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Foreign Aid and Growth Trajectory in Bhutan: A Time Series Analysis

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Abstract:

Debate over the effectiveness of foreign aid is a great concern to the aid-receiving countries. Empirical studies using multi-country data shows mixed results while studies with single country data reveal positive impact of aid. Bhutan accepts foreign aid to finance development requirements due to lack of domestic savings and petty export earnings. This paper focuses on the effectiveness of foreign grants in case of the economy of Bhutan. Statistical analysis of time-series data, fitting a vector auto-regression (VAR) model, shows that external aid in Bhutan is effective in raising income as well as domestic savings. Granger causality tests too show similar results. Notwithstanding the primacy of self-reliance in Bhutan's development philosophy, foreign aid might play a significant role for development in Bhutan, at least for the time being.

Keywords: Co-integration, foreign grants, growth, self-reliance, stationarity

1. Introduction

Developing countries are receiving aid from the developed countries for financing their development requirements for last few decades. Gap between domestic savings and investment, imports and exports as well as shortage of human and technical capital tended developing countries to receive external aid (Todaro and Smith, 2003). Objective of the recipient countries was to accelerate their economic growth through the proper utilisation of these foreign resources. However, countries differ regarding the utilisation of aid depending on the nature of their economic policies and implementation of various projects. Foreign aid is effective in raising income and savings for some countries, while ineffective for others.

Bhutan, a land-locked country in South Asia, received external assistance since the planned development began in 1961 (Singh, 1996). India is the major donor for Bhutan though the former itself is a developing country. Recently, India's share is decreasing, while that of other bilateral and multilateral agencies is increasing. During Bhutan's planned development, the country has been able to set up basic infrastructure and recorded high growth rate since last two decades. Now the question is what role the external assistance has played in this growth process. Bhutan's development policy is guided by the achievement of self-reliance with less dependence on external aid.

Worldwide debate over effectiveness of foreign aid calls for investigation of aid effectiveness in case of Bhutan. In order to achieve this objective, general survey of empirical literature has been conducted with special insight into their analytical frameworks and results found. Effectiveness of external assistance in Bhutan has been tested with the help of sophisticated statistical technique using time series data. A VAR model has been estimated after formal test for stationarity of data and co-integration among variables. Granger causality test has also been conducted for the same set of data. Both the test results show that external aid is effective in Bhutan.

2. Short Review of Literature

The earliest growth models linking aggregate output and resource mobilization was Harrod-Domar (Harrod, 1948; Domar, 1947) growth model. First application of this model for the analysis of impact of aid on economic growth was undertaken by Chenery and Strout (1966) in their 'Two-gap' model, one 'Savings-gap' and the other 'Trade-gap'. Their study shows that aid is effective in raising economic growth by filling dual gap-'Savings-gap' and 'Trade-gap'. Griffin and Enos (1970) first challenged the 'Two-gap' model showing a negative relationship between savings and aid. On the other hand, Papanek (1973) obtained a significant positive impact of aid on economic growth for a sample of 34 countries.

In a study by Burnside and Dollar (2000), interacting time effects of aid and economic policy on growth, shows that aid is effective only in good policy environment. Dalgard, et al. (2004) found out that aid is effective with diminishing returns and is less effective in tropical regions. They also find that aid effectiveness does not depend on the policy environment. Thus, there is substantial variability in the findings of different studies. The variability of research findings, to a large extent, is caused by different statistical techniques used by various researchers and heterogeneity in cross-country data (White, 1992).

Most of the studies based on single country data pointed out positive effects of aid on economic growth. Ouattara (2007) fitted an auto-regressive distributed-lag model with the data of Ivory Coast for the period 1975-1999. The study finds that, in the long-run, project aid negatively affects domestic savings while the impact of programme aid is positive. Another study by Amanja and Morrissey (2006) estimated a VAR model for the economy of Kenya shows that foreign aid in the forms of soft loans play a positive role.

