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Indebtedness and Poverty: The Case of Pakistan

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Since the advent of Neolibralism, debt has been construed as means of policy reforms to achieve stability, liberalisation and recovery from shocks. However, the other side of the picture has been either ignored or underappreciated. That is the human cost of indebtedness. Whether internal or external, indebtedness may have significant implications for the living conditions of the masses, as it leads to substantial deviation of resources towards debt management. This paper attempts to assess the impact of indebtedness on poverty for Pakistan. The impact of total, internal and external debt on poverty has been evaluated separately. Using the data from 1973 to 2013, Johansen Co-nintegration test reveals long run relationship between debt and poverty. The results remain consistent when domestic and external debt is taken separately. The long run impact of total, internal and external debt on poverty is positive. Which means that for Pakistan debt leads to increase in poverty. Further, it is evident that domestic debt has more severe poverty implications as compared to external debt. These results have two important policy implications; firstly, the overall levels of debt have to be reduced and secondly, the issue of domestic debt reduction takes priority.

JEL Classification: I30, I38, F34, H36

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I. INTRODUCTION

The imperative of borrowing by a nation was originally defined in context of external and internal gaps of the economy. In developing countries, in order to boost the savings to the desired level of investment, foreign capital is required. This makes room and justification of borrowing by the governments. The two-gap model explains that the shortage of foreign exchange adversely affects economic growth by constraining savings as well as imports. The solution posits relying on foreign aid or capital inflows. However, both these sources of development finance cannot be readily accessed [Chenry and Strout (1966)]. That leaves external debt as a viable way of filling the internal and external resource gaps.

For a developing country, however, owing to poor international credit ratings even unconditional external debt is not obtainable on manageable terms. Hence, many developing countries have to bank on domestic debt for filling the internal and external resource gap. The impact debt has on the economy remains ambiguous despite being thoroughly investigated. The overwhelming evidence indicates, however, that for

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developing countries debt tends to have an adverse impact on growth [Atique and Malik (2012); Sheikh, *et al.* (2010); Akram (2011); Kumar and Woo (2010)].

A relatively less explored issue happens to be the human cost of debt accumulation i.e. how the masses are affected by accumulation of debt. Kemal (2001) was of the view that debt is positively linked with poverty i.e. an increase in total debt stock will lead to a rise in the proportion of people lying below the poverty line.

World Bank has defined poverty as "the multidimensional phenomenon, encompassing inability to satisfy basic needs, lack of control of resources, lack of education and shocks, violence and crime, lack of political freedom and voice." While this definition is comprehensive and all-encompassing, empirically all the aspect given cannot be tested and some are even difficult to measure. One important aspect of poverty is income poverty. While there are other indicators of poverty like infant mortality or illiteracy, associating them theoretically and directly with debt is a bit problematic. Income poverty is a common and simple measure, in addition to this, income is the tool through which we can gain access to necessities and comforts of life. This makes income instrumental in alleviating other forms of deprivations.

This work is an attempt to explore the long run relationship between poverty and public debt for Pakistan. Most evidence pertaining to developing countries indicate that this relationship is positive. Further, in order to conduct a more meaningful analysis, the effects external and domestic debt have been assessed and compared. The study is divided into six sections. The first section presents the theoretical and empirical literature on the subject. The second section deals with the situation of debt and poverty in Pakistan. The third and fourth sections present with model and data used for estimation. The discussion of results is carried out in the fifth section and the last section presents conclusion of the study.

II. LITERATURE REVIEW

Kemal (2001) explained the relationship of debt accumulation and poverty. The paper gives the theoretical underpinnings of the relationship between the debt and poverty. He gave three channels from which the government finances the servicing of debt. They are the taxation of the investment, taxation on the consumption and reduction in government expenditure on social sector. Taxation of the investment, as suggested by Rogoff (1992) would result in capital flight which means repayment of the debt is a tax on the new investment. Thus fall in investment, according to Okun's law, would cause a fall in employment. This fall in employment will lead to decline in personal income and thus will lead to increase in poverty.

