### Copyright © 2014 by Academic Publishing House Researcher



Published in the Russian Federation European Researcher Has been issued since 2010. ISSN 2219-8229 E-ISSN 2224-0136 Vol. 89, No. 12-2, pp. 2133-2140, 2014

DOI: 10.13187/er.2014.89.2133

www.erjournal.ru



**UDC 33** 

# Impact of External Debt on Economic Growth: a Case Study of Pakistan

- <sup>1</sup> Farrukh Shahzad
  - <sup>2</sup> Dr Ahsan Zia
- <sup>3</sup> Naveed Ahmed
- <sup>4</sup>Zeeshan Fareed
- <sup>5</sup> Bushra Zulfigar
- <sup>1</sup> Jinnah College of Commerce and Science, Paksitan

E-mail: farrukh.hailian@gmail.com

<sup>2</sup> Lahore Leads University, Lahore, Pakistan

E-mail: ahsanzia444@gmail.com

<sup>3</sup> Lahore Leads University, Lahore, Pakistan

E-mail: naveed.ahmed@leads.edu.pk

<sup>4</sup> COMSATS Institute of Information Technology, Sahiwal, Pakistan

E-mail: zeeshanfareed@hotmail.com <sup>5</sup> University of the Punjab, Lahore, Pakistan E-mail: Bushra\_zulfiqar786@hotmail.com

#### **Abstract**

Since 1980s, the mounting debts and debt payment service of Pakistan due focus and consideration from the Policy makers and economists. This study was additionally done to audit and investigate the effect of external debt overhauling on the development and growth of Pakistan's economy. To hunt the target of research, five variables i.e. Growth, external debt servicing, saving, net export, Foreign Direct Investment were taken to focus their fact association with the GDP or development of the Pakistan's economy. Annual panel data was taken from the source World Bank indicator from the period of 1980 to 2013 and was manipulated through least square multiple regression models. The main variable external debt has significantly negative impact on dependent variable GDP so it's concluded that Pakistan should go for the option of debt forgiveness and must invite FDI but not much as their overloading may hurt the economy. Adjusting saving (ADS) highly significant positive relation with GDP reveals that habit of saving extremely boost up economy growth. Exports is basically good to helping hand for economy so they must be lifted up. The impact of external debt is quite hostile on growth so steps must be taken to abolish it in order to growth of economy.

**Keywords:** GDP; External debt; Adjusting Saving (ADS); Export; Pakistan.

#### Introduction

External debt plays both an optimistic and destructive part in forming Economic growth, especially of the developing nations. External debt is useful when the legislature uses it for

investment-oriented tasks, for example Power sector, base and the horticultural segment. Then again, it would influence contrarily when it is utilized for private and open utilization purposes, which don't bring any return. Also, a low level of external debt sways financial development absolutely; however this relationship gets to be negative at a larger amount. The particular defining moments are 35-40% of the obligation terrible residential item (GDP) proportion, and 160-170% of the export debt ratio (Ali, 2007)

Pakistan's external debt is seen to be the reason for all ills besetting the economy. In 1980 the external debt was \$869 billion now external debt expanded from \$1901.90 million in 1990 to \$2944.80 million in 1999 and further to \$37.362 billion by 2007. Furthermore as indicated by the State Bank of Pakistan (SBP) the nation's aggregate external debt and liabilities have contracted, by nearly 6 percent, amid the last logbook year. Pakistan's aggregate external debt and liabilities declined to \$59.383 billion as on December 31, 2013 contrasted with \$63.377 billion as on December 31, 2012 (Anwar, 2013). Also, in the greater part of the monetary years since freedom, the Government's Revenue has not exactly its consumption, which would result in financial deficiency which could be spanned through acquiring from both interior and external debt (obligation). At the same time the circumstances gets to be more awful when the nation is not able to reimburse its debt overhauling.

On the other hand, Musharraf's government made numerous moves to defeat this gigantic external debt including "the debt limitation law" which is intended to manage diminished of this trouble of external debt, beginning in 2000. Moreover, after 9/11, the world's key arrangements changed, and Pakistan turned into a bleeding edge state in the worldwide war on fear. Pakistan was thus capable either to discount or reschedule the outer obligation liabilities. The measure of settlements and outside awards additionally expanded complex amid this period. Pakistan was in this way ready to reimburse obligation administrations and enthusiasm of the IMF and the World Bank.