For the economy of Nepal, a study by Srivastava and Choudhary (2007) shows that the impact of foreign aid on income growth is positive and statistically significant. Khan and Rahim's (1993) study on Pakistan economy finds out a positive but insignificant impact of aid on economic growth. For Pakistan, Mohey-ud-din's (2005) study shows positive and decreasing returns to aid. Prasad et al. (2006) fitted a regression equation with the help of cross-country industry level data. Their major finding is that industrial countries benefited more with foreign aid. They mentioned the limited absorptive capacity of aid to the non-industrial countries.

3. Bhutan's Growth Pattern

Bhutan had no modern industries till 1960. With the industrial sector not being developed, Bhutan is based on subsistence agriculture. Most of the Bhutanese people earn their livelihood from this agriculture sector and primary activities. Forests play a significant role for the economy of Bhutan because the poor people of Bhutan use wood and timber products extensively. More than 72 percent of Bhutan's total land is covered with forests and only 7.7 percent of land is arable. Therefore, growth of agriculture plays pivotal role for overall economic performance the country. In 2003, growth rate of agriculture sector was registered at 4 percent while the share of agriculture was 33.2 percent of GDP (Asian Development Bank, 2004).

The economy of Bhutan experienced a landmark change in 1961, when the country embarked on the era of planned development. As a part of the process of modernization, government of Bhutan adopted several measures for the development of basic infrastructure of the country. Industrialization was emphasized during the planned development, especially since the Fourth Five-Year Plan (1971–1976). As a result, a few large-scale industries dominated by electricity generation and mineral products were set up.

Bhutan traditionally exported agricultural primary products. Recently, the structure of Bhutan's foreign trade has changed extensively. Bhutan is now exporting manufactured and mineral products, electricity and other novel items like philatelic products and coins. Thus, Bhutan's foreign trade sector has been diversified both in terms of the number of commodity items as well as trading partners. India is the vital trading partner for Bhutan. Hydropower remained Bhutan's largest export earning source accounting for 34.9 percent of total exports and 37.1 percent of exports to India in 20012-13.

The economy of Bhutan is growing at a faster rate since the 1990s. In 2000, annual growth rate of real GDP was 6.9 percent which peaked to 11.7 percent in 2010. Boost in hydroelectricity generation and electricity export is a major ingredient for this high growth rate. Share of agricultural sector has declined while that of industrial sector increased significantly. Share of agricultural value added in GDP was 17.5 percent and that of industry was 44.6 in 2010. According to population and census of Bhutan in 2005 (Royal Government of Bhutan, 2006), Bhutan's total population was 634,982 persons. Per capita income has also grown to a significant extent due to high growth rate. Bhutan's per capita income at purchasing power parity increased to 8,383 dollar in 2013, which was only 2,711 dollar in 2000.

Due to high growth rates of the economy, domestic savings increased over the decades. Bhutan's gross domestic capital formation in 2000 was of the order of Nu. 7162.2 million. In 2013, gross domestic savings for the stood at Nu. 26,345.51 million, while gross national savings was Nu. 25,097.77 million. This difference is attributed to net current transfers from abroad in the form of external grants and other transfers.

Impact of this high growth rate in Bhutan is rapid reduction of poverty incidence. Poverty in Bhutan is a rural phenomenon. In 2007, Poverty incidence in Bhutan was 23.2 percent of total population where 69.9 percent of these poor people live in rural areas and 30.1 percent in the urban areas. Two different concept of poverty line are used in Bhutan-Food Poverty Line (subsistence poor) and Total Poverty Line (poor). Food Poverty Line corresponds to ability to spend Nu. 688.96 per person per month. Addition of a non-food allowance of Nu. 407.98 to the food poverty line give the Total Poverty Line of Nu. 1096.94 per person per month at 2007 prices (National Statistics Bureau, 2007).

