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Basic Transfer Concept and External Debt Thresholds Measures of Selected South Asian Economies

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Abstract

The core objective of this paper is to estimate the basic transfer equation for the selected South Asian economies, Pakistan, India, Bangladesh and Sri Lanka. Debt crises all over the world stems from the basic transfer concept. To estimate the basic transfer Generalized Methods of Moments technique is applied which indicates that South Asian economies are still away from the default risk associated with external debt. By applying the Ordinary Least Square technique threshold levels of external debt are estimated for each economy separately which are also viable with the finding s of basic transfer which further implies that each economy can opt more for foreign assistance for the sustainable economic growth. It is also recommended that despite the below the threshold level, each economy has to properly channelize the domestic resources and foreign debt must be deployed in lucrative and export-oriented investment for further sustainability.

Introduction

South Asian economies have been indulged in various channel of external borrowing across the globe like other developing countries. These channels include regional and international financial institution and also governmental level borrowing agreements. The rate of debt accumulation and upward trend in debt servicing are designated as one of the major indicators to retard the economic growth in all developing countries, particularly after 1980s (Ali *et.al* 2013). Followed by inadequate exchange rate adjustment factor, most of these countries faced adverse impact on economy as a result of trailing their competitiveness at international markets. Furthermore, secular trends in economic growth were also supported by other macroeconomic variables in the vein of weakening term of trade, reckless governance tendency and fiscal mismanagement. Those countries were exposed to bear more downward pressure that were highly indebted, paid higher interest payments, decline international inflows and lower foreign exchange earnings. Many developing economies have been adopting the policy to drag towards foreign capital inflows through international borrowing and other means to fill the investment gap. South Asian countries have been financing their economies through external debt from various national, regional and international financial institutions. Carrying on this practice, since their inception, accumulation of external debt burden has shown uncontrolled tendency in south Asian economies (Siddiqui and Malik, 2001). The external inflows of these kinds have been considered as the foremost and result oriented force to foster the economic growth. However, the world has witnessed only a few success stories where such means have not contributed positively to improve the growth rate of the indebted countries. South Asian countries have borrowed significant amount of foreign loans but its role leaves many questions behind debt philosophy (Chaudhary, 1994; Ali, 1996). Despite the escalation in external debt, South Asian countries stand as one of the poorest and illiterate regions in the globe, experiencing more than 750 million poor masses below the international poverty line. It is also pertinent to mention here that south Asia remains the second poorest region in the world, with 38.6% of the population living below the poverty line in 2005 (SHRDC Report, 2012). Historically, scenario of external borrowing has been varying over the time in South Asia. World Bank (2001), ranked Pakistan to 'severely-indebted low-income country' from 'moderately indebted low-income country' in 1997, where India ranking showed improvement to less indebted low-income country from moderately indebted country in the same year. The abrupt surge in external debt, mountaineering external debt repayment pressure and rescheduling caused debt overhang situation especially in case of Pakistan, has raised the potential question about the external debt credibility regarding fostering the economic growth in South Asia. Mahmood, Arby and Sherazi (2014) explored that major South Asian economies are exposed to huge debt burden mainly due to current account imbalances and hefty fiscal deficit when come to comparing conventional debt ratios to the optimal standard level. South Asian economies rely on the external indebtedness to address twin deficits. The foremost objective of the research is to investigate the impact of external debt concern on the economic development of the selected South Asian economies such as Pakistan, Bangladesh, India and Nepal. Zafar *et al* (2015) explored that to foster the economic development; mostly developing countries depend on the external

sources of financing to mitigate poverty and get their macro policies stable which in turn overcome the effects of the adverse shocks. Once it is properly and successfully formulated, it has positive impact on the health of economy which is precondition for reducing the poverty. The core purpose of the paper is to compute the immunity level (External debt threshold level) for the selected South Asian economies. The core purpose of paper is to investigate the basic transfer equation for the selected South Asian economies which principally indicates the possibility of debt defaults/crisis. This paper also measures the debt threshold for the selected South Asian economies Pakistan, India, Bangladesh and Sri Lanaka.

