EFFECT OF FOREIGN AID ON ECONOMIC GROWTH OF THE RECIPIENT COUNTRIES: ROLE OF POLICY AND POLITICAL STABILITY FOR AID ON ECONOMIC GROWTH. EVIDENCE FROM ASIAN COUNTRIES.

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TO MY MOTHER AND FATHER.

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ABSTRACT

This study analyzes the effect of foreign aid on economic growth of developing Asian countries for the period of 1984 to 2013. In literature there exist significant ambiguity about the sign and magnitude of the effect of foreign aid on economic growth. This study emphasizes on the role of policy and political stability for aid on growth. The main findings of this study is that, foreign aid is found to be growth promoting given good governance by using fixed effects in a static panel framework whereas dynamic panel shows a variation in growth. The finding of a significant foreign aid growth relationship suggest that increased aid to developing Asia is one way to achieve higher economic growth if there is political stability and sound economic policies.

Key words: Economic growth, foreign assistance, aid, political stability, good governance, policy, panel data estimation

CHAPTER 1

INTRODUCTION

1.1 Background

Developing nations are capital starved, depend on foreign assistance for financing their socio economic development projects which mainly includes area of production, infrastructure and general development. Foreign direct aid is given by capital rich countries to the under develop countries for the economic growth and prosperity of the people. According to the neoclassical theory of growth, countries that start off with low endowments grow faster than resource rich countries. Financial flows to developing countries take two main forms, aid that comes from foreign governments, often called official development assistance and investment from foreign private companies known as private capital flows.

The key source of external finance for developing countries is official development assistance provided by the governments of high income countries in the form of food aid, emergency relief, technical assistance, peacekeeping efforts and funding for construction projects. Donor countries are motivated by the longing to support their political allies and trade partners, to expand the markets for their exports, and to reduce poverty and military conflicts threatening international security. Official assistance to developing and transition countries has three main components: Grants, which do not have to be repaid. Concessional loans which have to be repaid but at lower interest rates and over longer periods than commercial bank loans. Contributions of multilateral institutions promoting development, such as the United Nations, World Bank and regional development banks as Asian Development Bank, African Development Bank, Inter-American Development Bank.

Generally speaking, the rationale for foreign aid programs is that the provision of aid is helpful to less developed countries because among other things, it facilitates their economic growth and is thus welfare-improving. Most of Asian countries are capital starve so their political allies gives aid to improve their economic condition, but due to poor quality institution, political instability and poor policy are hinder in the way of progress. This study has analyzed that foreign aid impact on economic growth and how political stability and policy effect on aid to promote growth. This study include developing Asian nations including Pakistan, India, Bangladesh, Indonesia, China, Malaysia, Sri Lanka, Thailand, Philippines.

A modified neoclassical growth model provides, analytical frame work to this study, foreign aid has impact on developing nations so one interpretation is for foreign aid is that its acts as income transfer may or may not produce growth. The consequences of aid depend on how aid is used, invested (domestic output increased) or increase consumption. If countries use in investment process than aid could be effective.

Foreign aid plays vital role in relieving savings gap, in enabling the accumulation of physical and human capital stock and in the development of infrastructure (McGillivray, 2009). Significant doubt surrounds the magnitude and sign of the effect of foreign aid on economic growth. Foreign aid can possibly increase scarce domestic capital to spur growth but foreign aid can also remove positive incentive to build wealth and stalling growth. Foreign aid has been accused of not promoting economic growth and development in underdeveloped countries. In fact, many studies have criticized foreign aid, uttering that it does not promote what it should, such as increase in investment and reduction in poverty, but promote what it should not, such as more government increase non-development expenditure Griffin (1970).Some even argue that it is not promoting democracy because evidence was found that corrupt governments tend to receive more aid than less corrupt governments.

An ultimate assumption made by the supporters of aid is that it helps poor countries in achieving higher levels of economic growth. In the absence of such aid internal resources of the poor countries will not be able to take off (Dowling and Hiemenz, 1983). Moreover, since less developed countries are constrained by low foreign currency reserves aid can fill the foreign exchange gap as well as saving gap (Papanek, 1973). Hence foreign aid is vital in the process of economic development in developing countries. Even though most of foreign aid has been targeted to promote economic growth and improve the quality of life of their citizens in developing countries, there has been significant debate over the effectiveness of aid in the recipient countries. Empirical studies related to foreign capital flow and economic growth show evidence for and against the theoretical arguments regarding the impact of foreign capital.

According to the gap theory, Chenery and Strout (1966), aid can encourage growth because it often increases the foreign exchange (Islam2005 and Easterly 2003). An empirical counter argument by Radelet et al (2005) to the effectiveness of aid is that countries that receive aid, just use aid in consumption so they argue that it increase the consumption of the countries, and these countries become aid dependent. Gomannee (2005) conclude countries which receive aid, neither put the aid dollars into productive use nor invest it because of the fungibility of aid. Therefore, a large set of literature endeavors to identify the aid-growth relationship, but very few examine this issue for South Asian countries. By using of time series data from 1972 to 1988 Islam (1992) has suggested a weak positive relationship between aid and growth in Bangladesh.

This study tried to fill the gap and focus on developing Asia by analyzing impact of aid on growth considering political stability and good governance, it is clear that a bundle of aid is given to developing Asian countries but economic development is slow. Aid is given to these countries due to number of reasons there are political and social concern. So one can say that sound economic policies and good governance play significance role in the use of aid in adequate manner. This study contributes to literature on foreign aid, economic growth, role of political stability and policy for aid on economic growth. This study has not endeavored to identify exactly which institutions and policies are important for aid effectiveness, rather interested in the question of whether the whole package of growth enhancing institutions and policies are also a determinant of the productivity of aid. To best of our knowledge, this type of the first study that is analyzing developing Asian countries. The analysis is based on static and dynamic panel framework, the growth, aid, policy and political stability are also estimated in four equation system simultaneously. Very few studies has used panel data analysis to addressed the issue of the impact of aid on economic growth and analyze the role of policy and political stability of the recipient country for aid on economic growth for developing Asia. Most of the studies found are on African counties and Latin America. Asian countries are aid recipient and it is considered that increase aid to developing countries is one way to achieve the growth. This motivates to understand the aid, growth, policies and good governance relationship.

Good economic policies of any country also play vital role for aid on growth. If there are sound economic policies like fiscal policy, monetary and trade policy it will be helpful for developing nation to use aid in effective way. For instance, Burnside and Dollar (2000)[1]have discussed aid effectiveness in relation to policy variables in terms of whether aid is successful when associated with good policies in the recipient countries.

[1]Hansen and Tarp (2000), Tan (2009) and Eaterly et al. (2004)

1.2 Problem Statement

It has been observed, that despite considerable quantum of foreign aid received by developing countries over last 5 to 6 decades, but their social and economic performance cannot be observed as satisfactory. Many studies have examined the impact of foreign assistance on economic growth, there are mixed views about the impact of aid on growth, but these studies have not focus on the role of polices and political stability or good governance effect for aid on economic growth in Asian developing nations. It is obvious that policies and good governance play vital role for economic growth. This study has tried to find the role of policies of Asian developing countries which effect on aid for growth, political stability is another major instrument for aid to promote economic growth. This study has checked, that sound economic policies positively effect for aid on growth and political stability also play significant role for aid to promote growth.

1.3 Objectives of the Study

Following are the objectives of the study:

i. To analyze whether the foreign assistance is growth promoting

ii. To analyze the political stability (good governance) of recipient countries has effect for aid on growth.

iii. To analyze the role of policy of recipient countries for aid on growth

1.4 Significance of the Study

The simple question “does foreign aid enhance economic growth and role of polices and good governance of recipient countries play role for aid to promote economic growth’’ is the major question to be answered. This study attempted to analyze “Do the economic policies of the recipient countries matter”. How effective the good governance for aid on economic growth. The returns from aid are considered to be a very significant issue from policy perspective (Burnside and Dollar, 2000; Collier and Dollar, 2001, 2002), because ultimately it affects the mind set of donors in distribution of aid among different underdeveloped countries. Consequently it can be said that long run productivity of aid is directly affected by the policies of recipient country. Political stability is another debate concern with aid and economic growth of developing countries. Although good governance is important for supervision of foreign assistance, if there is good governance foreign assistance will be used in productive manner. Foreign aid is an important topic given its implications for poverty reduction in developing countries. Previous empirical studies on foreign aid and economic growth generate mixed results.

The analysis is based on a simultaneous equation system involving policy, political stability, aid and growth, since these variables are often determined together. The instrumental variable techniques Generalized method of moment is applied to solve the simultaneous system, possible endogeneeity in the growth equation is controlled for by instrumenting the endogenous variables by lag explanatory variables. Due to limitation of data we use data from 1984 to 2013. This study cover the area of aid and economic growth of developing Asian nations as it is known that these countries are aid recipient, and aid play a vital role in social and economic development of these countries. Analyze the importance of policy and political stability of recipient countries which play significant role in the use of aid in adequate manner.