4. Foreign Aid in Bhutan

Foreign aid refers to Official Development Assistance (ODA) undertaken by official agencies of the donor countries for the promotion of economic development of recipient developing countries at concessional financial terms, where the grant element is at least 25 percent (Tarp, 2006). In addition to these financial flows, technical co-operation costs for foreign experts, advisory personnel, training through workshops, foreign missions etc. are also included in ODA. However, grants and loans for military purposes, transfer payments to private individuals, private charity by the Non-governmental organizations (NGOs), commercial loans and Foreign Direct Investment (FDI) are excluded from the definition of ODA.

History of foreign aid is rooted in the U.S. financial assistance under the Marshal Plan for rebuilding post World War-II Western Europe (Chandra, 1996). This American aid extended positive impact on European growth. Since then, so called developed countries of the world have been donors to the developing countries for their development purposes. In order to explore effectiveness of aid on growth, a vast literature emerged. However, findings of empirical studies raised debate over the effectiveness of foreign aid.

Bhutan, a land-locked country in South Asia, received foreign aid since the 1960s when planned development was introduced. Foreign aid in Bhutan is crucial because of large gap between domestic savings and investment as well as that between exports and imports. Bottleneck imposed by the lack of human capital and technical know-how is a major cause of for accepting external assistance in

Bhutan. In spite of this critical shortage of capital and technical resources, the country showed apathy towards acceptance of foreign assistance.

However, Bhutan's attitude changed during the year 1959 as a clear consequence of events in Tibet. During the period 1958-1959, the Tibetan revolt against Chinese aggression was suppressed (Yadav, 1996), which resulted in the flow of several thousand Tibetan refugees into Bhutan. By autumn of 1959 Chinese actions began to be directed against Bhutan and the Chumbi valley, a triangular-shaped part of Tibetan territory between Sikkim and Bhutan was sealed off. Since then, Bhutan's northern relations with Tibet and China were totally closed. Due to entire absence of diplomatic relations with third countries, India was considered the only possible source of external assistance. This was the beginning of foreign assistance into the country.

Planned development in Bhutan was introduced in 1961. Bhutan's internal resources for investment and development were constrained by low domestic savings and low tax revenue collected by the government. In the initial stage of development, imports of equipments were inevitable for implementing development projects and programmes. Due to petty export earnings from abroad, foreign assistance remained the only source of foreign exchange for meeting the import demands. Thus, both the 'Savings-gap' and 'Foreign exchange-gap' envisaged by Chennery and Strout (1966) prevailed in Bhutan during the planned development era.

Bulk of development requirements under planning process were financed by foreign aid. Foreign aid consisted of two components-foreign grants and soft loans. Grants aid from the government of India and other international donors have traditionally financed on average over 30 percent of fiscal outlay. In the revised estimates of 2007-08 budget, grant support is anticipated to finance 37.5 percent of total expenditure. The First Five Year Plan (1961-66) and the Second Five Year Plan (1966-71) were totally financed by Indian grants with the cost of Rs. 101.2 million and Rs. 200 million respectively (Belfiglio, 1972). In addition, Rs. 300 million grants for road construction were advanced during the first plan period.

Bhutan became a member of the United Nations in 1971. Since then, Bhutan started receiving foreign aid from UN system and other bilateral agencies. Domestic investment too began to contribute to planned development since the Third Plan with as low as 3 percent of total plan expenditure. Gradually, the share of domestic financing and other bilateral and multilateral agencies gradually increased while that of Indian aid showed a decreasing trend.

Up to Fourth Five Year Plan (1976-1981) of Bhutan, whole foreign assistance used to come in the form of grants and there was no loan component. The loan component of foreign aid emerged from the Fifth Five Year Plan (1981-86) and is highly concessional. Concessional loans began in 1981-82 with the first SDR loan disbursement from the International Fund for Agricultural Development (IFAD) for the development of small farm projects. Since then, convertible currencies and Indian rupee loans have been disbursed in Bhutan.