Literature Review

Spilioti & Vamvoukas (2015) investigated the link between government debt and the economic growth in Greek for the period of 40 years. He found a statistically significant and negative impact of debt on the GDP growth rate.

Dritsaki, (2013) found that Granger causality in unidirectional form runs from exports to GDP rate and from GDP growth rate to the government debt, but exists no relationship in short run between the exports and the government debt. In long run, the output depicted that there is a unidirectional Granger causality run from the GDP growth rate to government debt. Pattillo, Poirson, & Ricci (2001) enlightened in their research that connection between average debt level and GDP growth rate turn into negative when debt to GDP ratio threshold level remain at 160-170 percent. This study also highlighted that the political rationale is also one of the key factors responsible for excessive borrowing which causes in finance flight that results lowering down the GDP growth rate of the borrowing country.

Reinhart & Rogoff (2010) applied coding errors and choosy segregation of the data considered, found that when external debt sustainability measure exceeds 90% of GDP, it leaves profound and debauched consequences on the economic growth of the economy. Therefore, avoiding the limit of the threshold sustainable mark, economy has to design prudent fiscal policies. Ali and Shahab (2018) revealed that most of the developing countries utilize the external debt to fill the public revenues gap when ill-managed results possibility of default and threat to sustainable level of debt.

Oleksandr (2003), conducted a study and segmented the prevailing literature of external beeswing into three groups. A first group stand for the viewpoint that as poor countries are lagging behind experiencing steady states, thus any investment injection in shape of foreign debt could direct them to enjoy accelerated economic growth through the channel of capital accumulation and productivity growth (Pattillo, et al. 2004). It implies positive correlation between foreign debt economic growth but off course up to certain threshold level. Second group of literature, ascertain that mounting accumulated debt stock keeps country's economic growth pace lower over the time. They provide the justification of debt overhang hypothesis of Krugman (1988), and Sach (1989) then advocated by Cohen (1993) to support their argument. The former describes the nonlinear association between external debt and growth phenomenon.

Lof *et. al* (2014), used panel VAR model and found reverse impact of growth on debt for 20 developed countries. Similarly, Sutherland & Hoeller (2012) numerates that private debt generates vulnerabilities in balance sheet disclosure to income shook's and movements in asset price. Due to which many economies are suffering from the multiple debt overhang issues. It was found that many advanced economies since 1870 faced financial stability risks due to debt taken by private sector rather the public debt (Jorda, Schularick & Taylor, 2013).

Yicaw and Ozem (2008) carried out an investigation and found that external debt sustainability is a measure which implies the ability to meet one economy foreign debt obligation. Ajayi (1991) analyzed the external debt of Nigerian economy within a framework of macro-economic modeling, he underscored that the country has been exposed to macroeconomic policies that directed the economy to the mounting debt level in excess performance. He also highlighted that in the whole era between 1970 and 1988, macro-economic policy complemented with repugnant trade policy led the country to a level of borrowing which not sustainable in Nigeria.

Adegbite *et al.* (2008) captured the effects of the huge accumulated external debt, and its correspondingly adverse influence on the South African and Nigerian economies which possesses so many similar indicators in the area of economic development experiences was investigated. The empirical evidence implied that the negative influence of external borrowing and its cost of servicing on economic growth is very apparent in these economies. Interestingly, external borrowing was examined to have positive contribution towards economic growth up to a level after which its impact redeems and finally start holding negative impression; hence it confirms the presence of effects of non-linearity or may be called as debt overhang.

