THE IMPACT OF TRADE OPENNESS AND EXTERNAL DEBT ON ECONOMIC GROWTH: NEW EVIDENCE FROM SOUTH ASIA, EAST ASIA AND MIDDLE EAST

Mahwish Zafar, *Pirzada Sami Ullah Sabri, **Muhammad Ilyas and ***Shazia Kousar
Economics and Commerce Department, Superior University Lahore
Mahwish.zafar@superior.edu.pk
* Department of Business and Management Sciences
(Corresponding author) pirzadasami@yahoo.com
**Superior University, Lahore, Pakistan
m.ilyas@superior.edu.pk
***Superior University Lahore
Shazia.kousar@superior.edu.pk

ABSTRACT:

Purpose:

Do lesser obstacles to international trade and more external debt encourage a positive effect on economic growth? This has been a burning issue within the field of economics for more than a century. This research aims to analyze the impact of trade openness and external debt on economic growth.

Methodology:

The impact of trade openness and external debt on economic growth is measured with the help of panel regression analysis. GDP is used as dependent variable, trade openness and external debt has been taken as independent variables. Unit root test has been applied to check the stationary of time series and cross section data. The analysis has been conducted among three regions as per divided by World Bank for the period 1980 to 2012.

Findings:

The results indicate a positive relationship between trade openness and growth. Moreover, external debt has significant and negative impact economic growth and debt is being considered by the nations as an obligation and ultimate burden on economy.

Practical Implications:

On the basis of the empirical results acquired, Policy proposals are advised to open new horizons for lesser trade barriers or trade openness. At the same time it will help the policy makers to design the debt polices. Moreover it will help to decide how it can be used effectively to make sure the repayment and to enhance economic growth.

Key Words: Trade Openness, External Debt, Economic growth, Pan

1. INTRODUCTION

Before 1980s, benefits of trade openness were skeptical; but the old controversies came to an end in the late 1980s, when countries started developing interest in multilateral trade agreement for economic cohesion. Trade liberalization is a system which minimizes the hedges to make the mobility of goods and services across the globe easy and more comfortable. Trade liberalization transforms the world into a global village by reducing the obstructions, which gives birth to dynamic changes in the economic activities at national and international level; ultimately the meaning of distance and living standard has been changed among the people of nations. IMF, World Bank, and WTO play significant role in trade liberalization [1]. Trade openness significantly changes economic, social and political life of the nations because appropriate trade policies produce economic fruits while inappropriate policies propagate sever disturbance at national level [2]. The influence of open trade on a country's prosperity is popular subject and frequently debated in literature for more than a century but still indecisive. In growth literature, it is widely accepted that growth is positively and significantly linked with trade liberalization but opponents argued that the effect of trade policies on economic growth cannot be determined exclusively because it work along other economic policies, which have significant effect on growth [3].

Traditional economist believed, trade liberalization improve productive efficiencies by making reallocation of resources keeping in view absolute and comparative advantages theory of economic growth, that ultimately uplift economic growth. Moreover, trade openness encourages competition at national as well as international level by diffusing knowledge and technological progress across the border. However, theorists heavily criticized classical and neo classical thoughts especially, which are concerned with development issues. They argued that continuously rising income differences between developed and lower developing countries prove the fallacy of free trade doctrine. Therefore, before 70s, the protectionist trade policies played a dominant role when large numbers of developing countries were forming industrial policies [4]. Main purpose of this discussion is to conclude that an "outward- oriented, export led growth strategy" is better than "import substitution industrialization" followed by govt. protection policy. Ambiguous theoretical relationship of free trade and development provide strong foundation of conflict in the economic literature [5]. Numerous studies discussed the consequences of free trade by adopting different statistical technique and some studies find significant impact of trade openness on economic growth [2], while some studies reported unhealthy relationship among these two variables, even negative at early stages of growth [6].

