Middle-East Journal of Scientific Research 17 (5): 565-572, 2013
ISSN 1990-9233

DOI: 10.5829/idosi.mejsr.2013.17.05.12207

The Role of External Debt in Economic Growth of Indonesia - A Blessing or Burden?

[1]Muhammad Azam, [2]Chandra Emirullah, [1]A.C. Prabhakar and [3]A. Qayyum Khan

[1]School of Economics, Finance & Banking, College of Business, Universiti Utara Malaysia
[2]COLGIS, Universiti Utara Malaysia
[3]Department of Management Sciences, COMSATS, Wah Cantt, Pakistan

Abstract: Today external debt situation is one of great concerns particularly for developing countries. The ongoing debt crisis in several European countries has the potential of creating external shocks to these countries but at the same time it shows the importance of managing well their debt. Several developing countries including Indonesia have faced stern economic problems in the past due to a high level of external debt. On the other hand, economic growth is vital to improve social welfare.This study analyzes the impact of external debt on economic growthof Indonesia. The method of least squares is used for parameters estimation. The main finding of the study shows external debthasa negativeimpact on economic growth during the period under the study. Thus, external debtis not a blessing but rather a burden for Indonesia. The finding suggests the importance of controlling external debt both, public and private, as well as enhancingdebt management effectiveness.

Key words: Economic Growth · External Debt · Exports · Debt Management Policy

INTRODUCTION

Developing countries face many administrative, economic, socio and political problems due to mismanagement, lack of appropriate technology, scarce capital, low savings, low investment and consequently sluggish economic growth. As the result of all these perpetuated problems per capita income levels are low and ultimately living standards unsatisfactory in many developing countries. Meanwhile, unpredictable economic criseshave become more often precipitated by severe debt crises all around the world, both in the developing and developed countries.

Many developing countries are being driven into poverty as the result of rising and unsustainable debt levels that they owe to the creditor countries and to international financial institutions such as the World Bankand International Monetary Fund (IMF) as well as commercial lenders. These countries including Indonesia receive external debt as an external source of finance to fill in the investment-saving gap and thus aided the effort to achieveeconomic growth to improve social welfare.

It has also been observed that a major share of the foreign currency the developing countries earn from exports goes just to make their debt payments. As the result, the problem of budget deficit has become a major issue in fiscal management of the developing countries in general and is also faced by Indonesia's authorities in particular. Presumably, the deficit is covered by external debt as well as domestic debt with appropriate management.

Therefore, debt problem is a crucial issue for Indonesia and its policy makers. Similarly, sustainable economic growth is imperative for Indonesia's economy like other developing countries which face the same challenges such as high levels of poverty, unemployment and inequality. In this regard, solid fiscal, monetary and financialpoliciesare necessary to maintain the fiscal deficit as well as external debt at the sustainable levels in order to ensurea conducive macroeconomic environment.

Moreover, in the present day external debt situation is one of great concerns particularly for the emerging countries that are already integrated in the global market. A country that has excessive external debt is prone to swings in investors' sentiment leading to capital reversals that can put it in a financial distress or crisis, a phenomenon that has occurred more often globally in the recent times. In this context, the US Federal Reserve Bank's plan to draw economic stimulus by ending Quantitative Easing and the ongoing debt crisis in several

Corresponding Author: Chandra Emirullah,, COLGIS, Universiti Utara Malaysia

European countries have the potential of creating financial shocks to the emerging countries but at the same time show the importance of managing well their debt.