Indian programme aid was purely grants used mainly for the budgetary allocations. These programme aid are highly flexible in the sense that Bhutan government is free to allocate these fund according to development priorities. On the other hand, project aid are soft loans with a grant component varied from project to project. For instance, the Chukha Hydel Project was established with Indian assistance where 60 percent of total cost was grants and 40 percent loans at subsidized rate of interest (Ghosh, 2006). UN assistance was basically technical assistance, used mainly for advisory purposes. However, the recipient government emphasized capital aid. The composition of third country aid has changed significantly, with an increasing proportion supporting capital projects rather than technical assistance.

India remained still the major donor for Bhutan. At present, other donors for Bhutan are the Asian Development Bank (ADB), Danish International Development Agency (DANIDA), the World Bank, UNICEF, Government of Austria, Swiss Development Cooperation and so on. For the year 2011-2012, total foreign grants were Nu. 12457.2 million, where India's share is Nu. 9003.4 million. Regarding sectoral allocation of these grant assistance, 44.3 percent was spent for transport and infrastructure followed by 19.4 percent in education and human development (Royal Monetary Authority of Bhutan, 2014). Recently, grant assistance from United Nations Environment Programme (UNEP) and Global Environment Facility is increasing to attain the objective of sustainable development in Bhutan.

From the very beginning, development policy of the government of Bhutan envisaged achievement of self-reliance. Priority has been assigned to raise domestic resources with less dependence on foreign aid. This was, to some extent, realized over the later stages of development. In the early 1980s, aid-GDP ratio amounted to 50 percent. However, aid-GDP ratio decreased to 20 percent in 1989-92 and further to 10.6 percent in 2012-13 due to robust growth.

5. The Time Series Analysis

5.1. The Model

Econometric models are in fact good tools for the assessment of the impact of foreign aid on economic growth of a country. Various regression models are fitted for this causal relationship depending on the nature of variables and that of statistical data. Most of the models are structural based on economic theories.

One alternative model known as non-structural model based on time series data does not rely on economic theories. VAR model developed by Sims (1980) are such non-structural models where data, rather than economist, specify the dynamic structure of a model (Pindyck and Rubinfeld, 1998). Generally, in the VAR models, largest number of lags is needed to capture the mutual effects on each other variable. At the very beginning, it is worth mentioning that in VAR estimation all the data series are required to be stationary. Broadly speaking, a time series data is said to be stationary if its mean and variance remain fixed over time (Enders, 2008).

A VAR model consists of at least two or more equations. Each equation contains one dependent variable and several independent variables and all the variables under consideration are endogenous variables. The current value of the dependent variable depends on the lagged values of all the independent variables and lags of itself. Thus, a VAR model is suitable for Granger causality test because it is possible that the past may influence the present, but it is impossible for the present to influence the past (Koop, 2002). Following VAR model has been used as an analytical tool for the establishment of, if any, causal relationship between Gross Domestic Product (GDP), Savings (SAV) and foreign Grants (GRT) for the economy of Bhutan:

$$\ln(\text{GDP}_t) = \alpha_1 + \sum \beta_{1j} \ln(\text{GDP}_{t-j}) + \sum \theta_{1j} \ln(\text{SAV}_{t-j}) + \sum \theta_{1j} \ln(\text{GRT}_{t-j}) + u_{1t} \quad (1)$$

$$\ln(\text{SAV}_t) = \alpha_2 + \sum \beta_{2j} \ln(\text{GDP}_{t-j}) + \sum \theta_{2j} \ln(\text{SAV}_{t-j}) + \sum \theta_{2j} \ln(\text{GRT}_{t-j}) + u_{2t} \quad (2)$$

$$\ln(\text{GRT}_t) = \alpha_3 + \sum \beta_{3j} \ln(\text{GDP}_{t-j}) + \sum \theta_{3j} \ln(\text{SAV}_{t-j}) + \sum \theta_{3j} \ln(\text{GRT}_{t-j}) + u_{3t} \quad (3)$$

where $i=1,2,3,\dots,q$.