In case of consumption taxation i.e. taxes on the consumer goods, this would again affect the poor. This strategy involves expansion of tax base, many a times through indirect taxation. The regressive nature of indirect taxes will ensure a greater adverse impact on the people in the lower income strata, leading to increase in poverty.

Further, if the spending on education, health and sanitation are curtailed to finance the debt repayment, as is the case with many indebted developing countries, then is will result in increased incidence of poverty. As explained by Handa and King (1997), a cut in government expenditure to reduce budget deficit is mainly attained by reducing the expenditure in social and public sector along with privatisation. Johnsan and Salop

(1980) found that government decreases public sector employment, which will result in a rapid increase in unemployment accompanied by lower wages. This in turn will increase the incidence of poverty, as lower wages impair the purchasing power of the poor. The aforementioned channels, formulate the theoretical basis for our analysis. The empirical evidence on the issue has also been rare.

Shiekh and Alam (2013) studied the impact of external debt on incidence of poverty for Pakistan from 1985 to 2010. Main findings of the study are that external debt and external debt servicing are significantly increasing incidence of poverty in Pakistan. Similarly, Saungweme and Shylet (2012) explored the effects of external indebtedness on the poverty indicators of Zimbabwe for 1980 to 2010 using the OLS technique. In their study they used three indicators for measuring poverty. To evaluate the liquidity and ability of Zimbabwean economy to fulfill foreign commitments, external debt is taken twice one as a ratio of exports and second as a ratio of GDP. Both variables of external debt and the external debt servicing affect the income indicators of poverty significantly and positively. External debt and its servicing have also an adverse impact non-income indicators of poverty i.e. life expectancy rate and mortality rate.

Oyedele, *et al.* (2013) analysed the impact of external debt and external debt servicing on poverty reduction in Nigeria empirically using the co-integration technique for 1980 to 2010. Poverty reduction was measured by public expenditure on social goods and services as ratio of GDP. Debt is taken as the ratio to GDP whereas debt servicing is measured by the debt service payment as ratio of exports. The study confirmed the long run relationship among the variables. OLS regression estimates concluded that debt income ratio and debt services ratio are negatively associated with poverty reduction. This implies that external debt and debt servicing increase the poverty in Nigeria.

Ngerebo (2014) confirmed the existence of long term relationship between poverty and domestic debt for Nigeria for time period of 1986 to 2012 by applying Johnson conintegration test. Results show that domestic debt has a significant and positive effect on real GDP and GDP per capita, hence, playing a important role in eradicating poverty in Nigeria.

In a penal study of 67 low income countries from 1985 to 1999, Loko, *et al.* (2003) investigated the relationship between poverty and external debt for low income countries. Using the non-income indicators like life expectancy at birth, infant mortality rate and primary enrolment rate, results of the paper reveal that external debt has limited but significant effect. The coefficients of debt variables conclude that increase in external debt stock worsens the poverty situation in country.

Oberdabernig (2010) inspected the Structural Adjustment Programme (SAP) by International Monetary Fund (IMF) on the poverty and income distribution of those countries which entered into the programme and compared it with the situation prevailing in the countries that did not. Poverty was measured by different indicators and income inequality by Gini coefficients. The paper considered four basic programme of SAP in which one is Poverty Reduction and Growth Facility, which is the mostly used by the low income countries to get the loan. Heckman regression has been employed to estimate the relationship of different poverty indicators of the countries who participated into the programme. Headcount ratio, poverty gaps, Gini coefficients and decentile share were used for 210 countries. Results show a positive impact of Structural Adjustment

Programme on poverty. The situation of poverty and income inequality in participating countries was worsening after entering in the programme than to those who did not.

