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Factors Promoting Foreign Aid Dependence in South Asian Countries

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ABSTRACT

This study used panel data approach to investigate comprehensive set of determinant of foreign aid and extent to which these determinants, domestic saving, capital formation, human capital, government expenditure, military expenditure and trade deficit, can affect foreign aid dependence in south Asian countries like Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri-Lanka. This study used Error correction model to estimate the short run association between defined variables. The results indicate that capital formation, ,trade deficit, government budget deficit and military expenditure have positive and significant association with foreign aid in the long run while these determinant have positive but insignificant relationship with foreign aid in the short run except gross domestic capital formation (GDCF). However, domestic savings, human capital formation has negative and significant relationship with foreign aid in long run. The findings of the study help foreign aid policy makers, analysts, researchers and official donor agencies.

Key words: domestic saving, capital formation, human capital, government expenditure, military expenditure

Introduction

The donor's interest as well as recipients concerns play vigorous role in the process of foreign aid allocation. Mostly literature describes the reasons of foreign aid allocation with donor's viewpoint while the recipient country perspective is under researched (Bandyopadhyay & Vermann, 2013; Berthélemy, 2006; Chong & Gradstein, 2006). The empirical literature states that poor countries are interested in having aid to foster their growth process but due to bad governance and inappropriate policies, (Williamson, 2010), these high aid receiver countries are constantly reporting negative growth. It indicates that there are some other reasons other than economic growth that cause to increase the urge of foreign aid continuously in developing countries. In developing countries, lower saving growth rate, low human and physical capital, over motivated government expenditures and high military expenditure generate irresistible demand of foreign aid. Many countries like republic of Korea, Indonesia, Bolivia, Ghana, Uganda, Tanzania, Mozambique and Vietnam practiced growth-aid experience along with negligible drawbacks but there is also extended list of developing countries,

Kenya, Haiti, Papua New Guinea, Somalia, Congo, Philippine, who are failed to overcome social and economic problems although they have received huge amount of aid during the last few decades. Empirical literature discusses broadly that why foreign aid fails to promote growth process of developing nations. However, the question that what are important factors that can influence the quantity of foreign aid is not properly addressed. This study attempts to investigate a set of economic and political factors that can affect the magnitude of foreign aid. In early studies, recipient need versus donors interest model got popularity (McKinley & Little, 1979). Recipient need model considered foreign aid as a remedial measure for shortfall in domestic resources (Maizels & Nissanke, 1984), whereas, donor interest model emphasis that donor's political and economic interests determine the extent of aid. In the process of foreign aid both parties' donor as well as receivers try to maximize their utilities irrespective of exploitation of any one party. In fact foreign aid satisfies mutual benefit of two states that facilitate the flow of money, goods and services toward recipient state. However, the flow of funds varies time to time because of international geo political set-up and global economic trend. Similarly, the internal socio economic environment also affects the bargaining power of a recipient country. The state with better social and economic scenario possess greater degree to influence the amount of assistances as compare to the country who is dealing with social and economic challenges (Alesina & Dollar, 2000). Generally foreign aid is given for humanitarian, political and development purposes but some time foreign aid is also provided for military assistance because in poor countries domestic resources are inadequate to satisfy growing military expenditures. Therefore, beside growth-aid objective, saving investment gap, trade deficit, human capital and military needs are considered the primary causes of foreign assistance in recipient countries.

In early seventies, developing countries demanded foreign aid for industrialization and realization of five year plans but lack of physical infrastructure, human capital and political environment restrict the targeted goals (Arshad Khan & Ahmed, 2008). Recent studies suggest that aid can produce positive fruits if it is allocated for specific sectors development (Gyimah-Brempong & Aziedu, 2008). Therefore, developing countries start to allocate a certain amount of foreign aid to develop human capital on priority basis (Anwar & Aman, 2010). Donor countries have special concern in health and education sector while allocating foreign aid to poor countries in order to achieve United Nations Millennium Development Goals (MDGs). The high priority rank of human resources on MDGs indicates their importance in socio economic growth of developing nations. Therefore, South Asian countries dignified external aid a source of human capital formation by improving enrollment rate in education sector and by reducing infant mortality rate in health sector (Gyimah-Brempong & Aziedu, 2008). However, sub-Sahara Africa observed that foreign aid lock the economy in low equilibrium trap through its negative impact on human capital formation along high population growth rate (Bräutigam & Knack, 2004).

