The Impact of Interest Rate, Exchange Rate, Inflation and Balance Of Trade on Public Debt: Evidence from Pakistan

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Abstract:
With the gradual rise in public expenditures and minimum capital generation in various developing states, different governments have reinstated towards domestic and foreign debt. For making the payment of interest and principal may increase the demand for international currency which can affect the exchange rate and inflation trend of the country. However, this research investigates the impact of interest rate, exchange rate, the balance of trade and inflation on governmental debt in Pakistan. The results confirm that interest rate, balance of trade and exchange rate have significant positive effect on the public debt. The sign of coefficient for inflations shows the negative impact of inflation on public debt however, the results are statistically insignificant. Hence it is recommended that government should pursue those projects which yield positive return so that the outstanding interest on debt and part of principal may easily be paid in time in order to avoid chances of financial distress.
Keywords: *Public debt, inflation, balance of trade, exchange rate, and interest rate*

1. Introduction

The developing and under developing nations are facing the issues of the budget shortfall and governmental enormous expenditure has been the challenge for policy makers to overcome this problem for many years. Government by three possible ways can finance its expenditure in order to overcome the budget shortage, due to the budget discrepancy and government liability; some other macroeconomic variables can be upset. Developing countries also facing a shortage of capital through external debt, therefore, borrowing through internal and external sources (Aluko & Arowolo, 2010).

Different researchers had carried out the research to check whether the foreign debt has any impact on economic development in developing countries. Most studies were aggravated with the help of "debt overhang" hypothesis- it is a situation when nation pay a large portion of their revenue to foreign lenders on the account of interest and principal that is the sign of depressing investment, (Krugman.P, 2005).The main causes of the decrease in investment in most of the developing and developed or both, depend on public debt due to a reduction in export prices, changing the interest rate and inflation caused investment downward, (Warner, 2003). Egen and R (2004), Consider theoretical prediction for the impact of interest rate on management liability and concluded that government debt effects on physical assets of the country (Engen & R, 2004). Discusses interest rate have an influence on tax cuts by the use without produce, (Laubach, 2003).In inflation the price level is increased continuously, it is a crucial issue for a financial system that is the reason different studies are being done in different time horizon, inflation has significant as well as the insignificant impact on, imports of the nation and it is the key factor through which investment is affected. There is a tendency for limited currency to enhance in value, a decrease in effectiveness of sale abroad industries that is the possibility of giving rise to inflation when capital inflow boost. Proposed that resources inflow have a contribution to the price of asset positive reception in this area, whereas assets inflow upset explain a small portion of advantage price variations (Kim & D, 2008). An analysis carried out by using secondary data from regulatory bank of Nigeria, it was observed that exchange rate variation has been strongest overstated by debt renovate payment, the debt should be invested on the creative economic actions, which can create enough revenue to distress the debt charges and principal, (Saheed, Sani, & Oldakwoji, 2015).The data was examined for nine Organization for Economic Cooperation and Development (OECD) countries, and concluded that the reason for government taking debt at large scale for early 1970s because there was increase in interest rates, hence government while taking public debt should keep in mind that there must be proper utilization and invest in development expenditure in order to face the challenges related to rising interest rate and exchange rate and to wave off debt. (Robert & Dogales, 2002).It is observed that relationship between interest rate and reliability of legal tender is not orderly and depend on the other situation, interest rate and exchange rate do not have a vagarious connection, it is hard to understand as a planned lack of efficiency of interest rate military protection, (Gold Fajn & Baig, 2006).This topic is so much important from Pakistan's point of view as our country is under developing the country and facing a twin deficit budget and mainly depends on domestic and external debt, while revenue is less than expenses. It is suggested that research will continue through the recognition and testing of other factors that manipulate the exchange rate, such as money transport and other factors of public finance (LiLiona, 2014).Sovereign risk and furthermore it became the cause of minimizing the governmental ability for the support of financial strength. Most of the developing countries are affected by debt problem which is due to the shortage of the budget, which unfavorably affects financial performance and financial consistency. Most of developing countries are affected by debt crises, the financial stability can get worse by the effect of poor debt management which can enhance the risk which related to financial stability and financial consistency,(S.Das, Papapioamou, & Ahmed, 2010).The important point exposed study is the high price of postponing fiscal change in such an environment of high-interest rate and small economic development, taking too much time in making a fiscal alteration that will result in rapid debt burden and that lead an enhancement in inflation rates, (Wijnbergen & Budina, 2007).