Koeda (2006) argued that a country's initial debt condition, preliminary income and total factor productivity will determine the status of a country whether it is trapped in a phenomenon of debt overhang or not. With initial and high-level debt, managing its debt at low interest rate would be advantageous for the country (an income level above which the country loses its eligibility for aid assistance), otherwise country becomes perpetual aid addicted. Ever since, debt servicing is managed by the institution, it may instigate the economy which will further enhance country's capacity to borrow more as a result high growth rate will be

enjoyed. On the contrary, as country witnesses low initial income, the country start depending on external borrowing based on concessional loans to mount the level of both investment and consumption in the short-run time period; and thus probability rises being trapped in the low steady state.

Frimpong and Oteng-Abayie (2006) have attempted to estimate the essential key debt indicators as determinants of growth in Ghana. The empirical results hold up the existence of a long-run growth equation in Ghana. Over the long-run period, external debt inflows, debt servicing and foreign direct investments interrupt GDP growth behavior. Raise in external debt inflows has a optimistic effect on GDP growth. A rise in external debt servicing reduces GDP growth and there is empirical evidence for the subsistence of the 'crowding out effect' in Ghana. Foreign direct investment holds a positive and essential influence on GDP growth behavior. Investment has a surprising negative and significant impact on economic growth. This result is a sign of the long-run "debt overhang effect" of high hoarded debt which proceed as a deterrent to capital formation and push capital flight.

Methodology

The methodology of the study stem from the Basic Transfer equation (Todaro, 1977) which unfolds the facts that how countries are exposed to debt crisis. The basic transfer equation cab be demonstrated as;

$$\boldsymbol{F_n = Dd} \text{ .....} \textit{Eq(1)}$$

F_n reflects the rate of increase in the total debt and D is the representative of total accrued external debt. D indicates the rate of increase in that total debt. As interest must be paid each year on accumulated debt. Let assume that r equals the average interest rate therefore $r.D$ computes the annual interest payments. The basic transfer equation postulates the net capital inflows minus interest payment:

$$\boldsymbol{BT = d.D - r.D} \textit{ or } \boldsymbol{(d-r)D} \text{ .....} \quad \textit{Eq(2)}$$

BT will get the non-zero value if d > r, the country will be gaining foreign exchange otherwise it will lose it.

External debt function is determined by the foreign interest rate, accumulated debt, exchange rate and gap of imports and exports. Thus, equation for the development of external debt is modeled as follows:

$$\boldsymbol{B^f_t = \left(1 + r^f_{t-1}\right) B^f_{t-1} + e_t + (X_t - C_{mt})} \text{ .....} \textit{ Eq (3)}$$

Equation (3) can also be expressed as;

$$\boldsymbol{B^f_t = B^f_{t-1} + B^f_{t-1}.r^f_{t-1} + e_t + (TD)}. \text{ .....} \textit{ Eq (4)}$$

This study also attempts to measure the threshold levels for external debt for the selected South Asian economies. The threshold levels help the economies to rank their respective level of default risk associated with foreign lending. It equips the policy makers designing a prudent policy and determine the trajectory for sustainable development. To calculate the threshold levels for the South Asia region and selected economies Pakistan, India, Bangladesh and India, the following empirical model[*] for external debt threshold is formulated:

$$\boldsymbol{Z_{i,t} = \Gamma_0 + \Gamma_j X_{i,t} + \epsilon_{i.t}} \quad \text{.....} \textit{ Eq (5)}$$

In equation (5), $Z_{i,t}$ denotes the observation for the external debt indicator. $X_{i,t}$ it represents the dummies for the certain threshold levels whereas Γ_j explains coefficient and *j* indicates the threshold levels. Γ_j Coefficient assists to determine the direction of the effect of the external debt measures. A negative sign of the coefficient explains that external debt indicator declines against particular threshold level. A negative and insignificant value or positive and significant value shows rise in the external debt indicator ratios and further implies unsustainable condition for the country. Γ_j Coefficient leads to three possible outcomes of the threshold level of external debt.

Results and Interpretations

For the empirical analysis, it is essential to primarily conduct primitive diagnostic tests when dealing with time series and panel nature of data. In fact, concrete findings from the econometric technique depend on establishing the assumption of the Stationarity of variables of the models. To obtain the objectives of study through empirical evidence, data was incorporated from the World Development Indicators (WDI).