Another strong reason for foreign aid is the gap between domestic saving and investment. The proponent of aid assumed that developing nations bridge saving-

investment gap with the help of foreign aid and try to achieve "take off" growth stage by fostering investment (Irandoust & Ericsson, 2005). However, in some cases, foreign aid lower domestic saving and growth rate because developing countries failed to raise income, through taxes and savings and their expenditure become a horse without hold. So sound economic polices matter a lot while determining the quantity and quality of foreign aid (Alesina & Dollar, 2000; Rajan & Subramanian, 2008). Moreover, recent literature extends two-gap model into three gap model by including fiscal constraint along with traditional saving and foreign exchange gap (Iqbal 1995). In case of developing nation, excessive public expenditure destabilizes the economic environment and gives birth to revenue-expenditure gap. The government of south Asian countries faces usually large fiscal deficit and tries to fill this gap with accumulated huge public debt through donor bailout packages (Butt & Javid, 2013). Generally limited amount of aid is a free gift from developed countries to under developing countries because of corruption, political climate and unproductive consumption. Therefore, foreign aid is important financial source for developing nations and this study try to determine the extent to which aid is influenced by different domestic factors. The main objective of this study is to investigate the short run relationship between economic and political factors and foreign aid in South Asian countries.

Literature Review

In developing countries, foreign aid is considered a vibrant source of economic, social and political development. Foreign aid is a transfer of resources or debt with lower interest rate or longer repayment period from rich countries toward poor countries. It can be a free gift from developed countries to under developing countries. In case of bilateral aid the mutual interests of donor and recipient's government affect aid allocation decision while international agencies like World Bank, Asian Development Bank (ADB) and international Monetary Fund (IMF) keep in view the economic growth, human capital and some other specific international objectives while making decision about aid allocation.

H1: There is relationship between foreign aid and domestic saving

The pioneer (Chenery & Strout, 1966), of the story of foreign aid pointed out that developing countries need foreign aid to bridge saving investment gap and to control trade deficit. Foreign aid accumulates financial resources by lowering the monetary constraints in the economy. Two different approaches, donor's interest and recipient need, have been utilized in literature to investigate the role of economic, political and military interests in aid allocation decisions (McGillivray, 1989). The trade policy in economic and political interests are main determinant of foreign aid to India for the period of 1960-85 (Gang & Khan, 1990). Moreover, in case of bilateral lending military interest become greater stimulus while in case of multilateral donor agencies, standard of living, GNP growth rate, current account

balance and population become major determinants of foreign aid (Maizels & Nissanke, 1984).

H2: There is relationship between foreign aid and government expenditure

In developing countries, high government expenditure is another important determinant of foreign aid. Financial constraint in poor nations restricts the availability of resources to finance current over ambitious development expenditures. Therefore, foreign aid serve as safeguard and extend the resource at the government disposal (McGillivray, 2000). Moreover, unproductive use of foreign aid negatively affects domestic saving, so domestic funding became inadequate to finance government expenditure (Bräutigam & Knack, 2004). Therefore, government non developmental expenditure and inadequate domestic finance raises dependence on foreign aid. Similarly in case of Pakistan, foreign assistance greatly affects general government expenditure while its impact on developmental expenditure is negligible (Iqbal, 1997). However, in developing nations economic growth, investment and import areas heavily dependent on foreign aid (Mohey-ud-din, 2005). Another study (Njeru, 2003), found the extent of dependence on foreign aid by using utility model and reported that 1 percent change in foreign aid lead 88 percent changes in government's general spending. It strongly advocates dependence of budgeting expenditure on foreign aid. Moreover, some empirical studies (Batten, 2009; Osei, Morrissey, & Lloyd, 2003; Ouattara, 2006; Remmer, 2004), finds that foreign aid is helpful in fiscal adjustments but irresponsible behavior in development expenditures causes to lower domestic tax collection. Overall literature admit the role of foreign aid but its effectiveness on fiscal behavior is still ambiguous (Franco-Rodriguez, 2000; Khan & Hoshino, 1992; McGillivray & Ahmed, 1999).