1.5 Organization of the Study

After introductory chapter, the remainder of the study is organized as follows. The chapter 2 of the study incorporated with the overview of aid in the Asia, how much foreign aid is delivered to Asian countries. Chapter 3 contain the literature review of the study. Chapter 4 incorporated with theoretical background, hypothesis and model. Further in chapter 5 discussed empirical results and chapter 6 with conclusion, policy recommendations and future research.

CHAPTER 2

AN OVERVIEW OF FOREIGN AID TO ASIAN COUNTRIES

2.1 Foreign Aid to Asian Countries

Foreign aid in less developed countries is primary concern to alleviate poverty, by bridging the domestic resource investment gap for socio economic progress. Despite improved poverty situation, in some East Asian countries the absolute number of people under poverty line leftovers high, however, in most of the South Asian countries the state of poverty has not improved much. Being one of the fastest growing regions, South Asia continues to be the utmost region with 71% of the population, living below poverty line and survived under $2 a day in 2008(World Development Indicators 2012). Although further funds are needed in form of foreign aid to assist developing the infrastructure requirement, adequate governance and capacity building.

Among donors countries including European Union (EU),United Kingdom (UK), United States of America (USA), Japan, Saudi Arabia, Scandinavian countries, Germany, France and Australia have active engagement, through their foreign assistant program in South Asia in response to humanitarian needs and global socio economic development program. $25.8 billion official development assistance in 2010 received by eight SAARC countries, from which Afghanistan secured about 30% of the total amount. Moreover aid has increased in India, Pakistan and moderately in Bangladesh and Maldives affected by security distress and natural disaster over the recent years.

EU is the main trading partner of SAARC countries, and has been showing dynamic interest in establishment the links between these two regional blocks. However, development cooperation between EU and South Asia has a long history, and covers both financial and technical aid as well as economic cooperation specifically with SAARC countries. Aid provided by the EU and other European countries are directed to promote poverty alleviation, regional trade, political stability, and fighting against terrorism. EU had pledged,€165 million to Pakistan, €225 million to India, for the development and economic cooperation over 2002-2006

Over the second half of the last decade, EU has been funding for India's economic and social development in the area of health and education. From 1976, EU provided to Bangladesh total of €1 500 million humanitarian aid and NGO co-financing, development assistance to Bangladesh by EU has been providing for environment policy, improving trade and investment, women status and science and technology. Figure show €61.32 million aid to Sri Lanka for economic cooperation, rural development and as post-conflict assistance over 2003-2005.

In the EU Country Strategy Paper (2007- 2013) figure shows, the plan to provide aid by EU is another €470 million to India, to support its economic and social sector. EU also under this strategy plan pledged, to make available €403 million to Bangladesh for human and social sector development and also assist for good governance and human right, moreover to Pakistan for development of trade, human rights and anti-money laundering projects to provide €398 million over 2007-2013. Estimated budget by EU for Sri Lanka for trade and economic capacity building, education and peace is €112 million (OECD, 2012).[2]

Japan the other one major foreign aid donor and also delivered nearly $1.5 billion to SAARC countries in 1998, from which India being the highest recipient of $504.95 million share of aid. Official development assistance disbursements by Japan, in 2005 to five major

[2]Source: World Development Indicators 2012, World Bank.

SAARC countries, namely: Pakistan, India, Sri Lanka, Bangladesh, and Nepal was accounted for $1.4 billion. On the other hand Japan committed, $1.2 billion ODA for education and health to Afghanistan, Pakistan, India and Bangladesh in 2010. The top most ODA supporter to South and Central Asia is the USA and delivered $8.6 billion in 2010. Which was 24 percent of all ODA to the region provided by top 10 donors. USA foreign aid program, to the South Asian region declined from peak in 1985. Because the region ongoing to open its trade regime, low in 1997 again but after this period they began to grow again. South Asia was the smallest receiver of USA non-food aid before the 2001. Two major countries of South Asia, India and Bangladesh, before 2002 were the largest recipient of USA bilateral aid. After the incident of 11 September 2001, USA assistance raised rapidly to the “front line” states namely: Pakistan, India, Philippines and Indonesia with increased non-food aid.

USA government pledged $134 million disaster assistance to Sri Lanka after December 2004 earthquake and Tsunami and $17.9 million to Pakistan (earthquake 2005).Another, $300 million economic assistance to Pakistan after the earthquake (2005). For security concerns, US provided $734 million mainly to chase terrorists to Pakistan. In the year 2007, $117 million to India and $93 million to Bangladesh of which $93 million was economic aid. The largest portion of USA aid to Bangladesh goes to education and support of anti-corruption reformand public health. In 2010 again USA delivered $51million to Bangladesh for improvement of health sector, water and education sector.

Bilateral aid form USA increased significantly to India in 2002-2003, as part of its counter terrorism efforts in the Asia region. In 2007,as economic aid to India to promote the private agricultural sector, US government disbursed another $158 million. Figure show that US development assistance to South Asia increased by 8% in 2008 budget with greater part of development assistance to Bangladesh and Pakistan. To Nepal and Sri Lanka to support environmental protection, public health, to improve water and sanitation facilities and investment and trade sector also higher assistance funding was allocated. US food aid to India fell hugely from $35.7 million in 2005 to $13.4 million in 2008 which is a big figure.$93 million in 2010, US development assistance on education, health and safe water provision to India. The largest portion of USA aid to India in 2010, directed to fund publich ealth sector especially and HIV/AIDS treatment and prevention. In the year 2010, Afghanistan received per person economic aid from USA equivalent to $159.56 and military aid $233.52 as compared to $10.52 economic aid and $4.95 military aid to Pakistan.

2.2 South Asian Regions

In this study major south Asian countries include namely: Bangladesh, India, Pakistan and Sri Lanka. Those occupy great importance in the world nations. Countries face economic, social, political issue so they receive a bundle of aid.

Since its independence in 1971, Bangladesh is a foreign aid recipient country. It receives foreign assistance mainly, to finance the budget or trade deficit and the annual development program. It also acquires external assistance in form of food and commodity aid for various purposes, mainly for, reconstruction of the newly independent country to overcome the various natural disasters, such as flood, famine and cyclones. Official foreign assistance from both the multilateral and bilateral donors, received by Bangladesh. Three development partners namely: World Bank, International Development Agency, Asian Development Bank and Japan all these deliver 52.71 percent of the total disbursed aid. The biggest multilateral donor is the World Bank, which delivered 23.11 percent of the total aid, Asian development bank, ranked second with a contribution of 16.09 percent, and UN Agency, secured third position by distributing 5.34 percent of total aid in Bangladesh. Multilateral donors, provide these amounts of aid entirely in the form of loans.

The foreign assistance received by Bangladesh, is mainly constituted by the grants and interest based Loans. During period 1971 to 2012 loans occupied the large portion as 58.22 percent of the total external assistance, while grants made up 41.78 percent of all foreign assistance. Infect the share of grants and loans in total aid changed with time. After Independence, the first decade (1971-1980) the amount of grants, was more than half as it was 51 percent of all foreign aid and this share goes down constantly over the next three decades. The share of loans in total aid, rose from 49 percent in 1971 to 69 percent in 2012 respectively which is an alarming figure. Bangladesh received about $56.5 billion foreign aid from the donor countries, during the period 1971 to 2012. While this figure recorded as, $51.12 billion for the period of 1980-2012.[3]

The United States mainly augmented bilateral aid to India in 2002 and in 2003, mostly for its counterterrorism struggles in the state. The current aid program aims to enhance Indian economic development Furthermore U.S. assistance serves the poorest segments of the population, in order to lessen economic and social conditions that may lead to political extremism. For Five Year 2008 the major portion of U.S. assistance to India funds public health and HIV, AIDS care and treatment. Foreign assistance related security and military supports programs is military professionalism, counterterrorism, counter narcotic and border security of the state, and economic support funds are to encourage the private agricultural sector as well.

Foreign assistance to Sri Lanka major aim to promote the peace process between the government of Sri Lanka and Tamil separatists. For economic development peace process is

[3]Source: OECD, OECD Aid Statistics 2012, http://www.oecd.org/dac/aidstatistics/ development aid

necessary. The U.S. assistance is also for to promote economic growth, especially in less developed and conflict cantered areas and helps to advance democracy, human rights, and civil society. In 2004 earthquake and tsunami, Sri Lanka suffered heavy human losses and property damage worth approximately $1 billion or 4.4% of GDP, that's why the Bush Administration assured $134.6 million for disaster relief and reconstruction to Sri Lanka. Further Sri Lanka received in 2006 Transition Initiative funding $1.7 million for the peace process, and $1.1 million for natural disaster assistance.