Moreover, in economic literature there is strong degree of consensus on positive relationship between trade and growth but the same degree of consensus is not available for trade liberalization and economic development [7]. Since the empirical findings are ambiguous and failed to find a succinct relationship of trade liberalization with development, so there is dire need to explore the true relationship among these two variables. Similarly like trade openness, external debt also play vital role in economic growth of nations. In literature the role of external debt in economic development of a country is ambiguous. In developing countries, at the early stages of development external debt and aid is considered a common phenomenon [8]. The developing countries facing, low per capita income, low saving and current account deficit require urgent inflow of capital from abroad. Erstwhile to 70s, Breton wood institution and regional commercial banks of developing countries grant loans to developing countries, that was comparatively small and on concessional basis for developmental projects. This era was considered as "golden period" for developing countries because mostly developmental projects were funded by internal resources and concessional loan were available from international community for the betterment of these regions. In these decades though LDCs received external debt but did not rely on these external resources for economic development heavily. At that time deficit in current account was not considered as a serious matter because international community encourages the countries with deficit current account to borrow from them for economic prosperity but after 1970s, scenario was suddenly changed and external debt became giant problem for developing countries. Although the external debt was taken to boost investment and economic growth but it has been proved a hindrance in the way of economic development. Moreover, payment of interest rate and repayment of external debt causes to lower the investment level, which is already lower in developing countries. The Govt. deficit financing, foreign exchange and high interest payment, makes the external debt less attract for economic development [9]. In contrast, some studies suggest that up to threshold level, foreign borrowing is beneficial for capital accumulation on the one hand [10], while on the other hand some studies found that debt servicing reduces the funds available for social sector like health and education [11], which make hindrance in development. Although the purpose of taking external debt is development rather than being depressed but ultimately burden of debt servicing becomes a constant source of headache for developing countries; even more debt is required to meet the debt obligation and developing countries trapped into "debt trap peonage" [12]. Now a day, debt does not have fixed meaning, simply debt mean obligation of a country for making payment of money. Nations borrow to boost economic development through reduction in poverty and to stabilize macro-economic policies that ultimately control sizeable adverse shocks [13], it will leads toward timely debt payment. Once this circle will complete successfully, it will affect positively living standard of the people which is a prerequisite for poverty reduction and economic growth. The main objective of this study is twofold:

1. Examine the effect of trade openness on economic growth.
2. Investigate the link between external debt and economic growth.

2. Literature Review:

Trade Liberalization, external debt and Economic Growth

Main concern of this study is to investigate that, trade openness is positively related with economic growth or not and what is the role of foreign debt in country's economic prosperity. Before empirical investigation, this section reviewed the results of previous research. The conclusions in past literature provide indistinct illustration regarding empirical benefits from international trade.

Literature regarding, higher export leads higher growth, provide mixed conclusion about the relationship between trade and economic growth [14]. Although the trade liberalization is beneficial for prosperity and development of nations, but its fruits are "country, time, and case specific" [15]. The contribution of trade liberalization in GDP growth is roughly 5%, that advocate liberal trade policy is necessary to lift economic activities [16]. However, Keynesian economist believe that liberal import policy may enhance trade deficit by increasing imports over exports [17] while conventional neo classical models emphasis that trade policy significantly affect steady state level of saving and capital accumulation by making reallocation of existing resources between different sectors [18]. Moreover, Endogenous Growth model and Standard Partial Equilibrium trade theory, stated that liberalization facilitate the diffusion of technology that significantly upgrade the contribution of export in economic development of nations [19-22].

The results of existing empirical studies can be divided in to three main categories. First set of studies [23] used cross sectional data on different countries. Second set of studies [23-26] used time series analysis on single country and found mixed results related to hypothesis that liberalization is better for growth. Third set of studies, [24, 27] used panel data analysis, conclude that trade liberalization may positively affect real GDP growth rate. Literature review portrays an abstract picture of relationship among openness and growth. Therefore, empirical investigation is crucial to examining the impact of trade liberalization on economic growth. Another important determinant of growth is foreign debt. In early 1980`s debt repayments became a big issue for less developed countries as they have less saving trends or even capacity for it, and increasing trend of foreign debt ultimately cause to reduced economic growth, to prove this relationship many empirical studies have been conducted. In previous studies only trend of external debt has been explored[28] whereas currently the relationship between economic growth and external debt is being less investigated [29].