The historyreveals that a serious globaldebt problem faced by the developing countries already started in the 1970s especially in Asia. Unluckily, less favourable terms of trade developed, mainly after the international oil price shock in 1979. As the consequence, the private sector became unable to generate sufficient finance to meet its increasing level of borrowing and therefore, external debt increased in many Asian countries includingIndonesia [1].This indebtedness has had serious long-term impacts on these countries' economy and on the millions of poor population [2]. The consequence of debt has explicitlybeen explained by [3] as quoted below:

- *Seventy-four years later, the world confronts another massive debt, although not one imposed by a treaty of peace. Indeed, this debt, totaling $1.362 trillion in 1991, has no identifiable demons: One cannot point to the vindictiveness of a Clemenceau, or the opportunism of a Lloyd George, or the naive idealism of a Wilson. Nonetheless, this debt has had the effect of plunging millions of people into conditions of economic despair and desperation. Most tragically, this debt will jeopardize the chances for the happiness of millions of children who will have committed no crime other than that of being born into a poor society. Ultimately, this debt, like the German debt, will not be repaid in full.*

In the first part of 1990s, Indonesia was beginning to accumulate a high level of external debt as the corporate sector borrowed heavily in the international market induced by the relatively low interest rate and government policy of gradual depreciation of the exchange rate. Although the country was able to grow at 7 percent in the middle of 1990s, it was not clear whether the borrowed foreign funds had contributed to the growth, as stated by an official from the Indonesian Central bank 'the huge growing number of external debt used however has not always significantly contributed to the growth expected' [4].

Finally, later in the decade the Asian financial crisis exploded in 1997 which was triggered, among other factors, by high and un-prudent management of external debt in the so called"East Asian tiger economies." Indonesia was hit very severely, in fact the worst in the region. GDP growth rate dropped by 13.2 percent in 1998 and over a short period, the Indonesian currency, Rupiah, lost 84 percent of its value. The crisis resulted in a significant increase in debt service obligation and debt level, whereby Debt Service Ratio (DSR) rose from 45 percent in 1996 to 58percent in 1998 while Debt to GDP ratio jumped from 49percent to 146percent during the same period [4]. The crisis cost the Indonesian economy very dearly, probably the most expensive bail-outsince the Great Recession of 1930s [5].

Though Indonesian economy was finally able to recover to some extent, according to the IMF, this recovery had not touched the millions of Indonesians where still half of the population was living on less than US$ 2 aday. Whereas, almost 39 million Indonesians were living on less than US$1 a day [1]. Indonesia spent more on debt repayments as compared to 1.1 percent on health and 0.9 percent on education. Thus, the effect of the crisis on the lives of common Indonesians was terrible. It was estimated that real wages decreased by 40 percent for agricultural workersand by 34 percentfor those in urban areas. The unemployment rate went up tenfold whereby 15 percent of males working in 1997 had lost their jobs by the middle of 1998 [6].

After the crisis, Indonesian external debt to GDP ratio was fluctuatingalbeit on a decreasing trend, going downto 35.9 percent in 2006 from 46.9 percent in 2005. However, in 2012 it increased to 28.2 percent from 26.4 percent in 2011 [7]. During 1970-2012, at average Indonesia's external debt is estimated at US$ 86258.82 million per year. The Bank Indonesia reported that total external debt in Indonesia increased to US$ 251199.94 million in 2012 from US$ 225374.53 million in 2011. The trend analysis of Indonesia's external debt can be seen from Figure 1 whereby it tends to increase, from a small amount in 1970s to well over US$200000 in 2011, although temporarily declining in the beginning of 2000s.

Table 1 shows that Indonesia's total external debt has jumped from US$141820 million in 2005 to US$213541million in 2011, an increase of morethan 50 percent in 6 years. Meanwhile the short-term external debt increased from US$11023 million to US$38173 million, an increase by 246percent, compared to an increase of only 40percent in the long-term debt which increased from US$122649 million to US$172327 million during the same period.

Indonesia's trend is in line with that of the developing countries. As shown in Table 2, their total external debt outstanding increased from US$ 2577 billion in 2005 to US$ 4876 billion in 2011, where the short-term

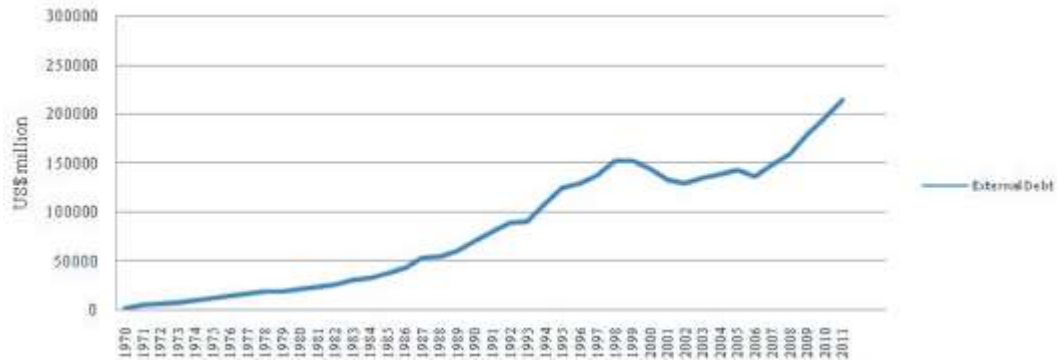

Fig. 1: Trend in indnesia external debt.

Table 1: External debts stock of Indonesia US$ Million

Debt/Years	2000	2005	2006	2007	2008	2009	2010	2011
Long-term external debt	110818	122649	123392	128821	137050	152240	159075	172327
Public and publicly guaranteed	69649	77405	76625	80315	87753	97447	100292	102552
Private nonguaranteed	41169	45244	46766	48507	49297	54793	58783	69775
Use of IMF credit	11149	8148	359	378	368	3105	3050	3041
Short-term external debt	21688	11023	12208	18655	20488	24050	33047	38173
interest arrears on long-term	4632	0	0	0	0	0	0	0
External debt stocks total	143655	141820	135959	147854	157906	179394	195172	213541

Source: The World Bank, International Debt Statistics (2013).

Table 2: External debts stock of developing countries US$ billions

Debt/Years	2005	2006	2007	2008	2009	2010	2011
Long Term (including IMF)	1993	2150	2570	2834	2964	3192	3469
Public and publicly guaranteed (including IMF)	1308	1294	1395	1443	1580	1674	1773
Private nonguaranteed	685	856	1175	1391	1385	1518	1696
Short-term external debt	521	607	811	793	810	1062	1249
Total external debt outstanding	2577	2802	3422	3678	3923	4412	4876

Source: The World Bank, International Debt Statistics (2013).

debt recorded the fastest growing component, rising by 18 percent in 2011 as compared to 9 percent increase in the stock of outstanding long term external debt.

Globally, according to the [8] in external debt ranking United States (U.S.) is on the top at US$ 14710 billion followed by United Kingdom at US$ 9836 billion and France at US$ 5633 billion in 2012, whereas, Indonesia stands on the 31st rank. Obviously U.S. economy has its own characteristics and position which are absolutely different from that of the developing countries like Indonesia. It has been observed that usually governments are long on promises and short on actions. Therefore, the government of Indonesia should define the logic and policy framework of how the debt will be re-paid, otherwise the future generation is going to beburdened heavily and unfairly.

The main objective of the present paper is to investigate the impact of external debt on economic growth in the context of Indonesia's economy. Sustainable economic growth is importantto alleviate poverty, also in generating revenues to service the debt.In light of the findings this study will help to shape decent policies for developing countries in general and Indonesia in particular with respect to external debt.

This paper is organized into 5 sections. Section 1 above introduces the background of the study along with some data on the development of external debt in the developing countries as well as Indonesia. Section 2 presents relevant previous theoretical and empirical studies. Section 3 outlines the methodology and data description. Section 4 deals with result interpretation. Section 5 concludes the paper and presents some policy recommendations.

Previous Studies: Numerous studies have been carried out on the relationship between external debt and economic growth by utilizing different econometric models and statistical tools to identify and verify the

relationship. Some prior studies found the negative impact of external debt on growth, while some could not find any statistically significant relationship. The following is the discussion how external debt could be linked with economic growth.

One of the crucial impacts of external debt often mentioned in the literature is what is called 'debt overhang'. According to [9] debt overhang is the presence of an existing, 'inherited' debt sufficiently large that creditors do not expect with confidence to be fully repaid. He also defined debt overhang in these words: 'A country has a debt overhang problem when the expected present value of potential future resource transfers is less than its debt.' The effect of debt on economic growth according to theory and policy analysis could occur through all the main sources of growth. In particular, the capital accumulation channel is supported by two arguments. First, the debt-overhang concept implies that when external debt grows sufficiently large, investors lower their expectations of returns in anticipation of higher and progressively more distortionary taxes required to repay the debt, so that new domestic and foreign investments are disheartened, which, in turn, will slow down capital accumulation.

Another view in the literature reaches a similar conclusion by stressing that in severely indebted countries, investors hold back, given the uncertainties about what portion of the debt will actually be serviced with the countries' own resources. Both arguments suggest that nonlinear effects of debt on growth are likely to occur through lower investments and thus capital accumulation [10]. [11] examined the practical relevance of the uncertainty-investment link for developing countries in general and Sub-Saharan Africa in particular. In low-income countries with debt servicing difficulties, there are uncertainties about what portion of the debt will actually be serviced with the countries' own resources. The investment- under-uncertainty argument stresses that in a highly uncertain and unstable environment, even if the fundamentals are improving, investors continue to exercise their option of waiting when considering whether to invest in costly, irreversible projects. Therefore, the very uncertain environment may also lead to misallocated and poorer quality investment projects that slow productivity growth.

Support for the inverted-U relationship of debt with growth was found by [12]. The findings suggested that the average impact of debt becomes negative at about 160-170 percent of exports or 35-40 percent of GDP. Results also showed that the marginal impact of debt starts being negative at about half of these values on average. The quantitative effects of high debt were found to be quite substantial: for a country with average indebtedness, doubling the debt ratio would reduce annual per capita growth by between half and a full percentage point, while for countries that are to benefit from debt reduction under the current Heavily Indebted Poor Countries (HIPCs) initiative, per capita growth might increase by 1 percentage point, unless constrained by other macroeconomic and structural distortions.

[13] examined the channels through which external debt affects growth in low-income countries. Results suggested that substantial reduction in the stock of external debt projected for HIPCs would directly increase per capita income growth by about 1 percentage point per annum. Declines in external debt service could also provide an indirect boost to growth through their effects on public investment. [14] assessed empirically the impact of external debt on economic growth for nine South American countries and found a statistically significant inverse relationship between the debt burden and economic growth during 1974-1986.

However, [15] failed to find any evidence in favor of a negative relationship between external debt and economic growth in a set of 81 developing countries over a period of 1965- 87. [16] examined the relationship between economic growth and external debt in sub-Saharan African countries over the period 1970-1986 using least squares method. The study found that direct effect of debt hypothesis shows that GDP is negatively influenced via a diminishing marginal productivity of capital. The study further found that on the average a highly-indebted country faces about 1 percent reduction in GDP growth annually.

In another study, an inverse relationship between debt overhang, crowding out and investment has been found in sub-Saharan African countries during 1970-1994. The study concluded that external debt depresses investment through both a "disincentive" effect and a "crowding out" effect, thus affecting economic growth [17]. [18] Investigated empirically the impact of Sudan's external indebtedness on economic growth over the period of 1978-2001. The study concluded that the findings of the study supported the need of Sudan to be considered for comprehensive debt relief measures. [19] analyzed long-term and short-term relationships between public debt service and GDP in Indonesia by applying co-integration analysis of time series data from 1980-2005. The result indicated that Indonesia faces a debt overhang problem in the long- run since increasing the public external debt service makes sluggish economic growth.

[20] reported that one unit change in the external debt will discourage -2.92 unit changes in the total FDI in flow into Pakistan.[21]found that debt reduction would enhance macro-economic performance in the Nigerian economy. [22] found significant relationship does exist between external debt and GDP during 1970-2011 by using Granger causality test. As external debt decreases it shows an increase in GDP growth in the HIPCs of the Southern African Development Community.

[23] examined the determinants of economic growth for Pakistan, the impact of domestic debt and external debt on the economic growth of Pakistan separately over period of 1980 -2010. The findings suggested an inverse relationship between domestic debt and economic growth and also the relationship between external debt and economic growth was found negative. The results also concluded that external debt slows down economic growth more as compared to domestic debt. In other words, the negative effect of external debt is stronger on the economic growth in comparison to domestic debt. However, [24] findings from the error correction model showed that external debt has contributed positively to the Nigerian economy during 1970-2010.

In recent studies, for example, [25] using least squares regression method found that external debt brought a negative effect while domestic debt impacted positively on economic growth of Nigeria. However, [26] showed that there is no long run relationship between the external debt and economic growth of Tanzania for the period of 1990-2010 by utilizing co-integration analysis. The study suggested there is a need for further research to identify the impact of external debt on foreign direct investments and on domestic revenues.

The present study aims to contribute to the literature which is still not fully conclusive in this important issue, with reference to global external debt in general and with reference to Indonesia in particular. As one of major developing countries, the country has had a long experience with external debt. However, studies on debt on Indonesia are still scarce, thoughabundant literature available on the other countries. Using arelatively long span of data and verifying it theoretically and empirically are the part of the salient features of this study.

MATERIALS AND METHODS

The following econometric model is used to verify the impact of external debt on economic growth along with the other explanatory variables such as exports, gross savings and infrastructure and inflation rate as control variables. The estimating equation for this study is in a simple linear form and can be symbolically written as follows:

$$G_t=\beta_0 + \beta_1 DEBT_t + \beta_2 X_t + \beta_3 INF_t + \beta_4 S_t + \beta_4 TEL_t + \varepsilon_t \quad (1)$$

In Equation (1), G is gross domestic product (GDP) per capita (current US$), DEBT is external debt stock total (current US$) as ratio of GDP (current US$), X is exports of goods and services (current US$) as ratio to GDP, INF is inflation rate, GDP deflator is in annual percentage, S is gross savings as ratio of GDP, TEL is telephone lines (per 100 people), a proxy used for infrastructure and $\varepsilon_t$is the stochastic error term. The explanatory variables and error term (ε) followed the classicalassumptions. The subscript (*t*) indexes time.

In Equation (1), external debt and inflation rate are expected to be negatively related with economic growth, while exports, infrastructure and gross savingsto be positively related.GDP per capita is the dependent variable thatrepresents economic growth.

Infrastructure development as measured by telephones per worker is expected to contribute to economic growth [27, 28]. They also used telephone mainlines per thousand population as proxy for infrastructure investment. Similarly, [29] reported that a higher saving rate led to higher economic growth in 22 OECD countries. [30] found that government savings have a positive impact on growth of real per capita GDP during 1965-1990. In another study, a positive relationship between exports and economic growth of Indonesia during the period of1990 through 2009was found by [31].

This study is based on secondary data ranging from 1980 to 2012.Eviews7 is used for computation purposes. Ordinary least squares method is used as an analytical technique for parameter estimation. The data have been taken from [7, 32, 33].

Result Interpretation: A summary of the descriptive statistics and correlation matrix is presented in Table 3. The data on external debt and exports are in current US$ million. The inflation rate and GDP deflator are in annual percentage, whereas GDP per capita is in current US$.From our reading of the Indonesian data it appears that the variables exhibit lower values in 1980 but high ones in 2012. However, as evident from the Table 3 inflation rate was the lowest at -0.096 (which is in 1987) and recorded the highest at 75.27 (in 1999). Gross savings are estimated at the highest at 32.09 percent (in 2010) and lowest at 13.20 percent (in 1999). Table 3 also shows a

Table 3: Summary of descriptive statistics and correlation matrix

Summary statistics					Correlation matrix						
Variables	Mean	St Dev.	Minimum	Maximum	Variables	G	DEBT	X	TEL	NS	INF
G	1126.349	862.228	434.461	3592.290	G	1					
DEBT	54.504	27.175	24.613	158.694	DEBT	-0.4375	1				
X	35.937	40.046	19.487	256.188	X	0.491	-0.062	1			
TEL	4.092	5.220	0.249	17.064	TEL	0.959	-0.342	0.397	1		
S	26.217	4.307	13.201	32.095	S	0.477	-0.526	0.167	0.384	1	
INF	13.399	13.020	-0.096	75.271	INF	-0.138	0.230	-0.018	-0.063	-0.457	1

Table 4: Regression results

Dependent Variable: GDP per capita (G)			
Independent Variable	Estimated Coefficient	t-Statistic	p-value
DEBT	-3.156*	-2.055	0.049
X	2.969*	3.124	0.004
INF	-1.972***	-0.651	0.520
S	12.791*	1.178	0.249
TEL	139.463*	17.504	0.000
Constant	312.015	0.916	0.367

Adjusted R^2=0.95, F-ratio (p-value)=117.87 (0.000), D.W.= 1.83, Sample=33, DF=28

Note:*, *** Significant at 1% and 10% level

correlation matrix, where the results obtained are with correct signs and support the hypotheses of the study. As expected, economic growth is negatively related with external debt and inflation rate. On the other hand, as expected, the signs of association of exports, savings and infrastructure with economic growth are positive.

Least Squares Results: As for the procedure,first,the time series dataneed to be checked for stationaritybefore running regression. An empirical work based on time series data assumes that the underlying time series is stationary. Any estimation based on non-stationary variables may lead to spurious results which are not acceptable even with the high R-squared value [34]. The time series property of each variable is examined using the Augmented Dickey Fuller (ADF) for the unit root test. The checking shows that the data were found not to exhibit any unit root signs and thus stationary.

The summary of the least squares regression results isshown in Table 4. Overall, the results are satisfactory based on the coefficient signs, adjusted R^2, F-ratio and t-ratio. The adjusted R^2 of 0.95 means 95 percent of the variation in the dependent variable, GDP per capita, is explained by the explanatory variables namely external debt, exports, gross savings, infrastructure and inflation rate respectively. The model is not spurious because the adjusted R^2 value is less than the D.W. statistics. The F-statistic is found statistically significant, which shows that all explanatory variables included in the model jointly influence the dependent variable. The estimated equation (2) is as follows:

$$G=312.015-3.156\ DEBT+ 2.969X -1.972INF + 12.791S + 139.463TEL \quad (2)$$

All these tests reveal that the model is a good fit. The explanatory variable, external debt, the focus of this study, has a negative sign indicating its negative impact on economic growth. The estimated coefficient found is statistically significant at 1 percent level. The size of the estimated coefficient is -3.156. Similarly, the impact of exports on the economic growth is positive and significant at 1 percent level of significance. The inflation rate shows a negative impact on economic growth as expected and is statistically significant at 10 percent level. The effects of infrastructure and gross savingsare found to be statistically significant at 1 percent levels with positive signs as expected [35-37]. Therefore, in short, the results of this study are in line of the prior studies [30, 18, 19, 31, 32].

CONCLUSION

This paper analyses the impact of external debt on economic growth in the context of Indonesia. For empirical analysis time series data for the period 1980through 2012 are used. Least squares method as an analytical technique is utilized to verify the relationship between external debt and economic growth. In addition, a set of macro-economy controlvariables are used namely exports, infrastructure, gross savings and inflation rate.

The results are statistically significant, carry expected signs and in line of the hypotheses of the study. External debt and inflation rate are negatively related to economic growth as expected. On the other hand, as predicted exports, infrastructure and gross savings have positive impacts on economic growth. The major findings of the study are that external debt dampens, whereas, exports augment Indonesian economic growth during the period

under the study. Theresults support many previous findings that external debt, if not managed well, may not be a blessing but rather a burden in way of economic growth. This is not only true for Indonesia but also for other developing countries.

Policy Recommendations: In order to bring Indonesia on the path of sustainable economic growth, it is suggested that active debt management policybe implemented. To reduce the risk of negative external shocks, external debtshouldbe lessened to a more manageable level. In this regard, the government's strategy to use more domestic debt instead of external one is a right policy. Other active debt management measures such as opting for fixed rather than floating interest rates, longer maturity loans rather than short ones, improvingdebt currency portfolio, as well asdebt swap should be implemented. Ideally, the external loans should be invested only for productive projects, even better if they are self-repaying.

On the private sector side, prudent guidelines, supervision, monitoring and reporting system should be adopted so thatthe external debt can controlledat the sustainable level. Apart from that,fiscaland monetary policy concerning such as budget deficit, government expenditure and revenues, inflation as well as other economic fundamentals need to be strengthened to maintain foreign investors' confidence and thus reduce the potentiallynegative effects fromexternal shocks or crises. Domestic debt market should also be expanded and deepened to allow government and firms access domestic savings.Prudent debt risk management such as hedging of external debts should be adopted not only by the private sector but also by both the government and State-Owned Enterprises (SOEs) borrowers.

REFERENCES

1. International NGO forum on Indonesian Development (INFID), 2006. Debt Swaps for Indonesia: A Proposal for Their Effectiveness.
2. Richard, J.C., 2004. Debt, Agricultural Expansion and Deforestation. Paper presented to the Australian Conference of Economists (ACE), University of Sydney, 27-30 September, 2004.
3. Ferraro, V. and M. Rosser, 1994. Global Debt and Third World Development. From: World Security: Challenges for a New Century, edited by Michael Klare and Daniel Thomas (New York: St. Martin's Press, 1994), pp: 332-355.
4. Kusumaningtuti, S.S., 2004. Country Experiences of Indonesia on External Debt Management. Paper presented at Regional Workshop on Capacity-Building for External Debt management. Bangkok.
5. Emirullah, C., 2011. The Performance of Public Debt since the Asian Crisis: The Case of Indonesia and Malaysia. Paper presented at Tenth Malaysia Plan Conference. Kuala Lumpur.
6. Jubilee, A., 2007. A Debt-for-Development Swap with Indonesia-Drop the Debt. A Policy Paper International Debt Statistics (2013) World Bank, Washington DC.
7. Republic of Indonesia, Bank Indonesia, 2013. External Debt Statistics of Indonesia. Vol. IV, June 2013.
8. Central Intelligence Agency (CIA), 2012. The World Factbook. Office of Public Affairs, Washington, D.C. 20505.
9. Krugman, P., 1988. Financing vs. Forgiving a Debt Overhang. Journal of Development Economics, 29: 253-268.
10. Pattillo, C., H. Poirson and L. Ricci, 2004. What Are the Channels through which External Debt Affects Growth? IMF Working Paper, WP/04/15.
11. Serven, L., 1997. Uncertainty, Instability and Irreversible Investment: Theory, Evidence and Lessons for Africa. World Bank Policy Research Working Paper No, 1722: 1-44.
12. Pattillo, C., H. Poirson and L. Ricci, 2002. External Debt and Growth. IMF Working Paper 02/69 (Washington: International Monetary Fund), pp: 1-47.
13. Clements, B., R. Bhattacharya and T.Q. Nguyen, 2003. External Debt, Public Investment and Growth in Low-Income Countries.IMF Working Paper, WP/03/249.
14. Geiger, L.T., 1990. Debt and Economic Development in Latin America. The Journal of Developing Areas, 24: 181-194.
15. Cohen, D., 1993. Low Investment and Large LDC Debt in the 1980's.The American Economic Review, 83(3): 437-449.
16. Fosu, A.K., 1996. The Impact of External Debt on Economic Growth in sub-Saharan Africa. Journal of Economic Development, 21(1): 93-117.
17. Iyoha, M.A., 1996. External Debt and Economic Growth in Sub-Saharan African Countries: An Econometric Study. Paper presented at AERC workshop, Nairobi.

18. Ahmed, M. and A. Mohammad, 2005. The Impact of External Debts on Economic Growth: An Empirical Assessment of the Sudan: 1978-2001. Eastern Africa Social Science Research Review, 21(2): 53-66.
19. Cholifihani, M., 2008. A Cointegration Analysis of Public Debt Service and GDP in Indonesia. Journal of Management and Social Sciences, 4(2): 68-81.
20. Azam, M., 2011. Impact of Exports on Economic Growth: An Empirical Evidence from Indonesia. Elixir International Business Management, 36: 3020-3022.
21. Ezike, J.E. and J.N. Mojekwu, 2011. The Impact of External Debt on Macro-Economic Performance. International Journal of Business and Management Tomorrow, 1(2): 01-12.
22. Sichula, M., 2012. Debt Overhang and Economic Growth in HIPC Countries: The Case of Southern African Development Community (SADC). International Journal of Economics and Finance, 4(10): 82-92.
23. Atique, R. and K. Malik, 2012. Impact of Domestic and External Debt on the Economic Growth of Pakistan. World Applied Sciences Journal, 20(1): 120-129.
24. Sulaiman, L.A. and B.A. Azeez, 2012. Effect of External Debt on Economic Growth of Nigeria. Journal of Economics and Sustainable Development, 3(8): 71-79.
25. Umaru, A., A.A. Hamidu and S. Musa, 2013. External Debt and Domestic Debt Impact on the Growth of the Nigerian Economy. International Journal of Educational Research, 1(2): 70-85.
26. Kasidi, F. and A.M. Said, 2013. Impact of External Debt on Economic Growth: A Case Study of Tanzania. Advances in Management & Applied Economics, 3(4): 59-82.
27. Easterly, W. and R. Levine, 1997. Africa's Growth Tragedy: Policies and Ethnic Divisions. Quarterly Journal of Economics, 112(4): 1203-1250.
28. Fayissa, B. and C. Nsiah, 2010. The Impact of Governance on Economic Growth: Further Evidence for Africa. Department of Economics and Finance Working Paper Series.
29. Jappelli, T. and M. Pagano, 1994. Saving, growth and liquidity constraints. The Quarterly Journal of Economics, 109(1): 83109.
30. Radelet, S., J. Sachs and L. Jong-Wha, 1997. Economic Growth in Asia. Background paper for the Asian Development Bank's study Emerging Asia: Changes and Challenges.
31. Azam, M. and N. Khattak, 2009. Effects of Economic Factors on Foreign Direct Investment Inflow: Evidence from Pakistan (1971-2005). Sarhad Journal of Agriculture, 25(1): 135-140.
32. The World Bank, International Debt Statistics, 2013. International Bank for Reconstruction and Development / The World Bank 1818 H Street NW, Washington DC 20433.
33. The World Bank, World Development Indicator (various issues).
34. Domodar, N.G., 2003. Basic Econometrics, 4rth Edition, McGraw-Hill International Edition.
35. Muhammad Azam, Sallahuddin Hassan and Khairuzzaman, 2013. Corruption, Workers Remittances, Fdi and Economic Growth in Five South and South East Asian Countries: A Panel Data Approach Middle-East Journal of Scientific Research, 15(2): 184-190.
36. Sibghatullah Nasir, 2013. Microfinance in India: Contemporary Issues and Challenges, Middle-East Journal of Scientific Research, 15(2): 191-199.
37. Mueen Uddin, Asadullah Shah, Raed Alsaqour and Jamshed Memon, 2013. Measuring Efficiency of Tier Level Data Centers to Implement Green Energy Efficient Data Centers, Middle-East Journal of Scientific Research, 15(2): 200-207.