Flow of foreign aid, began soon after the independence to Pakistan. During 1950s the flows of aid was very low but in next two decades 1960 and 1970, foreign aid remained significant source of capital flow for Pakistan. Moreover, Pakistan was one of the largest aid recipient countries in Asia. As figure indicate that Pakistan got foreign aid, around 6.6 percent of the GNP in 1960. This increase in aid, was concomitant with the increase in the level of private investment which rose 53.3 percent (1969-1970) from 42.55 percent of total investment in 1959-60 [Malik, et al. (1994)] During this period huge investment had made in the area of physical infrastructure, power, and irrigation related projects, infect foreign aid, which helped to lay down economic foundation of the country. Mega projects, like Terbala and Mangla dams were constructed during this period with the help of international donor. The inflow of foreign aid to Pakistan reached US$ 1.00 billion mark, and the proportion of aid to GNP by then had touched 5.5 percent in 1975. This huge inflow of foreign aid, made government unable to launched public investment programs such as, roads, electric power, increasing social services and developmental projects like Indus Super Highway and Pakistan Steel Mills especially. Due to Pakistan's nuclear policy Gross disbursements of aid fell in 1977-78 and 1978-79 by United States. After a short spam of low flow of aid again in 1980s Pakistan received a large amount of foreign aid as 4.6 percent of GNP, because of its front-line role in the America Soviet Union conflict over Afghanistan.

The foreign inflows reached to US$2.0 billion, mark per annum by the mid1980s which enhanced the credit earnestness of Pakistan. Pakistan and United States signed a six year agreement, in 1985 according to which United States provide US$ 4.02 billion in terms of loans and grants, over six year period beginning from 1987, from which 57 percent amount was allocated as economic aid and the remaining in the form of military aid. After making this agreement the gross disbursement of aid increased to US$1.8 billion in 1987-88, but composition of aid over the years has changed from grants and grants type assistance to loans on difficult terms and conditions.

The United States in 1990, declared that it would not enter into any more aid agreement with Pakistan and would wind up its aid related projects at the end of 1993. This shift in US policy gave considerable adverse change in aid receipts to Pakistan. When Pakistan conducted nuclear tests, in 1998, further international aid sanctions predominantly by the US government, were executed on Pakistan. That was the major reason, both bilateral and multilateral aid declined meaningfully during 1998-2001. However after the 9/11 incident, things went change dramatically and as Pakistan joined the 'War against Terrorism' the volume of aid enlarged by 7 times and touched US$ 776.5 million. The US had launched, another US$ 3 billion five year economic assistant package for Pakistan in 2003. Behavior of other donor countries also changed and rescheduled Pakistan's external debts. This situation reflects, how the flow of foreign aid to Pakistan has always been subject to conditionality, and vulnerable to geopolitical and strategic interests of the donors particularly. This huge inflows of foreign aid to Pakistan could not be consumed for the development purposes. While aid has served the vested interest of a small influential group of the society and the political elite in the government circle. An increase in foreign aid in the form of loans has worsened the foreign debt problem in the country.

2.3 South East Asian Regions

Since 2001 foreign aid spending in East Asia has increased markedly, largely due to counterterrorism efforts in the Philippines and Indonesia. Philippines is a Major Non-NATO Ally and Indonesia is a democratizing nation with the world's largest Muslim population.

USAID programs in East Asia has also purpose to address the conditions that may lead to radical ideologies and terrorism, such as poverty, unemployment, lack of education, unstable governments, political unrest and violent conflict. Bush Administration in October 2003, launched education programs in Philippines and Indonesia as part of its regional counterterrorism efforts. In 2007 Indonesia was the largest recipient of U.S. foreign aid especially in health sector and development assistance. Although Philippines was the largest receiver of Foreign Military Financing and International Military Education and Training in the region. Further foreign assistance related to Counter-narcotics and law enforcement were provided to Indonesia, the Philippines, Laos and Thailand. Foreign assistance also finances several East Asia regional programsmost of the funding approximately 75% supports economic growth efforts. Moreover the United States contributes to the Developing Asian Institutions Fund as part of the establishment of a Free Trade Area of the AsiaPacific. Peace and security is the second largest regional aid objective including aid activities for fighting transnational crime, nonproliferation, counterterrorism, and counter narcotics. The third largest aid concerning area is democracy building in the region. In year 2007 figure show a large amount of aid receive by Indonesia 147 million dollar, Philippine $ 105 million, china $ 34 million Thailand $ 9.8 million and Malaysia $ 3 million. Source U.S department of state

Thailand is a country at the center of south East Asia with 66 million people and occupied area approximately 513,000 $km^{2.}$ During the Vietnam War, Thailand along with other US allies received economic as well as military aid. Onward early 1980 internal issue in Myanmar had led to a large number of refugees in Thailand. At that time various agencies and foreign donor help that people through foreign assistance. History showed that Thailand was one of the biggest recipients of Japanese foreign assistance.

The bulk of the aid took the form of loans for infrastructure and development projects. Thailand received aid from Japan's government due to natural disaster like flood etc. Some scholars have advocated, Japan's own business interests were the main motivation to give aid to Thailand. Since 2002 Thailand is no longer an Economic aid recipient while Thailand contributed $60 million in economic aid to the neighboring countries in 2005 as well. Thailand receives economic as well military aid from US. In contrast to major bilateral donors in the region, the People's Republic of China provides relatively little official development assistance to less developing countries. China provided substantial foreign aid to Vietnam as well as other large and more developed countries like Thailand, Indonesia, and the Philippines.

USAID to People's Republic of China is given for Peace Corps has been involved in English language and environmental education in China since 1993. United States funding primarily to U.S. based, non-governmental organizations for democracy and Tibet programs has grown considerably since 2002 which is approximately $15 million per year. China received only Peace Corps assistance prior to 2000. The United States prolonged $28 million to the PRC in 1999 as reimbursement for damages caused by the accidental NATO bombing of the Chinese Embassy in Belgrade. Congress has enlarged its annual assistance for democracy, human rights and rule of law programs, in China from $10 million in (2002) to $23 million in (2006).[4]

[4]Source: CRS Report for Congress: U.S Foreign Aid to East and South Asia: Selected Recipients/Updated October 8.2008.

2.4 Summary and Conclusion

All the above detail shows that foreign assistance plays a vital role for developing countries, in social and economic sector. Although this assistance mostly given for development purpose and for the welfare of the people of that countries. It is obvious that capital move from countries which are rich in recourses toward the poor countries. Figure are increasing and decreasing in nature which show that there is fluctuation in availability of aid. Countries like India and Bangladesh receive aid mostly for health, education and budgetary assistance. On the other hand countries like Pakistan and Sri Lanka receive aid other than social and economic sectors, also for natural disaster and security concern. So that is the reason aid have a significant importance in the field of economic research, there is a lot of literature on the issue of aid disbursement, effectiveness, volatility and aid growth relation

CHAPTER 3

LITERATURE REVIEW

This chapter gives a brief detail of past empirical work and also gives a review of the existing literature related to our study. This chapter has divide into different sections as it addresses previous work on aid and growth relationship, effectiveness of aid, aid volatility, role of policies and good governance.

3.1 Review of Literature on Effectiveness of Foreign Aid

The effectiveness of foreign aid, is a controversial topic in literature. Studies show different views and explain the result in different manner. It is quite ironic that the economic literature is yet to reach a consensus about the effect of aid on growth, given the substantial work that has already been completed in the field. It is a fact that a large number of the poor countries that have received the bulk of aid in history remain poor questions the effectiveness of aid as a poverty alleviating means.

The story of foreign aid, begun with the work of Chenery and Strout (1966) "Two Gap Model". They gave the underlying economic rationale of accepting foreign assistance and argued that developing nations are unable to achieve their desired prosperity goals due to lower level of financing power. This is due to inadequate level of savings at domestic level. Although, these developing countries want to expand their economy then they need the help of foreign backing for fulfilling their financial gaps. However, McGillivray (2000) use three stage least square procedures to estimate that how aid inflows effect revenue collection in Pakistan. He had introduced domestic borrowing to finance both capital and recurrent expenditure. The results revealed, aid had no incremental effects on taxation and also found that it was also interrelated with expenditure level and not with consumption only.

3.1.1 Aid and Economic Growth

Why is the aid growth relationship difficult to pin down? There are theoretical arguments, why aid coefficient in a growth regression is ambiguous in sign. According to the gap theory argument due to Chenery and Strout (1966), aid can promote growth because it often increases the foreign exchange needed in production for aid dependent projects (Islam2005 and Easterly 2003). An empirical counter argument by Radeletet al (2005) to the effectiveness of aid is that countries that receive aid, just use aid in consumption, effectively becoming aid dependent. Gomannee (2005) conclude countries which receive aid, neither put the aid dollars into productive use nor invest it because of the fungibility of aid.