The above system is a VAR (q) model because each equation under study contains 'q' lags of all endogenous variables. If the number of lags for each equation is the same and the series of all variables are stationary, normal OLS estimation is feasible. This model can also be represented in growth form:

$$D\ln(\text{GDP}_t) = \alpha_1 + \sum \beta_{1j} D\ln(\text{GDP}_{t-j}) + \sum \theta_{1j} D\ln(\text{SAV}_{t-j}) + \sum \theta_{1j} D\ln(\text{GRT}_{t-j}) + u_{1t} \quad (4)$$

$$D\ln(\text{SAV}_t) = \alpha_2 + \sum \beta_{2j} D\ln(\text{GDP}_{t-j}) + \sum \theta_{2j} D\ln(\text{SAV}_{t-j}) + \sum \theta_{2j} D\ln(\text{GRT}_{t-j}) + u_{2t} \quad (5)$$

$$D\ln(\text{GRT}_t) = \alpha_3 + \sum \beta_{3j} D\ln(\text{GDP}_{t-j}) + \sum \theta_{3j} D\ln(\text{SAV}_{t-j}) + \sum \theta_{3j} D\ln(\text{GRT}_{t-j}) + u_{3t} \quad (6)$$

where D=first differencing.

In case of VAR model, if the variables are not stationary, appropriate differencing is to be made before estimating the VAR model. Standard error or usual 't' statistic will ascertain the significance of the individually estimated coefficients. If some of the original variables are not stationary and at least one of them is co-integrated, Vector Error Correction Model (VECM) is the suitable model. Two or more variables are co-integrated if there exist any long-run equilibrium relationship between the variables. Therefore, before estimating a VAR model, proper tests of co-integration must precede.

5.2. Data and Methodology

Annual time series data of Bhutan covering the period 1981-2009 has been used for fitting the VAR model. The major source of data is the Key Indicators of Developing Asia and the Pacific Countries (Asian Development Bank, 1999, 2007). Due to missing of some observations in the above mentioned references; those have been collected from Selected Economic Indicators (Royal Monetary Authority of Bhutan, 1989) as well as National Statistical Bureau of Bhutan. Statistical tests have been performed by using E-views software.

Augmented Dickey-Fuller (ADF) test has been followed for judging whether the data are stationary. Test results have been shown in Table-1.

Null Hypothesis: $\ln(\text{GDP})$, $\ln(\text{Grant})$ and $\ln(\text{Saving})$ have a unit root							
	t-Statistic	Test critical values	Level of sig.	R-squared	S.E. of regression	Akaike info criterion	Durbin-Watson stat
$\ln(\text{GDP})$	-1.964154	-3.225334	10 %	0.143849	0.035995	-3.709927	1.903003
$\ln(\text{Grant})$	-3.890116	-4.323979	1 %	0.377253	0.234897	0.041614	2.052219
$\ln(\text{Saving})$	-2.114770	-3.225334	10%	0.202108	0.242767	0.107530	2.205775

Table 1: Results of Stationarity Tests (Augmented Dickey-Fuller Test)

For the logged income variable, the ADF test statistic is 1.96 in absolute value, much below even the 10 percent critical value of 3.23. Therefore, the null hypothesis of non-stationarity is accepted. For the logged foreign aid variable, similar ADF test has been performed. ADF test statistic (τ) 3.89 in absolute value is much below the 1 percent critical value of 4.32. These results show that grant series is also non-stationary at the 1 percent level. For the logged savings series, the calculated ADF test statistic is 2.11 in absolute value, below the 10 percent critical value of 3.23. Thus, the savings series is non-stationary. Phillips-Perron unit root tests also show the similar results.