Maier (2005) revealed the consequences of external indebtedness on the income poverty for the 58 developing and transitional countries. The study used the data from 1970 to 1999 to analyse the distributional and total effect of debt on the Poorest 20 and 20 to 40 percent of the countries. In cross country approach, empirical findings had shown an adverse effect of external debt on the poorest 40 percent without any noteworthy improvement in growth rates. The study finds out that due to its more negative than positive effect, debt should be managed properly. Other conclusion of the study is that it may be the bad governance which hinders the policy tools to give debt relief to poor.

III. POVERTY AND DEBT IN PAKISTAN

As consequences of partition Pakistan inherited rural poverty and regional disparities. Rehabilitation of migrant, setting up new economy, tackling with the massive unemployment took enormous resources and attention of policy makers. In 1950's Pakistan entered in a Mutual defense agreement with US which opened the way of debt in Pakistan. Till 1958 Pakistan debt was \$500 million which was about 2.8 percent of total GDP at that time.

First time due attention was given to the structure of Pakistan economy in the 1960s. It was a labelled as golden era of Pakistan economy due to remarkable performance in both industrial and agriculture sector. Although, debt increased from \$1 billion in 1965 to \$2 billion in 1968 but this debt was so well managed and properly utilised that repaying capacity of economy also raised with same pace. Pakistan achieved highest growth rate in South Asia. In the same time, poverty increased with much higher speed. The rural poverty increased from 40 percent in 1963 to 51 percent in 1969.

The decade of seventies was the first democratic era with pro poor policies. If we look at the figure of poverty in figure III-1 we can see that poverty reduced from 45 percent in 1973 to 29 percent in 1980. However, the policies of nationalisation gave too much authority to bureaucracy in decision making in the economy. This caused a loss of investors' confidence. Pakistan was considered to be in the socialist block by the international community. Due to this external debt was not readily available and the government had to turn to the internal sources of financing i.e. domestic debt.

In 1980s Zia ul Haq tried to revive the confidence of investors. However, this decade was mainly lacking any coherent long term planning. After the invasion of Soviet Union in Afghanistan, the greater US' interest in Pakistan eased availability of debt which added into existing debt stock, thus external debt exceeded the domestic, debt (See Figure 2). Thus total debt stock was rising enormously, whereas Pakistan was relatively showing a notable decline in poverty.

The decade of 1990s was marked by the democratic forces quarrelling for power and governance. The successive governments of Pakistan People's Party (PPP) and Pakistan Muslim League (N) took opposite steps and further destabilised the economy. This increased from debt of \$20 billion in 1990 debt rose to \$43 billion, more than double

¹See Hussain (1985).

in 1998. In second government of Prime Minister Nawaz Shareef, Pakistan had to face large economic sanctions due to the nuclear tests. The famous scheme "Qarz Utaro Mulk Sanwaro" was also initiated in the same regime which aimed at repaying the existing loans and borrows less in future.

During the decade Pakistan showed poor performance in controlling poverty. As a result poverty which was having a downward trend from previous 30 years started increasing. From 20 percent in the beginning of the decade, poverty increased to 27 percent by the end.

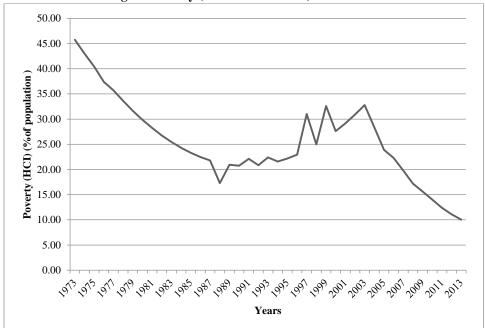


Fig. 1. Poverty (Head Count Ratio) in Pakistan

Source: Jamal (2006) and various edition of Pakistan Economic Survey.