Therefore, a large set of literature endeavors to identify the aid-growth relationship, but very few examine this issue for South Asian countries. By using of time series data from 1972 to 1988 Islam (1992) has suggested a weak positive relationship between aid and growth in Bangladesh. Grants and food aid are found to be more effective than community and project aid. However, in generally speaking, foreign resources appeared to have less impact on growth, as compared to domestic resources. The conclusion justifies careful consideration for two reasons. Firstly the time period of Islam study is short for time series analysis, and secondly Islam himself stated that estimated coefficients suffered from collinearity and specification problem as well. Recently work by Asteriou (2009) has used a panel dataset for five South Asian countries, to investigate the aid growth relationship. By using both panel Mean Group (MG) and Pooled Mean Group (PMG) approaches and find a positive aid-growth relationship in this region. Moreover Asteriouhas estimated, a neoclassical growth model, where economic growth is determined by investment, growth in labor force and foreign aid.

Hansen (2000) has examined the relationship between foreign aid and growth in real GDP per capita by using panel data method (GMM) as it develops from simple augmentations of popular cross country growth specifications. It has shown, aid in all prospect increases the growth rate, and this result is not conditional on good policy. There are however, decreasing returns to aid, and the estimated effectiveness of aid is highly sensitive to the choice of estimator and the set of control variables. When investment and human capital are controlled for then there is no positive effect of aid is found. Yet aid continues to impact on growth through investment.

As another work by Hansen and Tarp (2000) consider "three generations" of cross country regression studies, first generation studies offered an empirical assessment of how aid influences domestic savings (savings regressions). According to the Harrod-Domar equation growth depends on investment, which is financed by savings it includes domestic and foreign investment. If the effect of aid on domestic savings is positive then one may state, aid will increase growth, On the other hand aid will probably be unfavorable to the economic growth of developing countries. The second generation studies evaluate the link between aid and growth either with investment (investment regressions) or directly in reduced form equations (growth regressions). The third generation ones have explored the direct relationship between aid and growth. They conclude regressions giving empirical support to a positive aid growth relationship.

Goumanee et al (2005) have argued that the consistently negative dummy found for SSA is evidence, there is something different about SSA and limit their study to 25 SSA countries over a 25 year period. They find that aid actually supports growth but the contribution of aid is indirect. Aid promotes grow thin SSA through its contribution to "investment". Goumanee et al (2005) do not however address the kinds of endogeneity problems. Islam (2005) finds when data is limited to stable countries, aid supports growth

Different authors used a number of economic techniques for obtaining better understanding that how does aid works? As, McGillivray & Feeny (2010) applied Non linear three stage least square method on fragile economies, and the result shown that Government of Papua New Guinea is not using aid in an productive manner. It was actually used for fulfilling the budget deficit. A number of analyst's (Dowling, 1998 and Tendulkar, 1971) find, foreign aid often has no or very bad effect on the recipient country. Not only the opponents but the proponents also facing trouble, by the widely acknowledged theoretical possibility of aid being fungible.

Recently the literature on effectiveness of aid also includes another figure which is the pattern of aid disbursement by donors. The literature on aid commitments volatility, also has a number of dimensions. The IMF's economist Bulir and Hamann (2003) have argued that the inflows of foreign aid are really very unstable so this instability is greater than that of government revenues. Also this volatility tends to move in the same direction as that followed by GDP and revenues. Whereas and Hudson (2008)have found, the overall effect of such volatility is neither positive nor negative but it varies between positive and negative type of volatility.

Basnet (2013) has examined the role of foreign aid on domestic savings, and economic growth in South Asian countries including: Bangladesh, India, Nepal, Pakistan, and SriLanka, by using simultaneous equation system in which growth and savings are jointly determined. The study period is1960 to 2008. The results indicate that aid has a positive and significant effect on the growth rates of the five nations. Foreign aid appeared to crowd out domestic savings, rather than complementing it.

Another work by Lele and Goldsmith (1989) show that high volatility in aid inflows results in high turnoff ratio of staff misunderstandings develop in the relation of donor and recipient nations, and also reduced the level of learning opportunities. This fluctuating behavior of foreign aid inflows also follow to design an unpredictable policy environment, mainly because of fluctuating disbursement of expenditures by government. Therefore, this unpredictable policy making discourages both domestic as well as foreign investment in the recipient country (Rodrik 1990). While Anil et al. (2010) also check out the actual relation between aid fluctuations and long run economic growth. They find that there is no negative link present in case of middle income countries, as well as for those countries where institutions are strong. This link was only strong in case of sub-Saharan African countries which comprehensively rely on foreign aid for financing their expenditures.

3.1.2 Aid Economic Growth and Policies

In recent time, some studies are focusing on the manners in which aid is effecting on recipient economies and their policy maker's decision. Economic policies like trade policy, monetary policy and fiscal policy paly significant role in the process to receive aid and effect on economic growth. Working papers by British Department for International Development (2000) and Canadian International Development Agency (2002) have reinforced the investigation of Burnside and Dollar (2000) conclude that development assistance can contribute to poverty reduction in countries following sound policies and good governance, sound policy environment are the most important determinants of aid effectiveness respectively.

Likewise many other studies such as Burnside and Dollar (1997, 2000, 2004) Collier and Dollar (2001, 2002) are of the view that the positive impacts of aid is subject to the fiscal strategy of the recipient countries, because it facilitates better in those states which have satisfactory policy environment. Although, there are also some other studies such as Hansen and Tarp (2000, 2001) Lensink and Morrissey (2000) advocate that the performance of aid is irrespective of the quality of prevailing economic policies. Burnside and Doller (2000) have used a new debate on foreign aid to find the relationship among the aid, economic policies and growth of per capita GDP. In this work they find the answer of the questions like is the impact of aid on economic growth is conditional on good polices and do foreign donor allocate more aid to good policies country? They take panel of 56 countries and period from 1970 to 1973 and 1990 to 1993. Study found that on average foreign aid has less impact on growth while more positive effect on growth in good policy environment. Further about the allocation of aid study reveal that no significant tendency to total aid or bilateral aid to favor good policy. Moreover they found in their study aid is positively related with government consumption.

Another work by Doller and Burnside (2004) to find the relationship between aid and growth with new data set focusing on 1990s period. The evidence leads the view that the impact of aid depends on both, quality of state institutions and policies. In this study they use, overall measure of institutions and policies mostly given in the empirical growth literature. The interaction of aid and institutional quality has a robust positive relationship with growth, which is strongest in instrumental variable regressions. Further, there is no support for the challenging hypothesis that aid has the same positive effect everywhere. In their study found that allocation of aid to low income countries with better institutions got favor.

3.1.3 Aid Economic Growth and Political Stability

It is obvious that good governance is very important in the development process of any country. It contributes to enhance economic as well as social development. No matter how much a country is resource full unless it has good governance cannot achieve progress. Economic growth and political stability are acutely interrelated. On the one way the uncertainty associated with an unstable political environment, may reduce investment and t speed of economic development. On the other hand poor economic performance may lead to government breakdown and political conflict[0]. So it is clear that political stability play crucial in the development process of the country. If a country is aid recipient its governance is important to use aid in proactive manner. There is a look on literature which contributes in relation of aid economic growth and political stability.

The research of Quartey (2005) emphases on innovative ways of making financial aid effective in Ghana. The author has found that mainly multi donor budgetary support could be successful but only if the government of Ghana and its partners plan well and harmonize their efforts. Broadly speaking the government needs to work on dropping its debt burden and would not use its aid inflows to service its debt. The author recommends that the MDBS cannot be fully successful until it is entirely harmonized with other forms of project aid and until the inflows become more predictable.

A study by Knack (2001) shows that foreign aid by providing training and technical assistance, helps to develop institutional capabilities which in turn, give an important improvement to the efficiency and effectiveness of governance and growth. Another work by Bauer (1976) has revealed that aid inflows to poor countries can prolong corrupt behavior, and create moral hazard, moreover, undermining their institutions rather than building them. On the other hand bureaucrats and ruling elites may view aid resources as a means of making revenue and a source of employment for their supporters and family members, leading to an increase of the foreign debt.

A study by Islam (2007) gives more emphasize on the political stability and used pooled 2SLS technique. The author argues that a stable government (political) environment is necessary condition for aid to promote growth. He has recognized the possible non linearity of the aid growth relation, and also endogeneity problems. Dollar and Levin (2006) have tried to find out this question in those countries where governance system is not much stable. Their results revealed that in the beginning the aid donors prefer to lend to those countries where economic conditions are not suitable, but now the preferences of donors have changed. They like to support those countries which have comprehensive economic environment.