Following reseach questions have been developed to seach for.

Q:1 what is the difference between public debt and governmental borrowings?

Q:2 What is the relationship between inflation rate and public debt?

Q:3 What is the effect of interest rate on public debt of Pakistan?

Q:4 What effect does exchange rate have on the external debt of Pakistan?

Q:5 What effect does balance of trade on public debt of pakistan.?

Q:6 What is the interrelationship among interest rate, inflation rate, exchange rate and balance of trade of Pakistan?

Next part will focus on literature review which will be followed by hypotheses and

2. Literature Review

The topic of public debt and factors affecting it such as exchange rate, interest rate, inflation and balance of trade have been reviewed by numerous scholars in previous decades and it is still remnants to be one of the burning issues in international trade and industry and there is need a lot of work to be done in future on this topic. Rudiger Dornbusch was the first one who analyzed the performance of exchange rate in 1973. Research work shows that inflation is such a most crucial factor which affect the exchange rate and components which cause to rise in inflation. Whereas honesty, output development, and trade. In general consequences, it demonstrates that the debt belongings are most imperative for far above the ground reduction/inflation countries. Openness, length and the accumulation of nominal governmental liability variables that propensity to force up are momentous in amplification the speed of so-called depreciation. On the other hand, the outcome intended for the conditions of trade, an additional factor that have to influence the nominal exchange rate by the use of its pressure on the actual exchange rate, it varied for the (OECD) nations. The inflation factor heavily comes into view to control the will power of the rational exchange rate (Lane, 2006).The main reason for causes of inflation and its impact on the economic stability have been examined by many researchers. The Friedman (2005), concluded that a tight monetary policy should be maintained, this can help in checking of inflation for the long time period, all of that was mentioned by him in his famous work inflation, reasons, and results. Monetarist representation accomplished that precedent behavior of cash to production ratio would give details the present pace of secular cost change. The De Sila (2003), measured inflation as the consequences of nation's enormous shortfall.

Results of the study recommend that there is a long run affiliation between actual domestic manufactured goods and additional macroeconomic changeable, in the long run, household merchandise of Pakistan which is intolerant by the exchange rate. The exchange rate also has an effect on the foreign direct investment, net exports as well as total demand, furthermore exchange rate is furthermore causing to economic profundity and financial budget shortage in Pakistan which is moreover dependable by the theory, (Imran, Qambar, & Farooq, 2012).

Most of the researchers are agreed on an idea that money supply is the main factor behind the causes of inflation in Pakistan. A rise in money supply for long time period costs a great boost in an inflation and therefore gives support for measure hypothesis of money, (Kemal, 2006).

According to the structural theory of inflation, which states that inflation arises as a mechanism of internal demand of any national changes, whereas country's cumulative demand remain same.

In accordance with theory, while demand calculated for supplies in a few sectors increases, this came along with the rise in costs and earnings, but the sectors where the demand for commodities decreases, there is always rise and fall in the prices and wages. Moreover, there is no shifting of resources from such industries whose demand reduce in size to those businesses where demand increases. For this reason, in general, the propensity of prices be likely to rise in the financial system, this was concluded by, (Julio, 2008).

Examines the macroeconomic problems of governmental debt in the US through applying inconsistency decomposition.In order to achieve the desired result of the study for the period of the 1980s and 1990s. The study was carried out Through the hypothesis of Ricardian Equivalence in order to analyze the impact of governmental debt on production, the level of price and interest rate as well. It was concluded from the results of research that governmental debt has an indifferent and significant impact on interest rates, cost level and the amount produced, (Wheeler, 2009).