Also, if the government has the capacity follow up on the obligation constraint law, which has been passed by parliament, it would have the capacity to dispose of obligation owed to both the IMF and the World Bank. On the other hand, there remains the need of empowering divisions like industry and agribusiness to overcome the fiscal gap.

Shahid Hasan Khan, Special Assistant on Economic Affairs to the PM of Pakistan in the Benazir Bhuto government in 1993, said that "the monetary shortfall is the essential driver of every last one of ills of the economy. Therefore, any exertion went for restoring the economy would have the disposal of monetary deficiency as the most obvious thing on the agenda." (Baksh, 1994). Every single IMF and World Bank report on Pakistan additionally says that the outside obligation trouble has been the essential driver of every last one of ills of economy, particularly since the begin of the structural change programs in 1988 (Zaidi, 2007).

As per the World Bank downright external debt may be characterized as obligation owed to non-resident repayable as far as foreign currency, services and goods. External debt is the piece of long haul obligation (open and freely ensured obligation in addition to private non ensured obligation), fleeting business obligation and International Monetary Fund (IMF) advances. Preceding early 1970s the outer obligation of creating nations was essentially little and authority sensation, the larger part of banks being outside governments and worldwide money related organizations offer advance for development project (Todaro, 1988).

# Literature review

Customary studies on the external debt issue have centered for the most part on the improvement of the greatness and patterns of the external debt in the LICs and afterward emulated by different studies which have analyzed the debt burden indicators and seriousness of the debt problem (Ahmed, 2008). Scholastic research on external debt and its effect on economic growth have just blasted after the obligation emergencies that hit numerous creating nations in the early 1980's. In any case, as of late numerous exact studies have been directed to survey the effect of external debt on economic development but there is ambiguity in the results.

Oleksandr D, (2003) separated the current literature on the related theme into three Groups. A first Group of speculations recommend that in light of the fact that poor nations are far from relentless expresses any venture infusion in manifestation of foreign debt could lead them to have quickened financial development through capital collection and profit growth. Subsequently

foreign debt has a positive effect on development up to certain limit level. Second group of speculations, stretch that high amassed debt stock have negative effect on development. A main clarification for this negative relationship is the purported obligation overhang speculation of (Krugman & P, 1988), and Sach (1989), then bolstered by (Cohen & D, 1993). Third gathering of hypotheses joins these two impacts and contended that the effect of obligation on development is nonlinear.

The relationship between remote obligation and monetary development has chiefly centered on the negative impact of "debt overhang". (KRUGMAN, 1988) Characterized the debt overhang as a circumstance in which the normal reimbursement on remote obligation misses the mark regarding the contractual estimation of the obligation. In like manner, (Borensztein, 1990)characterized the debt overhang as a circumstance in which the indebted person nation profits next to no from the come back to any extra speculation on account of the obligation administration commitments.

The audit of existing experimental investigations of outer debt and financial development relationship showed that it an insufficient to make any speculation of the relationship between Economic growth and outside debt. Along these lines, it is important to consider the instance of every nation or gathering independently.

Adesola, (2009) inspected the impact of external debt administration installments on the economic growth in Nigeria by utilizing normal minimum square various relapse strategy for his investigation. It was figured out that debt service payment have negative effect on growth of economy.

Abu Bakar, (2008), centered to examine the effect of external debt on financial growth in Malaysia. The dissection was directed both at total and disaggregate level. The observational results showed that aggregate outer obligation decidedly influence the monetary development at total and disaggregate level. In the short run, all out external debt had positive consequences for growth of economy. It additionally uncovered that Malaysia had not experienced debt overhang issue.

Hasan and Butt (2008), investigated the relationship between external debt and growth of economy in Pakistan for the time of 1975-2005 utilizing Auto Regressive Distributed Lag (ARDL) methodology to cointegration. Results showed that work compel and exchange both over the long haul and the short run basically decided economic growth in Pakistan. All debt was not to be an essential determinant of economic growth either in the short-run or the long run mostly because of wasteful utilization of external debt.

On a Similar line Cholifihani, (2008) dissected the short run and long run relationship between external debt and salary in Indonesia from 1980 to 2005. The discoveries demonstrated that GDP, DSR, capital stock, work power and human capital inputs have a long run harmony relationship. External debt overhauling demonstrated a noteworthy negative association with GDP, which showed that debt overhang wonder, has happened in Indonesia over the long haul. While work power and human capital was primary supporting variables of GDP over the long haul; however capital stock is critical variable in boosting Economic growth.

Boopen, (2007), mulled over the relationship between external debt overhauling installments and financial development in Philippine for period 1981 to 2005. Results demonstrated that financial development was not truly influenced by outside debt overhauling. This was likely in light of the fact that external debt overhauling in Philippines was not yet a danger in economy growth and subsequently, Philippines ought not to fear of encountering debt overhang within a brief span of time.

S, P, & D, (2007), explored the relationship between external public debt and the financial performance for condition of Mauritius over the period 1960-2004. The results proposed that external debt have been adversely connected with the yield level of the economy in both short and long run. Causality between external obligation and growth of economy was likewise reported. In addition, there were likewise proves that open obligation have negative effect on both private and open capital load of the nation therefore affirming the obligation shade and swarming out theories.

Clements, (2003) analyzed the channels through which external debt influence growth of economy in 55 LICs over the time 1970-1999. The study proposed that past a certain limit, higher external debt is connected with lower rates of development of for every capita salary. The results

showed a limit level of around 30–37 percent of GDP or around 115–120 percent of fares. The study watched that the negative impact of debt on development lives up to expectations not just through its effect on the load of debt, additionally through the stream of administration payment of debt, which are liable to 'swarm out' open venture. This is so in light of the fact that administration installments and reimbursements on external debt douse up assets and lessen open speculations. The harming effect of obligation adjusting on monetary development is attributable to the diminished of government consumption coming about because of debt instigated liquidity constraints.

It is worth specifying that the majority of existing experimental writing report that external debt unfavorably influences economic growth. Cunningham (1993), Afxentiou (1993), Deshpande (1997), were (2001), Karagol (2002), Colfihani (2008), Hameed et al (2008), reported that the External debt negatively influence the economic growth. Though Warner (1992), Cohen (1993), Afxentiou and Serletis (1996) and Patenio and Tan-Curz (2007), inferred that external debt did not influence the Economic growth. While Omet and Kalaji (2003), and Abu Baker (2008), report the positive effect of external debt on economic growth. The hypothetical writing has outlined the accompanying channels specifically debt overhang, liquidity demand, monetary impact, benefit concealment and diminished in human capital aggregation along which outer obligations influences contrarily development (see Krugman, 1988 and Savvides, 1992)

# 1 Summary of Literature Review of External Debt and Economic Growth Relationship:

<b>Author Name</b>	Country	Period of Time	Judgment
Hameed	Pakistan	1970-2003	Debt service load contrariwise affect
			economic growth.
Wijeweera	Srilanka	1952-2000	Debt overhang had not exist in Srilanka
Omet and Kalaji	Jordan	1970-2000	External debt certainly affect economic growth beneath optimal debt level i.e. 53 percent of GDP
Patenio and	Philippine	1981-2005	Growth of economy was not exaggerated
Tan-urz			by external debt servicing.
Colifihani	Indonesia	1980-2005	External debt payment has
			Substantial adverse relationship to
			GDP.
Ayadi and	Nigeria and	1970-2007	Confirm the adverse effect of external
Ayadi	South Africa		debt on economic growth
Abu Baker	Malaysia	1970-2005	External debt certainly affect economic
			growth

#### **Research Hypothesis**

These are hypothesis that will be practiced to concluded this study

Ho = There is no impact of external debt on the economic growth of Pakistan

H<sub>1</sub> = There is an impact of external debt on the economic growth of Pakistan

# Methodology of research 1 Data source:

The data for conducting this study has been taken from a secondary source "World bank indicator". Annual data of Pakistan used for this study starting from the year 1980 to 2013 that means that research depends upon panel data and its methodology. There are 5 important variables observed to drive a model in order to study the impact of external debt on growth of Pakistan's economy.

#### 2 Specification of model:

Following model built for purpose of testing the hypothesis for this study.

$$Y = \beta_{\circ} + \beta_{1}DSE + \beta_{2}FDI + \beta_{3}ADS + \beta_{4}X + \mu$$

# 3 Variables:

β0, β1, β2, β3, and β4, are represent the coefficient of each variable or parameter of the regression, u indicate the error term. Following are variables that used to build the study

Y= GDP growth (Annual %)

DSE= Debt servicing on external debt(total, US \$)

FDI = Foreign Direct Investment (net inflows, current US \$)

ADS = Adjusted Savings, net national savings (% of GNI)

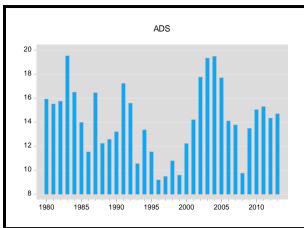
X = Exports of goods and services (current US \$)

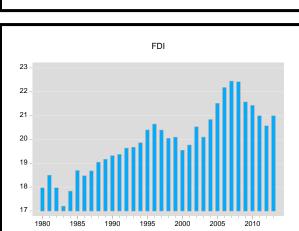
The main variable is Debt servicing on external debt and other ones used as control variables.

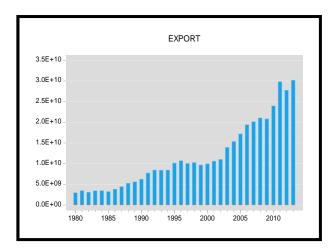
# **Analysis and estimations of results**

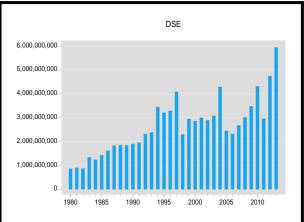
#### 1 Unit root test results

Non stationary of time arrangement information has frequently been considered as an issue in experimental analysis. Working with non-stationary variables prompts spurious relapse results, from which further induction is good for nothing. Subsequently, it is paramount to test the stationary of all arrangement entering in the model. The ADF test was utilized to test the stationary of the arrangement. The null hypothesis was that the variable under scrutiny has a unit root, against the option that it doesn't. The consequences of the test for the variables are introduced in Figure. Notwithstanding the ADF test, the study likewise endeavored to inspect the pattern of the variables graphically. The graphical representation of the variables exhibits the comparative normal for the variables as the ADF test.









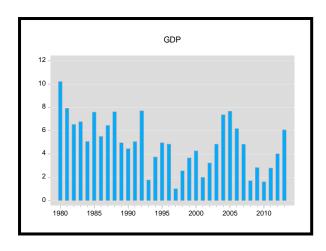


Table 1: Results of ADF Test for Non Stationary

Variables	ADF test at level		ADF test at 1st difference	
	Calculated	lag	Calculated	lag
GDP	2.49	1	4.51**	1
LFDI	2.30	1	4.45*	1
ADS	2.72	1	4.21**	1
X	2.78	1	6.12**	1
DSE	2.98	1	5.29*	1

Note: The asterisks (\*) and (\*\*) indicates statistical significance at the 5 percent and 1 percent significance level.

The results reported in Table 1 are completed with pattern and capture. Results showed that all arrangement display non stationary in levels. As such, the invalid theory that each of the time arrangement has an unit root can't be rejected. On the other hand, there is no proof of an unit root when the arrangement are initially differences. The no stationary hypothesis was released in all cases. It implies that all the variables under scrutiny are stationary from the beginning distinction at 1 percent level of centrality with the exception of LK which was stationary at 5 percent level of diacritical's, as can be construed from table 1

#### 2 Multiple regression result

Table 2: Regression result

Dependent Variable: GDP							
Method: Least Squares							
Date: 11/08/14 Time: 19:42							
Sample: 1980 2013							
Included observations: 34							
Variables	Coefficient	Std. Error	t-Statistic	Prob.			
С	7.256052	0.859968	8.437584	0.0000			
DSE	-8.80E-10	2.99E-10	-2.942071	0.0060			
LFDI	-0.726294	0.262819	-2.763479	0.0094			
ADS	0.359119	0.118631	3.027190	0.0048			
X	-1.03E-10	4.50E-11	-2.297089	0.0283			
R Square = 0.26		Mean dependent var = 9.826743					
Adjusted $R2 = 0.21$		S.D. dependent var = $2.210025$					
F-statistic = 9.653168		Sum squared resid = 107.1976					
Prob (F-statistic) = 0.006019		Durbin-Watson = 0.971531					

The proposed model precise results are portrayed by the above table. The incline coefficients of ADS in the OLC researches have positive effect on GDP though three variables LFDI, X and DSE have adverse effect on GDP respectively.

The Adjusted R square is .26 which explains 26 % variety in the dependent variable (GDP) represented by the explanatory variables DSE, LFDI, ADS and X. The estimation of Durbin Watson is .97 which implies that there is sure autocorrelation of leftover.

### **Conclusion and Suggestions:**

The fundamental subject of this article was to study the effect of external debt overhauling on the development of Pakistan's economy. By experiencing a considerable measure of previous research works and articles and by controlling the gathered information and looking at the model found after distinctive tests, it has been inferred that external debt has a negative effect on the growth of Pakistan's economy because of it over the top impacts on the macroeconomic elements in charge of the development. External debt adjusting balances the ventures by making a swarming out impact and debt overhang issue. FDI helps a considerable measure in accumulating the foreign trade and investment and livelihood and innovative and business structure in the nation however this impact gets dismissed because of an excess of foreign direct investment and their exertions of sparing from charges and offering benefits to the host nation. Administration the external debt, amidst this dim back road, export comes as a beam of light and aides in boosting the growth. FDI and export are supporting great the development of the under developing country like Pakistan yet the real piece of these profits is, no doubt counterbalance by raised FDIs and external debt overhauling. Funds and inward investment rates have nothing to do with the development in the vicinity of external debt overhauling for Pakistan and hence, they are not becoming admirably.

- 1. Pakistan must benefit the alternative of debt absolution as it may diminish the debt levels due on them to pay and may give an opportunity to thrive.
- 2. They must assemble and channelize their private investment and assets in a manner that their generation builds so they can export immense number of items and gain incomes to pay off debt.

- 3. They must pull in FDI but not over swarm it furthermore cease from giving a considerable measure of subsidies. Most likely, FDI will bring a great deal of business advancements and opportunities which will help low wage nations to become however a ton of subsidies will consume up their due measure of incomes.
- 4. Energize people for saving trend by issuing govt bonds that will be positive impact on economic growth.

#### References

- 1. Abu Bakar, N. A. (2008). Empirical Evaluation on External Debt of Malaysia. International Business & Economics Research Journal, 7(2), 95-108.
- 2. Adesola, W. (2009). Debt Servicing and Economic Growth in Nigeria: An Empirical Investigation. Global Journal of ocial ciences,, 2, 1-11.
- 3. Ahmed, M. M. (2008). External Debts, Growth and Peace in the Sudan Some Serious Challenges Facing the Country in the Post-Conflict Era. CHR Michelsen Institute SR, 1.
- 4. Ali, A. (2007, 8 16). worldscibooks. Retrieved from worldscientific: http://www.worldscientific.com/page/worldscibooks
  - 5. Anwar, Y. (2013). Annual Report FY13. Lahore: SBP Publisher.
  - 6. Baksh, A. (1994). Reducing fiscal deficit-"Key to Salvage Economy". Karachi.
- 7. Boopen, S. K. (2007). External Debt and Economic Growth: A Vector Error Correction Approach. International Journal of Business Research, 211-233.
- 8. Borensztein. (1990). IMF Working Paper,. Debt overhang, debt reduction and investment: The case of Philippines, 7.
- 9. Cholifihani. (2008). A Co-integration Analysis of Public Debt Service and GDP in Indonasia. Journal of Management and Social Sciences,, 4(2).
- 10. Clements, B. B. (2003). "External Debt, Public Investment, and Growth in Low-Income Countries",. IMF Working Paper., 149.
- 11. Cohen, & D. (1993). Low Investment and Large LDC Debt in the 1980s. American Economic Review, 83(3), 437-449.
- 12. D, O. (2003). Non linear impact of external debt on economic growth: The case of post soviet countries. The case of post soviet countries.
- 13. Krugman, & P. (1988). Financing vs. forgiving a debt overhang: Some analytical issues. Cambridge, Massachusetts: National Bureau of Economic Research, 24(46).
- 14. KRUGMAN, P. (1988). FINANCING vs. FORGIVING A DEBT OVERHANG. Journal of Development Economics, 29, 253-268.
- 15. S, B., P, K., & D, R. (2007). "External Debt and Economic Growth: A Vector Error Correction Approach". International Journal of Business Research, 211-233.
- 16. Todaro, M. P. (1988). Economic Development in the Third World. (F. Edition, Ed.) Longman, New York and London.
  - 17. Zaidi, S. A. (2007). Issue in Pakistan Economy. Oxford University Press.