3.3 Summary and Conclusion

A lot of literature explains the aid relation with growth but no conclusive results are evident about any nexus and mixed results are reported. This variability in results seems to be time, region, analysis frame work, period specific and methodology specific. Few of them studies argue that aid actually retard growth or has an insignificant effect, few believe that there is nonlinear relationship (Boon, 1996); (Cassen, 1994). The Empirical evidence regarding the effect of aid on growth is just as confounding. Hansen and Tarp (2002) have found that the aid-growth effect is sensitive to choice of estimator. Hansen and Dalgaard (2001) have found that aid promotes growth irrespective of policy environment. Burnside and Dollar (2000) have argued that the necessary condition was policy for aid to promote growth. In contrast Islam counters by arguing that the necessary condition for aid to be growth promoting is political stability. Some more attempts by Islam (2007) and Easterly (2003) concur that the positive aid growth relationship establish by Burnside and Dollar (2000) is the result of the misinterpretation of the significant interaction term between aid and policy. Our work is a response to some of the questions generated from reviewing the aid literature. The contribution of this work is to address some of the different kinds of endogeneity problems, which plague the aid-growth relation. These relevant endogeneity problems include: endogeneity due to simultaneity bias (aid, growth, political stability, and policies may be determined together) endogeneity due to individual specific effects, endogeneity due to measurement error which can lead to attenuation bias, endogeneity due to omitted variable bias, and endogeneity due to feedback effects. To account for simultaneity bias this study is following Islam (2007) by equation simultaneous system in which involving policy, political stability, aid and growth since these variables are often determined together and instrumental variable technique.

To sum up there is lack of serious work to explore whether aid promotes growth in the presence of better polices and good governance in developing countries of Asia and this study tries to fill this gap.

CHAPTER 4

THEORETICAL MODEL AND DATA DESCRIPTION

Theoretical bases of any study determine its reliability. This chapter gives a theoretical ground for this study to be used for empirical estimations. This study has used an endogenous growth frame work, as our work used simultaneous equation model for analysis. There is a brief review of theoretical literature, before the outlining the theatrical model. In first section there is brief description of a theoretical perspective. In the light of previous studies this study has developed hypotheses that this study tries to test.

4.1 A Theoretical Perspective and Hypothesis Development

The role of foreign aid in the growth process of developing countries has been a topic of intense debate. According to the standard theory of growth, neoclassical, countries that start with low endowments grow faster than resource rich countries, further convergence for OECD countries conformed by Islam (1996), Romer (1996) and Barro. There are valid theoretical arguments, about the aid coefficient in a growth regression.

In forward direction according to the gap theory Chenery and Strout (1966) aid can promote growth, because it often expands the foreign exchange needed in production for aid dependent projects. The original Harrod-Domar model was prolonged in the sixties by Chenery and Strout two gap model. The shortage of foreign exchange was as another possible growth constraint. Actually, developing countries need to import goods and services which is vital for investment and production process, but import requirements usually exceed export earnings. As investment constrained either created gap by shortage of domestic savings and shortage of export earning, infect to fill this gap needed foreign aid inflows and foreign capital inflow. Although to grow faster these countries foreign inflow plays key role, if there is no foreign inflows the country will experience slower growth and inefficient employment of internal resources.

As Morrissey (2001) points out that there are a number of appliances through which aid can contribute to economic growth. As first of all aid increases investment both in physical and human capital, further aid enhances the capacity to import capital goods and technology. Aidis associated with technology transfer which increases the productivity of capital and also promotes endogenous technical change.

Hypothesis: 1 *Foreign aid has impact on economic growth of the recipient countries.*

On the other hand effectiveness of aid is another important debate, other external factors also important for the effectiveness of aid. As recommended by McGillivray, et al. (2006), firstly, aid has decreasing returns and secondly, aid effectiveness is influenced by external and climatic conditions. Third aid effectiveness is also influenced by political conditions of the countries and forth, aid effectiveness depends on quality of institutional as well.

Hypothesis: **2** *Political stability or good governance has effect for aid on growth.*

Heller (1975) is the first person, apply Fiscal Response Model on a cross sectional data of 11 African countries to analyze the effect of foreign aid on fiscal aggregates. This model has supposed the recipient governments concern at maximizing their utility and analyzed the behavior of government's spending level. Constraint is budget, which is a sum of revenues, borrowings and aid. Heller has explained that the recipient government would explain goals for various costs and also define goals for revenue, which is a sum of tax and borrowings. So these recipient governments, which would try hard to maximize their goals by achieving these revenue and expenditure objectives (Bhattarai 2007).

Ghulam (2005) has used Quadratic regression model as it is fitted to the data of official development assistance and GDP. But objection is raised that using linear quadratic loss function, for government utility is not correct due to its wrong specification. Because this function relates to social welfare with fiscal aggregates, which are investment and consumption, not with objectives and output which are the variables of main interest, because these variables primarily affect the practical decision taken regarding budget allocation.

Burnside and Doller (2000) work on aid and economic growth in such a way, construct policy index, and their findings suggest that good policy environment is conditional for aid to promote growth. Recently work by Basnet (2013) on economic growth, foreign aid and domestic saving in south Asia by using simultaneous equation system in which growth and saving are jointly determined. Period from 1960 to 2008 give positive and significant result, but results reveal a negative relationship between foreign aid and domestic savings.

Hypothesis: **3***Macroeconomic policies such trade policy, fiscal policy and monetary policy has effect for aid on growth.*

Considering the importance of aid for developing countries and its role in growth, this study will contribute in such a way that analyze the impact of aid on growth while for better and effectiveness of aid the role of policy and political stability play crucial part so further analyze the political stability has positive effect for aid on growth also analyze the role of policy for aid on growth. A panel data estimation technique has use for Asian developing countries.

Next section explains the empirical model.

4.2 Methodological Frame Work

This section discusses the model specifications to observe the relationships between foreign aid and per capita GDP growth further aid equation, political stability equation and policy equation. The models specified are estimated using panel least squares estimation method. According to the neo classical theory of growth, countries that start off with low endowments grow faster than resource rich countries. The production function in which foreign aid is introduced as an input in addition to labor and domestic capital. In the usual notation the production function can be written as follows:

$Y = f\,(L, K, A)$

Where Y is gross domestic product (GDP) in real terms, L is labor input, K is domestic capital stock, and A is stock of foreign aid.

This analysis has also included several other variables that often believed to have a favorable effect on growth. This study deal with panel data estimation technique that find the impact of aid on growth and find the role of policy and political stability effect for aid on growth. This study has estimated aid equation, political stability equation and policy equation, further discussed each equation and variable.

First growth equation can be written in the following way:

$$Y_{it} = \alpha_i + \beta_1 \sum X_{it} + \mu_t + \varepsilon_{it} \qquad (4.1)$$

Where dependent variable is Y_{it} is growth of per capita GDP of country i and period t, α_i andu_t is country specific effect and period specific effect ε_{it} is an error term. In the vector X_{it} includes the traditional growth determinist, in which includes physical capital, labor force participation, human capital, trade openness, budget deficit, inflation and further the endogenous variables are : aid, political stability (PS), policy (POL) .

4.2.1: The Aid Equation

There is substantial literature on the determines of aid as few of them are Mckinaly (1978) Little (1979) Nissnake (1984) and Wall (1994) described that strategic interest of donors play important role in the allocation of aid, moreover aid is given to low income countries and with small population aid relative to GDP is much higher. Empirical evidences Frey and Schneider (1986) has found that commitment of World Bank assistance is related with good policies such as low inflation. In this study follow by Burnside and Dollar (2000) Islam (2007) to determine the aid. Aid_{it} is Aid/GDP and left side there is lag of growth GDP per capita, log of population, lagged policy index, (to find whether aid is allocated to favor of good policy include policy index) human capital and the lagged aid variable. The aid equation takes the following form:

$$\mathbf{Aid_{it} = \beta_0 + \beta 1GGDP_{i,t-1} + \beta_2 logPOP_{it} + \beta_3 HK_{it} + \beta_4 POL_{i,t-1} + \beta_5 Ait_{i,t-1} + \varepsilon_{it}} \text{ .... } \mathbf{(4.2)}$$

4.2.2 The Political Stability Equation

Political stability equation is instrumented with appropriate variables as several factors affect political stability, like education, system or type of government (democracy or dictatorship) good economic performance. A high level of education is expected to be positively correlated with political stability (Barro, 1996), democracies are more stable on average than other types of government and should also be positively correlated with political stability. On average good economic performance is expected to be positively correlated with political stability. The political stability equation takes the following form

$$\mathbf{PS_{it} = \beta_0 + \beta_1 ED_{it} + \beta_2 DEM_{it} + \beta_4 GGDP_{it} + \varepsilon_{it}} \text{ .... } \mathbf{(4.3)}$$

The proxies have use to measure are ED for education, in the countries where people have aptitude of education and a trend toward education it will lead to good governance. DEM dummy for democracy (dummy = 1) and growth of GDP. Political stability or good governance has been found to be a necessary condition for aid to be growth promoting at least for low developing countries (Islam 2000).

4.2.3. The Policy Equation:

The influence of policy on growth has enjoyed significant analyses in the literature with Hansen and Tarp (2001),Burnside and Dollar(2001), and Arrellano et al (2005) having all contributed**.** Trade openness is a measure of economic policies (trade policy) that either limit or offer trade between countries. For example, if a country sets a policy of high trade tariffs, thus restricting the desirability of international trade, this restrictive policy will inhibit other countries from sending exports and accepting imports from that country. According to dominating economic theory, this restrictiveness, this lack of trade openness, will have an economic effect of slowing economic development/growth. Conversely, according to economic theory trade openne**ss** will have an economic effect of increasing economic development and growth. Trade openness will calculate as total trade (the sum of exports and imports of goods and services) relative to GDP.