Univariate Analysis

Panel unit root test is used to investigate the stationarity of the data when dealing with the panel data. It explains whether the data oscillate over the time or remains stationary. It is essential to check the stationarity of the panel

[*] Muhanji (2010)

data because if the time series is non-stationary, the results of the (estimation) findings will not be reliable and it may lead to spurious inference. In this research, Augmented Dickey and Fuller (ADF) test is applied for the examination of stationarity. The economists recommend Phillips-Perron test for high frequency data and to check the higher order serial correlation. Apart from this, this study also applies lm, Pesaran and Shin (IPS) test for estimating the stationarity.

Table 1: Unit Root Tests: Level Form and First Difference

	ADF			PP			IPS		
Variables	**Level**	**1st Difference**	**Result**	**Level**	**1st Difference**	**Result**	**Level**	**1st Difference**	**Result**
ED	-0.65	-4.98	I(1)	-1.25	-5.22	I(1)	-0.64	-5.04	I(1)
DIR	-6.07	-	I(0)	-7.03	-	I(0)	-6.53	-	I(0)
FIR	-3.27	-	I(0)	-4.24	-	I(0)	-2.27	-	I(0)
ER	4.88	-6.65	I(1)	5.08	-7.98	I(1)	4.7	-7.18	I(1)
TD	1.39	-6.18	I(1)	1.97	-9.11	I(1)	1.55	-7.32	I(1)

The Philliphs - Perron (PP) test stat, Augmented Dickey-Fuller Test (ADF) test and Im, Pesaran- Shin (IPS) test stat reject the hypothesis of unit root prevalence in the data. In all scenarios, tests fail to accept the null hypothesis of non-Stationarity. Application of Hausman test recommends that random effect is the most appropriate as probability value 0.2310 leads to acceptance of the null hypothesis.

Interpretation of Results

To analyze the factors affecting the external debt of selected economies Pakistan, India, Bangladesh and Sri Lanka, the results of the GMM are given below;

Table 2: External Debt Function

$$ED_t = \gamma_0 + \gamma_1 ED_{t-1} + \gamma_2 ED_{t-1} * FIR_{t-1} + \gamma_3 e_t + \gamma_4 TD + \varepsilon_t$$

Variable	Coefficient	Std. Error	t-Statistic	Prob.
γ_0	0.6312	0.1985	3.1788	0.0018
γ_1	0.5866	0.0162	58.2030	0.0000
γ_2	0.0354	0.0114	3.0911	0.0024
γ_3	-0.1051	0.0022	-2.3190	0.0221
γ_4	0.0425	0.0085	4.9709	0.0000

The results present very interesting situation in the selected South Asian economies given I the Table 2, above. It reflects that accumulated debt in previous years holds significant and positive impact on the current total level of external debt. It implies that one percent increase in previous period debt leads to 58% increase in current level of debt whereas debt servicing also puts significant and positive effects on total external debt. It signifies that one percent rise in debt servicing results in 3.5% hike in external debt. This particular finding provides very important insight of the external debt phenomenon. It also authenticates the Basic Transfer concept[†] which asserts that growth rate in external debt is higher than the interest payment then country will be in a position to enjoy foreign exchange otherwise economy will lose the financial inflows. Furthermore, it postulates that South

[†] See Todaro (1977)

Asian selected economies still possess the ability to earn more financial inflows which can further make them better off provided that external debt is applied in prudent and lucrative project. Exchange rate depreciation and external debt hold negative relations between themselves. It indicates that as exchange rate depreciates it enhance the tendency in accumulation in the external debt. The results show that depreciation in exchange rate adversely affects the external debt by 10%[‡]. The findings of the trade deficit indicate significant and positive connection with external debt. It implies that one percent rise in trade deficit causes 4.2% increase in external debt.