H3: There is relationship between human capital formation and foreign aid

Mostly literature discusses the impact of foreign aid on growth and finds that effectiveness of foreign aid is bind with appropriate policies (C.-J. Dalgaard & Hansen, 2001; C. J. Dalgaard, Hansen, & Tarp, 2004). Similarly foreign aid possibly can affect different aspect of human development like education and health (Gyimah-Brempong & Aziedu, 2008). Therefore, human capital formation, improvement in the education and health of individual, is another important determinant of foreign aid. Although some researchers (C. J. Dalgaard et al., 2004; Verschoor & Kalwij, 2006) advocate to study the impact of foreign aid at sectorial level rather than on economy to have some appropriate implications but a little attention has been given in this respect (Gyimah-Brempong & Aziedu, 2008; Kwabena & Asiedu, 2008). A study (Dreher, Nunnenkamp, & Thiele, 2008), found primary school enrollment, a measure of education outcome, has positive and statistically significant relationship with foreign aid. It indicates that increase in aid causes to increase in educational attainment. Moreover, foreign aid

positively and significantly affects human capital along with appropriate policies and good institutions(Farooq, 2012; Gyimah-Brempong & Aziedu, 2008). Some empirical studies (Azarnert, 2008; Feyzioglu, Swaroop, & Zhu, 1998; Radelet, 2006), investigated the impacts of aid on human capital formation and found that total aid per capita significantly lower infant mortality rates but life expectancy does not have statistically significant association with foreign assistance. Study found that additional spending on health in recipient countries increases significantly and improve health opportunities in aid recipient countries (Bourguignon & Sundberg, 2007). Moreover, (Gomanee, Girma, & Morrissey, 2005), found negative association between aggregate aid and infant mortality in LDCs and by applying quintile regressions analysis, study found significant improvement in human welfare in aid recipient countries along with reduction of infant mortality. Aid has positive association with state's social spending and causes to improve state of poverty and reduce infant mortality in the recipient countries (Verschoor & Kalwij, 2006). On contrast some studies found that aggregate aid has no significant impact on human capital in LDCs (Boone, 1996).

H4: There is relationship between foreign aid and military expenditure

Previous studies have found that arm races among the nations is major determinant of military expenditure in developed countries (Hartley & Sandler, 1990; Richardson, 1960; Smith, 1995), while smaller literature focuses the developing countries and finds that military spending increases defense burden (Collier & Hoeffler, 2002) and causes to reduce the availability of funds for development purposes and ultimately generate the demand for foreign aid in poor nations. A lot of research work (Easterly, 2008; Tarp, 2006), indicates that more aid means more resources for development but a few research has been conducted to identify that excess of military spending creates the need for foreign aid. During the last few decades a rising trend in military expenditure has been observed in LDCs (J. Dunne, 1996). Therefore, increased military expenditure causes to lower the funds available for socio economic growth (Frederiksen & Looney, 1983). In some cases, government tries to meet excess military expenditure at the cost of lower growth in other sector of the economy. Higher military expenditure worsen budget deficit that leads to higher government borrowing to cover this deficit and cause to increase real interest rate that ultimately lower private investment (Feridun, 2014; Looney, 1991). Thus, rapid increase in defense spending in South Asian countries causes to withdraw resources from productive investment and boost foreign aid dependence (Ali, 2011). Generally existing empirical studies provide statistical evidence (Collier & Hoeffler, 2002; Feridun, 2014; Lebovic & Ishaq, 1987; Ram, 1995), that trade-off between productive investments and military expenditures exist strongly. However, the existing literature do not give conclusive verdict about this tradeoff such as Ali (2011) argue that the crowding-out of private spending depends on how much government is allocating its resources to military expenditures. Moreover, a notable exceptional study (P. Dunne & Perlo-

Freeman, 2003) found that in developing countries, neighbor's military expenditure also influenced the other countries for many reasons other than military threat. The governments of these countries decide about resource allocation keeping in view the behavior of their neighbor. Although in some cases clear indication of military need is absent but still rivalry arm activities cannot be overlooked.