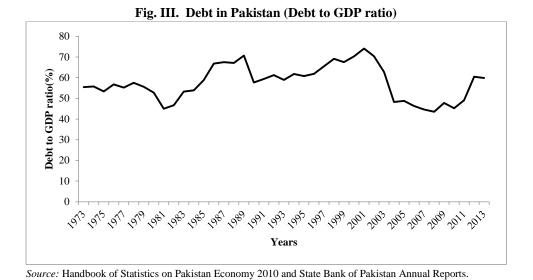
The country's economy showed an impressive performance in the first half of the decade ending 2010. Poverty that had increased to 32 percent in the initial year i.e. 2000, started decreasing after 2004. At the same time, total debt stock has reached about 70 percent of the total GDP. If we look at the trend of external debt and domestic debt, external debt tends to have a down trend after 2003 (see, Figure 2).

In 2007 election PPP held government, which was a democratic one after nine years. Poverty headcount showed a negative trend in this period as well, probably owing to schemes like Benazir Income Support Programme. The situation of debt just got worse. Trend in domestic debt is showing a rapid increase. Pakistan's domestic debt has witnessed a tremendous rise of Rs 1.9 trillion from 2012 to 2013. Short term domestic debt constitutes around 36 percent of the total public debt in Pakistan which is alarming due to roll over problem. Another reason for the rapid intensification of domestic debt may be the large subsidy to energy sector. Trend of external borrowing indicates a decline.

External Debt to GDP ratio(%), Domestic Debt to GDP ratio(%) External Deb 1985 1987 1989 1991 1993 1999 2001 2003 2005 Years

Fig. II. External and Domestic Debt in Pakistan

Source: Handbook of Statistics on Pakistan Economy 2010 and State Bank of Pakistan Annual Reports.



Pakistan's public debt during fiscal year 2013 peaked at 63.3 percent of the GDP. According to Fiscal Responsibility and Debt Limitation Act of 2005 ceiling for the debt was 60 percent of GDP. Pakistan public debt has broken the ceiling. Total stock of public debt that in 60 years (1947-2007) stood at Rs 4802 billion has risen to Rs 9466 billion in just six years (2008-13) (Ministry of Finance). Looking at the trends the total debt, from 2000 to 2008, it is experiencing a down, whereas afterwards total debt is rising just like external and domestic debt.

IV. THE MODEL

Authors have attempted to assess that impact of debt on poverty. To further elucidate the situation, the impact of internal and external debt has been assessed along with that of debt servicing. Poverty, thus, is expressed as a function of debt variables.

$$Pov_t = f(X_{it})$$
, where i = 1, 2, 3, 4 (1)

 X_{1t} is external debt, X_{2t} is domestic debt, X_{3t} is total debt and X_{4t} is debt servicing. Four separate models have been estimated for each debt variable. Beside the focus variables other explanatory variables are public Health Expenditures (HE), real Per Capita Income (PCI), Trade Openness (TO) and Unemployment (UE). The variables have been selected on the basis of available literature. The final model is given below:

$$Pov_t = \alpha_0 + \alpha_1 X_{it} + \alpha_2 PCI_t + \alpha_3 UE_t + \alpha_4 TO_t + \alpha_5 HE_t + \varepsilon_t \qquad \dots \qquad (2)$$

Debt is likely to increase the poverty. The burden of servicing of debt is critical for the economy. The sign of all types of debt is expected to be positive which implies that with increase in debt, incidence of poverty increases. When debt is not allocated wasted on filling the fiscal and current account gap, it adds nothing in the economy but more burden of servicing. The funds for the development are eaten by debt servicing. Impact of debt can be negative when domestic debt is spent on development projects and infrastructure. It can relieve the poor and reduce the incidence of poverty. It is also understandable that the impact of external and domestic debt will differ. The few researches conducted on the relationship depict that domestic debt may lead to a decline in poverty. However, Pakistan's situation may be much different.