Fischer (1993) causation runs, from good macroeconomic policy towards economic growth, and argues that growth is negatively associated with high inflation, large budget deficits and distorted foreign exchange market. High inflation shrinks growth by reducing investment and productivity growth. Budget deficit also reduces both capital accumulation and productivity growth. Randel.et.al (2004) study proposes that noninflationary monetary policy and low budget deficits, is essential for savings and for accumulating capital. High inflation and large budget deficits cause the financial instability and discourage the savings and investment as well. A study Montiel and Serven (2004) have suggested that developing countries attain the progress with suitable fiscal and monetary policy but volatility in behavior of these variables caused the macroeconomic uncertainty. They proposed a stable macroeconomic policy environment, attribute a fiscal stance safely consistent with fiscal solvency, a monetary policy with low and stable inflation.

The policy equation is given below:

$$\mathbf{POL_{it} = \beta_0 + \beta_1 TO_{it} + \beta_2 BD_{it} + \beta_3 INF_{it} + \beta_4 GGDP_{i,t-1} + \beta_5 A_{i,t-1} + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots (4.4)}$$

In this equation TO is Trade openness, BD is Budget deficit (defined as government revenue expenditures) and INF is inflation. To handle with endogeneity of policy in the growth equation, the policy index equation is instrumented by, lagged value of GGDP and lagged Aid. In this study policy index has weight to the policies according to their impact on growth as done by Burnside and Dollar (2000). The inclusion of lag values is to capture the dynamic or feedback relationship between the variables.

4.3 Data and Variable Description

In this section of study explanation about data and variable is given. Secondary data has been used in this study from period 1983 to 2013. After taking necessary lagged values ultimately left with sample period 1984 to 2013. We have select developing Asian countries including Bangladesh, china, India, Indonesia, Malaysia, Pakistan, Philippines, Thailand. A bundle of foreign development assistance is given to developing Asian countries which play significant role in economic growth of the developing nations. Data is taken from World Development Indicators. Growth of GDP per capita is taken, for foreign assistance aid is taken as aid to GDP ratio, using the variables as ratios solve the economy size problem. Average year of schooling (25+)[5]is used as proxy for human capital. Human capital is a measure of efficiency of the labor force. Average year of schooling is a stock variable. Political stability variable is taken from International Country Risk Guide (ICRG). For education we took primary enrolment.

For policy equation, variable for fiscal policy is taken budget deficit, inflation (CPI) for monetary policy and for trade policy the study has taken trade openness as imports and export (import + export/GDP). Further for education taken as primary enrolment, percent of

[5] (Barro – Lee 2001 Data set)

all eligible children. This variable has taken for political stability equation. Table below given the variable description and expected sign according to the growth equation.

TABLE 4.1: Data Description and Data Sources

Variable name	Description	Expected sign	Data source
GGDP	Growth of GDP per capita		WDI
AID	Official development assistance		WDI
POP	Population	Negative	WDI
EDU	Primary school enrolment	Positive	WDI
DEM	Democracy	Positive	
TO	Trade openness	Positive	WDI
BD	Budget deficit	Negative	WDI
INF	Inflation (CPI)	Negative	WDI
PS	Political stability		ICRG
HK	Human capital (average years of schooling)	Positive	WDI (Barro-Lee 2001 dataset)
PK	Physical capital	Positive	WDI
L	Labor force	Positive	WDI

4.4 Estimation Technique

Panel data estimation technique is extensively used in this paper. Different econometric procedure exist for estimating the relation of aid and economic growth but this study has employed static panel data model, pooled least square, random effects and fixed effects.

To address simultaneity bias, this study has instrumented the aid equation, political stability equation the policy equation and calculate predicted values from each equation. Then the predicted values of these endogenous variables are used in the growth equation so as to minimize endogeneity bias. The country specific effects cannot be ignored so to test whether the possible presence of country specific effect is causing endogeneity in the growth equation. Once panel data is use question arises whether, the individual effect is taken as a common or fixed or random. To compare between common effect model and fixed effect Radandant fixed model is used. Then fixed effect and random effect models are compared based on Hausman test. The Hausman test support fixed effect method over random effect.

The aid-policy interaction was also included afterward included in growth equation was re-estimated by fixed effect. The study has also performed a regression where the aid-policy interaction is replaced with the aid-good governance (or political stability) interaction estimated by fixed effect. In next step the study, excluded the political stability and policy and find the relation of aid and growth.

Moreover three endogenous variables aid, political stability and policy include in aid equation and estimated with lag economic growth per capita in dynamic panel data model. The generalized method of moment model suggested by Arellano and Bond (1991) and modified by Blunder and Bond (1998) is used as estimation technique. GMM estimators are consistent under two conditions. First instruments should be valid and second error terms should not be serially correlated. Arellano and Bond (1991) have suggested two tests to deal with this issue. First test is a Sargan test of over identifying restrictions. It checks the overall validity of the instrumental variables by examining the sample analogue of the moments conditions. Its null hypothesis is that instruments are valid. Second test check whether error terms are serially correlated.

CHAPTER 5

EMPIRICAL RESULTS AND DISCUSSION

The main focus of the present study is to explain the relation of economic growth and aid. For this purpose panel data estimation technique is applied by estimating static fixed effect model and dynamic panel data model. In this chapter empirical result of study has discussed.

5.1 Summary Statistics

Given below the Table 5.1 presents the summary statistics of the dependent and independent variables. Table shows the value of mean, median, standard deviation, Skewness, Kurtosis of the variables. The results of table shows as mean value the measure of central tendency of data. The aid variable has 0.0419 mean, indicate where the center of the data is located, and what the yearly provision of aid, and 0.02 standard deviation, tells how much data deviate from mean. Variable GDP per capita (GDPc) has mean value 1555.51 and standard deviation is 1788, per capita GDP of the country of a year is 1555. Mean value of education is 99, as we take primary enrolment of percent of eligible children of total population. as it has mean 99 and standard deviation is 15.5. Human capital (average years of schooling) has mean 6, and SD is 2. Variable like inflation has mean 6 and standard deviation is 5, the maximum value is 24 which tells us there is exist in data a large value of inflation and minimum is -1.4. Physical capital has mean 10.4906, and SD is 0.6. Mean of trade openness (import plus export/GDP)is 0.67 and SD is 0.4.

Table.5.1: Summary Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	prob	Obser
AID	0.0149	0.0082	0.09878	-0.007	0.02	2.183	7.63247	0	279
ED	99.612	99.84	132.34	51	15.58	-0.95	4.34284	0	279
GDPC	1555.52	841.53	10538.1	191.9	1788	2.495	10.2899	0	279
HK	6.08029	5.75	11.1	2	2.272	0.318	2.21638	0	277
INF	6.85634	6.1167	24.339	-1.408	4.179	2.796	4.61265	0	278
LNDEF	11.3006	11.495	24.4242	0	3.459	-0.19	7.28961	0	279
PK	10.4906	10.427	12.6584	9.154	0.689	0.619	3.44641	0	279
POL	1.58713	1.3769	5.59765	-6.963	1.593	-0.56	7.70776	0	279
POPG	0.0072	0.0073	0.01478	-0.011	0.003	-0.83	6.88465	0	270
PS	4.36796	4.5764	6.9	0	1.307	-1.08	4.94987	0	279
TO	0.67165	0.5286	2.20407	0.12	0.469	1.435	4.48366	0	279

5.2 Table of Correlation Matrix

The table 5.2 of correlation matrix shows the correlation among the variables used in this study. The presence of multi-colinearity among the variables has been tested and the results revealed that variables are not highly correlated with each other. There is better correlation with dependent variable. So it is stated that low correlation among the variables directs that there is no multi-colinearity between variables.

Table.5.2 Correlation

	AID	**ED**	**GDPC**	**HK**	**INF**	**LNDEF**	**PK**	**POL**	**POPG**	**PS**	**TO**
AID	1										
ED	-0.282	1									
GDPC	-0.397	0.169	1								
HK	-0.084	0.42	0.548	1							
INF	0.23	0.057	-0.3	-0.094	1						
LNDEF	-0.341	0.286	-0.02	-0.106	0.155	1					
PK	-0.691	0.475	0.321	-0.034	-0.19	0.45	1				
POL	-0.337	0.035	0.633	0.4242	-0.82	-0.2	0.1236	1			
POPG	0.228	-0.49	-0.23	-0.402	0.051	-0.3	-0.4425	-0.0732	1		
PS	-0.523	0.247	0.423	0.2183	-0.3	-0	0.4095	0.4897	-0.225	1	
TO	-0.285	0.108	0.723	0.6158	-0.25	-0.2	-0.0366	0.7524	-0.046	0.4877	1

5.3 Results of Panel Data Regression Analysis

Panel data estimation technique is apply by fixed effect method, which is discussed earlier. Further explain the results of each equation separately.

