ilyas, and S. Kousar, "the Impact of Trade Openness and

Journal of Production,Operations Management and Economics
ISSN: 2799-1008
Vol : 02 , No. 03 , April-May 2022
http://journal.hmjournals.com/index.php/JPOME
DOI: https://doi.org/10.55529/jpome.23.14.25

External Debt on Economic Growth: New Evidence From South Asia, East Asia and Middle East," Sci.Int.(Lahore), vol. 27, no. 1, pp. 509–516, 2015, [Online]. Available: http://www.sci-int.com/pdf/1173126275509-516-Mahwish Zafar--SABRI--
a. MS--Paid.pdf.
52. N. Akram, "Public debt and pro-poor economic growth evidence from South Asian countries," Econ. Res. Istraz. , vol. 29, no. 1, pp. 746–757, 2016, doi: 10.1080/1331677X.2016.1197550.
53. S. Hussain, P. Sabri, Z. Amjad, and A. Tahir, "Economic Growth of Pakistan: Effects of Foreign Capital Inflows.," Pakistan Vis., vol. 17, no. 2, p. 14, 2016.
54. F. T. Mweni and A. Njnguna, "Time Series Analysis of the Relationship Between GDP Growth Rate and External Debt in Kenya," Int. J. Econ. Commer. Manag. United Kingdom, vol. IV, no. 7, pp. 154–174, 2016.
55. O. . Eze, A. . Nweke, and E. Atuma, "Public debts and Nigeria's economic growth," J. Econ. Financ., vol. 10, no. 3, p. 24040, 2019.
56. S. Al Kharusi and Mbah Stella Ada, "External Debt and Economic Growth: The Case of Emerging Economy," J. Econ. Integr., vol. 33, no. 1, pp. 1141–1157, 2018.
57. A. Serrão, "Impact of Public Debt on Economic Growth in Advanced Economies," Int. J. Manag. Stud. Res., vol. 4, no. 2, pp. 70–76, 2016, doi: 10.20431/2349- 0349.0402008.