With an increase in real per capita income poverty is likely to decline. Trade openness is likely to decrease the poverty. However, the possibility of increase in trade deficit may also depict a positive relationship between poverty and trade openness. The expected relation between poverty and unemployment is positive. The sign of health expenditure is expected to be negative; which implies that with the increase in health expenditure by government, reduction of poverty is possible. In a Report of Working Group 1 of the Commission on Macroeconomics and Health, relationship between poverty and ill health is discussed. The report concludes that health pattern show that poor are at disadvantage. They face a serious dearth of resources to spend on health. Therefore if the public expenditure on health increases, good health of the poor can be ensured. With increase in health expenditure poverty is likely to be reduce.

V. DATA

Data for poverty is in form of head count ratio. Data of poverty is mainly accessed from Jamal (2006). For last of the 10 years, data was accessed from various editions of Pakistan Economic Survey. Missing values for the some years have been interpolated and extrapolated. Data for debt, per capita GDP have been accessed from Handbook of Statistics on Pakistan Economy 2010 published by the State Bank of Pakistan. Onwards

²See Kemal (2001).

³See Ngerebo (2014).

⁴See Ngerebo (2014).

⁵See Gillani, et al. (2009).

values have been accessed from annual reports of State Bank of Pakistan. Debt is in form of percent of total GDP. Data for trade openness is calculated by dividing the sum of export and import by total GDP. Data on unemployment rate is taken from various issues of *Pakistan Economic Survey*.

(1) Results and Discussion

In this section of the study, results of all tests are presented. Johansen Cointegration technique is employed in the study to assess the relationship between debt and poverty in the long run. Cointegration technique is generally applied for the data encompassing 60 years or more. However, the issue of data availability has prevented us from doing so. However, there are studies that carried out cointegration analysis on fewer years [Akram (2011); Ngerebo (2014); Atique and Malik (2012)]. There are three steps involved in estimating the relationship between poverty and debt. Unit root test is used to check the order of integration whereas lag length criteria is employed to check the optimal lag length. Results of each test will be presented in detail.

Unit Root Test

A series of Augmented Dickey-Fuller unit root test is performed to determine the order of integration of the variables. Table.IV-1 shows the ADF test results for both at the level and the first difference on intercept and trend. The reported result in table reveals that the hypothesis of a unit root can't be rejected in all variables in levels. That means all the variables achieve stationarity only after first difference.

Table1

Augmented Dickey Fuller Unit Root Test

Variables	Level	First Differences	Decision Decision	Order of Integration
POV	-1.808	-4.226***	Non Stationary	I(1)
101	-1.000	7.220	at level but stationary	1(1)
			at first difference	
X_1	-1.008	-6.289***	Non Stationary	I(1)
-			at level but stationary	` ,
			at first difference	
X_2	0.508	-5.546***	Non Stationary	I(1)
			at level but stationary	
			at first difference	
X_3	-0.417	-5.403***	Non Stationary	I(1)
			at level but stationary	
			at first difference	
X_4	0.484	-6.676***	Non Stationary	I(1)
			at level but stationary	
PCI	0.685	-7.348***	at first difference	I (1)
PCI	0.083	-7.348****	Non Stationary at level but stationary	I(1)
			at first difference	
UE	-0.201	-7.218***	Non Stationary	I(1)
OL	-0.201	-7.216	at level but stationary	1(1)
			at first difference	
TO	2.168	-5.964***	Non Stationary	I(1)
10	2.100	5.50.	at level but stationary	1(1)
			at first difference	
HE	-0.499	-5.370***	Non Stationary	I(1)
			at level but stationary	` ,
			at first difference	

^{*** 1} percent critical value = -2.625606.

Lag Length Selection

Prior to Johansen co-integration Test, another important step is to choose an optimal lag length. For this purpose, we have used the Hannan-Quinn information criterion and Shwartz Information criterion. As we will be applying Johnsen Coitegration test on four models, therefore four lag lengths will be presented for each regression.