Table.5.3: Results of Aid, Policy and Political Stability Equation

Variables	Model 1 AID EQ	Model 2 PS EQ	Model 3 POL EQ
Con	0.011*	2.54*** (0.497)	1.28*** (1.70E-10)
lGDP	-0.013		-1.51E-12 (8.43E-12)
HK	-0.009		
LPOP	-0.002*		
EDU		0.0139*** (0.005)	
GGDP		0.0798*** (0.022)	
DEM		0.148 (0.183)	
TO			0.02** (1.06E-12)
BD			-0.02*** (1.11E-11)
INF			-0.18*** (5.14E-12)
lPOL	-0.342^{e-3}		
lAID	0.903***		-5.02E-12* (2.95E-11)

Significant at 1%, 5%, 10% respectively. *** ,**, *.Parentheses are standard error

5.3.1 Results of Aid Equation

Above Table 5.4 gives the results of panel least square estimate of aid equation in Colum 2, negative sign GGDP, Aid is given to low income countries Aid is negatively related with the population variable, as one percent increase in population 0.002 percent decrease aid. Negative coefficient of population show that if population increase, per capita aid decrease. Coefficient of human capital is negative, which show that if human capital increase aid has tend to decrease these countries. Countries that have technical advance human capital get less aid.

There is substantial literature on the determines of aid as few of them are Mckinaly (1978) Little (1979) Nissnake (1984) and Wall (1994) described that strategic interest of donors play important role in the allocation of aid, moreover aid is given to low income countries and with small population aid relative to GDP is much higher, as coefficient of population gives the negative sign which follow the existing literature. Empirical evidences Frey and Schneider (1986) has found that commitment of World Bank assistance is related with good policies such as low inflation. The economic policy index (lagged) is included to explore whether aid is allocated in favor of good policy. The lagged values of the aid variable are included to account for the effect of previous aid policy on the current period allocation decision. In this study follow by Burnside and Dollar (2000) Islam (2007) to determine the aid.

5.3.2 Results of Political Stability

Table 5.4 column 3 gives results of panel least square estimates of equation political stability. The results provide appropriate evidence that education has positive relationship with political stability as confirmed by previous literature (Barro, 1996). Democracies are more stable on average than other types of government and should also be positively with political stability. Further evidence shows that if there is political condition of any state are stable than economy of state will grow batter than unstable political situation. On average good economic performance is expected to be positively correlated with political stability. Results of political stability equation show coefficient of education variable is positive and significant related to political stability, here education is taken as primary enrolment percent of all eligible children of total population which is a flow variable as enrolment will increase there is increasing trend of political stability. The coefficient of growth is positive and significant. Empirical evidences shows a positive association between income levels and growth rates on the one hand, and political stability and education attainment on other hand. (Kahn, 1997).

5.3.3 Results of Policy Equation

First of all a policy index is constructed following Burnside and Dollar (2000) as well as Islam (2005).Burnside and Dollar (2000) in the construction of policy index, they assigned the weights to the policy variables according to their correlation with growth.

Policy index = $\alpha + \alpha TO + \alpha BD + \alpha INF$

Policy index = 1.28 + 0.02*TO - 0.02*BD – 0.18*INF

To determine the weights in the policy index, the independent variables in the policy equation are regressed on GDP per capita growth. Result of coefficients and policy equation given in the table.5 Fischer (1993) causation runs, from good macroeconomic policy towards economic growth, and argue that growth is negatively associated with high inflation, large budget deficits and distorted foreign exchange market. In model 3 policy equation inflation variable is significant has negative sign. High inflation shrinks growth by reducing investment and productivity growth. Budget deficit also reduces both capital accumulation and productivity growth.

Randel.et.al (2004) study propose that noninflationary monetary policy and low budget deficits, is essential for savings and for accumulating capital. High inflation and large budget deficits cause the financial instability and discourage the savings and investment as well. A study Montiel and Serven (2004) have suggested that developing countries attain the progress with suitable fiscal and monetary policy but volatility in behavior of these variables caused the macroeconomic uncertainty. They propose a stable macroeconomic policy environment, attributed a fiscal position carefully consistent with fiscal solvency, a monetary policy with low and stable inflation as well.

5.4 Results of Growth Equation when Introduce Interaction Terms

In Table.5.4 presents results by incorporating interaction terms in the growth equation of policy and political stability with aid models. In the given table model 1 gives the results of growth regression when introduce

Table.5.4 Results of Growth, Policy and Political Stability Model

Variables	**Model 1 PS**	**Model 2 POL**	**Model 3 AID-GROWTH**
Dependent Variable	GGDPc	GGDPc	GGDPc
Con	-53.39***`` (11.83)	-56.4*** (12.718)	-66.4*** (15.5)
Aid	0.107* (0.026)	-20.936*** (8.412)	-0.37*** (2.18)
TO	0.013** (0.010)	0.016 (0.0168)	0.03 (0.024)
BD	-0.211*** (2.042)	-0.241*** (2.053)	-0.26 (-2.06)
INF	-0.188*** (2.042)	-0.173*** (2.048)	-0.0019*** (-2.0795)
HK	-1.21 (-0.52)	-1.297 0.469	-1.161 (0.42)
PK	6.620*** (1.441)	7.030*** (1.515)	7.66*** (1.80)
DEM	1.044* (3.66)	0.050 (2.759)	0.789 (4.68)
Aid*ps	5.349* (3.514)		
Aid*pol		2.691 (8.268)	
R^2	0.555	0.494	0.46
Adjusted R^2	0.524	0.462	0.42
F-test	17.830	15.298	13.037
Prob(F-test)	0.000	0.000	0.000

Significant at 1%, 5%,10% respectively *,**,*** Parentheses are standard error

Aid*political stability interaction and in model 2 results are of aid*policy. In model 3 we have excluded both political stability and policy from growth equation.

The results of model 1 shows as coefficient of aid is positive and significant as we introduce interaction of aid and political stability. This finding supported by Islam (2005), as political stability is necessary condition for aid to promote growth. One percent increase in aid 0.107 percent increase the growth, when there is stable or good governance in the country

Further variables trade openness in model 1 is significant and positive which indicated that more open countries grow faster Harrison (1996). Democracy variable is significant and positive as expected, it is clear from literature and empirical evidences that democratic nations grow more than other form of government (Barro, 1996). Most important is aid variable in model 1 is significant and positive. Human capital with negative sign, which indicate that growth promoting process in Asian regions may not to be more depend on the level of education. Studies since Mankiw, Romer, and Weil (1992) and Benhabib and Spiegel (1994) find significant positive effects of human capital on income levels, the findings regarding the growth effect have been rather contradictory. Mankiw et al. (1992) hav etestified a positive effect of human capital on growth in a human capital improved Solow (1956). While Benhabib and Spiegel (1994) have found no effect in a growth accounting workout and suggested instead a different specification with human capital affecting growth through productivity.

All these are the developing nations which heavily depend on agriculture, so they do not have means to use the education in effectively manner to increase output. Infect getting more education and advancing the technology of production process, education will surely be growth promoting. Study however; concede that this might be a problem with the model specification. Moreover, aid is such a big promoter of growth, and most of the aid used as to promote commerce and not to education so it may not contribute, so much to growth through its effect on aid. Variable like inflation and budget deficit are significant and negative sign as expected. Physical capital is significant and positive sign as expected, physical capital and economic growth has positive association.

Model 2 explain the results of aid and policy interaction, finding shows that by introduce aid policy interaction, the coefficient of aid become negative, this finding contradict the Burnside and Doller (2000) results who find that high level policy country with significant amount of aid grow faster. Our results agree with Islam (2007) and Armah and Nelson (2008),'s findings. Additionally, Islam (2007) argue that this positive significant coefficient (of Burnside and Doller (2000)'s work), on the interaction term may imply that policy is more effective when supported by inflows of aid rather than aid being more effective in a good policy environment. Moreover the impact of aid, for a country with average policies is zero Boone (1996). Other variable hold the expected sign and agree with existing literature. Further work by Muhammad and Qayyum (2011) on country Pakistan aid policy interactive term has positive and significant coefficient both in the short run and long run by applying ARDL approach.

Model 3 explain the results when exclude the political stability and policy from the growth equation. Aid coefficient becomes negative when we drop the policy and political stability. Which shows that if countries want to utilize their external resources in economic development there is need to good governance and adequate economic policies. Results support the evidences that aid has negative relation with growth. Existing literature of aid and growth supports this negative coefficient, Burnside and Doller (2000), Islam (2007) Boone (1996). Although a study by E. M. Ekanayake found, that aid has mixed results on economic growth of the developing countries. Moreover a work by Besant (2011) has examined the role of foreign aid on domestic savings and economic growth in five South Asian countries Bangladesh, India, Nepal, Pakistan, and Sri-Lanka, by using simultaneous equation system in which growth and savings are jointly determined. The results direct that aid has a positive and significant effect on the growth rates of the five countries.