The other study which was carried out by determining of effects of the fiscal shortfall and governmental debt on interest rate in Nigeria by using the "Vector Autoregression" from1981 to 2006. The results of the research show that fiscal shortage, as well as governmental debt, show off a significant effect on interest rates.The researchers give the suggestion that returns increased, furthermore unnecessary expenses should also be reduced by the government, where there is a budget deficit, (Obi & Abu, 2009).

Examine the association flanked by public liability along with inflation in countries by higher charges of inflation is feed with the increasing expenses of household public money owing. These authors argue that the increase in debt to the Gross Domestic Product(GDP), most of the developing and under developing countries acquire loans on urgent basis in order to fill the budget deficit gap that loans have high interest rates and their maturity is very short, therefore such loans create inflation and burden of high-interest rate on GDP, (Bildirici & Ersin, 2007).

Through explaining the impacts of a shortage of budget which describes that reduction in national saving, which is an important and most negative shock due to the shortfall of the budget. Saving is the keep factor through which consumption can be kept in balance and in future it can be reinvested. A small portion of saving treated as lower assets formation for future. For the policy of long time period, lower saving has become the main reason behind the unemployment and in this way the manufacturer's ability will go in a downward direction,therefore, it is necessary for any nation to make saving and reduce unnecessary expenses to overcome the budget shortage, (Laurance & Mankiw, 2002).

Easterly & Schmidt-Hebbel (2009), analyzed that budget shortage of 10 developing nations had a powerful proof that monetary financing results in a higher inflation and liability financing to high-interest rates. Moreover, the facts are given about adverse impact of the shortfall on the trade deficit. Empirical results show that trade shortage is due to the budget shortfall, this also leads an exchange rate high. After describing and empirically giving the proof of main impacts of budget shortage, the researchers gave the suggestions that vigorous development builds the financial system sustainable and creates shortfall fewer adverse. Budget arrangement should be enhanced and various reforms should be approved in favor of private asset,the budget deficit causes the trade deficit and loans that have high-interest rates for short time period have also adverse effect on economy of country.it is the necessary for nation get loans at low rates for long time period and utilize those loans on productive based activities,political involvement should not be there.

Rates of interest, the rate of exchange as well as expansion are extremely correlated. Advanced interest rates present bestowers in a financial arrangement an upper return to relative to additional nations. The reason, high-interest rates catch the attention of foreign resources and causes the exchange rate to increase. The impact of upper rates of interest is reduced, on the other hand, if the price rises, the country is greatly advanced than in others, otherwise if supplementary factors fulfill to force the money to decline. The contradictory connection endures for declining interest rates, so as to is lower rates of interest be disposed to reduce rates of exchange, (Bamiddele & Joseph, 2013). On the contrary, changes in currency supply hold indirectly inflated the balance of payment and stage of abroad funds as well. Ambivalence in relation prices of imports might survive owed to fluctuations in currency deliver as well as this might encompass shock on the stage of exports plus imports. Thus, we can utter that owing to the budget shortage, the balance of payment is too exaggerated ultimately throughout comparative prices also currency reduction (Wakeel & Kafaitullah, 2013).The prices of imports are based on the currency rates, if currency fluctuates it will affect on consumer prices, it is important that export of country must be higher than its imports.to make the economy we should depend on our domestic product and there must be a balance of trade and foreign reserves to a stable economy.

3.Hypotheses of study:

This study is related to dependent and independent variables used in the research and to give the answers to questions asked in the introductory section.

3.1 Public Debt

The public debt is taken as a dependent variable, which includes domestic and foreign debt.The public debt is also known as national debt, when it is utilized in a proper way there will be a lot of development and unemployment rate can be decreased, otherwise, it will create a lot of burden on the economy.

Debt is a duty or obligation to give money deliver goods or deliver services under an expression or obscure agreement, which creditors promises timely interest and principal payment, whereas public debt has two main types domestic and foreign debt. While contributed by the financial institutes on promised. (Bamiddele & Joseph, 2013).

Examined the relationship between domestic debt and inflation of those countries where a high rate of inflation. It was concluded that domestic debt increases due to rise in inflation as a result, the rising debt to GDP ratios put pressure on these countries to take loans having upper cost and with short maturity. The study explains the boost in the cost of borrowing is as a result of not- Circadian financial strategies, (Bildirici and Ersin, 2007).