It was observed in 24 developing countries economic growth reduced because of repayment of Debt, which decrease the available funds for investment of those countries[30]. Tight term and conditions makes it burden for the nations and adversely affect the prosperity because developing countries are unable to utilize the debt in proper manner in short run or even in long run [31]. Moreover, when non availability of funds slowdown economic growth

that affects exchange rate, which cannot adjust quickly, and consequently they begins to lose their competition and business in international market[32]. However, external debt can be helpful to discover the potentials of a country but cannot enhance them. However, if the yields of spending are more than marginal cost of borrowing on the assumption that debt is paid, then fruits of external debt can be realized [33]. Therefore, performance of Nigerian economy improved because of availability and proper utilization of external debt within under review period [34], but if government consumes more on nonproductive projects rather than productive investment, then debt reprieve may become a burden. Proper utilization of debt is linked with good institutions [35]. Poor institution creates hurdles and prevents the country to achieve the objective, higher living standard, and makes the debt unfruitful [35, 36]; Moreover, external debt along appropriate fiscal and monetary policies in transition countries positively affects the growth rate of these countries because they are on positive slope side of Laffer curve [37]. Some studies found insignificant relationship between external debt and economic growth [38]. Thus, overall empirical literature on debt-economic growth relationships is ambiguous, so there is dire need to investigate this relationship to have a right decision, to have debt or not.

3. METHODOLOGY

To examine the general relationship between Trade openness, the external debt, on economic growth, along with control variables savings, foreign direct investment and Government Expenditure, study estimated panel regressions for each region as well as pooled data. Specifically, to study the long-term association between GDP per capita and the control variables, this study followed the neo-classical growth model.

$GROWTH_{i,t}=$

$$\beta_0 + \beta_1 TRD_{i,t} + \beta_2 EXDET_{i,t} + \sum_{j=1}^{m} \lambda_j x + e_{i,t}$$

i = (1,2, ……N) (1)

Whereas

GDPi,t = Gross domestic product as annual percentage

TRDi,t = Trade Openness(Import+Export)/gdp

EXDETi,t = External Debt

SAVi,t = Savings

GCEi,t=Government Expenditure

FDIi,t= Forign Direct Investment

Study used panel data which contains same cross-sectional units (countries) over a same time period [39]. So, panel data is a blend of both times series and cross-section data. In econometrics there is lot of techniques for conducting analysis with panel data but the two most important and

:Table 1: Descriptive Statistics

East Asia and pacific					
Statistics	**Mean**	**Median**	**Maximum**	**Minimum**	**Standard deviation**
External debt (%)	3.67	3.63	5.93	1.09	0.78
Trade openness (%)	2.81	2.77	8.94	0.08	1.04
Govt. Expenditure	1.67	1.88	4.4	-3.47	1.01
Savings (%)	3.03	3.16	3.97	0.53	0.57
GDP (%)	1.58	1.78	2.9	-4.58	0.86
FDI (%)	0.69	1.07	2.95	-8.79	1.38
Middle East and North Africa					
Statistics	**Mean**	**Median**	**Maximum**	**Minimum**	**Standard**
External debt (%)	0.23	1.22	2.12	0.92	0.13
Trade openness (%)	2.76	2.68	7.15	0.78	0.81
Govt. Expenditure (%)	2.13	1.58	0.66	0.61	0.17
Savings (%)	3.03	3.08	4.24	0.77	0.49
GDP (%)	1.44	1.55	3.64	-2.62	0.77
FDI (%)	-0.16	0.12	3.15	-8.26	2.16
South Asia					
Statistics	**Mean**	**Median**	**Maximum**	**Minimum**	**Standard**
External debt (%)	3.53	3.66	4.47	-1.26	0.67
Trade openness (%)	2.14	2.06	5.91	0.43	0.68
Govt. Expenditure (%)	2.35	2.35	3.16	1.41	0.44
Savings (%)	3.13	3.09	3.96	1.69	0.32
GDP (%)	1.64	1.66	3.34	-2.12	0.56
FDI (%)	-0.99	-0.47	2.55	-12.5	2.29

widely used techniques are fixed effects model and random affects model. In literature different authors [40] provided different justifications for adopting these techniques.