Debt Threshold level of South Asia

External debt threshold level guides the policy makers to take decisions about further foreign debt keeping in view the borrowing constrains to avoid default. These results are found following the equation 4.44 in Section 4, by applying generalized least squares fixed effects. Table 3 indicates the external debt sustainability condition of the South Asia region. ED/GDP ratio is negative and significant till 60 percent of the threshold. It further explains for South Asia 60 percent of external debt to GDP is sustainable. It also provides very significant insights that when South Asia opt for external debt, external debt should not exceed 60 percent of its GDP, otherwise debt will no more be sustainable and desirable for the region. In the context of the DS/GDP, less than 5 percent level will be sustainable for South Asia. For ED/EX, upto 200% threshold is sustainable and after this coefficient catches positive value which implies unsustainable ED/EX ratio. DS/EX ratio is sustainable for the region at the level of 20 percent. It further means that South Asia has to maintain this ratio till 20 percent which is sustainable. It is pertinent to mention here that ED/GDP represents External Debt to Gross National Product Ratio whereas DS/GDP indicates Debt Servicing to Gross National Product Ratio. ED/EX shows External Debt to Exports Ratio and DS/EX reflects Debt Servicing to Exports Ratio.

Table: 3 Thresholds for Sustainable External Debt for South Asia Region

Thresholds for External Debt	ED/GDP	EDS/GDP	ED/EX	EDS/EX
<5%	-	0.0035	-	0.0051
	-	(-12.5059)	-	(-41.2222)
>5% -10%	-	0.0007	-	0.0049
	-	(12.5049)	-	(-33.5271)
>10%-20%	0.0687	-	-	0.0053
	(-4.6831)	-	-	(-20.214)
>20% - 40%	0.0287	-	-	0.0087
	(-9.7777)	-	-	(18.8347
>40% - 60%	0.0267	-	-	-
	(-25.9198)	-	-	-
>60% - 80%	0.0584	-	-	-
	(12.0067)	-	-	-
>80% - 100%	0.1324	-	-	-
	(6.1731)	-	-	-
>100% -200%	0.1567	-	0.2222	-
	(7.5799)	-	(-10.197)	-
>200%	-	-	0.2222	-
	-	-	(10.1969)	-

(Author's own calculation using World Development Indicators). Parentheses indicate t- stats while other values depict coefficients.

Debt Threshold level of Pakistan

The threshold level of ED/GDP for Pakistan economy is reported to be 50 percent, as depicted in Table 4. It means that 50 percent of external debt of GDP is sustainable for Pakistan. Consequently, Pakistan economy should not make an accord of external borrowing more than 50 percent of its GDP otherwise it will lead to

[‡] External debt is reported in foreign currency $US. However, depreciation of exchange rate leads to increase the cost of external debt. Resultantly, government/ policy makers become reluctant to borrow more from foreign resources (Muhanji, 2010; Senhadji, 2003; Semet and Wouter, 2003).

insolvency. DS/GDP threshold is less than 5 percent in case of Pakistan. It means that any DS/GDP percentage beyond the 5 percent may cause entering economy into the default risk zone. For Pakistan, ED/EX threshold is reported to be 250% which indicates the sustainable state for the country. So Pakistan need to manage 250 percent of external debt to its exports otherwise ratio exceeding the threshold will leave serious consequences. The threshold for the DS/EX is between 10 to 20 percent. It implies that Pakistan economy can have ED/EX ratio maximum to the 20 percent otherwise, it will be highly riskier for Pakistan economy.