Table 2

Lag Order Selection

	Model1		Model 2		Model 3		Model 4	
	$(Pov_t=f(X_{1t}, Z_{it}))$		$(Pov_t = f(X_{2t}, Z_{it}))$		$(Pov_t=f(X_{3t}, Z_{it}))$		$(Pov_t = f(X_{4t}, Z_{it}))$	
lags	SC	HQ	SC	HQ	SC	HQ	SC	HQ
1	-8.897*	-9.912*	-9.632*	-10.64*	-9.636*	-10.65*	-7.740*	-8.755*
2	-7.684	-9.714	-8.291	-10.32	-8.257	-10.286	-6.684	-8.713
3	-6.162	-9.206	-6.947	-9.991	-6.531	-9.576	-5.131	-8.17

^{*} indicates lag order selected.

As Hannan-Quinn Information criterion and Schwarz information criterion are two criterions for optimal lag length. For all the 4 regression, both the information criterions are recommending a lag length of 1.

Johansen Co-integration Test

The results of Johansen cointegration test has been presented in Table IV-3. For determining the number of cointegrating vectors, Johansen (1988) has introduced two tests named as Trace and Max eigan value test. At none, the null hypothesis of both the test is the there is no cointegrating vector among the variables. And alternative hypothesis is there exists at least one cointegrating vectors. Both tests give evidences for a long run relationship among the variables.

Table 3

Johansen's Cointegration Test

		Trace	Critical	Max-Eigen	Critical	
Model	No. of CE's	Statistic	Value	Value	Value	Conclusion
1	H_0 :None	148.204*	103.847	57.298*	40.956	Cointegrated
	H_1 :At most 1	90.906*	76.972	29.193	34.805	
2	H_0 :None	143.972*	95.753	64.190*	40.077	Cointegrated
	H_1 :At most 1	79.776*	69.818	29.716	33.876	
3	H_0 :None	135.643*	95.753	56.529*	40.077	Cointegrated
	H_1 :At most 1	79.113*	69.818	27.451	33.876	
4	H_0 :None	155.709*	117.708	57.952*	44.497	Cointegrated
	H_1 :At most 1	97.756*	88.803	37.314	38.331	

^{*}Indicates the rejection of null hypothesis at 10 percent significance level.

SC: Schwarz information criterion.

HQ: Hannan-Quinn information criterion.

Table 3 is showing that for all the four models Max Eigenvalue test is suggesting the existence of at most one cointegrating vector among the variables by rejecting the null hypothesis at None. Whereas, Trace test is suggesting more than one cointegrating vectors. Although, evidence from Max eigenvalue test are preferred in case of small sample, however what really important is that both tests are indicating presence of at least one cointegrating vector.⁶

The cointegrating coefficients reflect the long run impact of the regressors on poverty. The estimates are given in Table 4.

Table 4
Summary Results

Variable	Model 1	Model 2	Model 3	Model 4
External debt	0.504***	-	_	_
	(0.16)			
Domestic debt	-	1.526***	-	-
		(0.28)		
Total debt	-	-	0.985***	-
			(0.23)	
Debt Servicing	-	-	-	0.282**
				(0.12)
Per Capita Income	-0.684***	-1.961***	-1.124***	-1.706***
	(0.122)	(0.28)	(0.16)	(0.33)
Unemployment	0.652***	0.995***	0.796***	0.731***
	(0.09)	(0.13)	(0.10)	(0.13)
Trade Openness	-2.352***	-3.502***	-2.363***	-3.785***
	(0.31)	(0.40)	(0.36)	(0.37)
Health Expenditure	-0.007	-0.809***	-0.179	0.024
	(0.00)	(0.24)	(0.12)	(0.15)
Constant	0.76	-1.93	-0.597	-5.225
Ect(-1)	-0.20***	-0.13***	-0.20****	-0.09**
	(0.05)	(0.03)	(0.04)	(0.04)
R-squared	0.482	0.555	0.574	0.582
Adj. R-squared	0.382	0.451	0.475	0.485

Standard error given in parenthesis.