Analysis

Table 1, Represents descriptive statistic of all variables incorporated in the model from all three regions which represent 33 countries during the period from 1980 to 2012. Statistics include the mean, median, minimum and maximum values along with standard deviation of all variables. Region vise summary of statistic are as follows

Gross Domestic Product (GDP):

Among three regions mean vary from lowest point 1.44% to highest point 1.64% and median is fluctuating 1.55% to 1.78%. Its maximum values vary from 2.90% to 3.64% and minimum values are between -2.12% to -4.58%. As far as standard deviation is concern, it is moving from the values 0.86 to 2.29 in all three regions.

Trade Openness:

Among all three regions mean vary from lowest point 2.14% to highest point 2.81% and median is fluctuating 2.06% to 2.77%. Its maximum values vary from 4.4% to 7.15% and minimum values are between 0.08% to 0.78%. As far as standard deviation is concern, it is moving from the values 0.68% to 1.04% in all three regions.

External Debt:

Among all three regions mean vary from lowest point 0.23 % to highest point 3.67 and median is fluctuating 1.22% to 3.66%. Its maximum values vary from 2.12% to 5.93% and minimum values are from -1.26% to 1.09%. As far as standard deviation is concern, it is moving from the values 0.13% to 0.78% in all three regions.

Government Expenditure:

Among all three regions mean vary from lowest point 1.67% to 2.35% and median is fluctuating 1.58% to 2.35%. Its maximum values vary from 0.66% to 4.4% and minimum values are varying from -3.4% to 1.41%. As far as standard deviation is concern, it is moving from the values 0.17% to 1.01% in all three regions.

Foreign Direct Investment:

Among all three regions mean vary from lowest point -0.16% to 0.69% and median is fluctuating -0.47% to 1.07%. Its maximum values vary from 2.55% to 3.15% and minimum.

Table 2: Unit Root; South Asia

Series	Method	Statistic	Cross-Sections
FDI	Liven, L & c	2.92835***	7
	I p, and s W- Stat	0.33835***	7
External debt	Liven, L & c	-0.42306***	7
	I p, and s W- Stat	0.18354***	7
Trade openness	Liven, L & c	-3.02979*	7
	I p, and s W- Stat	-6.51496*	7
Govt-Expenditure	Liven, L & c	-1.64170**	7
	I p, and s W- Stat	-2.46200*	7
Savings	Liven, L & c	-0.89035***	7
	I p, and s W- Stat	-0.52656***	7
GDP	Liven, L & c	-8.76101*	7
	I p, and s W- Stat	-9.19701*	7

East Asia and Pacific

Series	Method	Statistic	Cross-Sections
FDI	Liven, L & c	-2.07654**	13
	I p, and s W- Stat	-2.38517*	13
External debt	Liven, L & c	-1.46741***	13
	I p, and s W- Stat	-2.85534*	13
Trade openness	Liven, L & c	-10.0520*	13
	I p, and s W- Stat	-9.05746*	13
Govt-Expenditure	Liven, L & c	-9.45121*	13
	I p, and s W- Stat	-10.0580*	13
Savings	Liven, L & c	-1.56526**	13
	I p, and s W- Stat	-1.43160**	13
GDP	Liven, L & c	-9.96886*	13
	I p, and s W- Stat	-10.0389*	13

Middle East and North Africa

Series	Method	Statistic	Cross-Sections
FDI	Liven, L & c	0.93154**	10
	I p, and s W- Stat	0.32449**	10
External debt	Liven, L & c	-0.67983**	10
	I p, and s W- Stat	0.20799**	10
Trade openness	Liven, L & c	-12.4566*	10
	I p, and s W- Stat	-10.1814*	10
Govt-Expenditure	Liven, L & c	-2.35822*	10
	I p, and s W- Stat	-2.39073*	10
Savings	Liven, L & c	-4.32051*	10
	I p, and s W- Stat	-3.61233*	10
GDP	Liven, L & c	-11.8512*	10
	I p, and s W- Stat	-12.2707*	10

Levin-Lin-Chu Test (LLC) and Im, Pesaran, and Shin (2003) have been employed to check the hypothesis that whether data is stationary over the certain time period or not.

The results of Levin-Lin-Chu Test (LLC) and Im, Pesaran, and Shin are shown in table 2 which indicate that data is stationary over the period.