Table: 4 Threshold for Sustainable External Debt for Pakistan

Thresholds for External Debt	ED/GDP	EDS/GDP	ED/EX	EDS/EX
<5%	-	0.0008	-	0.0185
	-	(-11.9254)	-	(-10.844)
>5% -10%	-	-	-	0.0138
	-	-	-	(-12.312)
>10%-20%	-	-	-	0.0114
	-	-	-	(-8.1383)
>20% - 40%	0.0478	-	-	0.0153
	(-8.1505)	-	-	(8.4786)
>40% - 60%	0.0475	-	-	-
	(-4.6342)	-	-	-
>60% - 80%	0.0975	-	-	-
	(3.0241)	-	-	-
>80% - 100%	-	-	-	-
	-	-	-	-
>100% -200%	-	-	-	-
	-	-	-	-
>200% -250%	-	-	0.0324	-
	-	-	(-5.1558)	-
>250%	-	-	-	-
	-	-	-	-

(Author's own calculation using World Development Indicators). Parentheses indicate t- stats while other values depict coefficients.

Debt Threshold level of India

For Indian economy, external debt to GDP threshold is 60 percent. Indian economy if exceed the limit of 60 percent of its GDP will not be sustainable. Therefore, policy makers need not to cross this limit whereas DS/GDP threshold is negative and remain significant for the less than 5 percent. It implies that debt servicing to GDP less than 5 percent is sustainable for Indian economy. External debt to exports is reported to be upto 200 percent threshold for India. It indicates that if ED/EX should be managed till 200 percent and not cross this threshold. The threshold for Debt servicing to exports is recorded upto 10 percent. It implies that DS/EX if goes beyond 10 percent will leave the economy to default, as its coefficient is negative and significant till 10 percent threshold. The results are described in table 5 below:

Table: 5 Threshold for sustainable external debt for India

Thresholds for External Debt	ED/GDP	EDS/GDP	ED/EX	EDS/EX
<5%	-	0.0045	-	0.0203
	-	(-8.172)	-	(-6.0394)
>5% -10%	-	0.02	-	0.0316
	-	(7.9034)	-	(-1.7263)
>10%-20%	-	-	-	0.0326
	-	-	-	(0.0325)
>20% - 40%	0.2144	-	-	0.0123

	(-2.6182)	-	-	(14.2141)
>40% - 60%	0.0598	-	-	-
	(-5.0996)	-	-	-
>60% - 80%	0.0641	-	-	-
	(0.4321)	-	-	-
>80% - 100%	0.0852	-	-	-
	(2.1495)	-	-	-
>100% -200%	0.0692	-	0.2239	-
	(7.3612)	-	(-7.9649)	-
>200% -250%	0.0602	-	0.2119	-
	(7.3610)	-	(8.8486)	-
>250%			-	-
			-	-

(Author's own calculation using World Development Indicators). Parentheses indicate t- stats while other values depict coefficients.

Debt Threshold level of Bangladesh

For Bangladesh, external debt to GDP threshold is 40%. As Bangladesh economy has less level of external debt and low nominal GDP which does not allow economy to go beyond the 40% of threshold. So Bangladesh economy when contract for external financing, should not exceed the 40% of its GDP. In case of debt servicing to GDP, the sustainable level for Bangladesh economy is less than 5 percent. If exceeding this level, economy may lead towards bankruptcy. External debt to export threshold level is 200 percent which means that 200 percent ratio of external debt to exports is sustainable for Bangladesh economy. Less than 5 percent Debt servicing to export is reported to be a threshold level for Bangladesh. It implies that policy makers should manage this ratio less than 5 percent threshold level. The findings are presented in table 6;

Table: 6 Threshold for sustainable external debt for Bangladesh

Thresholds for External Debt	ED/GDP	EDS/GDP	ED/EX	EDS/EX
<5%	0.08	0.0124	-	0.0056
	(-2.3227)	(-3.1756)	-	(-11.597)
>5% -10%	0.0639	-	-	0.0115
	(-3.2936)	-	-	(2.7819)
>%-20%	0.0236	-	-	0.0114
	(-5.0133)	-	-	(6.4207)
>20% - 40%	0.0263	-	-	-
	(-3.0195)	-	-	-
>40% - 60%	0.031	-	-	-
	(5.2371)	-	-	-
>60% - 80%	-	-	-	-
	-	-	-	-
>80% - 100%	-	-	-	-
	-	-	-	-
>100% -200%	-	-	0.0545	-
	-	-	(-6.9168)	-
>200%	-	-	0.5451	-
	-	-	(5.5168)	-

(Author's own calculation using World Development Indicators). Parentheses indicate t- stats while other values depict coefficients.