H5: There is relationship between foreign aid and trade deficit

In poor nations foreign exchange earning restricts the process of capital formation and development. So to stimulate the process of prosperity, literature suggests that the role of foreign aid is to bridge the gap between import expenditure and export earnings. Foreign aid has long run positive and significant association with development process of poor countries because poor performance in trade sector and huge foreign exchange deficit increases their dependence on foreign resources (Nowak-Lehmann, Martínez-Zarzoso, Herzer, Klasen, & Cardozo, 2013). In a dynamic dependent-economy model, untied aid has no impact on exchange rate in long run. However, in short run it may have temporary and negligible appreciate in real exchange rate (Tekin, Turnovsky, & Cerra, 2008). Moreover, another study (Ouattara & Strobl, 2008), investigated "Dutch disease", inflows of foreign currency appreciate domestic currency that worsen trade deficit and found no support for this hypothesis neither in the long run nor in the short run. On the contrary, foreign aid causes to depreciation of the real exchange rate both in the short and long run. Another study (Bhattarai & Armah, 2005), found a stable long run relationship between exports, imports and the real exchange rate. Furthermore, the study showed that in short run exchange rate was the significant factor that could affect trade balance while in the long run real exchange rate significantly affects the trade balance.

Variable	Description	Definition	Sources
ODA	Official development assistance	ODA consists on concessional loans with a grant element of at least 25 percent given by developed nations.	WDI, Economic Cooperation and Development Creditor Reporting System database
GDS	Gross domestic saving	Gross domestic savings is equal to GDP minus final consumption expenditure. Data are in current U.S. dollars.	IMF, world bank
GCF	Gross capital formation	Gross capital formation includes fixed assets of the economy plus net changes in the level of inventories.	WDI/world bank
EDU	Primary completion rate, total (% of relevant age group)	Primary completion rate, is the number of new entrants (enrollments minus repeaters)	WDI/world bank

GEXP	Government revenue - Government expenditure	Tax revenue (% of GDP) - government final consumption expenditure (% of GDP)	IMF, world bank
MEXP	Military expenditure	Military expenditures includes all current and capital expenditures on the armed forces	WDI
TRADE	Export - Import	Export of goods and services (% of GDP) - Import of goods and services (% of GDP)	IMF, world bank

Methodology

Study used Error correction model developed by (Paul & Sakthivel, 2002) to estimate foreign aid determinant. Error correction model was for the first time used by (Sargan, 1964) to identify short run co integration. If a shock to dependent variable creates disequilibrium, the error correction model provides information about exactitude of instability from one period to the next period in an economic system. The general form of ECM is as:

$$\Delta y = \delta + \beta 0 \Delta x_t - \Pi u_{t-1} + b1 x_{t-1} + \in_t$$

β0 = short run impact or impact multiplier
Π = error correction term
b1= long run effect

Impact multiplier measures the extent of change in yt due to change in xt while adjustment effect shows how much of disequilibrium is being corrected (Asteriou & Hall, 2007). Error correction term used to indicate divergence form long run equation equilibrium and it magnitude show the rate of adjustment form period to period.