Table. 3: Dependent Variable is GDP

Region	East Asia		South Asia		Middle East	
	1	2	1	2	1	2
C	2.390 (-1.414)	0.667 (-0.613)	3.961 (-1.652)	1.988** (-2.013)	9.531* (-3.992)	5.5971* (-4.312)
TRD. OPENNESS	0.0381* (-2.937)	0.0005* (-2.613)	0.005* (-2.757)	0.002** (-3.405)	0.002** (-3.246)	0.0002* (-2.131)
Ext debt	-0.038* (-2.335)	-0.004 (-0.460)	-0.1029* (-2.669)	-0.0203* (-2.397)	0.003** (-2.386)	-0.0035* (-3.622)
FDI	0.028* (-2.199)	0.107 (-1.025)	0.9381* (-2.734)	0.429195* (-1.969)	0.166* (-3.643)	0.189* (-2.874)
Savings	0.178* (-2.414)	0.1463* (-5.630)	0.1477* (-3.243)	0.100* (-3.500)	0.006** (-2.180)	0.019 (-0.701)
Govt. Exp	0.081* (-2.702)	0.1572* (-5.390)	0.100 (-0.735)	0.130** (-1.989)	0.340** (-2.926)	0.159* (-3.271)
Cross section	13	13	7	7	10	10
Adjusted R^2	0.498	0.218	0.236	0.175	0.108	0.060
F- statistics	6.265	14.283	2.209	7.992	1.604	3.860

Note: * shows significance at 0% while ** shows significance at 5%. 1 represent fixed effect model while 2 indicate random effect model

Table 4. Housman Test:

Regions	Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
East Asia and Pacific	Cross Sections	38.317921	5	0.001
South Asia	Cross Sections	3.759885	5	0.0345
Middle East and North Africa	Cross Sections	4.340498	5	0.0415

values are between –8.26% to -12.5%. As far as standard deviation is concern, it is moving from the values 1.38% to 2.29% in all three regions.

Savings

Among all three regions mean vary from lowest point 3.03% to 3.13% and median is fluctuating 3.08% to 3.16%. Its maximum values vary from 3.15% to 3.96%and minimum values are from –0.53% to 1.69%. As far as standard deviation is concern, it is moving from the values 0.32% to 0.57% in all three regions.

To decide between a random effects and fixed effects model, researchers often depend upon the Housman (1978), specification test. The Hausman test is designed to find breach of the random effects modeling assumption that the explanatory variables are orthogonal to the unit effects. If there is no correlation between the independent variable(s) and the unit effects, then estimates of β in the fixed effects

model (βˆFE) should be similar to estimates of β in the random effects model (βˆRE).

EMPIRICAL RESULTS:

Table 3 shows results for panel regressions; Panels 1 and 2 respectively, in which study used Trade openness, External debt, Savings, Government expenditure and foreign direct investment as independent variables, while gross domestic product (GDP), measurement of economic growth, is dependent variable. Whereas, the control variables taken into account to have the expected effect. This is also consistent with the argument that well-developed Trade openness in developing countries may significantly contribute to an increase in GDP which trigger economic growth. Results indicate that trade openness has a positive effect and its coefficient is, as expected, statistically significant. Trade with no barriers is always fruitful for economic growth of less developed countries [41]. Miracle changes in economic growth of china and India is the example of trade liberalization [42]. The countries with open trade are on right track of the success because of proper utilization of time, energy and resources to have specialization in production of goods in which they have comparative advantage [40, 43]. Moreover, free trade improve term of trade by increasing prices of export and reducing prices of imports, that ultimately improve the welfare of the poor nations [44]. Singapore experienced rapid growth in living standard of its people after exposure to international trade [45]. In the second half of the 20th century the four Asian tigers (Hong Kong, Singapore, South Korea, and Taiwan) experienced incredible growth rate. Trade liberalization played active role in this remarkable growth story of Asian tigers through effective export-oriented tactics [46].