In this study we do not introduce both interaction (aid*policy and aid*political stability) at same time to minimize multi collinearity (Armah and Nelson, 2008). R^2 range is 46% to 55%.

5.5 Results of Static and Dynamic Panel Estimate

In table.6 there are results of model 1 which is FE static panel estimate and in model 2 is FE dynamic panel estimate.

Table 5.5 Results of Static and Dynamic Growth Model

Variables	**Model 1 static panel estimate**	**Model 2 dynamic GMM Panel estimate**
Dependent variable	GGDPc	GGDPc
Con	-59.44 *** (11.3)	-20.6 *** (7.53)
lGDP		-0.479*** (2.16)
Aid	0.926* (0.42)	0.153* (0.033)
Pol	0.336* (0.037)	0.36* (0.24)
PS	0.980* (0.37)	10.38*** (1.57)
HK	-1.800*** (0.508)	-0.053 (0.165)
PK	6.460*** (1.30)	0.76 (0.83)
DDEM		12.8*** (2.24)
Lab	0.052 (0.05)	
R^2	0.40	0.25
Hausman (p-value)	0.13	
Sargan J test (p value)		0.000

Significant at 1%, 5%, 10% respectively. *** ,**, *. Parentheses are standard error.

Model 1 which gives us result of Fixes Effect model static panel estimate as in this section by adding the estimated value of aid, policy and political stability, further add the traditional variable of growth equation as labor force participation, physical capita and human capital. Aid variable is positive and significant. Physical capital is significant and positive. The coefficient of policy and political stability is positive, when both variables introduce in the equation. Although a good policy environment is a necessary condition for growth, in itself it does not provide a sufficient condition for aid to stimulate growth. Sufficiency is assured only if good policies are coupled with political stability, giving an environment free from uncertainty in the country. A stable political system allows agents to utilize aid funds effectively without any interruption, thereby achieving more growth. If the political system becomes unstable, aid is more likely to be dissipated in unproductive consumption rather than being invested even in the presence of good policies Islam (2007).

In static fixed effect method policy and political stability are significant and positive. Coefficient of aid is also positive and significant. Economic growth in South Asia is found to be encouraged by foreign aid, however the effectiveness of foreign aid to accelerate economic growth might be conditional on governance and institutional quality (Choudhry and Das 2011).

As one percent increases in the physical capital more the one percent increase in the growth, this point heavily support the literature that if external resources utilize in the process of investment and increase the infrastructure this will actually contribute in the economic growth. This finding is consistent with previous studies. In the growth process the role of physical capital is very important. Here introduce the labor variable which is labor force participation, active labor which participates in the process of growth, coefficient of labor is positive and significant. Evidences from existing literature show that economic growth and labor force participation has positive association. Human capital is taking as skilled people and advance technology learner people, who participate in the process of growth. This variable is significant with negative sign show that these countries are agriculture based economy, although their skilled and educated people may not contribute in the process of economic growth. Unemployment rate is also very high in these countries, which show that these countries are unable to utilize their educated population in the process of economic growth.

Model 2 is extended by including lags of the dependent variable as explanatory variable on the right hand side. To handle endgogenity by introducing lag growth variable on the right hand side generalized method of moment is used. The lag explanatory variables are used as instruments and Sargan J test confirms the validity of the instruments. Aid has positive coefficient, further policy and political stability have positive and significant coefficient. The results of other traditional growth control have same effect as mentioned above.

To sum up political stability has strong association with aid to promote growth, and without the stable government, policy and aid do not work well to promote growth and negative coefficient of human capital indicate that developing countries not using their educated people in the process of growth, economic growth is weakly determined by the highly educated people in these countries.

CHAPTER 6

CONCLUSION AND FUTURE CHALLENGES

This work use panel data analysis frame work to find the impact of aid on economic growth of developing Asian countries over period of 1984-2013. We determine the aid, political stability and policy equation outside the model. Growth equation estimated by dynamic and static fixed effect method.

6.1 Conclusion

We conclude this study as defining simultaneous equation system to account for the possible simultaneity bias, that arises because aid, growth and political stability are determined together we find that aid is growth promoting in Asian countries after estimation by Fixed Effect. Hausman test prefer fixed effect over dynamic effect, therefore fixed effects is the appropriate estimator.

By applying fixed effects (group dummies), there is controlling for the average differences across countries in any observable or unobservable predictors, such as differences in quality, sophistication, demography etc. The fixed effect coefficients soak up all the across group action. It has greatly reduced the threat of omitted variable bias. We cannot confirm, Burnside and Dollar(2000)'s claim that this relationship is conditional on good policy. While our study verifies Islam (2007)'s finding that political stability is necessary for aid to efficiently promote growth. When we introduce aid and political stability interaction we get aid coefficient positive and significant. Aid is growth promoting when state hold political stability. Aid and policy interaction gave negative and significant coefficient of aid. By dropping political stability and policy from growth equation we find significant aid coefficient with negative sign. Introducing aid, policy and political stability jointly in growth equation and estimated by static FE, aid, policy and political stability coefficients became positive and significant, which support the point that if there is stable government than policy may contribute for aid to promote growth. Other variables like democratic form of government also positively related with political stability and promote economic growth. Human capital coefficient with negative sign show that it may not use in economic growth of these countries as these countries are more depend on agriculture, and these countries are not utilizing their human capital in effective manner yet. Many empirical studies could be sited, supporting insignificant or negative effect of human capital on economic growth (Human capital can carry negative sign in developing countries (Nyatepe-Coo 1998). There is strong need to reformulate the policies to produce labor force educated, skilled and trained enough that it can contribute in the process of development. Analysis of the dynamic panel model proved a lot more challenging. It is clear from the dynamic model that explains the variation in growth.

We can conclude that aid coefficient could be negative or positive, if it is negative we cannot say aid does not contribute in economic growth or it has negative impact on growth, most important point is that there should be a good governance and proactive policies if a country want to utilize its external resources in developmental purpose.

6.2 Policy Recommendation and Future Challenges

Developing Asian countries received aid from their political allies and other organization. Aid mostly given by donor for their own interest rather than the aim of economic development, so it could be the reason that developing countries could not get desire results from foreign assistance. In 1980's most of the aid given to Asian countries to get favor in during the cold war, further after the 9/11 Pakistan received a bundle of aid, it shows that political factor contribute in the foreign assistance distribution. There are tight sanctions on the recipient countries from the donor countries. Furthermore the unstable government, internal conflicts, high level of corruption, low level of institution, poor economic policies hindered the economic growth as well as the effective use of foreign assistance. These entire factors contribute in the process of effective utilization of external resources. So these countries need to follow proactive policies, strong institution and good governance if they want to get desire outcomes from internal and external resource. The work by Choudhry and Das (2011) suggested, Foreign aid can contribute to the national economy more effectively if the Bangladesh government utilizes its aid funds more efficiently by reforming its institutions and policies

Debt burden increase due to foreign loan, which automatically leads to budget deficit, it is the major issue of the developing countries. So government of the developing countries needs to take a look on the foreign loans and understand the real reason why donor gives loan, moreover sanction of the donor countries if acceptable and in favor of the country than accept it. Many studies show that the consumption increase in the recipient countries in the result of foreign aid, which leads high inflation distortion of monetary policy, which may lose the true meaning of the aid. So it is necessary for government to utilize the foreign assistance in the productive and development sector, otherwise just debt burden will enlarge in the response of foreign assistance which leads other economic and social evils like, inflation, budget deficit, unemployment, corruption etc. Strong institution, good governance, strong and proactive economic policies are need to boost economic growth as well as effective utilization of external resources.

Governments in developing countries may consider the use of foreign aid for enlightening the sectors like education, health, export, which make significant contribution to their growth.

Governments in developing countries may adopt export promotion development strategies to reduce its dependencies on foreign aid, because the dependence on foreign aid does not offer the solution for sustained rapid growth. This strategy requires emerging countries to remove all obstacles to trade including maintaining competitive real exchange rates and providing better export infrastructures such as better telecommunications in the most of Asian economies.

We would like to conclude the study too by mentioning that foreign assistance is necessary for developing countries but not sufficient condition for economic growth. Foreign assistance like other tools of economic growth is a mean to an end. But should not be taken as an end itself. Infect the quality, nature and efficient use of foreign assistance is more important than mere the volumes.

6.3 Future Research

Further we gives some deeper look for future research on the issue of foreign assistance and economic growth, this study estimates the whole data without separating it into the loans, grants, bilateral and multilateral aids. So there is a good scope to conduct further research, on different types of aid to show their individual effect on the economic growth of Asian countries.

Furthermore it is important to understand the real reasons why donors give aid, and how recipient countries strategize to receive aid. In this study we analyze the economic policies as whole not specify the policies which could be effective for aid effectiveness, future work could be done in this manner as well.

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