Delong & summers (2012), these researchers concluded that the long run effect of public debt and output growth is unclear and predicts negative relationship and some give the positive relationship between growth and debt, influenced circumstances. We still require guessing the scale of such belongings empirically. (Ghoshel, Kim, E.Gmendoza, & Quershi, 2013)

3.2 Inflation Rate:

Inflation in this study is used as an independent variable, and it is one of the most problems of financial growth for every nation in the world. The central bank of any country is responsible for paying full attention to controlling the rate of inflation. The inflation rate is used as an independent variable for public debt, it is an economic variable and it has an impact on both debt and equity. The increase in inflation enhance the interest rate, this depicts a positive relationship between inflation and interest.

Frank and Goval (2009), explains that when organization expects that inflation can be an increase in future or in another case when the current inflation rate is low the companies issue the debt securities, but this prediction of the rate of interest especially depends on the changing trend of the economy of inflation. By using cointegration technique empirically investigated the relationship of the budget shortfall and inflation among 15 ECOWS countries from 1980 to 2011.The results of the study explain that budget shortfall is financed by raising the supply of money and steady rise in money supply cause the price level increase. The researchers concluded that there is a positive and significant connection between inflation and a budget shortfall in most of the countries for the long term. (Pelesai & Oyinpreye, 2013)There is also another research which shows a reduction in inflation may be connected with the expansion of money owing. The connection between the quantity of governmental debt and rate of inflation is consequently like to that of highly developed economies. The domestic debt does not have any impact on rate of inflation (Kocner, 2014)The crucial point revealed by studies is high price of postponing fiscal adjustment in such an environment of elevated interest rate and small economic development, taking too much time in making fiscal adjustment that will result in rapid debt burden and that lead an enhancement in inflation rates (Wijnbergen & Budina, 2007)

Hypothesis*: 1 there is a positive relationship between inflation and public debt.*

3.3 Exchange rate:

The relationship stuck between government expenditure as well as the rate of real exchange has been the topic of rising issue for nations and still further need to research, however, comprehensive literature in worldwide finances. Observed the instrument in the course of which public communications expenses affects the dynamics of the actual exchange rate. By means of a two segment contingent open financial system representation with intertemporal modification costs, they have exposed that administration expenses produce non-monotonic rounded alteration trail in favor of the real exchange rate with sharp intertemporal tradeoffs. The effect of government spending on the real exchange depends on the work of public expenditure, the fundamental monetary policy, the strength of confidential assets in construction, and comparative output of public transportation., (Chatterjee & Mursaguloy, 2012)

Examined the connection between external public debt and real exchange rate in rising developing.The result of the study shows that debt extension has the propensity to value rate of exchange in the elongated time period.(Sene,2004).

On the basis of above, we can say that there is a positive relationship between exchange rate and public debt.

Lin (2005), contrary to this examines the stable state consequence of governmental money owing on the actual exchange rate and concluded that raise in governmental debt devalues the actual exchange rate of the nation.

Hypothesis: *2 there is a positive relationship between exchange rate and public debt in the long run.*

3.4 Interest Rate:

Interest Rate is an amount paid by the government on public debt or payment made by debtors to creditors for debt or it is also it is defined a definite addition to cash remunerated or received is recognized as the rate of interest, in order to achieve the positive development the interest rate is considered as a major economic factor.

Examines the macroeconomic crashes of governmental debt in the US through applying inconsistency decomposition and desire responds purposes for the from the 1980s to 1990s. Through the hypothesis of Ricardian Equivalence the impact of governmental debt on production, the level of price and interest rate as well. It was concluded from the results of research that governmental debt has an unenthusiastic and noteworthy impact on interest rates, cost level and the amount produced (Wheeler, 2004).

Using a typical set of statistics and simple financial structure, in order to check analytically the effect of central governmental debt on interest rates. Moreover, they concluded that a 1% raise in governmental debt to GDP could increase two to three points to a real rate of interest, (Mark,2005).