The same test has been performed for $D\ln(\text{GDP})$, $D\ln(\text{GRT})$ and $D\ln(\text{SAV})$. The results of these tests indicate that all these three series become stationary after first differencing. These results have been shown in Table-2.

Null Hypothesis: $D\ln(\text{GDP})$, $D\ln(\text{Grant})$ and $D\ln(\text{Saving})$ have a unit root							
	t-Statistic	Test critical values	Level of significance	R-squared	S.E. of regression	Akaike info criterion	Durbin-Watson stat
$D\ln(\text{GDP})$	-5.688048	-4.339330	1 %	0.574124	0.039008	-3.545635	2.031182
$D\ln(\text{Grant})$	-7.787183	-4.339330	1 %	0.716461	0.273756	0.351278	1.993505
$D\ln(\text{Saving})$	-6.749551	-4.339330	1 %	0.655515	0.252375	0.188640	1.877670

Table 2: Results of Stationarity Tests (Augmented Dickey-Fuller Test)

Co-integration test is required for detection of co-integration among the variables. There are three popular tests for detecting co-integration among the variables. For two variables, Durbin-Watson test and Eagle-Granger tests are sufficient. However, for three or more variables, Johansen co-integration test is appropriate (Wang, 2009). There are two types of test statistics-Trace statistic and Eigenvalue statistic. Results of this test for Bhutan's ln (GDP), ln(GRT) and ln(SAV) series have been shown in Table-3.

Series: ln GDP ln Grant ln Saving, Trend assumption: Linear deterministic trend				
Unrestricted Co-integration Rank Test (Trace)				
Hypothesized	Eigenvalue	Trace Statistic	Critical Value (5%)	Prob.**
No. of CE(s)				
None	0.318305	17.59103	29.79707	0.5964
At most 1	0.188741	6.862189	15.49471	0.5937
At most 2	0.035273	1.005489	3.841466	0.3160
Trace test indicates no cointegration at the 0.05 level				
Unrestricted Co-integration Rank Test (Maximum Eigenvalue)				
Hypothesized	Eigenvalue	Max-Eigen Statistic	Critical Value(5%)	Prob.**
No. of CE(s)				
None	0.318305	10.72884	21.13162	0.6743
At most 1	0.188741	5.856700	14.26460	0.6317
At most 2	0.035273	1.005489	3.841466	0.3160
Max-eigenvalue test indicates no co-integration at the 0.05 level				

Table 3: Johansen Co-integration Test

At the 5 percent level of significance, both Trace statistic and Eigenvalue statistic indicate that there is no co-integrating equation.

5.3. Results

It has been found that all the three variables viz. ln(GDP), ln(GRT) and ln(SAV) are non-stationary and their first difference is stationary. None of the series are co-integrated. Therefore, estimation Empirical studies using cross-country data explored mixed results regarding effectiveness of external of VAR model is appropriate with data in their first difference. Lag length of VAR model has been selected on the basis of Akaike Information Criteria (AIC) or Schwarz Information Criteria (SIC).