Debt Threshold level of Sri Lanka

For Sri Lankan Economy, external debt to GDP threshold is 60 percent which implies that rising debt beyond this level will lead to insolvency. Therefore, when Sri Lankan economy deals for external debt this ratio should not cross the 60 percent of sustainable level. In case of debt servicing to GDP, sustainable level is less than 5 percent. Thus, country has to keep this ratio below the threshold level of 5 percent otherwise; it may lead to serious aftermaths. The threshold level of External debt to export is recorded to be 200 percent which means that ED/EX ratio will be sustainable upto the level of 200 percent for Sri Lanka whereas debt servicing to exports will remain sustainable at the level of 10 percent otherwise economy may enter into a risky zone which will not be good for the batter health of economy. The findings of threshold are reflected in table 7, mentioned below:

Table: 7 Threshold for sustainable external debt for Sri Lanka

Thresholds for External Debt	ED/GDP	EDS/GDP	ED/EX	EDS/EX
<5%	-	0.2301	-	0.0107
	-	(-2.7125)	-	(-5.0213)
>5% -10%	-	-	-	0.0112
	-	-	-	(-0.6556)
>10%-20%	-	-	-	0.0118
	-	-	-	(4.8092)
>20% - 40%	0.0343	-	-	0.0326
	(-8.2222)	-	-	(3.9708)
>40% - 60%	0.0415	-	-	-
	(-2.2246)	-	-	-
>60% - 80%	0.0331	-	-	-
	(6.3755)	-	-	-
>80% - 100%	-	-	-	-
	-	-	-	-
>100% -200%	-	-	0.1675	-
	-	-	(-7.1349)	-
>200%	-	-	0.1865	-
	-	-	(5.1889)	-

(Author's own calculation using World Development Indicators). Parentheses indicate t- stats while other values depict coefficients.

The overall situation of the south Asian economies indicates that all the selected economies have made their decision regarding the external debt in accordance within the constraints. As thresholds results imply all selected countries can still avail the option of foreign borrowing to achieve the desired interests. These results are also compatible with the Basic Transfer function discussed in section 7.

Conclusion

The external debt function reveals that previous level of external debt, debt servicing and net exports are positively associated with external debt. The external debt function reveals that current situation of the South Asian selected economies, could even borrow more form the international resources. The classical theory of Basic Transfer concept section (7.1) also confirms the further viability of more external debt for the selected countries. The thresholds of external debt for South Asia region are found to be compatible with the international standards except EDS/EX and do not pose any threat for the region for further aid agreements. The external debt sustainable level for Pakistan ED/GDP is reported to be sustainable at 60%, EDS/GDP less than 5% ED/EX upto 250% and EDS/EX upto 20%. The sustainability of external debt for Indian economy is estimated at 60% of ED/GDP, less than 5% of EDS/GDP, 200% of ED/EX and EDS/EX upto 10%. The results indicate that Bangladesh economy remains out of default risk when maintain upto 40% of ED/GDP, less than 5% of EDS/GDP, 200% of ED/EX and less than 5 percent of EDS/EX. The external debt sustainable measures for Sri Lankan economy of external debt are receded as 60% of ED/GDP, less than 5% of EDS/GDP, 200% of ED/EX and EDS/EX upto 10%. Generally speaking, threshold levels for the external debt ED/GDP, EDS/GDP, ED/EX and EDS/EX further permit the selected South Asian economies to decide more for the foreign debt to fulfill its requirement. Therefore, it is recommended that theses selected economies need to channelizes the

domestic resources first, if they have to opt for the external debt then proceeds of external debt may be applied in a lucrative and export-oriented project to achieve the trajectory lead to sustainable development.

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