It could be concluded from the results of researches which were conducted by different researchers in different time periods that there is no any linkage between governmental debt and interest rate, therefore, they have a tendency to sustain the "Ricardian equivalence hypothesis" (Barro, 2003), (Gulley, 2006), (Seater, 2009), negative effect of public debt on interest rates for the United States of America was found for long run.

Hypothesis:3 There is a positive relationship between interest rate and public debt.

3.5 Balance of Trade:

The balance of trade is an international account and records import and export transactions of the country.The deficit is declared if imports are greater than exports and trade surplus is recognize in vice versa situation. The difference between country's exports and imports is called the balance of trade.pakistan is facing trade deficit since last two decade because its imports are greater than exports.Like other developing countries Pakistan is facing the problem of the budget deficit problem, and it is a factor which is responsible for greater inflation, slow development, the deficit in trade and reduction in savings as well as consumption (Chaudhary & Kiyoshi, 2010).

Expected impacts of funds shortfall trade and observed that shortfall of budget is financed by all the way through issuing of bonds as well as securities, might increase great pressure on rate of interest, upper-interest rate draws foreign investment, investment drift of foreign speculation increases the foreign exchange rate demoralizes net exports and in the result the trade deficit occurs, (John, 2005).

Hypothesis:4 There is a positive relationship between public debt and balance of trade.

Data Sources and Methodology

The secondary data have been used in this study which is based on time series analysis.The yearly, as well as monthly data which was then converted into yearly, is taken from State bank of Pakistan, World development Indictor and Economic survey of Pakistan ministry of finance covering the time period from 1995 to 2014. Public debt is taken as dependent variable whereas inflation, interest rate, exchange rate and balance of trade is taken as independent variables.The exchange rate is measured in US Dollar and public debt (sum of domestic and external debt) is expressed in Millions.

Model Specification:

In order to attain the objectives of the study, the linear regression model is used to guess the effect of interest rate, inflation, exchange rate and balance of trade on public debt the following researchers had also used the linear regression model, (Ribeiro, Vaicekauskas, & Lakstutiene, 2012).

The model specified thus as

$$pd_t = \beta_0 + \beta_1 irate_t + \beta_2 inflation_t + \beta_3 erate_t + \beta_4 bot_t + +e_t.$$

Where

Pd= Public Debt (Domestic and Eternal Debt)

Irate=Interest rate

inf=inflation

erate=Exchange Rate

bot=Balance of Trade

t=Time

e=Error Term

β_0 = Constant intercept

Data Analysis:

Table 1

Descriptive Statistics

Variable	N	$Minimum^*$	$Maximum^*$	Mean	Std. Deviation
Pd	20	1662.00	15534.00	5796.1850	3955.20671
Bot	20	-3544.00	-12.00	-863.1620	1002.78077
Irate	20	8.00	20.00	12.3000	3.54074
Estate	20	34.34	98.65	63.8145	18.80330
Inflation	20	3.10	20.70	8.8545	4.28981

. the figure are in million.*

As depicted table 1, the mean value of public debt is around 5798 million, the mean value of the balance of trade is around -863, mean value of interest rate is around 12.3, the mean value of exchange rate is around 63.81 and mean value of inflation is 9 million.

Table No. 2

Regression Results

Dependent variable: PD				
Method: Least Square				
Date: 16-12-2015				
Sample: 1995 to 2014				
Included Observations: 20				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10186.67	777.1434	-13.10784	0.0000
IRATE	232.7327	44.43148	5.238013	0.0001
ERATE	214.0691	7.658627	27.95136	0.0000
INFLATION	-141.4042	32.72665	-4.320766	0.0006
BOT	-0.824629	0.111249	-7.412481	0.0000
R-squared	0.990700	Mean dependent var		5796.185
Adjusted R-squared	0.988220	S.D. dependent var		3955.207
S.E. of regression	429.2823	Akaike info criterion		15.17442
Sum squared resid	2764249.	Schwarz criterion		15.42336
Log likelihood	-146.7442	Hannan-Quinn criteria.		15.22302
F-statistic	399.4737	Durbin-Watson stat		2.315194
Prob(F-statistic)	0.000000			

Computed through Eview 6.0

Results and discussion:

Table 2 indicates that the value of adjusted R^2 is .988 which indicates that almost 99% variations in dependent variable is explained by the independent variables (irate, erate, bot and inflation) whereas only 1% change in the dependent variable, that is public debt can be supposed to be explained factors outside the model, the F-stat of 399.4737 point out that the fitness of model is quite satisfactory.