Specific form:

$$\Delta ODA = \delta + \beta 1 \Delta GDS + \beta 2 \Delta GCF + \beta 3 \Delta EDU + \beta 4 \Delta GEXP + \beta 5 \Delta MEXP + \beta 6 \Delta TRADE - \Pi \mu t - 1 + \in$$

All the data is in log form and covering time span of 1966-2014.
Oda= official development assistance
Gcf= gross capital formation
Gds= gross domestic saving
edu= primary enrollment rate
Gexp= government expenditure
Mexp= military expenditure
Trade= exports – imports

Empirical Results

Before the application of any econometric technique it is necessary to check the stationary of data to avoid spurious relationship among variables. The property of stationary time series is that its mean and the variance does not depend on time and not vary systematically with time. Therefore, mean, variance and autocorrelation

structure of stationary time series do not change over time. In empirical studies mostly unit root test is used to check the stationary of time series data. If unit root is present it means data is non- stationary while the absence of unit root indicate that data is stationary and study can draw significant implication on the basis of this stationary time series data. In panel study, most commonly used unit root test is Levin-Lin-Chu and Impesran to check stationary of data. If data is non-stationary at level then it has to be differenced at 1st and 2nd level. Results are reported in table 1 which shows that all the variables are non-stationary at level and data has to be differenced at once to make time series data stationary. Study used Kao (1999)test to check co integration among selected variables. Results are stated in table 2 and result indicates that there is co integration among said variables.

Table: 1 Unit Root Test

Variables	Levin, Lin & Chu t*		Im, Pesaran and Shin	
	At level	Statistic at 1st difference	At level	Statistics at 1stdiffrence
D(LNODA)	0.17743 (0.5586)	-4.43358*** (0.000)	-1.43597 (0.0855)	-11.9216*** (0.000)
D(LNGDS)	3.12821 (0.1256)	-7.62251*** (0.000)	2.10407 (0.1776)	-11.3039*** (0.000)
D(LNEDU)	-1.95728** (0.0252)	-4.05578*** (0.000)	-0.25367 (0.3999)	-1.30928*** (0.000)
D(LNGEXP)	-0.64125 (0.2607)	-6.77883*** (0.000)	-0.74772 (0.2273)	-6.20753*** (0.000)
D(LNMEXP)	-1.10481 (0.1346)	-5.05104*** (0.000)	-0.74944 (0.2268)	-3.84566*** (0.000)
D(LNGCF)	0.46336 (0.6784)	-6.47448*** (0.000)	1.63245 (0.9487)	-8.50166*** (0.000)
D(LNTRADE)	-0.94185 (0.1731)	-3.59124*** (0.000)	2.11882 (0.9829)	-8.57781*** (0.000)

(***) indicate the significance at 1% level and p value is given in parentheses

Table: 2 Kao Residual Co-integration Test

Kao Residual Co-integration Test	
Automatic lag length selection based on SIC with a max lag of 2	
ADF	-2.776541*** (0.0027)

Three star (***) indicate the significance at 1% level while ** show significance at 5% and p value is given in parentheses

Table: 3 Correlation Matrix of the Foreign Aid Determinants Model

VARIABLE	LNODA	LNGDS	LNGCF	LNGEXP	LNEDU	LNMEXP	LNTRADE
LNODA	1						
LNGDS	0.6279	1					
LNGCF	0.6247	0.9754	1				
LNGEXP	0.4983	0.9299	0.9565	1			
LNEDU	0.0812	-0.0610	-0.1395	-0.2199	1		
LNMEXP	0.5658	0.9412	0.9159	0.9335	0.0724	1	
LNTRADE	0.6525	0.4618	0.3296	0.1708	0.1690	0.3418	1

ODA is economic development assistance, GDS is gross domestic saving, GCF is gross capital formation, GEXP is government expenditure, EDU is

government expenditure on education, MEXP is military expenditure and trade represent trade deficit. Results of correlation matrix of foreign aid model indicate that multi-colliniarity among variables is absent. The ECM is used to investigate both the short-run and long-run effects of different factors of the economy on foreign aid. The results are reported in table 4

Table: 4 Dependent Variable D (LNODA)