Moreover, another important determinant of economic growth in this study is external debt; results indicate that external debt is playing negative and significant role in the economies of above mentioned three regions. Debt always taken on the basis of some certain conditions like, rate of interest, percentage, time bound, or service charges so it is considered as liability for the nation [47]. The debt can have positive affect only if debt is utilized in for productive purposes. Appropriate policies play vital role in utilization of foreign available funds in different developmental sectors [48]. Moreover, some empirical studies emphasis that external debt might lead to increase in economic growth while service to the external debt might lead to disturb the economic growth of the country [49]. However, some empirical studies suggest external debt may affect negatively in short run period but in the long run it certainly beneficial for productive activities. Moreover, external debt affects the economies adversely in short run as well as in long, only when it exceed beyond the threshold point that eventually reduce repayment capacity of the nations and ultimately economies will withdraw their funds from running developmental projects [50] that will cause a reduction in economic growth.

1. CONCLUSION

This study has been aggravated by a real concern about consideration the role of trade openness and external debt within an economic growth perception. As development is a basic requirement of less developed countries to attain the status of developed countries. In this world of globalization economic growth is affected by different factors around the world. As a result, a huge population affected by the decisions of policy makers if they leave few factors uncovered. Ideological believes of global organizations, World Bank, IMF and the WTO, endorse trade liberalization as the ―universal medicine for growth. Moreover economic growth gets affected by the external debt as it is a burden for the nation.

The summary of finding is that "Trade liberalization is very important for the growth of the economy". Trade with less tariffs and conditions should be promoted especially in developing countries for their economic growth. Whereas external debt is saddle for the economic growth, it has negative relationship with economic growth. So policy makers and Government should find alternative ways for external debt even for productive purposes. Trade Openness and external debt are very important variables to measure economic growth, developing countries can avail the benefits of external debt only with appropriate polices.

REFERENCES

[1] S. Shaheen, M.M. Ali, A. Kauser, F.B. Ahmed, Impact of Trade Liberalization on Economic growth in Pakistan, (2013).

[2] I. Wik, Trade liberalization: The right engine of growth? A quantitative analysis, (2007).

[3] J.J. Lewer, H.V.d. Berg, How large is international trade's effect on economic growth?, *Journal of Economic Surveys*, **17** (2003) 363-396.

[4] I. Abdullaev, C. De Fraiture, M. Giordano, M. Yakubov, A. Rasulov, Agricultural water use and trade in Uzbekistan: situation and potential impacts of market liberalization, *Water Resources Development*, **25** (2009) 47-63.

[5] S.M. Miller, M.P. Upadhyay, The effects of openness, trade orientation, and human capital on total factor productivity, *Journal of Development economics*, **63** (2000) 399-423.

[6] L.A. Winters, Trade Liberalisation and Economic Performance: An Overview*, *The Economic Journal*, **114** (2004) F4-F21.

[7] L. Andersen, R. Babula, The link between openness and long-run economic growth, *Journal of International Commerce and Economics*, **1** (2008) 1-20.

[8] P.K. Smith, M. Carrier, J.C. Chen, A. Haverich, J.H. Levy, P. Menasché, S.K. Shernan, F. Van de Werf, P.X. Adams, T.G. Todaro, Effect of pexelizumab in coronary artery bypass graft surgery with extended aortic cross-clamp time, *The Annals of thoracic surgery*, **82** (2006) 781-789.

[9] G. Melina, S. Yang, L.-F. Zanna, Debt Sustainability, Public Investment, and Natural Resources in Developing Countries: the DIGNAR Model, (2014).

[10] S. Gupta, E. Baldacci, B. Clements, E.R. Tiongson, What sustains fiscal consolidations in emerging market countries?, *International Journal of Finance & Economics*, **10** (2005) 307-321.

[11] A.K. Fosu, W. Naudé, The global economic crisis: towards syndrome-free recovery for Africa, WIDER Discussion Papers, World Institute for Development Economics (UNU-WIDER), 2009.

[12] G. Ndoh, MACROECONOMIC EFFECTS OF DEBT AND DEBT-SERVICE REDUCTION IN CAMEROON.

[13] N. Okonjo-Iweala, C.C. Soludo, M. Muhtar, The debt trap in Nigeria: Towards a sustainable debt strategy, Africa World Press, 2003.

[14] J. A. Giles, C.L. Williams, Export-led growth: a survey of the empirical literature and some non-causality results. Part 1, *Journal of International Trade & Economic Development*, **9** (2000) 261-337.