Coefficients give the results of each independent macroeconomic variable. The results of coefficients indicate that out of four variables used in the study three variables such as interest rate, exchange rate and balance of trade have significant effect on public in Pakistan with t-statistic value of 5.238013, 27.95136 and -7.412481 for irate, irate and bot respectively, whereas inflation does not significantly affect public debt. Moreover, the results indicate that balance of trade has a negative effect on public debt, whereas the exchange rate and interest rate positively affect public debt. We also did Pearson's correlation analysis to grasp the indirect impact of inflation on public debt and it was found that there is inflation have an indirect impact on public debt through the interest rate. By suggestion changes, in one of the independent variables will cause variation in the public debt in Pakistan. For example, a one unit change in interest rate brings 232.732 units change in public debt, whereas one unit change in exchange rate will bring 214.069 units change in public debt, also, one unit change in inflation will bring -141.404 units change in public debt and one unit change in balance of trade brings -0.825 units change in public debt in Pakistan.

The results we have found are also consistent/inconstant with studies such as Obi &Abu (2009) and Ramzan, Saleem & Izhar (2013).The impact of interest rate can be credited on the basis of fiscal deficit and governmental debt in Nigeria, results of the research show that fiscal shortage as well as governmental debt show-off a significant and positive effect on interest rates. The researchers give the suggestion that returns should be increased; furthermore unnecessary expenses should also be reduced by the government, where there is a budget deficit, (Obi &Abu, 2009).

Another study which was carried out in Pakistan concludes that there is a significant relationship between inflation and public debt whose significant level is 0.009, which is not greater than 0.05, (Ramzan, Saleem & Izhar, 2013).

Conclusion & Recommendation:

Analysis executed on secondary data taken from the State Bank of Pakistan, Ministry of Finance and World Bank. It is examined in the perspectives of this research, all the variables were investigated having significant and insignificant statistical impact on Public debt within the domain of research observed. While the interest rate, the exchange rate has significant positive impact on public debt, whereas the insignificant negative effect of inflation and negative significant effect of balance of trade on public debt in Pakistan was observed. According to the findings, it is hence recommended that public debt should only be pursued for creative economic activities, through which can produce enough yields to minimize the debt issues and its original principal.

References

Aluko, F., & Arowolo, D. (2010). Foreign Aid, the Third World's Debt Crisis and the Implication for economic Development: The Nigeria Experience. *African Journal of Political Science and International Relations, 4* (4), 120-127.

Bamiddele, T., & Joseph, A. (2013). Financial Crisis and External Debt Management in Nigeria. *International Journal of Business and Behavioural Sciences, 3* (4).

Bildirici, M., & Ersin. (2007). Domestic Debt, Inflation and Economic Crisis: A Panel Cointegration Application to Emerging and Developed Economies". *Applied Econometrics and International Development, 7* (1).Bua, G., Juan, P., & Andrea, P. F. (2014). Domestic Debt in low-income countries: Trends and Structure. *Review of Development Finance, 4*, 1-19.

Chatterjee, S., & Mursaguloy, A. (2012). fiscal policy and Real exchange rate. *IMF working paper No.52*.

De Sila, K. (2003). Money Supply, Inflation and Balance of Payments in Sri Lanka 1959-74. *The Journal of Development Studies, 13* (2), 22-36.

Easterly, w., & Schmidt-Hebbel, K. (2009). Fiscal Deficit and Macroeconomic Performance in Developing countries. *World Bank research Observer Oxford University Press, 8* (2).

Engen, E. M., & R, G. H. (2004). "Federal Government Debt and Interest Rates". *NBER Macroeconomics Annual (Cambridge, Massachusetts: National Bureau of Economic Research)*, pp.83-138.

Friedman, M. (2005). The Role of Monetary Policy. *The American Economic Review, 58(1)*, 1-17.

Ghoshel, A., Kim, J. I., E.Gmendoza, & Quershi, M. S. (2013). Fiscal Fatigue, Fiscal Space and Debt Sustainability in advanced Economies. *Economic Journal, 123* (566), 4-30.

Gold Fajn, I., & Baig, T. (2006). Economic Crisis: Evidence from Insights from East Asia. *booking papers on economic activity 2*, 1-135.

H.G.Olivera, J. (1964). On Structural Inflation and Latin-American Structuralism. *Oxford Economic Papers, 16* (3), 321-332.

Imran, C., Qambar, Y., & Farooq, F. (2012). Monetary Policy, Inflation and Economic Growth: Exploring the Co-integration and Causality Relationships. *Pak: J.Commer.soc.Sci, 6* (2), 332-347.

Julio.H.G.Olivera. (2008). On Structural Inflation and Latin-American Structuralism. *Oxford Economic Papers, 16* (3), 321-332.

Kemal, M. (2006). Is Inflation in Pakistan a Monetary phenomenon? *Pakistan Development Review, 45* (2), 213-220.

Kemal, M. (2006). Is Inflation in Pakistan a monetary phenomenon?. *Pakistan Development Review, 45* (2), 213-220.

Kim, S., & D, Y. (2008). The Impact of capital Inflows on Emerging East Asian Economies: Is too much money Chasing too little Good?Office of the Reginal Economic Integration: Asian Development Bank.

Kocner, M. (2014). The Impact of Public Debt on Economic Growth and Inflation. *62* (6), 1545-1549.

Krugman.P. (2005). Financing Versus Forgiving a Debt Overhang". *Journal of Development Economics, 29*, pp 253-268.

Lane, P. (2006). What Determines the Nominal Exchange Rate? Some Cross-Sectional Evidence. *"The Candian Journal of Economics", 32* (No.1).

Laubach, T. (2003). "New evidence on the Interest Rate Effects of Budget Deficit and Debt". *Federal Reserve Board Finance and Economics Discussion Paper No.2003/12(Washington: federal Reserve Board)*.

Laurance, & Mankiw. (2002). What do the budget deficits do? *National Bureau of Economic Research Cambridge*.

LiLiona, B. (2014). The impact of external debt on Exchange rate Variation in Romania. A *Recent issue in economic Development economic and Sociology, 7* (3), pp. 104-115.

Obi, B., & Abu, N. (2009). Do Fiscal Deficits Raise Interest Rates in Nigeria? A Vector Auto Regression Approach. *Journal of Applied Quantitative Methods, 4* (3), pp.306-316.

Robert, F., & Dogales. (2002). "World public Debt and Real Interest Rates.". *Oxford Review of Economic Policy, 15* (2), pp.77-94.

S.Das, U., Papapioamou, M., & Ahmed, F. (2010). Measuring Public Debt and its Financial Stability Implication. *IMF Working Paper*.

Saheed, Z., Sani, I. E., & Oldakwoji, B. O. (2015). The Impact of Public External Debt on Exchange rate in Nigeria. *Journal of International Finance and Banking, 2* (1).

Udaibir, S., Papapioamou, M., & Ahmed, F. (2010). Measuring Public Debt and its Financial Stability Implication. *IMF working Paper*.

Wakeel, I., & Kafaitullah. (2013). Impacts of Budget Deficit on Output, Inflation and Balance of Trade: A Simultaneous Equation Model Approach. *Journal of Global Sci- Issues, 1* (1).

Warner, A. (2003). Did the Debt crisis Cause the investment Crisis? *Quarterly Journal of Economics*, 1161-1186.

Wheeler, M. (2004). The macroeconomic impacts of Government Debt: An Empirical Analysis of the 1980s and 1990s. *Atlantic Economic Journal, 27* (3), pp 273-284.

Wijnbergen, S. V., & Budina, N. (2007). Inflation Stabilization, Fiscal Deficits and Public Debt Management in Poland. *Journal of Economic Literature*.