Variable	Coefficient
C	7.555 [4.704] (0.000)
D(LNGCF)	0.879** [2.526] (0.013)
D(LNGDS)	-0.305 [-1.051] (0.296)
D(LNGEXP)	0.530 [1.187] (0.239)
D(LNEDU)	(0.314*) [2.246] (0.0805)
D(LNMEXP)	0.186 [0.468] (0.640)
D(LNTRADE)	0.083 [0.207] (0.836)
LNGCF(-1)	0.684*** [3.642] (0.000)
LNGDS(-1)	-0.366** [-2.682] (0.057)
LNGEXP(-1)	0.497** [2.323] (0.023)
LNEDU(-1)	-0.279** [-2.403] (0.019)
LNMEXP(-1)	0.393** [2.859] (0.005)
LNTRADE(-1)	0.107*** [2.702] (0.009)
ECM (-1)	(-0.699)*** [2.702] (0.0000)
F-statistic	2.746295
Prob(F-statistic)	0.003491
Durbin-Watson stat	1.65042
R-Squared	0.688300

Three star (***) indicate the significance at 1% level, (**) shows significance at 5% and one (*) shows significance at 10%. P value is given in parentheses and T values are given in bracket.

In table 4 results indicate that in short run period gross capital formation has positive and significant relationshipwith foreign aid (β=0.879**p= 0.013). Similarly human capital formation is significantly associated with foreign aid at 10% level of significance (β=0.314* and p= 0.0805). However, other determinants like gross domestic saving (β =0.305and p= 0.296), government expenditure (β= 0.530, p=0.239), military expenditure (β=0.186, p=0.640) and trade deficit (β=0.083, p= 0.836) has insignificant association with foreign aid. Moreover, in the long run period GCF (β=0.684, p=0.000) has positive and significant relationship with foreign aid. Its shows that 1% increase in GDC causes 68% increase in foreign aid. Moreover, GDS (β=-0.366, p=0.057), human capital (β=-0.279 p=0.019), significantly and negatively associated with foreign aid. However, government expenditure (β=0.497, p=0.023) military expenditure (β=0.393 p=0.005) and trade deficit (β=0.107, p=0.009) has positive and significant relationship with foreign aid. ECM term shows the speed of adjustment in case any external shock deviate the model from equilibrium path. The coefficient value of ECM indicates speed of adjustment to restore equilibrium in dynamic model. It is with correct theoretical negative sign -0.699 with highly significant t-statistics 2.702 at 0% level. Results indicate that if any shock to ODA diverge it from equilibrium path then it will converge with high speed because proximately 69% disequilibrium will be corrected in each period. Furthermore, the null hypothesis of no autocorrelation in the errors is accepted because the calculated Durbin–Watson statistic is higher than the upper critical values at the 5% level.

Discussion of Results

Results show positive and significant relationship between foreign aid and gross capital formation in short run as well as in long run. In developing countries resource constraint and Inefficient administrative and political policies enhance foreign aid dependence to realize developmental plan (Dutta, Mukherjee, & Roy, 2015). Results of short run and long run models confirm temporary and permanent impact of capital formation and foreign inflow. The coefficient value of LNGCF (0.879) indicate that 87% changes in foreign aid is caused by gross capital formation in short run while in long run the coefficient value of LNGCF (0.684) depict 68% changes in foreign aid are due to gross capital formation. The causal relationship among foreign aid, saving and investment abridge saving and investment gap and elevate process of prosperity in poor nations. However, results of this study indicate that in the long run LNGDS shows negative and significant relationship, while in the short run the relationship is negative but insignificant (Doucouliagos & Paldam, 2006; Rajan & Subramanian, 2008). Empirical result indicates that 1 unit increase in domestic saving causes 0.336 unit decrease in foreign aid. In developing countries low domestic savings cause a low level of capital accumulation. Therefore, low level of investment implies a lower

level of employment that further causes low income level and a country trapped into vicious circle of poverty. Thus, in poor countries inflow of foreign resources is considered significant source to overcome saving deficiency (Taslim & Weliwita, 2000), but at the same time high foreign aid causes low domestic saving and create disincentives to save (Radelet, 2006). However, Foreign aid raises gross domestic investment by removing limit of domestic saving and this realized incremental investment uplift the domestic output by improving productive capacity in case of underutilized resources. The result implies some subjective inferences like lack of effort, government carelessness about tax system, and easy access to foreign saving causes to increase dependence on foreign aid and by taking care of these policies south Asian countries can reduce foreign aid dependence.