External debt significantly and positively affects the poverty, where 1 percent increase in external debt, leads to increase in the poverty by 0.504 percent. This result confirms that external debt is harmful for poor as it increases the incidence of poverty. Sheikh and Alam (2013) have reported similar results in their study that external debt causes an increase in the incidence of poverty. Unfortunately, government finds it a convenient method of financing its expenditure. There is a serious dearth of policy and planning to properly manage the incoming foreign capital in order to pass the fruits of debt stocks to the poor. Furthermore, new loans should be avoided or at least be taken

^{***, **, *,} indicate significance at 1 percent, 5 percent and 10 percent significance level respectively.

⁶See Dutta and Ahmed (1997), and Odhiambo (2005).

considering the repaying capacity. Accumulation of debt stock without growth in the repaying ability may push economy into debt trap and debt overhang. Any external debt in this situation comes with a series of strict conditions. Removal of subsidies is one of the strictest conditions for external debt sometimes. Poor suffer due to these harsh terms as when subsidies are removed, cost of production goes up and prices of consumer goods rise.

Domestic debt also exerts a positive and significant effect on poverty. These results are contrary to the existing literature. Therefore it is not advisable for the policy makers to rely on domestic debt. Domestic debt in Pakistan has seen a tremendous increase in last five years and it is increasing at a greater pace than external debt. Furthermore a large proportion of domestic debt is composed of short term loans. This further magnifies the problem of servicing as short term loans require rollover after maturity of one year. Our results are depicting that domestic debt is even more damaging than external debt. Domestic debt reallocates the resources within a country. This also involves the evaporation of funds from the money market leading to unavailability of credit for the domestic investors. In the light of these results the recent hike in domestic debt becomes highly disputed and troubling.

The result shows that total debt significantly affects the poverty. There exists a positive relationship between these two variables where one percent increase in total debt lead to increase in poverty by 0.98 percent. Total debt servicing increases the incidence of poverty by 0.28 percent. Each and every variable of debt is worsening the situation of poverty in Pakistan. When a country keeps on taking loans from the other countries and international organisation its credibility gets damage in the international market. Furthermore, servicing of both external and internal debt is an enormous burden on the national exchequer. Government has to compromise on important development projects to service the debt. In case of Pakistan, this compromise is reflected in lower spending in education, health and other development related projects. Hence, the positive and significant impact of debt on poverty in Pakistan is tragically understandable.

The results for the other variables depict that an increase in per capita income can be effective in reducing poverty in Pakistan, while unemployment shows a positive effect on poverty. Trade openness contributes to reduction in poverty. As public health expenditure was found to be insignificant. Public health expenditures are vital in alleviating various undesirable outcomes of poverty like, infant and maternal mortality and morbidity or mortality caused by preventable or treatable diseases. Government should provide the good health facilities in rural areas and subsidise the health sector. However, in order for health expenditures to matter, it is absolutely vital that the government of Pakistan should increase the expenditure on public provision of health services significantly, as the levels of allocation to health in Pakistan are too low to matter i.e. less than one percent of national income.

VI. CONCLUSION

Increase in debt leads to increased burden of its servicing, which is generally met by cutting off the social sector expenditure like health, education and sanitation etc. Like other developing nations, Pakistan also borrows both internally and externally. Growth in debt stock is alarming as it is injurious to growth. Rising level of debt not only dries up funds from market for private investor but also discourages the foreign investor. In case of Pakistan, domestic debt has more destructive effect on poverty than external debt. With increase in domestic debt by 1 percent, poverty rises by 1.52 percent as compared to external debt which causes poverty to increase by .504 percent.

Government should consider its repayment capacity before taking additional loans. Further, the level of domestic debt needs to be brought down. That may involve measures like increasing the tax base and lowering government expenditures. However, the government would have to make sure that the burden of tax is not increased on poor; a progressive direct tax may be more effective in this regard. Similarly, while curtailing spending the government will have to ensure that the allocations to social sector development and services provisions are not significantly affected. Considering the situation in Pakistan the need to reduce the debt burden is not just an imperative for ensuring sustainable growth but also, as the results depict, for bettering the quality of life for the masses.

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