[15] P.K. Goldberg, N. Pavcnik, Distributional effects of globalization in developing countries, in, National bureau of economic research, 2007.

[16] R. Wacziarg, K.H. Welch, Trade liberalization and growth: New evidence, *The World Bank Economic Review*, **22** (2008) 187-231.

[17] J. Bhagwati, D. Greenaway, A. Panagariya, Trading preferentially: Theory and policy, *The Economic Journal*, **108** (1998) 1128-1148.

[18] A. Mattoo, D. Roy, A. Subramanian, The Africa Growth and Opportunity Act and its rules of origin: generosity undermined?, *The World Economy*, **26** (2003) 829-851.

[19] B. Goldar, A. Kumari, Import liberalization and productivity growth in Indian manufacturing industries in the 1990s, *The Developing Economies*, **41** (2003) 436-460.

[20] M.M. Hoque, Z. Yusop, Impacts of trade liberalisation on aggregate import in Bangladesh: An ARDL Bounds test approach, *Journal of Asian Economics*, **21** (2010) 37-52.

[21] T. Beck, Financial development and international trade: Is there a link?, *Journal of international Economics*, **57** (2002) 107-131.

[22] J.-A. Crawford, S. Laird, Regional trade agreements and the WTO, *The North American Journal of Economics and Finance*, **12** (2001) 193-211.

[23] A. Harrison, Openness and growth: A time-series, cross-country analysis for developing countries, *Journal of Development economics*, **48** (1996) 419-447.

[24] D. Greenaway, W. Morgan, P. Wright, Trade liberalisation and growth in developing countries, *Journal of Development economics*, **67** (2002) 229-244.

[25] D. Greenaway, W. Morgan, P. Wright, Trade reform, adjustment and growth: what does the evidence tell us?, *The Economic Journal*, **108** (1998) 1547-1561.

[26] P.K. Narayan, R. Smyth, Multivariate Granger causality between electricity consumption, exports and GDP: evidence from a panel of Middle Eastern countries, *Energy Policy*, **37** (2009) 229-236.

[27] G.M. Ghani, The impact of trade liberalisation on the economic performance of OIC member countries, *Journal of Economic Cooperation and Development*, **32** (2011) 1-18.

[28] P.R. Lane, Empirical perspectives on long-term external debt, *Topics in Macroeconomics*, **4** (2004).

[29] M.M. Ahmed, External Debts, Growth and Peace in the Sudan. Some Serious Challenges Facing the Country in the Post-Conflict Era, *CMI Report*, (2008).

[30] S. Shabbir, Balance Sheet Channel of Monetary Transmission in Pakistan: An Empirical Investigation, *SBP Research Bulletin*, **8** (2012).

[31] W. Adesola, A. Okwong, An empirical study of dividend policy of quoted companies in Nigeria, *Global Journal of Social Sciences*, **8** (2009) 85-101.

[32] C. Pattillo, H. Poirson, L.A. Ricci, External debt and growth, *Review of Economics and Institutions*, **2** (2011) 30.

[33] I.S. Gill, B. Pinto, Public debt in developing countries: has the market-based model worked?, World Bank Publications, 2005.

[34] C.P. Trimurti, Y. Komalasari, Determinants of Unemployment: Empirical Evidences from 7 Province in Indonesia, (2014).

[35] S.E. Dessy, D. Vencatachellum, Debt relief and social services expenditure: The African experience, 1989–2003, *African Development Review*, **19** (2007) 200-216.

[36] M. Ogunmuyiwa, Does external debt promote economic growth in Nigeria, *Current Research Journal of Economic Theory*, **3** (2011) 29-35.

[37] A. Uzun, C. Karakoy, B. Kabadayi, O.S. Emsen, The Impacts of External Debt on Economic Growth in Transition Economies, *Chinese Business Review*, **11** (2012) 491-499.

[38] S. Mahdavi, Shifts in the composition of government spending in response to external debt burden, *World Development*, **32** (2004) 1139-1157.

[39] J.M. Wooldridge, Introductory econometrics: A modern approach, South-Western Pub, 2009.

[40] E. Marelli, M. Signorelli, China and India: Openness, trade and effects on economic growth, *European Journal of Comparative Economics*, **8** (2011) 129-154.