	D(lnGDP)		D(lnGrant)		D(lnSaving)	
D(lnGDP(-1))	0.187897		-1.027585		0.973668	
	S. E.	t-stat.	S. E.	t-stat.	S. E.	t-stat.
	(0.21144)	[0.88867]	(1.50367)	[-0.68338]	(1.75538)	[0.55468]
D(lnGDP(-2))	-0.285355		0.731378		-1.862856	
	(0.19617)	[-1.45461]	(1.39513)	[0.52424]	(1.62866)	[-1.14379]
D(lnGDP(-3))	0.185526		-5.315672		2.037023	
	(0.25523)	[0.72690]	(1.81513)	[-2.9285]*	(2.11897)	[0.96133]
D(lnGrant(-1))	0.001006		-0.320639		0.062858	
	(0.02857)	[0.03520]	(0.20322)	[-1.57782]	(0.23723)	[0.26496]
D(lnGrant(-2))	-0.001083		0.094119		0.208058	
	(0.03023)	[-0.03581]	(0.21501)	[0.43775]	(0.25100)	[0.82893]
D(lnGrant(-3))	0.081770		-0.009962		0.047452	
	(0.02851)	[2.86812]*	(0.20276)	[-0.04913]	(0.23670)	[0.20047]
D(lnSaving(-1))	-0.054781		-0.076495		-0.305306	
	(0.03102)	[-1.76578]	(0.22063)	[-0.34671]	(0.25756)	[-1.18537]
D(lnSaving(-2))	0.022154		-0.302780		0.098662	
	(0.03191)	[0.69419]	(0.22696)	[-1.33406]	(0.26495)	[0.37238]
D(lnSaving(-3))	-0.045308		-0.146230		-0.154590	
	(0.03267)	[-1.38700]	(0.23231)	[-0.62946]	(0.27120)	[-0.57003]
C	0.067190		0.447365		0.087398	
	(0.02782)	[2.41508]	(0.19786)	[2.26107]	(0.23097)	[0.37839]
R-squared	0.515968		0.578565		0.286340	
S.E. equation	0.034812		0.247573		0.289015	
F-statistic	1.776630		2.288077		0.668713	
Log likelihood	54.85679		5.813130		1.943812	
Akaike AIC	-3.588543		0.334950		0.644495	
Schwarz SC	-3.100993		0.822500		1.132045	

Table 4: Results of VAR Estimation

Table-4 shows the results of VAR estimation. Pair-wise Granger causality test has also been carried out for the same data set using Eviews. Table-5 shows the results of pair-wise Granger causality tests for those three variables in growth terms.

Variables	Granger causes	Variables	Lags
D(lnGDP)	Causes	D(lnGRT)	3,4,5
D(lnGDP)	Causes	D(lnSAV)	6
D(lnGRT)	Causes	D(lnSAV)	8

Table 5: Results of Granger Causality Tests

5.4. Discussions

Estimated results in Table-4 shows that in the GDP growth equation, coefficient of foreign grants three periods lagged is positive and statistically significant. This implies that the growth of past foreign grants raises GDP growth today. One percent increase in foreign grants today would raise growth of GDP by 0.8 percent more after three years. In case of foreign grants equation, three periods lagged GDP is statistically significant. This means that GDP also raises foreign grants. Pair wise Granger causality tests also show causality from both directions. Foreign grant Granger causes gross domestic savings and vice versa. These two test results together indicate that foreign aid is effective both in terms of accelerating growth and raising domestic savings in Bhutan.

Bhutan's good governance, good economic policy, socio-political stability and security might have played catalytic role for this aid effectiveness. From the beginning of Bhutan's planned development in the 1960s, the country has been following very cautious approach to development. Major share of Bhutan's external aid has been appropriated for the development of human capital and basic infrastructure and least for government's consumption expenditure. Since Bhutan is a late comer in modern development, the country better knows the mistakes other aid receiving countries have committed. Bhutan's development philosophy is guided by 'Gross National Happiness (GNH)' rather than mere economic growth. Good governance and sustainable development are the two out of the four pillars of 'GNH'. Development approach guided by Buddhist value system helped maintain socio-political stability in Bhutan.

6. Conclusion

Bhutan accepted external assistance and properly utilised for development purposes. India has been the major donor for Bhutan though India's share is gradually decreasing. The economy of Bhutan is growing at a robust rate and substantial structural transformation has taken place. Foreign aid has played a positive role in this growth process. Analysis of Bhutan's time-series data vindicated significant positive impact of foreign aid on income growth and growth of domestic savings. Good governance of the government of Bhutan may be one of the major causes for this aid effectiveness. Robust growth has led the country to the threshold of attainment of self-reliance. Self-reliance remaining one of the fundamental goals of national development, foreign assistance might play a vital role for accelerating sustainable development in Bhutan.

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