Study shows positive and significant effect of govt. expenditure on foreign aid. A 1 % increase in GEXP causes 49 % increase in foreign aid. This shows the intensity of budgetary process on foreign aid in developing countries. In poor countries foreign aid is conceivable source to finance budget deficit and supporters of this view argue that ODA is potential source to extend domestic resources. Generally when primary source, domestic revenue generated by taxes, of financing government expenditure become inadequate then foreign aid is used as an instrument to finance current government expenditure (Martins, 2011). In poor countries, inappropriate polices toward foreign aid, consider foreign aid as a substitute of domestic resources, to assist import of inappropriate technology, to support bigger inefficient and corrupt government (Irandoust & Ericsson, 2005), causes to increase dependence fiscal expenditure on foreign resources. In poor countries, powerful rulers have complete discretion over foreign aid decisions and they utilize it to fulfill their short term political interests and to influence the repute of opposition party. So, lack of commitment and accountability cause devastating use of resources that ultimately generate the need of more aid for development. The results suggest implication that in South Asian countries better coordination among management of aid inflows can reduce dependence on foreign aid.

Moreover, results on human capital formation indicate that there is positive and significant relationship among human capital formation and foreign aid in short run while in the long run relationship is negative and significant. During last decades developing countries received huge amount of foreign aid for education sector development. United Nations give 2nd priority to achieving primary education among eight Millennium Development Goals (MDGs). Indeed, over the past year the inflow of foreign aid towards developing nations has been substantially increased to achieve MDGs. Over the period of 1993-2006 the aid in education sector has been increased from 1.1 % to 9.3% (OECD 2006) and it leave positive and significant effect on primary completion rate (Gyimah-Brempong & Aziedu, 2008). This huge inflow of foreign resources certainly affects some aspect of human development. in some developing countries like Ghana, Mozambique and Rwanda, aid dependence has gone down dramatically during 2000 to 2009 because of human development (measured by the UNDP

Human Development Index, which measures income per person and access to health and education) improvement during this period (Aid, 2011). Therefore, results implies that initially in short run period if human capital formation increases ODA increases but in the long run availability of educated policy maker causes to lower the dependence on foreign resources. Similarly results indicate that military expenditure has positive and significant association with foreign aid in case of south Asian countries and indicate that 1% increase in military expenditure causes 39% change in foreign aid. Therefore, industrialized countries are biggest producer and exporter of weapons and their interest are linked with the sale of weapons. So these countries prefer to provide aid for militarization, for training forces for the purpose of profit maximization and least concerned about reduction in military expenditure in third world countries. About half of the bilateral aid provided by the United States is allocated on the basis of military expenditure. Thus, military expenditure is major cause of foreign aid in south Asian countries because these countries are making huge military expenditure for the purpose of defense. In developing countries aid is fungible because aid is granted for development purpose but government spends this aid for military purposes (Feyzioglu et al., 1998; K. Griffin, 2000; K. B. Griffin & Enos, 1970).

The impact of trade deficit is positive and insignificant in short run model but positive and significant in long run model. The coefficient value indicates that 1% change in trade deficit causes 10% change in foreign aid. Results show a limited role of trade deficit in foreign aid policy.

Summary of key Finding

This study proposes a set of factor which causes to increase dependence of South Asian countries on foreign resources. The key findings suggest that government expenditure, military expenditure and trade deficit increase dependence on foreign resources in long run. Gross domestic investment has positive and significant relationship with foreign aid in short run as well as in long run. However, human capital formation has negative and gross domestic saving reduces dependence on foreign aid. Further research is needed to explore the robustness of these results.

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