[41] P. Babula, V. Adam, R. Opatrilova, J. Zehnalek, L. Havel, R. Kizek, Uncommon Heavy Metals, Metalloids and Their Plant Toxicity: A Review, in: Organic Farming, Pest Control and Remediation of Soil Pollutants, Springer, 2010, pp. 275-317.

[42] H. Herath, Impact Of Trde Liberalization On Economic Growth Of Sri Lanka: An Econometric Investigation, (2010).

[43] D. Sakyi, J. Villaverde, A. Maza, K.R. Chittedi, Trade openness, growth and development: evidence from heterogeneous panel cointegration analysis for middle-income countries, *Cuadernos de Economía*, **31** (2012) 21-40.

[44] C. Bajona, M.J. Gibson, T.J. Kehoe, K.J. Ruhl, Trade Liberalization, Growth, and Productivity, *Ryerson University, Washington State University, University of Minnesota, and New York University*, (2010).

[45] C.J.K. Tan, International Trade and Economic Growth: Evidence from Singapore, in, COLUMBIA UNIVERSITY, 2012.

[46] Y.-P. Ho, Trade, industrial restructuring, and development in Hong Kong, Macmillan, 1992.

[47] S. Bangura, M.R. Powell, M.D.N. Kitabire, External Debt Management in Low-Income Countries (EPub), International Monetary Fund, 2000.

[48] M.J.D. Ostry, M.S. Qureshi, M.K.F. Habermeier, D.B. Reinhardt, M.M. Chamon, M.A.R. Ghosh, Capital inflows: The role of controls, International Monetary Fund, 2010.

[49] W. Utomi, The Impact of External debt on Economic Growth in Nigeria, in, Covenant University, 2014.

[50] M. Shah, M. Hasan, S. Pervin, External public debt and economic growth: empirical evidence from Bangladesh, 1974 to 2010, (2012).

Annexure

Variables	Definition	Description
Economic growth	As more goods and services are produced, real GDP Increases and people are able to consume more.	In this study economic growth is taking as GDP which is considered as dependent variable in the model.
Trade Openness	The removal or reduction of restrictions or barriers on the free exchange of goods between nations. This includes the removal or reduction of both tariff (duties and surcharges) and non-tariff obstacles (like licensing rules, quotas and other requirements).	Trade openness is taking as independent variable to evaluate the effect of changing in this variable that how it will bring change in the economic growth of different countries of different regions.
External Debt	External borrowing can increase a country's access to resources; domestic borrowing only transfers resources within the country. Hence, only external debt generates a "Transfer" problem (Keynes, 1929).	External debt is taking as another independent variable, as we know external debt plays important role in economic growth. Therefore to check their cause n effect relationship this variable is taken.
Savings	According to Keynesian economics, the amount left over when the cost of a person's consumer expenditure is subtracted from the amount of disposable income that he or she earns in a given period of time.	Savings is the variable which is taken in this model as control variable. Control variable means that it will control the effect other variables which are also playing crucial role in economic growth.
Government Expenditure	Expenditures made in the private sector by all levels of government, such as when a government entity contracts a construction company to build office space or pave highways.	Government Expenditure is taken as another control variable to control the effects of variable on GDP, as it can effect by so many independent variables.
Foreign Direct Investment	Foreign direct investment (FDI) is a direct investment into production or business in a country by an individual or company of another country, either by buying a company in the target country or by expanding operations of an existing business in that country.	FDI is control variable to control the effect on GDP to evaluate the true picture of role of Trade openness and external debt on economic growth.

2. List of selected regions as per divided by World Bank is given below:

As it is discussed earlier there are three Regions which divided in to 33 countries.

1) East Asia and Pacific

Cambodia, China, Fiji, Indonesia, Lao PDR, Malaysia, Mongolia, Papua New Guinea , Philippines, Solomon Island, Thailand, Tonga Vanuatu, Vietnam

2) Middle East and North Africa

Algeria , Djibouti, Egypt. Arab Rep., Iran. Islamic Rep., Jordan, Lebanon, Libya, Morocco, Syrian Arab Republic, Tunisia, West Bank and Gaza, Yemen. Rep

3) ***South Asia,*** Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka