UNIVERSITI PUTRA MALAYSIA

IMPACT OF FOREIGN AID AND INSTITUTIONS ON ECONOMIC GROWTH, INCOME INEQUALITY AND PRODUCTION EFFICIENCY

RUHAIDA SAIDON

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By

RUHAIDA BT SAIDON

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfillment of the Requirements for the Degree of Doctor of Philosophy

August 2015

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the Degree of Doctor of Philosophy

IMPACT OF FOREIGN AID AND INSTITUTIONS ON ECONOMIC GROWTH, INCOME INEQUALITY AND PRODUCTION EFFICIENCY

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August 2015

Chairman : Professor Zulkornain Bin Yusop, PhD
Faculty : Economics and Management

Five decades as humanitarian crises continue around the world, foreign aid remains as one of the important tools for the developed countries to improve standard of living in developing countries. The main goal of giving foreign aid is to alleviate poverty by generating economic growth in aid recipient countries. However, the empirical evidence on the effectiveness of foreign aid is inconclusive and has generated much controversial. Studies on aggregate foreign aid and institutional quality data indicated that the effectiveness of foreign aid is depend on the quality of institutions in aid recipient countries. This study attempts to examine the role of disaggregated institutions quality (i.e. socioeconomic condition, internal conflict, law and order, bureaucracy quality, ethnic tensions and investment profile) on the impact of sectoral allocations of foreign aid (i.e. aid to social sectors, aid to economic sectors, aid to production sectors and aid to multi sectors) on economic growth, income inequality and production efficiency in aid recipient countries during the period 1995 to 2009. This study used system-Generalized Method of Moment (sys-GMM) on a panel of 59 and 50 aid recipient countries in estimating the role of institutions quality on the impact of sectoral allocations of foreign aid on economic growth and income inequality, respectively. Meanwhile, the Data Envelopment Analysis (DEA) and panel Tobit regression on 80 recipient countries for the same period have been utilized in analyzing the role of disaggregated institutions quality on the impact of sectoral allocations of foreign aid on production efficiency in foreign aid recipient countries. The empirical results revealed that law and order has contingency effect on the relationship between sectoral allocations of foreign aid on economic growth, income inequality and production efficiency. These findings imply that law and order plays an important role as a complementary factor for the effectiveness of sectoral allocations of aid on enhancing economic growth, narrowing income inequality and increasing production efficiency in recipient countries. Moreover, empirical results also indicated that different sectoral allocations of foreign aid exerted different effects to economic growth, income inequality and production efficiency. Aid to production sector has significant impact on increasing economic growth. Oppositely, aid to economic and aid to social sectors have exhibited a negative impact on economic growth. However, aid to social sectors has exhibited a significant impact in reducing income inequality in the aid recipient countries. In addition, findings showed that aid to economic sectors is effective in increasing production efficiency in aid recipient countries. This study also determines the impact of disaggregated institutions quality on economic growth, income inequality and production efficiency in recipient countries. The empirical findings on the impacts of institutions quality reported that different institutions quality have different impacts on economic growth, income inequality and production efficiency. This study exposes that the quality of institutions such as socioeconomic condition, internal conflict and ethnic tensions are found to have a positive and significant impact on economic growth. In addition, bureaucratic quality has positive influence on production efficiency but it affected economic growth adversely. Meanwhile law and order is found to have positive and negative impact on production efficiency and income inequality, respectively. As long as different disaggregated institutions quality and sectoral allocations of foreign aid exerted different impacts on the development of recipient countries, international organization, such as World Bank, International Monetary Fund (IMF) and donor countries should provides foreign aid corresponding to the development objectives in the recipient countries. In addition, recipient countries should improve and maintain good quality of institutions in order to enhance the effectiveness of foreign aid.

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Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

KESAN BANTUAN ASING DAN INSTITUSI KE ATAS PERTUMBUHAN EKONOMI, JURANG PENDAPATAN DAN KECEKAPAN PENGELUARAN

Oleh

RUHAIDA BT SAIDON

Ogos 2015

Pengerusi : Profesor Zulkornain Bin Yusop, PhD
Fakulti : Ekonomi dan Pengurusan

Krisis kemanusiaan berlaku di seluruh dunia selama lima dekad telah menunjukkan bahawa bantuan asing masih menjadi salah satu kaedah yang penting bagi negara-negara maju untuk meningkatkan taraf hidup di negara-negara membangun. Matlamat utama pemberian bantuan asing adalah untuk membasmi kemiskinan dengan menjana pertumbuhan ekonomi di negara-negara penerima bantuan. Walau bagaimanapun, bukti empirikal tentang keberkesanan bantuan asing tidak meyakinkan dan telah menimbulkan kontroversi. Kajian ke atas data agregat bantuan asing telah menunjukkan bahawa keberkesanan bantuan asing adalah bergantung kepada kualiti institusi di negara-negara penerima bantuan. Kajian ini bertujuan untuk mengkaji peranan kualiti institusi mengikut pecahan (iaitu keadaan sosioekonomi, konflik dalaman, undang-undang dan peraturan, kualiti birokrasi, ketegangan etnik dan profil pelaburan) dalam mempengaruhi kesan peruntukan bantuan asing mengikut sektor (iaitu bantuan kepada sektor sosial, bantuan kepada sektor ekonomi, bantuan kepada sektor pengeluaran dan bantuan kepada pelbagai sektor) ke atas pertumbuhan ekonomi, jurang pendapatan dan kecekapan pengeluaran di negara-negara penerima bantuan sepanjang tempoh 1995 hingga 2009. Kajian ini menggunakan kaedah *system-generalized method of moment* (*SYS-GMM*) ke atas data panel bagi 59 dan 50 negara-negara penerima bantuan dalam menganggar peranan kualiti institusi dalam mempengaruhi kesan peruntukan sektor bantuan asing ke atas pertumbuhan ekonomi dan jurang pendapatan, mengikut keutamaan. Sementara itu, *data envelopment analysis* (*DEA*) dan kaedah panel regresi tobit ke atas data panel 80 buah negara penerima bantuan telah digunakan dalam menganalisis peranan kualiti institusi mengikut pecahan ke atas kesan peruntukan bantuan asing mengikut sektor terhadap kecekapan pengeluaran di negara-negara penerima bantuan asing bagi tempoh yang sama. Dapatan kajian menunjukkan bahawa undang-undang dan peraturan mempunyai kesan luar jangka terhadap hubungan antara bantuan asing mengikut sektor dengan pertumbuhan ekonomi,

jurang pendapatan dan kecekapan pengeluaran. Dapatan kajian ini menunjukkan bahawa undang-undang dan peraturan memainkan peranan penting sebagai faktor pelengkap kepada keberkesanan peruntukan bantuan bantuan asing mengikut sektor dalam meningkatkan pertumbuhan ekonomi, merapatkan jurang pendapatan dan meningkatkan kecekapan pengeluaran di negara-negara penerima. Selain itu, keputusan empirikal juga menunjukkan bahawa peruntukan bantuan asing mengikut sektor yang berbeza memberi kesan yang berbeza ke atas pertumbuhan ekonomi, jurang pendapatan dan kecekapan pengeluaran. Bantuan kepada sektor pengeluaran mempunyai kesan yang siknifikan dalam meningkatkan pertumbuhan ekonomi. Sebaliknya, bantuan kepada sector ekonomi dan bantuan kepada sektor sosial telah memberi kesan yang negatif kepada pertumbuhan ekonomi. Walau bagaimanapun, bantuan kepada sektor sosial telah menunjukkan kesan yang ketara dalam mengurangkan jurang pendapatan di negara-negara penerima bantuan. Di samping itu, penemuan kajian menunjukkan bahawa bantuan kepada sektor ekonomi adalah berkesan dalam meningkatkan kecekapan pengeluaran di negara-negara penerima bantuan. Kajian ini juga menentukan kesan kualiti institusi mengikut pecahan ke atas pertumbuhan ekonomi, jurang pendapatan dan kecekapan pengeluaran di negara-negara penerima. Hasil kajian empirikal melaporkan bahawa kualiti institusi yang berbeza mempunyai kesan yang berbeza ke atas pertumbuhan ekonomi, jurang pendapatan dan kecekapan pengeluaran di negara penerima. Kajian ini mendedahkan bahawa kualiti institusi seperti keadaan sosioekonomi, konflik dalaman dan ketegangan etnik didapati mempunyai kesan yang positif dan signifikan terhadap pertumbuhan ekonomi. Selain itu, kualiti birokrasi mempunyai kesan yang positif terhadap kecekapan pengeluaran, tetapi ia memberi kesan yang negatif kepada pertumbuhan ekonomi. Sementara itu, undang-undang dan peraturan didapati mempunyai kesan positif terhadap kecekapan pengeluaran dan mempunyai kesan yang negatif terhadap jurang pendapatan. Selagi kualiti institusi mengikut pecahan yang berbeza dan peruntukan sektor bantuan asing yang berbeza memberi impak yang berbeza kepada pembangunan di negara-negara penerima, organisasi antarabangsa seperti bank dunia, Tabung Kewangan Antarabangsa (IMF) dan negara-negara penderma perlu menyediakan bantuan asing mengikut sector yang bertepatan dengan matlamat pembangunan di negara-negara penerima. Di samping itu, negara-negara penerima perlu meningkatkan dan mengekalkan kualiti institusi yang baik bagi meningkatkan keberkesanan bantuan asing.

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LIST OF ABBREVIATIONS

2SLS	Two Stage Least Squares
ADB	ASEAN Development Bank
CPIA	Country Policy and Institutional Assessment
CRS	Credit Reporting System
DAC	Development Assistance Committee
DEA	Data Envelopment Analysis
DFID	Department for International Development
EA	Economic Aid
FE	Fixed Effect
GDP	Gross Domestic Product
GMM	Generalized Method of Moment
GNI	Gross National Income
GNP	Gross National Product
HIPCs	Highly Indebted Poor Countries
ICOR	Incremental Capital Output Ratio
ICRG	International Country Risk Guide
ICT	Information and Communication Technologies
IDA	International Development Association
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
LDCs	Less Developed Countries
LICs	Low Income Countries
LMICs	Low Middle Income Countries
MA	Multi Aid
MCC	Millennium Challenge Corporation
MDG	Millennium Development Goals
OA	Official Aid
ODA	Official Development Assistance
OECD	Organization of Economic Corporation and Development
OLS	ordinary least squares
PA	Production Aid
PPP	Purchasing Power Parity
SA	Social Aid
SAA	Sectoral Allocations of Aid
SIDS	Small Island Developing States
SPF	Stochastic Production Function
SWIID	Standardized World Income Inequality Database
SYS-GMM	System Generalized Method of Moment
TA	Technical Assistance
U.K.	United Kingdom
U.S.	United States
UN	United Nation
UNDP	United Nation Development Policy
USAID	United States Aid
WDI	World Development Indicators
WTO	World Trade Organization

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CHAPTER 1

INTRODUCTION

1.1 An Overview

Foreign aid is financial aid given by governments and other agencies to support the economic, environmental, social, and political development of developing countries. It is distinguished from humanitarian aid by focusing on alleviating poverty in the long term, rather than a short term response. In the history of development economics scholar's, the foreign aid or foreign assistance, which is known as the official development assistance (ODA) is the key factor that fills the financial or investment gap in order to achieve economic growth and alleviate poverty in developing countries. According to Nelson (1956) and Erikson (2005), poor countries have low incomes and savings, which cause them to be caught in a "vicious circle of poverty" or "poverty trap". They experience a "low-level equilibrium trap" where a higher income does not lead to an increase in savings but only results in higher population growth. Thus, foreign aid is one of the important tools to reduce poverty and income inequality by facilitating faster and sustained economic growth via increased saving and investment in developing countries (Harrod and Domar, 1965; Chenery and Strout, 1966; Papanek, 1973; Gulati, 1975; Roemer, 1989; Islam, 1992; Thirlwall, 1999; Sachs et al., 2005).

In year 2002, the effectiveness of foreign aid in the Millennium Declaration at Monterrey had received greater attention. It was the vital instrument in supporting global partnership in developing countries achieving the eight Millennium Development Goals (MDGs); to eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower woman, reduce child mortality, improve maternal health, combat of HIV/AIDS, malaria and other diseases. This is to ensure environmental sustainability and to develop a global partnership for development by 2015, which in turn has led to emphasis on quantity and improves the quality (effectiveness) of foreign aid.

There have been broad discussions and studies about the effectiveness of foreign aid on improving the standard of living in developing countries. Most of the studies focused exclusively on the impacts of foreign aid on economic growth. Many investigations conclude din positive (Chenery and Strout, 1966; Papanek, 1973; Gulati,1975; Roemer,1989; Islam, 1992 and Thirlwall, 1999).Those concluded in negative (Griffin and Enos, 1970; Weisskoff, 1972; Levy, 1984; Singh, 1985; Boone, 1996; Easterly, 2001; Mohamed et al., 2014) or relationship between foreign aid and economic growth is inconclusive in other studies (e.g. Mosley,1987;1992; Rajan and Subramaniam, 2008).In contrast, Islam (2005) indicated that the aid-growth relationship must be conditioned on political stability, not macroeconomic policy as political stability is the more pertinent determinant of the efficacy of aid in stimulating growth. The effectiveness of foreign aid on the increasing economic growth depends on the country's absorption capacity of aid, economic and political structure and time chosen (Cassen, 1994). Keefer and Knack (1995) corroborated this view by stressing that good quality of institutions, particularly in the form of predictable, impartial, and consistently applied rule of law, is crucial for the sustained and rapid growth in per-capita incomes of poor and developing countries. These arguments are parallel with Hall and Jones (1999) as they stressed that differences between countries in capital accumulation, productivity, and output per worker ultimately attributed to differences in "social infrastructure," where they also defined it as "the institutions and government policies that determine the economic environment within individuals which accumulate skills and firms accumulate capital and produce output."

There are strand of studies highlighted where economic policy is pre-condition for the effectiveness of foreign aid in developing countries (Burnside and Dollar, 2000; 2004).In addition, Brautigam and Knack (2004) also pointed out that poor quality institution, weak rules of law, absence of accountability, controls over information and high level of corruption have distorted the benefits of foreign aid in most African countries. Similarly, Wolfensohn the president of World Bank in 2002 observed, *"we have learned that corruption; bad policies and weak governance will make aid ineffective"* (Khan and Ahmed, 2007). Understanding the potential implications of foreign aid for quality of institutions is paramount, because good qualities of institutions are now recognizing major determinant of economic performance.

Economic growth is essential in the development of the country and the people in the country. Despite economic growth, foreign aid may have an impact on income distribution of the aid recipient countries. The foreign aid though can be beneficial for the development of the recipient country but reliance on foreign aid makes the dependency of the economy on external sources, increases ways to corruption and also affects economic administration badly. The income inequality has increased impact of foreign aid and it may be because foreign aid flows are used less productively. The leakage of the foreign aid flows into the non-industrious expenditures may have cause negative impacts on economic growth, (Ishfaq and Ahmad, 2005; Javid and Qayyum, 2011), thereby it caused increase in income inequality. Therefore, study on the effect of foreign aid on income inequality is necessary due to both the destructive consequences of inequality as well as its potential effect on growth and poverty. However, the available research on foreign aid and inequality provides little insight into the nature of the relationship. Studies conducted this far have found an almost equal share of positive effects (Boone, 1996; Herzer and Nunnenkamp, 2012; Ali and Ahmad, 2013; Pham, 2015) or negative effects (Shaifiullah, 2011; Tezanos et al., 2013) or positive but not significant effects (Layton and Nielson, 2008).

Production efficiency also plays an important role to development of a country. The production efficiency can reflect the production ability of a recipient country (Veiderpass and Andersson, 2007). The higher the production efficiency, the more efficient of production inputs usage in production process. Production efficiency and technological progress are the two components of total factor productivity (Grosskopf, 1993). Production efficiency is important for the developing countries where as their technological progress is slow. The technological progress is the expansion of the set of production possibilities; an increase in production efficiency is identical to a more efficient use of the existing production inputs and corresponds to a convergence towards the production frontier[1]. Foreign aid and quality of institutions have significant impact on production efficiency in aid recipient countries. Even though very limited studies has been done on this, but studies by Feene and Roger (2008) stressed that the higher level of quality institutions and governance associated with higher production efficiency. While foreign aid increased production efficiency in democratic governance (Christopoulos et al., 2010).

In addition, the form of foreign aid data used in analyzing the effectiveness of foreign aid is also an important factor that determines the effectiveness of foreign aid in recipient countries. Almost all of the past studies employ aggregate data of foreign aid. The weakness of using aggregate foreign aid data is it presumes that the effect of aid on growth is the same for all the various categories of aid (Cassen, 1994; White, 1998; Mavrotas, 2002a; 2002b; Clemens, 2004; Mavrotas, 2005; Mavrotas and Ouattara, 2006a; 2006b; Doucouliagos and Paldam, 2009a; 2009b). Another caveat of using aggregate data is that it precludes researcher or policy makers from identifying the types of foreign aid that enhance growth and other development, such as income inequality and production efficiency. Such information will help donors determine which sectors to target foreign aid. Due to the different types or form of foreign aids causes different effect on development.

Thus, study using data on sectoral allocation of foreign aid (aid to social sectors, aid to economic sectors, aid to production sectors and aid to multi sectors) will provide a more accurate and apparent findings about the impact of foreign aid on economic growth, income inequality and production efficiency and other development indicators to the researchers and policy makers. Therefore, this study intends to examine the impact of foreign aid on economic growth, income inequality and production efficiency on selected developing countries by going beyond the aggregate figure of foreign aid. Particularly by sectoral allocation of foreign aid (i.e. aid to social sectors, aid to economic sectors, aid to production sectors and aid to multi sectors). Having realized the importance of quality of institutions as pre-condition of foreign aid effectiveness, this study investigates the role of disaggregated institutions quality on the impact of sectoral allocations of foreign aid on promoting economic growth and production efficiency and narrowing income in aid recipient countries.

This chapter provides the overall outlay of this study. Next section discusses the background of the study. It follows by discussing the issues and problem statement in section 1.3. The research question of the study is listed in section 1.4 followed by objectives of the study in section 1.5. Then, section 1.6 presents the significance of the study and organization of the thesis reviewed in the last section.

[1]The production frontier thus refers to the maximum technically feasible output attainable from agiven set of production factors.

1.2 Background of the Study

For the sake of humanity and willingness to help people in poor countries, foreign aid is considered as a blessing. Foreign aid is meant to bring about a developmental convergence by providing a means to the reduction of poverty and improving the crisis in major sectors of an economy. Foreign aid or known as official development assistance (ODA) flows to developing countries and multilateral institutions which is provided by official agencies, including state and local governments, or by their executive agencies for economic and welfare development purposes and contains a grant element of at least 25% (OECD website, 2010). The main objective of foreign aid is to promote economic growth in poor countries and thereby pull people out of poverty. The idea dates back to economist John Maynard Keynes who in the 1930s argued that government could stimulate development by financing investments. Keynes' ideas for the domestic economy were taken up by a new breed of development economists who argued that investment in less developed countries (LDCs) could be stimulated by injection of cash from overseas.[2]

The Monterrey Consensus signaled a new partnership between rich and poor countries aimed at achieving the Millennium Development Goals (MDGs). The agreement adopted by heads of state at the International Conference on Financing for Development in Monterrey, Mexico, in March 2001. It contained commitments by all countries for specific actions to help low-income countries achieve the MDGs.[3] The Consensus recognizes that the main responsibility for accelerating development lies with the governments of poor countries themselves, which must be placed in appropriate policy and institutional frameworks and make difficult decisions where necessary to ensure full implementation. It also acknowledged that poor countries themselves could not achieve the goals, or even make significant progress towards them, without the cooperation and assistance of the international community. In 2002, major bilateral donors have agreed to expand their aid or ODA (Official Development Assistance) to developing countries in the international conference on financing for development in Monterrey which held in 2002. After the Monterey conference, donors have increased foreign aid from US$90 billion in 2002 to US$185 billion in 2015. This increase is a great help indeed.

1.2.1 Patterns of Aggregate ODA and Sectoral Allocations of ODA Flows to Developing Countries

In recent years, the foreign aid has increase and majorly channels to developing countries like Africa, Asia and pacific regions where many of its inhabitants are poor. The largest amounts of poor countries are located and aid distributed based on the benevolence of the donor organization, the effects of the cold war and the desire to gain political advantage, poor economic systems performance and failing prices of major imported goods in developing countries. This has also influenced the flow of foreign aid to recipient countries. About US$4.27 trillion been given as ODA since 1960 to 2016 (OECD Report, 2016). Today development aid flows are at about

[2] See Erikson (2005).

[3] The text of the Monterrey Consensus can be found at http://www.un.org/esa/ffd/0302finalMonterreyConsensus.pdf.

US$150 billion a year and the aid shares on the average is about 7.5% of the recipient's GDP (UNU-WIDER 2016). Figure 1.1 illustrates the patterns of aggregate ODA to developing countries for the period of year 1967 to year 2014.

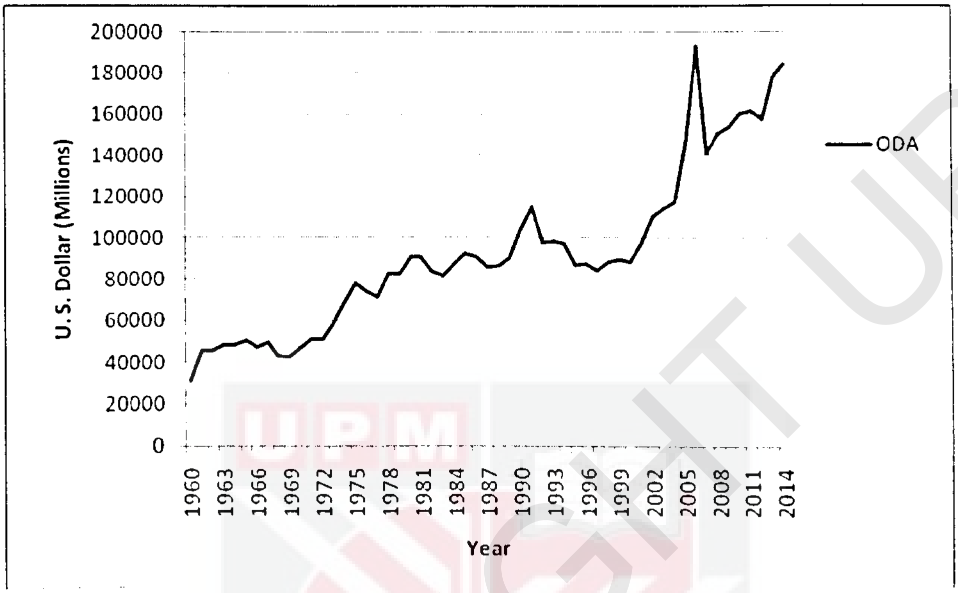

Figure 1.1: Official Development Assistance (ODA) to Developing Countries from All Donors, 1960-2014 (In constant 2014 U.S. Dollars, Millions)
(Sources: Development Assistant Committee (DAC), Organization of Economic Corporation and Development (OECD), Online Database, 2016).

Figure 1.1 shows that, despite the overall upward trend, total ODA flows have experienced downward trends or were flat during some periods. For example, during the period 1971 to 1982, the ODA flows to developing countries were stagnant, as a result from the widespread debt crisis in developing countries. However there is a sharply increase in ODA starting 1983 to 1985 and drastically decrease from 1986 to 1993. Then, the declining trend was more articulated during 1994-1997 with an absolute decline in net ODA flows from US$84.7 billion in 1994 to US$68.4 billion in 1997 (in constant 2009 prices and exchange rates).

This turnaround in aid flows followed the end of the Cold War that changed the geopolitical picture of the world and most donors experienced a decline in their aid budgets. This explains the increasing pressure on the national budgets of aid donors (Sweden, Italy, Finland, etc.) that were running large fiscal deficits, decreased their aid budgets significantly while donors with smaller budget deficits like Norway, Japan and Ireland were increased their aid budgets in real terms (Organization of Economic Corporation and Development (OECD) 1997). As seen in the Figure 1.1, ODA flows to developing countries were dramatically increasing starting from year

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2002 to 2014. This is due to Monterey Declaration, where donors had doubled their aid in order to promote economic growth and reduce poverty in recipient countries.
During the period of 1960-2014, the geographic patterns of total ODA flows were slightly changed. As can be seen in Figure 1.2, Asia and Africa were given higher priority since the early 1970s with at least one third of total ODA is going to countries in these regions. The Asia region continues to be important for aid donors although its share in total aid flows has been declining since the 1970s. This explains the successful development efforts of number of countries in the region, such as the Republic of Korea, Malaysia, Singapore, and the Peoples' Republic of China. A higher priority given to Africa is understandable looking into the context of the deep-seated political, social and economic problems that many countries in the region have been experiencing during the last four decades or so.

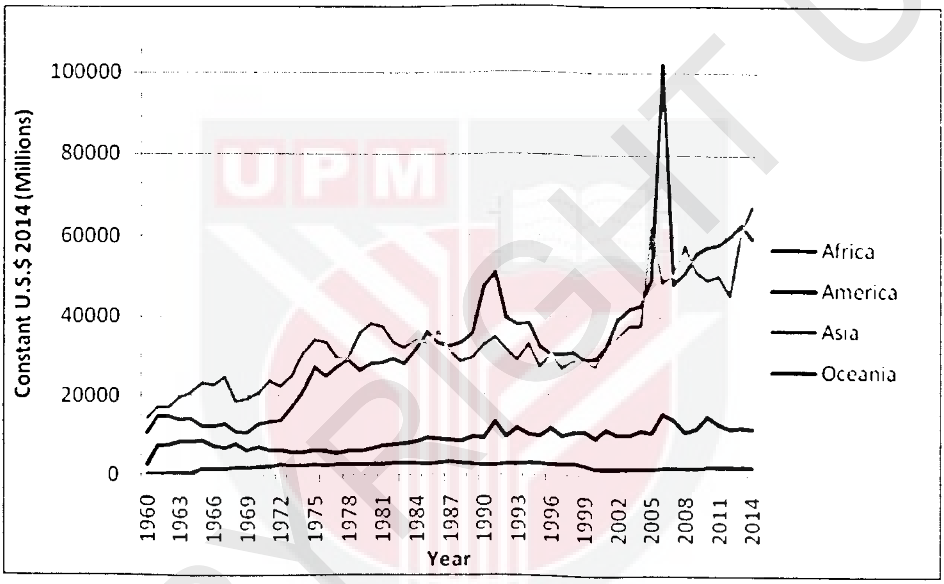

Figure 1.2: **Geographical Allocations of ODA Disbursements, 1960-2014 (In constant 2014 US$ Million)**
(Sources: Development Assistant Committee (DAC), Organization of Economic Corporation and Development (OECD), Online Database, 2016)

While Africa and the Asia region continues to be the major recipients of ODA, in the 1990s, Eastern Europe and the former Soviet Union emerged as other favored destinations of foreign aid. Transition countries in this region received on average more than 13 percent of total ODA flows beginning early 1990s.On average, countries in Africa and Asia region received about US$37.3 and US$33.1 billion of aid respectively in 2000-2014. In addition, Figure 1.3 displays the sectoral allocations of ODA flows from all donors 1970 to 2014. The line graphs illustrates that aid to social sectors is the major sectoral allocation of ODA given to recipient countries from 1990 to 2014. About US$1.4 trillion of aid have been disbursed to all developing countries within this period. Aid to social sectors include aid for education, health, population policy or program and reproductive health, water supply, sanitation and sewerage, government and civil society, and other social infrastructure and services of a country.

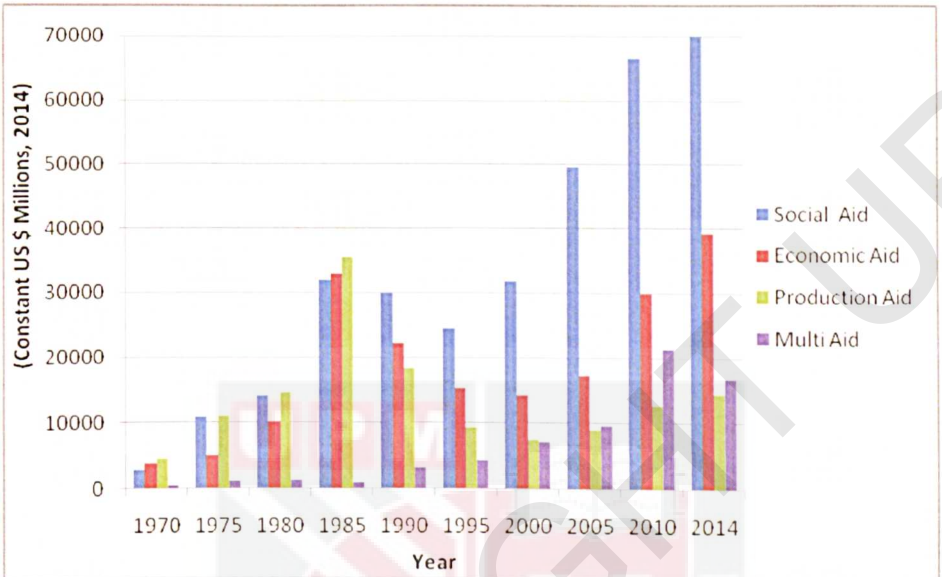

Figure 1.3 : Sectoral Allocations of ODA (1970-2014)
(Sources: Credit Reporting System (CRS), Organization of Economic Corporation and Development (OECD), Online Database, 2016)

The objective of giving aid to social sectors is to develop the human resource potential and improve living conditions in aid recipient countries. Aid to this sector depicted increasing trend from 1985 to 1995.The figure indicates that the amount of aid to social, economic and production sectors had disbursed to developing countries were almost equal in 1985, which is 33 billion in average. It is slightly decreased in 1990 until 1998 during world economic crisis. Then, donors had increased their aid to social sectors to developing countries in year 2000 until 2014.

Aid to production sectors was the largest amount of sectoral allocations of aid given to recipient countries for the period 1970 to 1985. However, donors have reduced the amount of this aid to production sector from US$18.3 billion to US$7.4 billion, in 1990 and 2000, respectively. Aid to this sector goes to the primary sector of recipient country that is to agriculture, forestry, fishing, industry and mining, constructions, trade policies and regulations. The allocation of ODA to production sectors were more than double compared to the other sectors and also the second largest sectoral allocations of ODA for economic sector.

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1.2.2 Trend of Poverty, Income Inequality, Economic Growth and Quality of Institutions in Developing Countries

On the bright side, extreme poverty has declined significantly over the last two decades. In 1990, nearly half of the population in the developing world lived on less than $1.25 a day; that proportion dropped to 14 per cent in year 2015.Globally, the number of people living in extreme poverty has declined by more than half, falling from 1.9 billion in 1990 to 836 million in 2015. Most progress has occurred since 2000. The proportion of undernourished people in the developing regions has fallen by almost half since 1990, from 23.3 per cent in year 1990–1992 to 12.9 per cent in year 2014–2015. Figure 1.4 depicted the number of people living on less than $1.25 a day worldwide for the period 1990 to 2015. The figure depicted that the absolute number of people living in extreme poverty globally fell from $1.9 billion in 1990 to $1 billion in 2011. Estimates suggest that another 175 million people were lifted out of extreme poverty as of year 2015. The number of people worldwide who are living on less than $1.25 a day has also been reduced by half from its 1990 level.

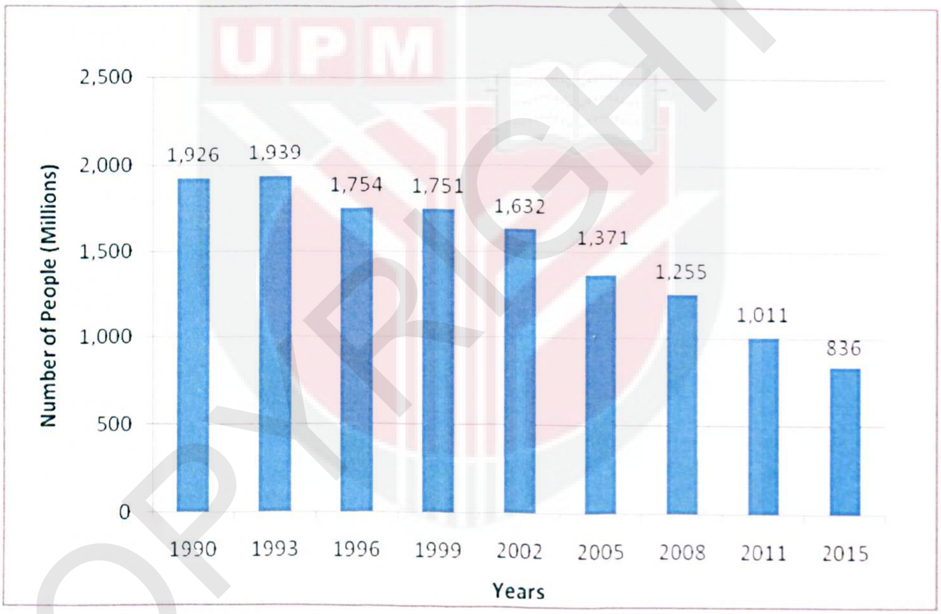

Figure 1.4: Number of People Living on Less than $1.25 a Day Worldwide, year 1990-2015 (millions)
(Source: MDG Report, 2015)

For global poverty, the MDG targeted of reducing by half the regional proportion of people living in extreme poverty, was achieved in year 2011, ahead of the 2015 deadline (MDG Report 2015). Figure 1.5 shows the latest estimates of the proportion of people living on less than $1.25 a day globally (world)that fell from 36 per cent in 1990 to 15 per cent in 2011. Projections indicate that the global extreme poverty rate has fallen further, to 12 per cent, as of 2015. The poverty rate in the developing regions has plummeted, from 47 per cent in 1990 to 14 per cent in 2015, a drop of

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more than two thirds. By year 2011, all developing regions except sub-Saharan Africa had met the target of halving the proportion of people who lived in extreme poverty. The world's most populous countries, China and India, played a central role in the global reduction of poverty. Due to the progress in China, the extreme poverty rate in Eastern Asia has dropped from 61 per cent in 1990 to only 4 per cent in 2015. Southern Asia's progress is almost as impressive. There is a decline from 52 per cent to 17 per cent for the same period and the rate of reduction has accelerated since 2008. In contrast, sub-Saharan Africa's poverty rate did not fall below its 1990 level until after 2002.

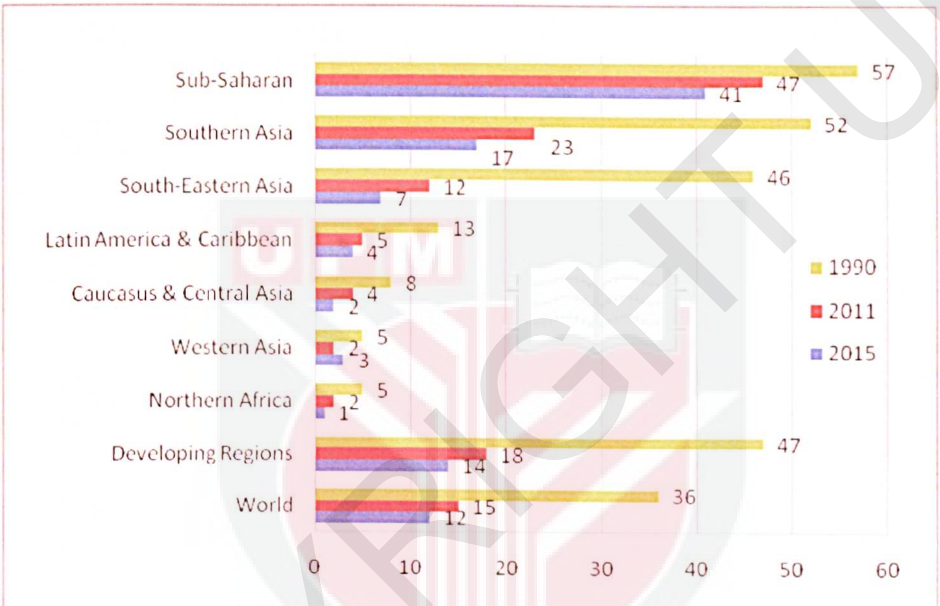

Figure 1.5: Regional Proportion of People Living on Less than $ 1.25 a day, 1990, 2011 and 2015 (%)
(Source: MDG Report 2015)

Even though the decline of poverty has accelerated in the past decade, the region continues to lag behind. More than 40 per cent of the population in sub-Saharan Africa still lives in extreme poverty in 2015.In West Asia, the extreme poverty rate increased from 2 per cent in 2011 to 3 per cent in 2015. On the other hand, income per capita which is proxy by adjusted by Gross Domestic Product (GDP) per capita, measured by purchasing power parity (PPP), in constant 2005 U.S. dollar of the of the household in the most regions of the world has increased steadily in relation to the average per capita income of developed countries. Figure 1.6 illustrates a significant increased in GDP per capita of East Asia and Pacific from U.S. $2000 in 1990 to more than U.S. $12,000 percent in 2015 (World Bank Report, 2016). The economic performance of this region show flexibility in the face of unstable international markets and remains the fastest-growing region in the world, with the region's economic performance prospects remain strong due to its limited exposure to global turmoil, coupled with increasing investment activity.

Despite of the significant increase in GDP per capita of the countries in the most the regions in the world, there were only small changes of GDP per capita in Sub-Saharan Africa and South Asia. The GDP per capita in both regions have been stagnant at U.S. $1800 to U.S. $2000 from 1990 to 2002. Even though about US$ trillion of ODA had given to Sub-Saharan Africa, but countries in this region has experienced only a little increased in GDP per capita, which is US$ 3,695 and in year 2015 from US$ 1,640 in 1990 which is average 3.2 per cent during the period.

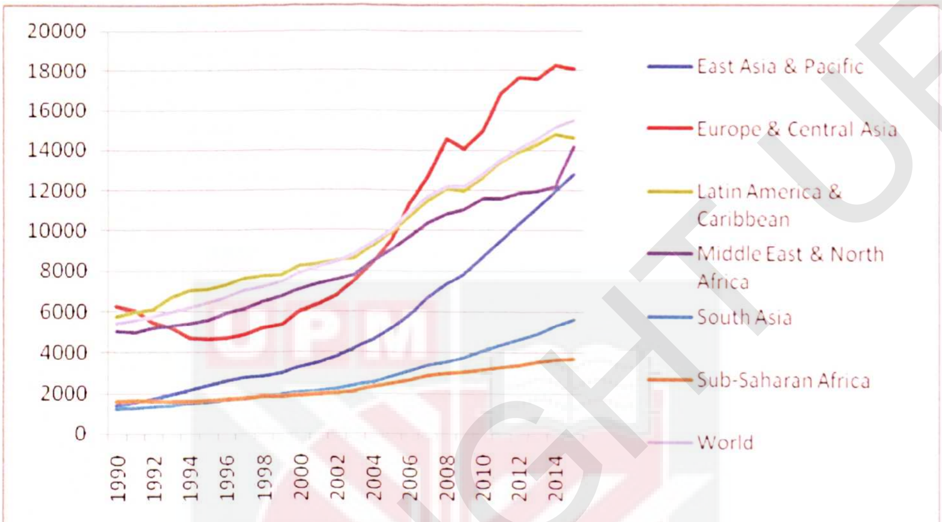

Figure 1.6: Gross Domestic Product Per Capita, Purchasing Power Parity (PPP) Worldwide, 1990-2015
(Source: World Development Indicator Database 2015)

Apart of poverty and GDP per capita, income inequality, which is proxy by Gini index, was another important indicator that represents the economic performance of a country. Gini index measures the distribution of income or consumption expenditure among individuals or households within an economy deviates from an equal distribution. A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality (World Bank Report, 2015). Figure 1.7 indicated that there are decreasing trend of income inequality in the most region in the world started from year 2000 to present accept in Asia and Europe region. The figure illustrates that the average Gini Index in Europe and Asia region from year 2000 to 2013 are stable around 29.5 per cent and 36.5 per cent, respectively.

Notwithstanding enormous progress of GDP per capita increment, income inequality and poverty reduction, it is devastating that about 800 million people still live in extreme poverty and suffer from hunger, without access to basic services (MDG Report, 2015). Over 160 million children under age five have inadequate height for their age due to insufficient food. Currently, 57 million children of primary school age are not in school. Almost half of global workers are still working in vulnerable conditions, rarely enjoying the benefits associated with decent work. About 16,000 children die each day before celebrating their fifth birthday, mostly from preventable causes. The maternal mortality ratio in the developing regions is 14 times higher than in the developed regions. Just half of pregnant women in the developing regions receive the recommended minimum of four antenatal care visits. Only an estimated 36 per cent of the 31.5 million people living with HIV in the developing regions were receiving antiretroviral therapy (ART) in 2013. In 2015, one in three people (2.4 billion) still use unimproved sanitation facilities, including 946 million people who still practice open defecation.

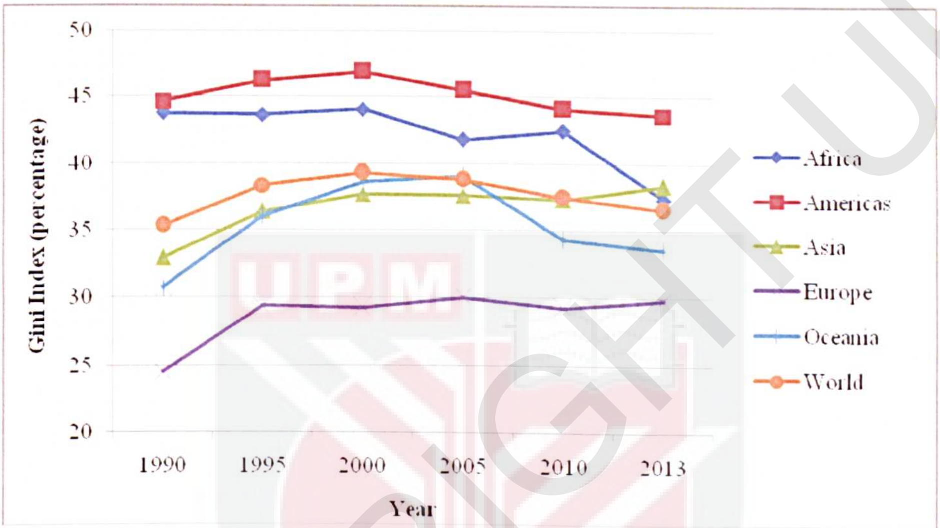

Figure 1.7: Worldwide Income Inequality, 1990- 2013
(Source: Standardized World Income Inequality Database (SWIID), Version 5.0)

Today over 880 million people are estimated to be living in slum-like conditions in the developing world's cities. The region of Sub-Saharan Africa, Southern-Asia and Southern-Eastern Asia continues to have the high prevalence of slum conditions of all regions, estimated at 55 per cent, 31 per cent and 27 per cent, respectively in 2014. However, this represents a decline of almost 10 percentage points in prevalence since 2000. On the other hand, the proportion of the urban population living in slums continues to grow in countries affected by or emerging from conflict. Iraq, for example, experienced an increase of more than 60 per cent between 2000 and 2014. Although the MDG target reached globally, additional efforts are needed to improve conditions for the growing numbers of slum residents, especially in the many countries that still lag behind. Some lessons are drawn from successful experiences over the last 15 years. They include bold policy reforms and implementation of equitable planning and economic policies to prevent future slum growth. Slum reduction requires a combination of complementary approaches, from raising awareness to increase ODA and its effectiveness in providing basic services, along with policy reforms and institutional strengthening (MDG Report 2015). The key to development lies in the quality of a country's political, legal, and economic institutions.

Research has shown that institutions can matter far more than geography (Acemoglu, et al., 2008; and Rodrik, 2004), but also that quality institutions are the result of economic prosperity. Table 1.1 reported the worldwide trend of selected indicators of quality of institution provided by ICRG from year 1990 to 2013. The institutions quality indices that a score of higher index equates to very low risk and a score of lower index equates to high risk. The table indicates Africa have the lowest rate of quality institutions compared to other regions in the world.

Table 1.1: World Wide Selected International Country Risk Guide (ICRG) Indicator, 1990-2013

	1990	1995	2000	2005	2010	2013
			Corruption			
Africa	2.9	2.8	2.2	1.8	2.1	1.8
Americas	2.9	3.3	3.3	2.6	2.6	2.4
Asia	2.8	3.3	3.5	3.0	3.4	3.4
Europe	5.0	4.8	3.9	3.4	3.5	3.4
Oceania	4.7	4.7	4.0	3.8	4.0	4.0
			Law and Order			
Africa	2.2	3.3	3.1	3.0	3.0	2.9
Americas	2.8	3.7	3.4	3.0	2.7	2.7
Asia	2.5	4.6	4.1	3.9	3.9	3.8
Europe	5.1	5.7	5.0	4.9	4.8	4.7
Oceania	5.0	5.0	4.7	4.6	4.5	4.5
			Socioeconomic Condition			
Africa	5.2	5.0	3.6	3.3	3.3	3.1
Americas	5.6	6.1	4.8	5.2	5.2	5.2
Asia	5.4	6.5	5.0	6.3	6.2	6.0
Europe	6.7	6.4	6.8	7.9	7.2	6.9
Oceania	5.4	6.5	7.0	7.8	7.4	7.2
			Internal Conflict			
Africa	5.7	8.3	7.7	8.7	8.5	8.0
Americas	7.0	10.0	8.3	9.4	9.4	9.3
Asia	6.4	10.6	8.7	9.0	8.8	8.2
Europe	11.2	11.8	10.2	10.6	10.3	10.0
Oceania	10.7	11.0	10.7	10.4	10.3	10.2
			Bureaucracy Quality			
Africa	1.6	1.6	1.2	1.2	1.3	1.3
Americas	1.6	1.9	2.2	2.2	2.2	2.2
Asia	1.9	2.3	2.1	2.1	2.2	2.2
Europe	3.1	3.3	3.0	3.0	2.9	2.9
Oceania	3.5	3.5	3.3	3.3	3.3	3.3

(Source: International Country Risk Guide (ICRG), PRS 2015)

However, the relationship between good institutions and economic prosperity may not always be linear or straightforward, but it is clear that weaker institutions undermine the political will. It is necessary to put appropriate policies or implement key reforms. In addition, stable political and legal structures in which property rights are enforced are critical in attracting investors, as is a degree of equality in society that allows different segments to participate in economic life (Acemoglu, 2003).

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More and better, investment is one of the main ingredients of sustained growth. Low-income countries have implemented important political and institutional reforms in recent years. Many of these countries have switched to democratic institutions and multiparty elections. According to the report of the Commission on Growth and Development (2008), "In many countries [in sub-Saharan Africa], if not most, a new generation of leaders is in power, committed to growth and to more open and accountable government. Institutions have also improved in a number of places." Nevertheless, more remains done in many of these countries. Although many nations face serious institutional challenges, the international community has focused on so-called fragile states—countries characterized by weak institutional capacities and governance, social tension, and political instability—in other words; countries caught in the conflict and bad governance traps (Collier, 2007). Fragile states have 9 percent of the developing world's population but 27 percent of the extreme poor (living on less than $1 a day). International organizations use different measures to judge fragility, generally combining aspects of the capacity and accountability of institutions with indicators related to conflict risks. In 2006, the World Bank identified 35 countries as fragile.

1.2.3 Foreign Aid, Quality of Institutions and Economic Growth in Developing Countries

This section presents the recent figure on ODA and Gross Domestic Product (GDP) per capita of the recipient countries by income. Figures 1.8a to 1.8e display the scatter plot of GDP per capita (Purchasing Power Parity (PPP), in constant 2005 US Dollar and aggregate ODA and sectoral allocations of ODA for the sampled countries average over the entire period 1995 to 2014. The fitted line in all scatter plots in Figure 1.8a to 1.8e show a negative relationship between aggregate of ODA and sectoral allocations of ODA with real GDP per capita. Meanwhile, scatter plots in Figure 1.9a to 1.9fillustrate positive correlation between quality of institution and real GDP per capita. Figure 1.9a, 1.9b, 1.9c, 1.9d, 1.9e and 1.9fpresent the scatter plots between selected quality institutions indicators and real GDP per capita.

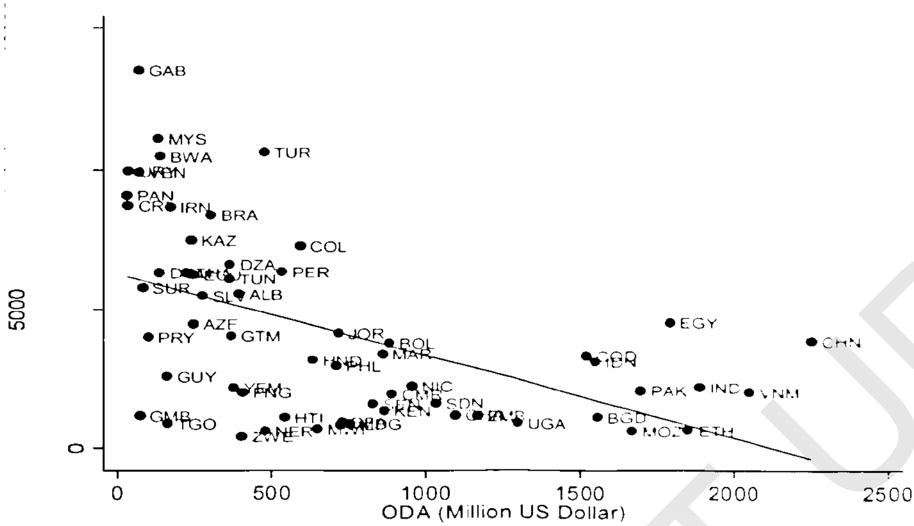

Figure 1.8a: Real GDP Per Capita Vs. Total ODA
(Sources: World Development Indicators (2016), Organization of Economic Corporation and Development (OECD), 2016)

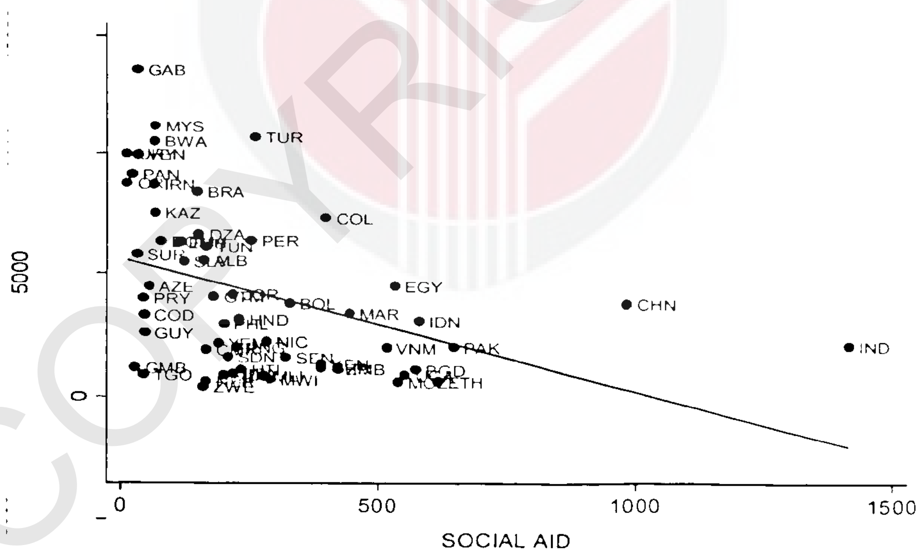

Figure 1.8b: Real GDP Per Capita Vs. Social Aid
(Sources: World Development Indicators (2016), Organization of Economic Corporation and Development (OECD), 2016)

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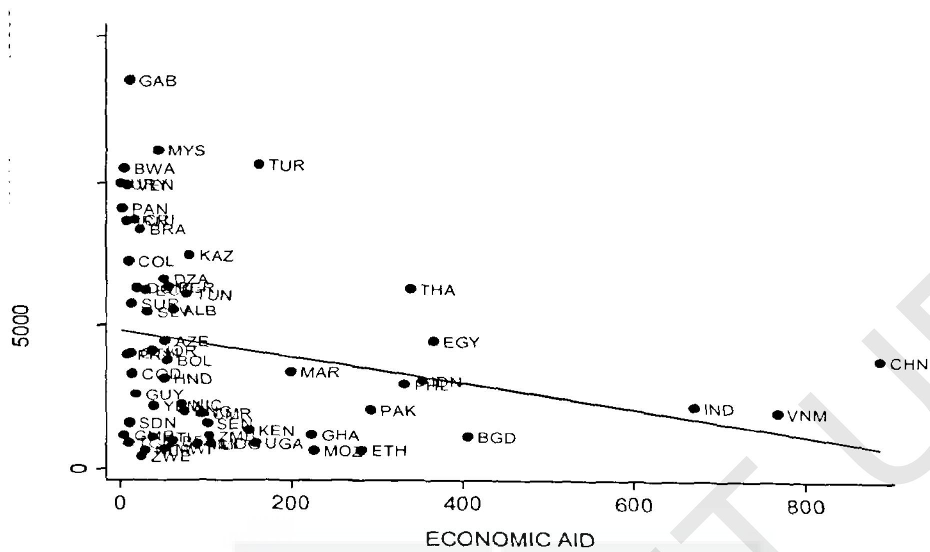

Figure 1.8c: Real GDP Per Capita Vs. Economic Aid
(Sources: World Development Indicators (2016), Organization of Economic Corporation and Development (OECD), 2016)

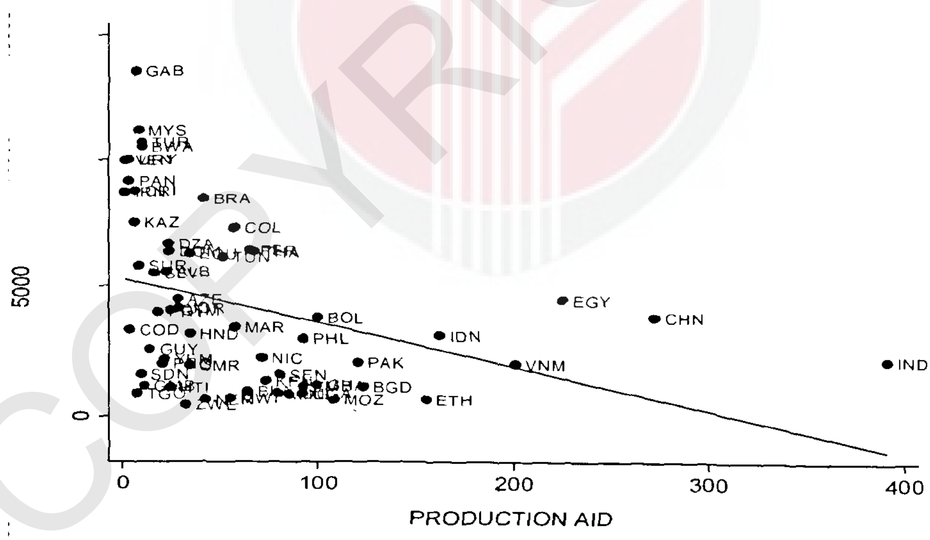

Figure 1.8d: Real GDP Per Capita Vs. Production Aid
(Sources: World Development Indicators (2016), Organization of Economic Corporation and Development (OECD), 2016)

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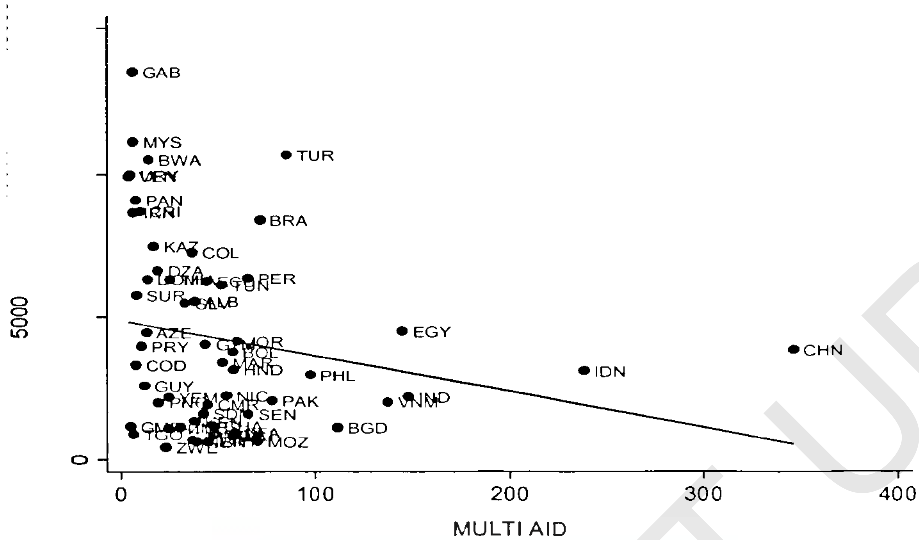

Figure 1.8e: Real GDP Per Capita Vs. Multi Aid
(Sources: World Development Indicators (2016), Organization of Economic Corporation and Development (OECD), 2016)

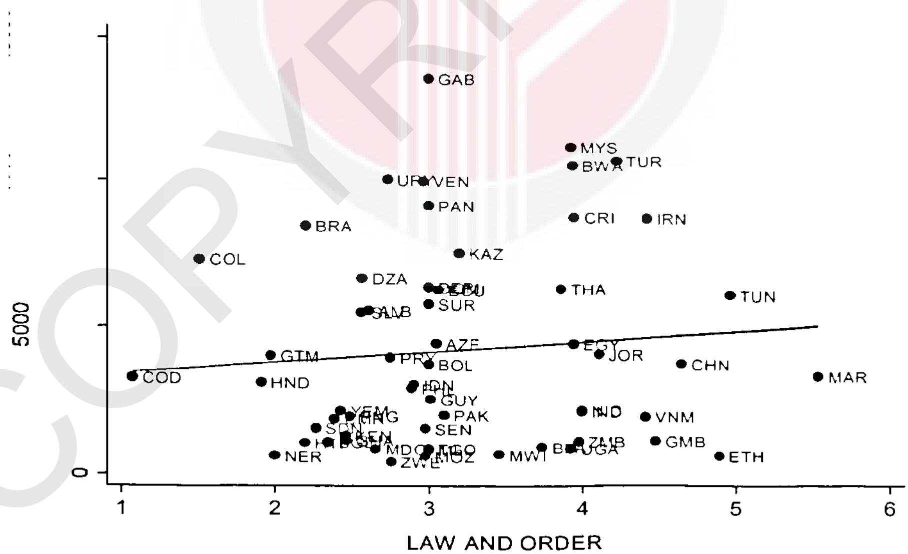

Figure 1.9a: Real GDP Per Capita Vs. Law and Order
(Sources: World Development Indicators (2016), International Country Risk Guide (ICRG), PRS Group, 2011).

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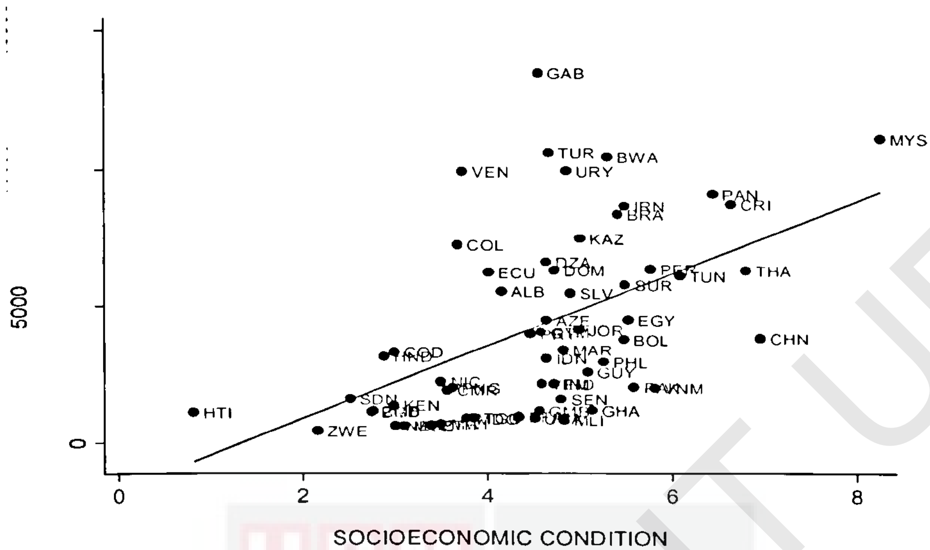

Figure 1.9b: Real GDP Per Capita Vs. Socioeconomic Condition
(Sources: World Development Indicators (2016), International Country Risk Guide (ICRG), PRS Group, 2011)

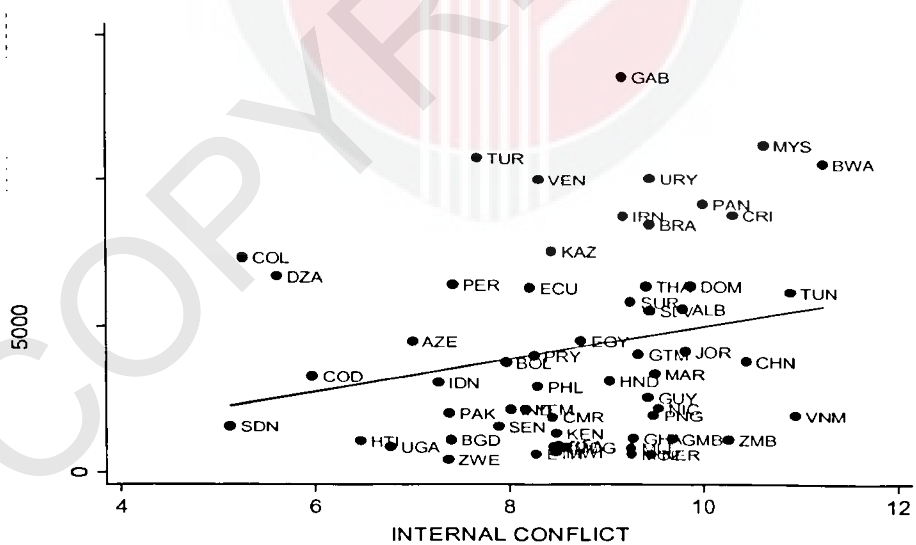

Figure 1.9c: Scatter Plot between Real GDP Per Capita Vs. Internal Conflict
(Sources: World Development Indicators (2016), International Country Risk Guide (ICRG), PRS Group, 2011).

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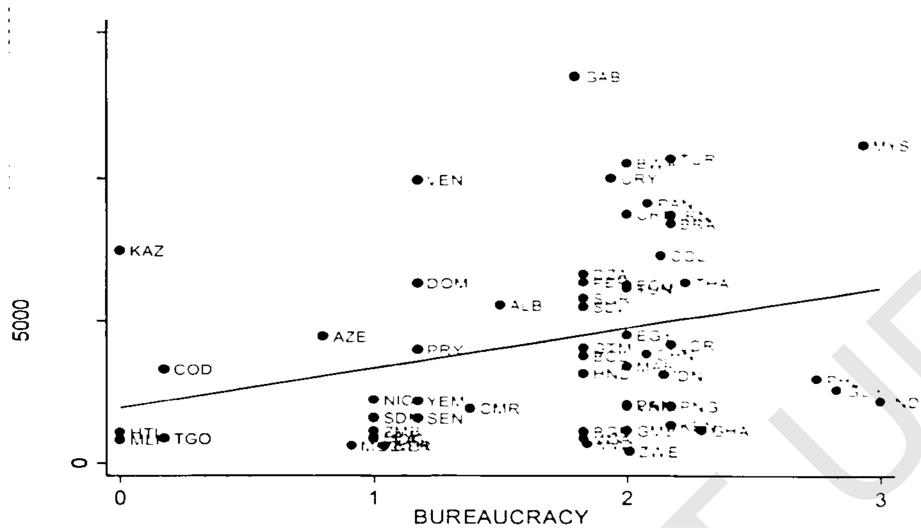

Figure 1.9d: Scatter Plot between Real GDP Per Capita Vs. Bureaucracy Quality
(Sources: World Development Indicators (2016), International Country Risk Guide (ICRG), PRS Group, 2011)

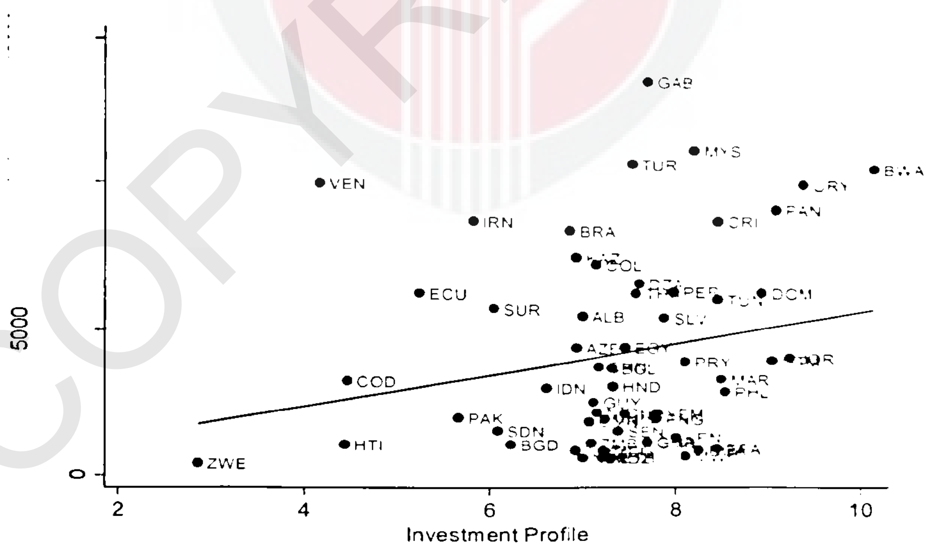

Figure 1.9e: Scatter Plot between Real GDP Per Capita Vs. Investment Profile
(Sources: World Development Indicators (2016), International Country Risk Guide (ICRG), PRS Group, 2011)

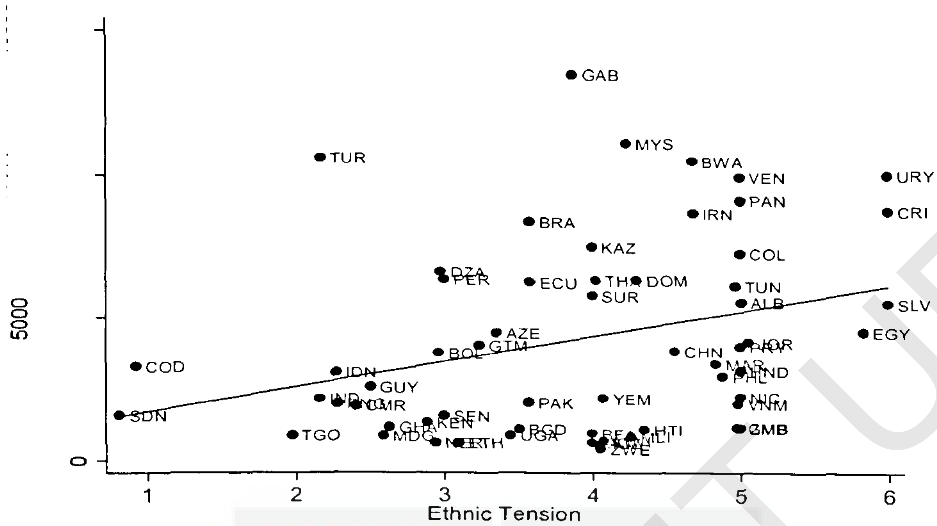

Figure 1.9f: Scatter Plot between Real GDP Per Capita Vs. Ethnic Tension (Sources: World Development Indicators (2016), International Country Risk Guide (ICRG), PRS Group, 2011).

The magnitude of correlation does not imply the actual magnitude of the effect of sectoral allocation of aid and quality of institutions on economic growth. The actual effects of these variables can be confirmed relation could be test using more powerful and robust econometric methodology. However, the positive of correlation between quality institutions and economic growth can pay off the negative correlation of sectoral allocation of aid on economic growth through the interaction terms effect.

1.2.4 Foreign Aid, Quality of Institutions and Income Inequality in Developing Countries

The indicator of income inequality within a country is represented by the Gini Index that runs from 0 (perfect equality) to 100 (complete inequality). Figure1.10a to 1.10e illustrate the scatter plots between total ODA disbursements (in constant 2005 US$, million) and sectoral allocations ODA with income inequality in selected aid recipient countries for the period 1995 to 2014. Figures 1.10a to 1.10e indicate that aggregate and sectoral allocations of ODA have negative relationship with income inequality of the recipient countries.

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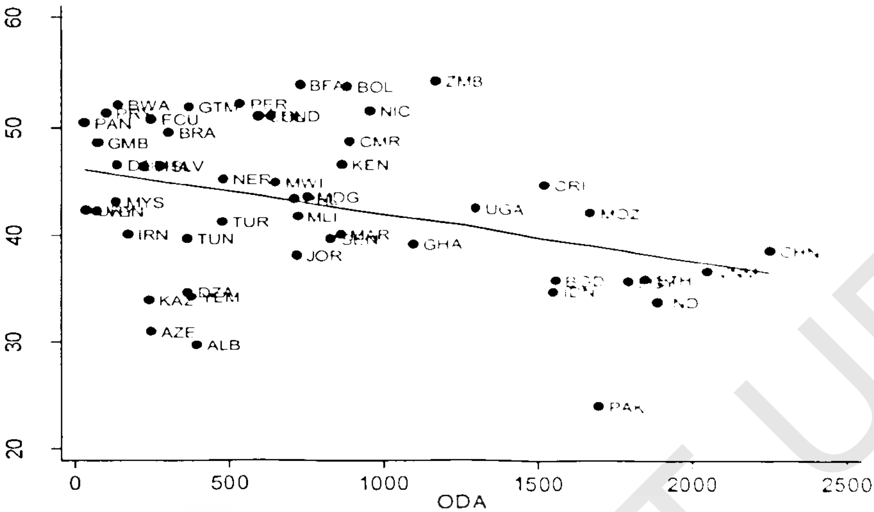

Figure 1.10a: Scatter Plot between Income Inequality (Gini Index) Vs. Total ODA

(Sources: Organization of Economic Corporation and Development (OECD), (2016) and Standardized World Income Inequality Database (SWIID), 2011)

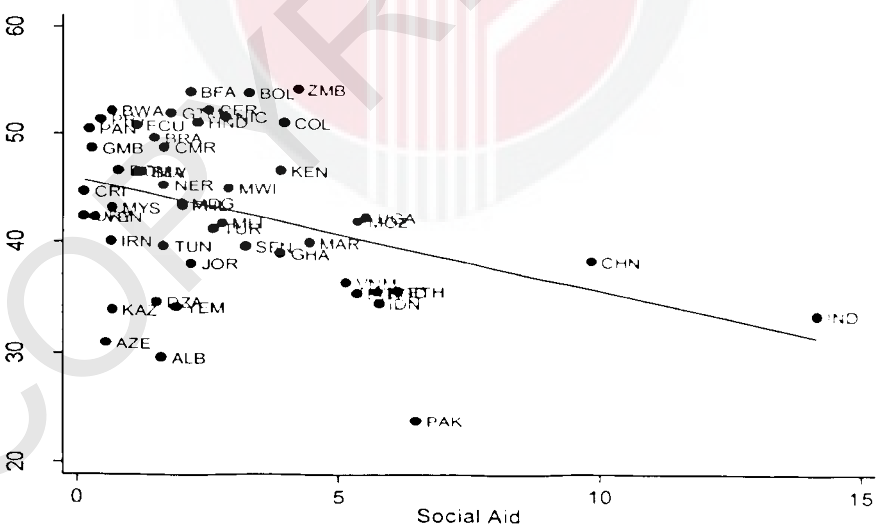

Figure 1.10b: Scatter Plot between Income Inequality (Gini Index) Vs. Social Aid

(Sources: Organization of Economic Corporation and Development (OECD), (2016) and Standardized World Income Inequality Database (SWIID), 2011)

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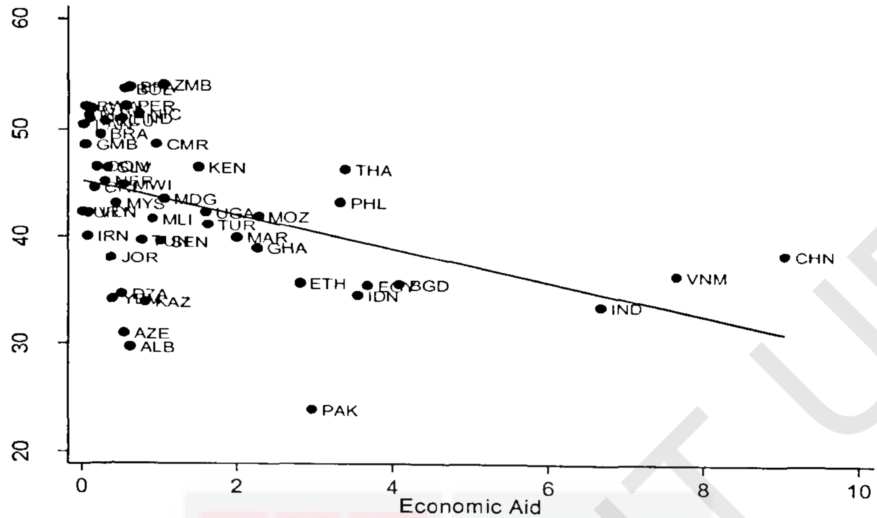

Figure 1.10c: Scatter Plot between Income Inequality (Gini Index) Vs. Economic Aid
(Sources: Organization of Economic Corporation and Development (OECD), (2016) and Standardized World Income Inequality Database (SWIID), 2011)

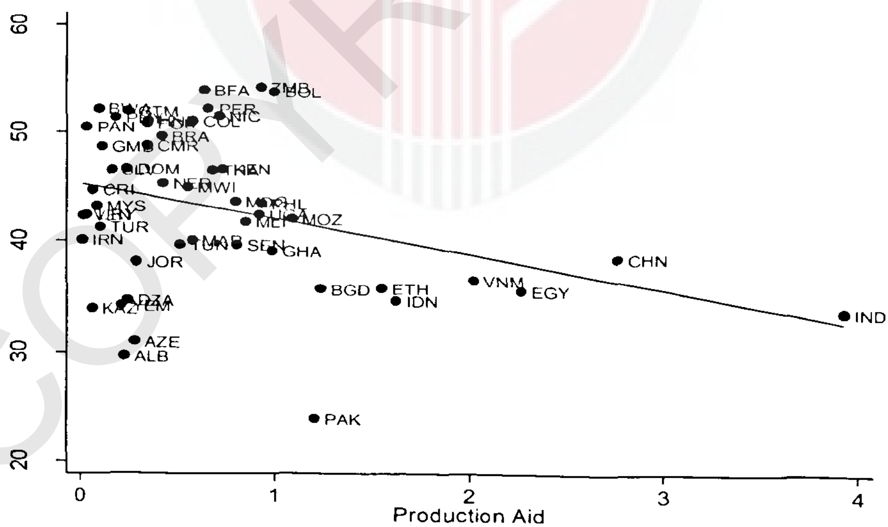

Figure 1.10d: Scatter Plot between Income Inequality (Gini Index) Vs. Production Aid
(Sources: Organization of Economic Corporation and Development (OECD), (2016) and Standardized World Income Inequality Database (SWIID), 2011)

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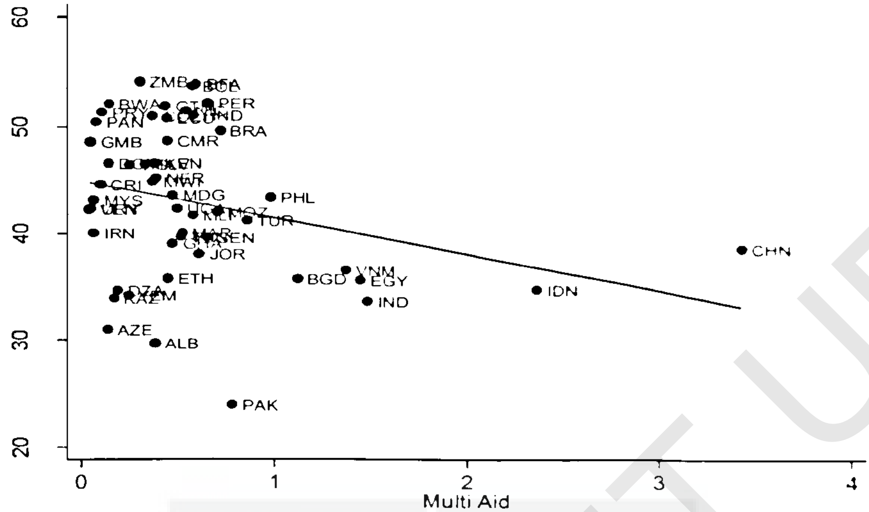

Figure 1.10e: Scatter Plot between Income Inequality (Gini Index) Vs. Multi Aid (Sources: Organization of Economic Corporation and Development (OECD), (2016) and Standardized World Income Inequality Database (SWIID), 2011)

In addition, the scatter plots between Gini Index and six qualities of institutions are depicted in Figure 1.11a to 1.11f.The figure indicates that law and order and portray that law and order and socioeconomic condition are potentially reducing income inequality in the recipient countries. In contrast, internal conflict, investment profile and ethnic tension, are positively correlated with Gini Index. These indicators have seen to increase income inequality in the aid recipient countries.

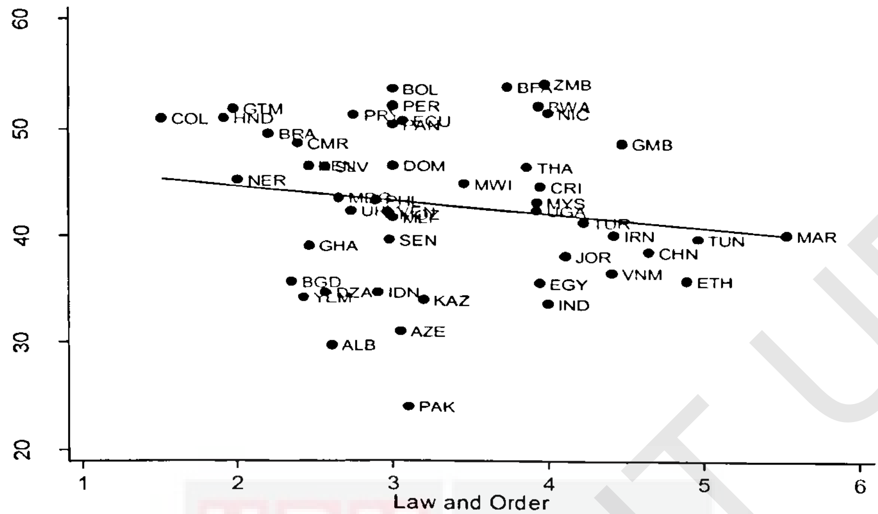

Figure 1.11a: Scatter Plot between Income Inequality (Gini Index) Vs. Law and Order
(Sources: Standardized World Income Inequality Database (SWIID), (2011) and International Country Risk Guide (ICRG), PRS Group, 2011)

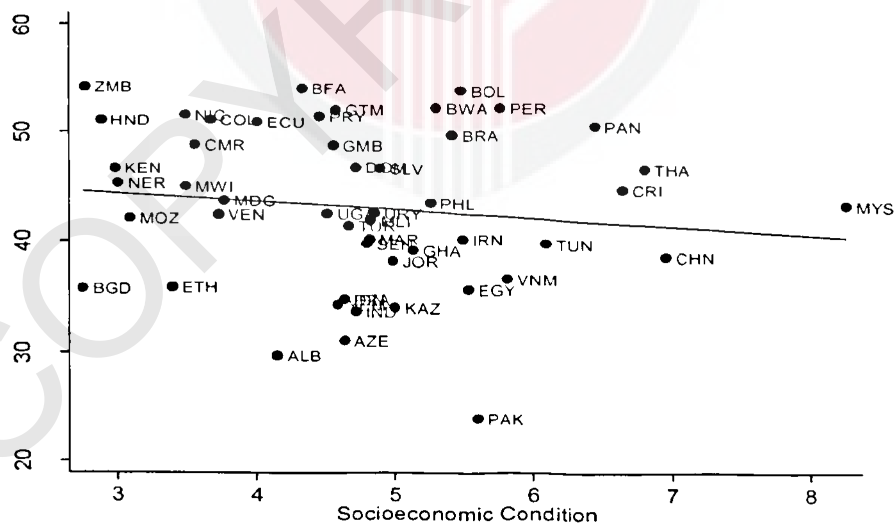

Figure 1.11b: Scatter Plot between Income Inequality (Gini Index) Vs. Socioeconomic Conditions
(Sources: Standardized World Income Inequality Database (SWIID), (2011) and International Country Risk Guide (ICRG), PRS Group, 2011)

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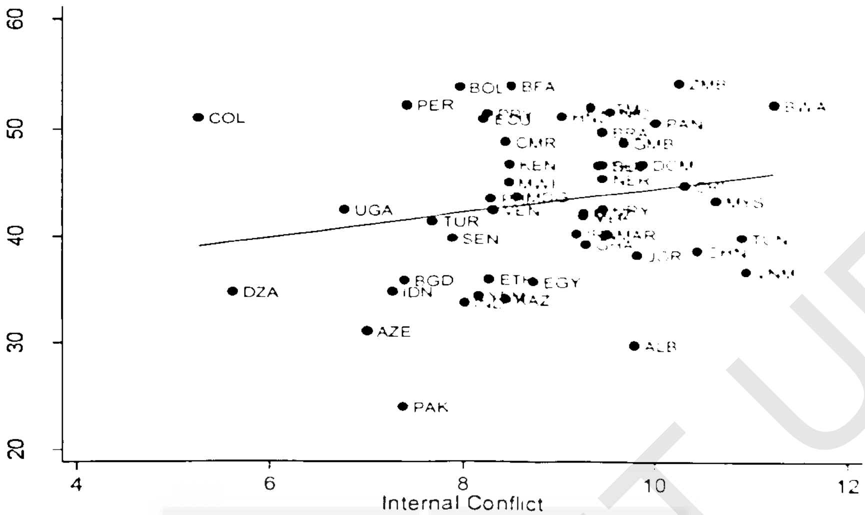

Figure 1.11c: Scatter Plot between Income Inequality (Gini Index) Vs. Internal Conflict
(Sources: Standardized World Income Inequality Database (SWIID), 2011 and International Country Risk Guide (ICRG), PRS Group, 2011)

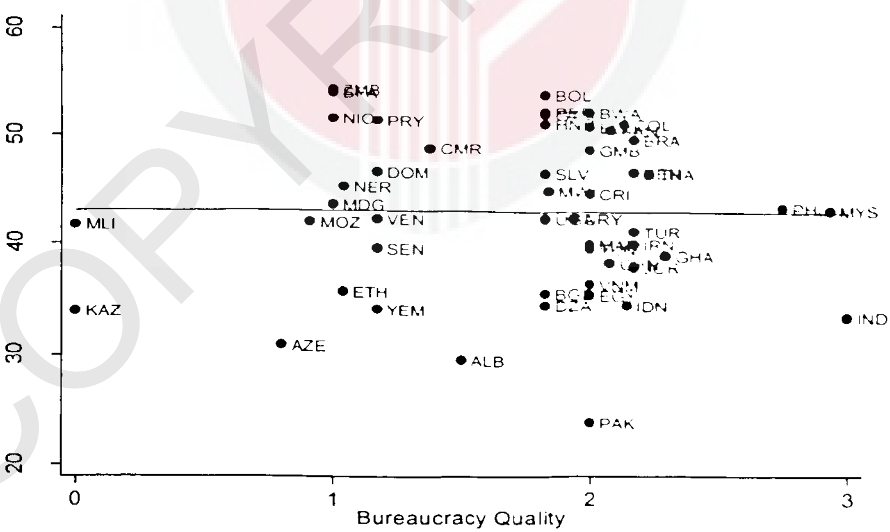

Figure 1.11d: Scatter Plot between Income Inequality (Gini Index) Vs. Bureaucracy Quality
(Sources: Standardized World Income Inequality Database (SWIID), (2011) and International Country Risk Guide (ICRG), PRS Group, 2011)

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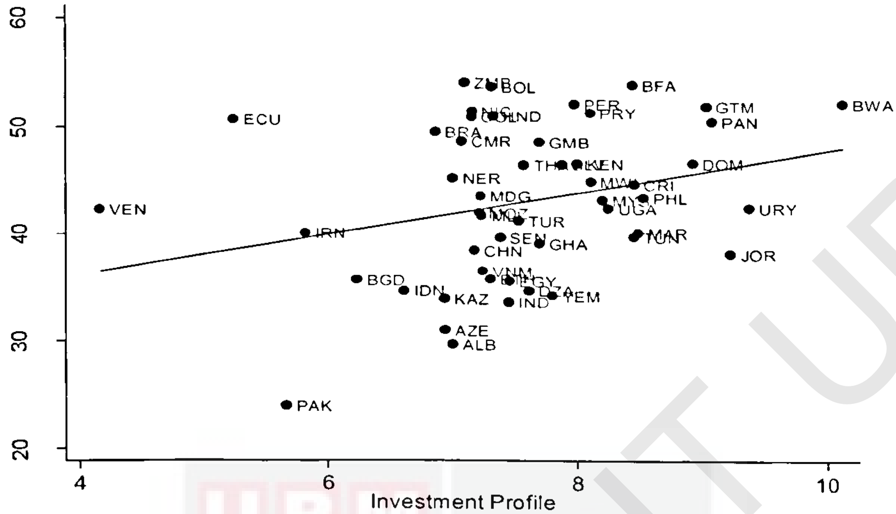

Figure 1.11e: Scatter Plot between Income Inequality (Gini Index) Vs. Investment Profile
(Sources: Standardized World Income Inequality Database (SWIID), (2011) and International Country Risk Guide (ICRG), PRS Group, 2011)

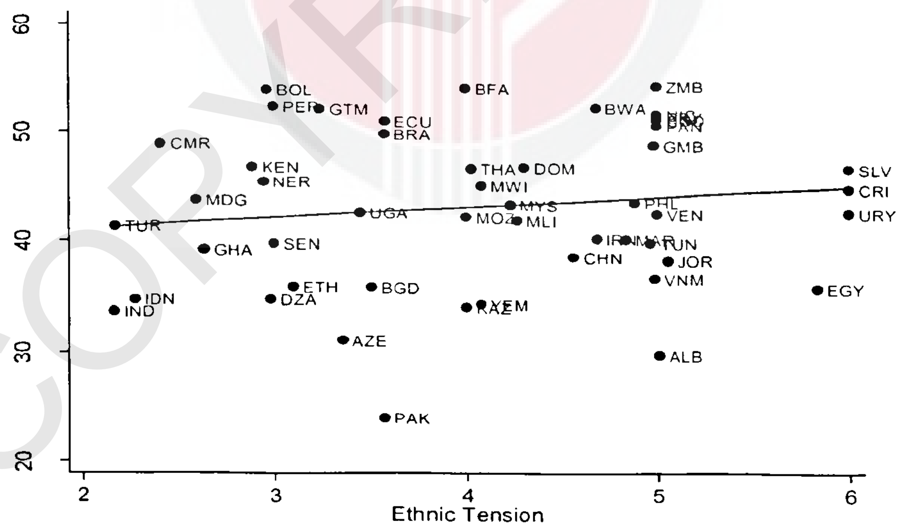

Figure 1.11f : Scatter Plot between Income Inequality (Gini Index) Vs. Ethnic Tensions
(Sources: Standardized World Income Inequality Database (SWIID), (2011) and International Country Risk Guide (ICRG), PRS Group, 2011)

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1.2.5 Foreign Aid, Quality of Institutions and Production Efficiency in Developing Countries

Foreign aid also has an impact on production efficiency on the aid recipient countries. Figures 1.12a to 1.12e illustrate the scatter plots between total ODA disbursements (in constant 2005 US$, million) and sectoral allocation ODA with production efficiency in selected aid recipient countries for the period 1995 to 2014.

The scatter plots in Figure 1.12a to 1.12e describe the positive relationship between aggregate and sectoral allocation of ODA and production efficiency during the period 1995 to 2014.

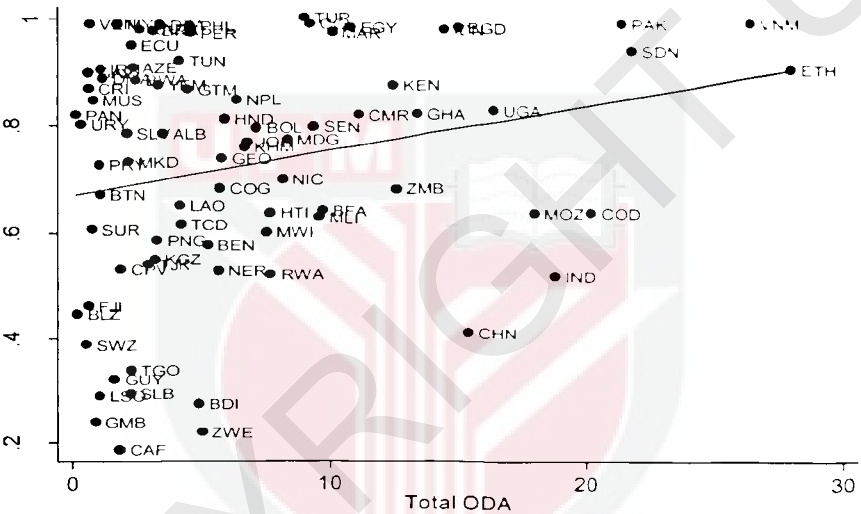

Figure 1.12a : Scatter Plot between Production Efficiency Vs. Total ODA
(Sources: DEA output (Production Efficiency Score) and Organization of Economic Corporation and Development (OECD), 2016)

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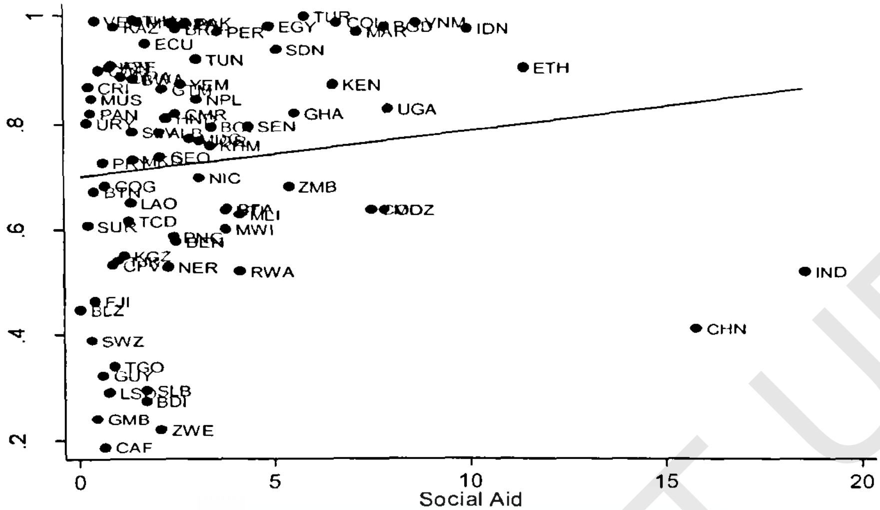

Figure 1.12b : Scatter Plot between Production Efficiency Vs. Social Aid
(Sources: DEA output (Production Efficiency Score) and Organization of Economic Corporation and Development (OECD), 2016)

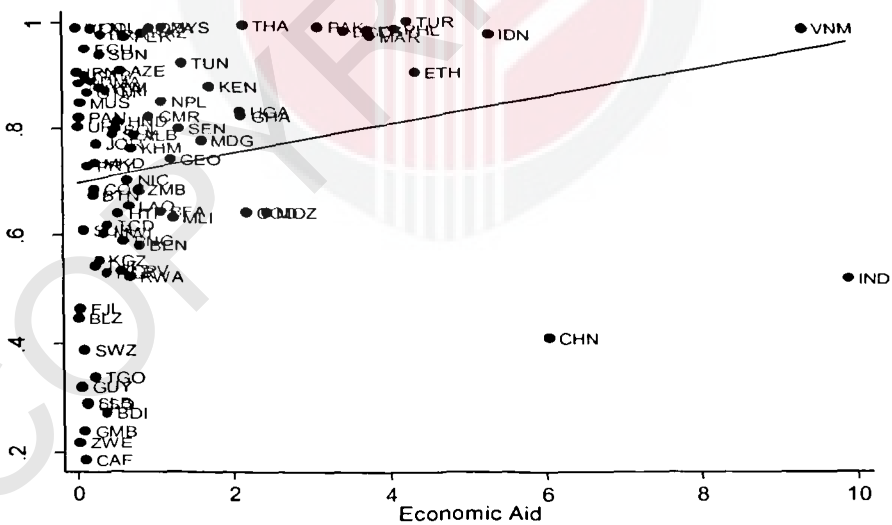

Figure 1.12c : Scatter Plot between Production Efficiency Vs. Economic Aid
(Sources: DEA output (Production Efficiency Score) and Organization of Economic Corporation and Development (OECD), 2016)

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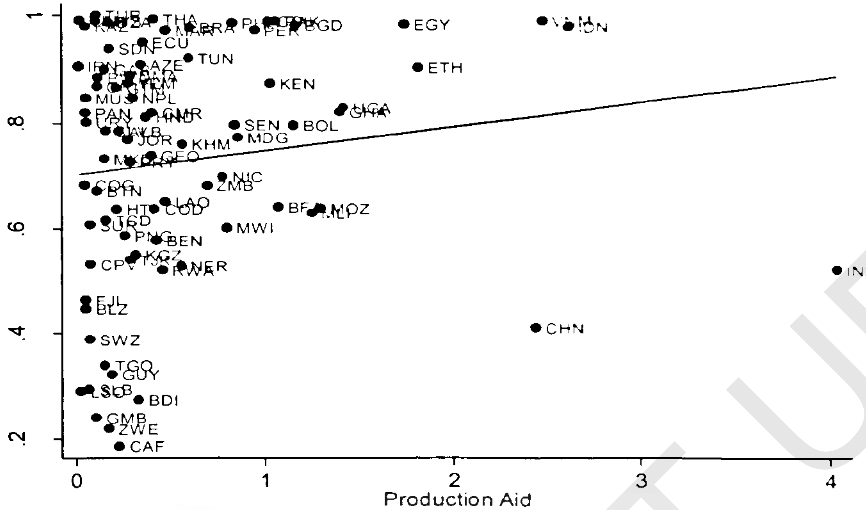

Figure 1.12d : Scatter Plot between Production Efficiency Vs. Production Aid
(Sources: DEA output (Production Efficiency Score) and Organization of Economic Corporation and Development (OECD), 2016)

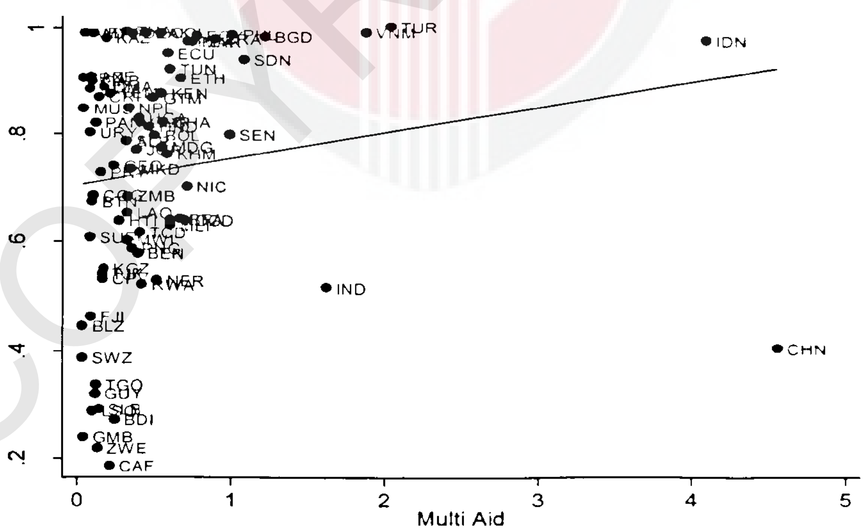

Figure 1.12e : Scatter Plot between Production Efficiency Vs. Multi Aid
(Sources: DEA output (Production Efficiency Score) and Organization of Economic Corporation and Development (OECD), 2016)

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In additions, the scatter plots between institutional qualities with production efficiency are depicted in Figure 1.13a to 1.13f.

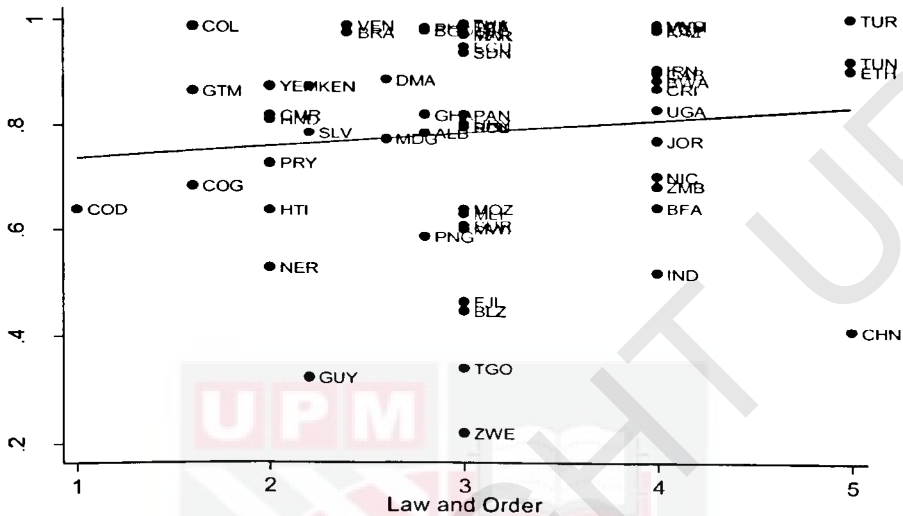

Figure 1.13a : Scatter Plot between Production Efficiency Vs. Law and Order
(Sources: DEA output (Production Efficiency Score) and International Country Risk Guide (ICRG), PRS Group, 2011)

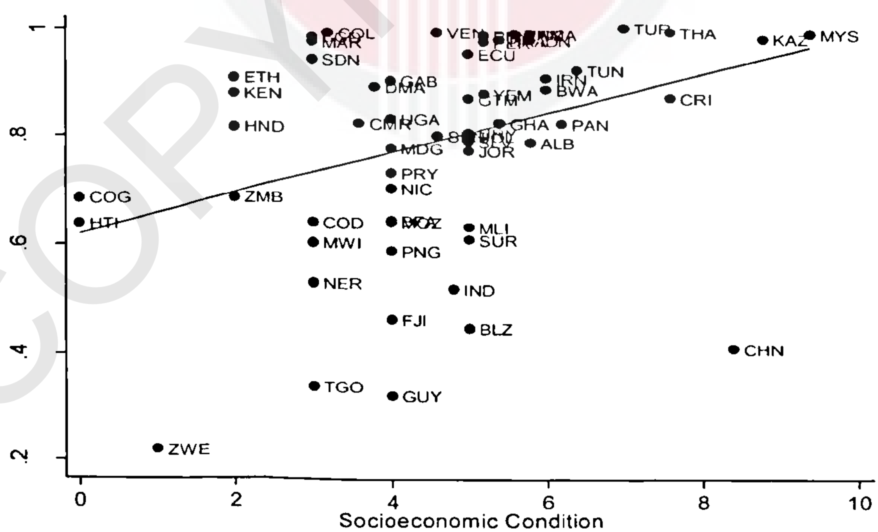

Figure 1.13b : Scatter Plot between Production Efficiency Vs. Socioeconomic Condition
(Sources: DEA output (Production Efficiency Score) and International Country Risk Guide (ICRG), PRS Group, 2011)

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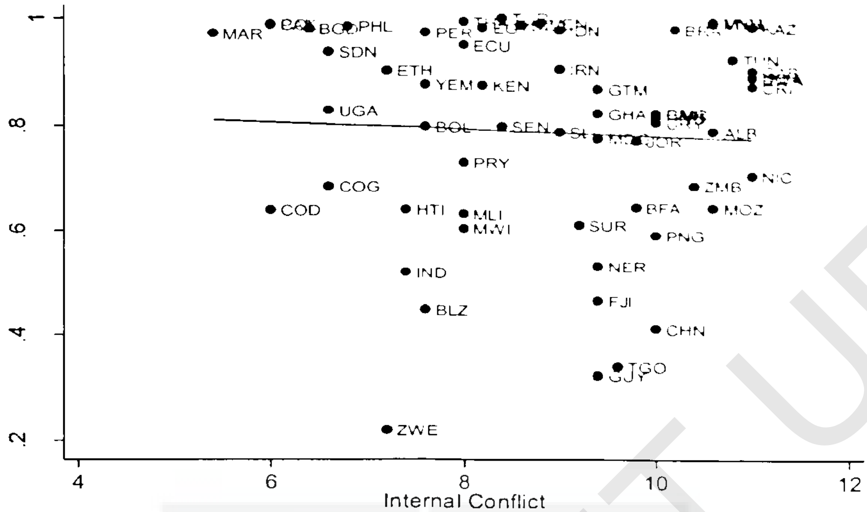

Figure 1.13c : Scatter Plot between Production Efficiency Vs. Internal Conflict
(Sources: DEA output (Production Efficiency Score) and International Country Risk Guide (ICRG), PRS Group, 2011)

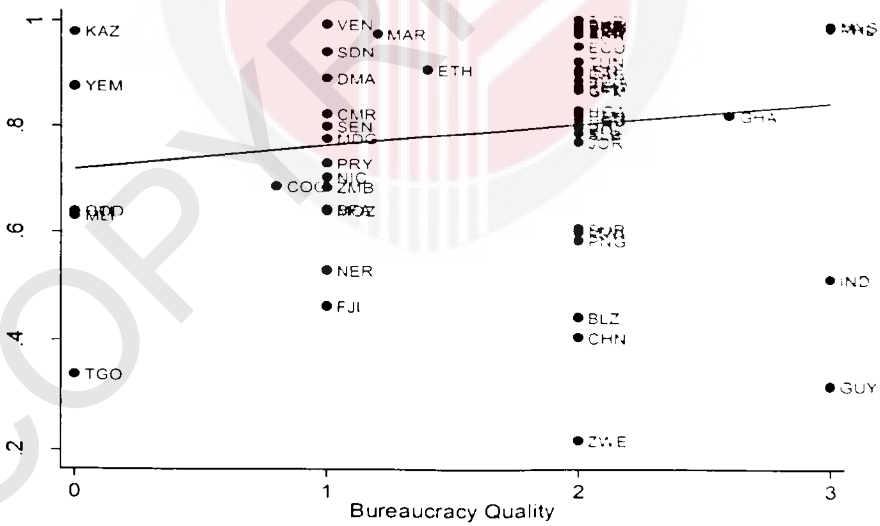

Figure 1.13d : Scatter Plot between Production Efficiency Vs. Bureaucracy Quality
(Sources: DEA output (Production Efficiency Score) and International Country Risk Guide (ICRG), PRS Group, 2011).

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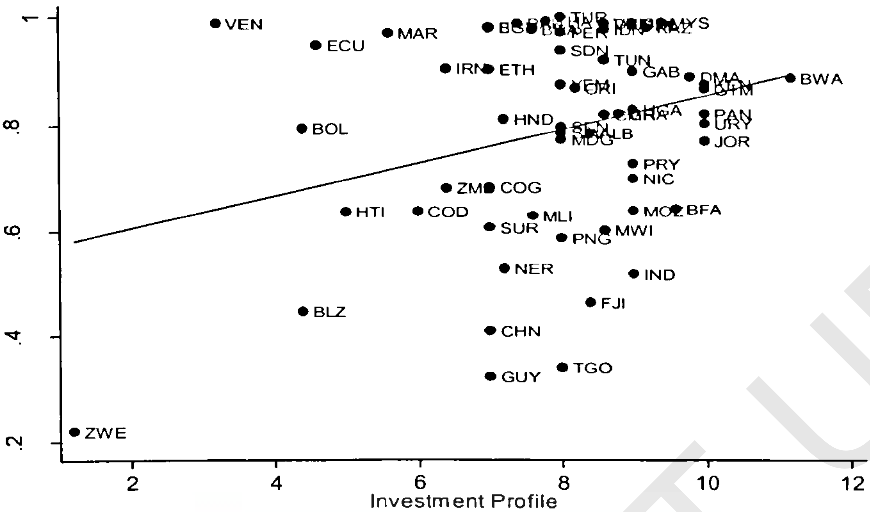

Figure 1.13e : Scatter Plot between Production Efficiency Vs. Investment Profile
(Sources: DEA output (Production Efficiency Score) and International Country Risk Guide (ICRG), PRS Group, 2011)

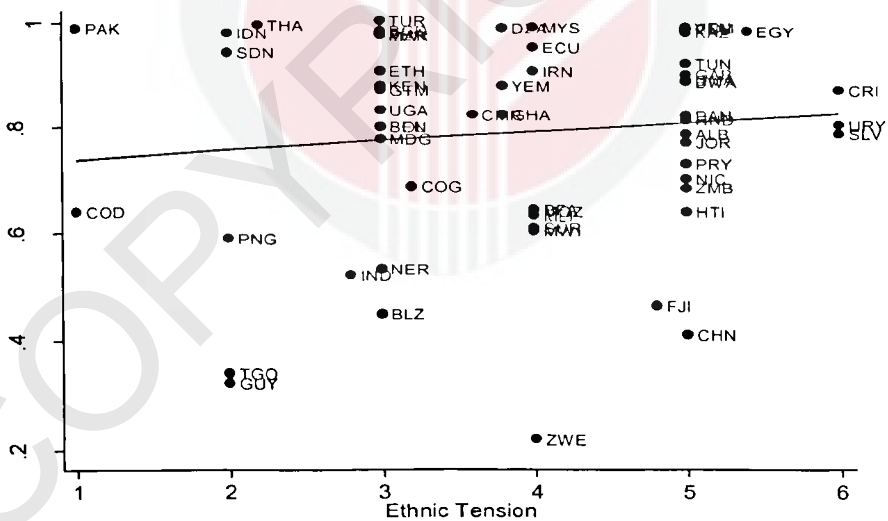

Figure 1.13f : Scatter Plot between Production Efficiency Vs. Ethnic Tension
(Source: DEA output (Production Efficiency Score) and International Country Risk Guide (ICRG), PRS Group, 2011)

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The scatter plots in Figure 13a to 13f show that law and order, socioeconomic condition, bureaucracy quality, investment profile and ethnic tensions have positively correlated to production efficiency.

In conclusion, all the scatter plots portrayed that aggregate and sectoral allocations of ODA correlated with economic growth, income inequality and production efficiency. At the same time most of the quality of institutions has a better and stronger correlation to economic growth, income inequality and production efficiency. Therefore this study predicts that quality of institutions have a significant influence (the interaction effect) on the impact of sectoral allocation of ODA on economic growth, income inequality and production efficiency of ODA recipient countries. Meaning that quality of institutions can determine the impact of sectoral ODA on economic growth, income inequality and production efficiency of the recipient countries.

1.3 Issues and Problem Statements

Foreign aid, in particular Official Development Assistance (ODA) regarded as a key for the achievement of the Millennium Development Goals (MDGs). It can resolve the poverty and income inequality problem by fostering sustained economic growth in the developing countries. Development aid, recognized as a crucial instrument to help poor and developing nations grow out of poverty. In year 2016, the OECD noted that donor nations have provided more than \$4.27 trillion in development of ODA to developing countries, with about one-fifth of that provided by the United States since 1960.

Unfortunately, the growth experiences by many of these countries have not been very satisfactory despite a continual increase in aid. The apparent failure of foreign aid has brought series of debates about the effectiveness of foreign aid among economists and policy makers in both developed and developing countries. The core argument on the ineffectiveness of foreign aid involves with the problem of weak quality of institutions in countries who are receiving foreign aid. Poor institutions encompass various dimensions, such as poor quality of bureaucracy, weak adherence of law, rampant corruption, and mismanagement of public resources. Weak institutions not only prevent development aid from reaching its intended target, but also lessen the magnitude of the impact on other social aspects aimed at improving human welfare in recipient countries.

Therefore, the institutional quality of the recipient countries appears to be the key explanatory variable for the ineffectiveness of foreign aid on economic growth. This argument is supported by World Bank (1998), which pointed out that the failure of foreign aid is cause by weak governance structure and poor institutional quality of the recipient country, known as "crisis of governance". This view implies that aid is effective in the countries that have good quality of institutions and governance. Therefore, the quality of institutions plays as a mediator or pre-requisite of foreign aid effectiveness on increasing economic growth. Thus, study on the impact foreign

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aid on economic growth should take consideration on the quality of institutions of the recipient countries.

The second issue addressed in this study concerns the impact of foreign aid on income inequality of recipient countries. As discussed earlier, ODA, considered as one of the most important factors, which can resolve poverty and income inequality problem by fostering sustained economic growth in the developing world. Though some of developing countries have experienced some positive indications of progress, in general, inequality is still at a very high level for developing countries. Foreign aid potentially causes increasing of income inequality in the developing countries (Layton and Nielson, 2008). As reported in UNDP Report (2016), inequality for developing countries has increased by 11 percent if the growth of population is taken into account (UNDP, 2016). This phenomenon occurs when large inflow of foreign aid, only benefits corrupted and undemocratic governments. Aid usually may not be directly transferred to the poor, as it is the domestic governments that act as representatives of the population of a country, and many governments in poor countries are quite corrupt and inefficient (Khiew, 2013).

Corruption can hamper not only economic development, as many studies suggested, but it also can change the distribution of public resources by diverting the resources towards specific groups. Specifically, corruption redirects aid money away from its intended target to a small segment of the population, increasing income inequality. The poor who depend heavily on government-provided goods and services usually have limited access to the services, and they often describe their experiences with government bureaucrats as unpleasant (Narayan et. al, 2000). Thus, lack of competency and motivation, shirking, and absenteeism among government officials undermine the quality of public goods and services provisions. When a large amount of development aid is transferred through government bureaucratic system, which is often described as corrupt and inefficient, the poor may not benefit much from the transferred resources.

Furthermore, the rule of law, which includes judges, court personnel, and police, is supposedly in place to enforce public accountability in the bureaucracy and ensure public sector integrity. When the rule of law cannot perform its functions, as is often the case in many developing countries, corruption is rampant and government accountability is plummeting, affecting any resource distribution coming through the system. Therefore, good institutional quality is important in decreasing income inequality because it will help government to meet the needs of the poor. Better institutions and governance also decreases income inequality by redistributing income through effective taxation and by decreasing the influence of the "high-income political elites" through crackdowns on corruption. Without good institutions, aid is likely to have a detrimental impact on distribution of income in recipient countries. Thus, it is clear that the effectiveness of foreign aid on reducing income inequality depend on the quality of institutions of aid recipient countries.

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Apart from promoting economic growth and reducing income inequality, aid is also targeted to improve production efficiency in the recipient countries. In addressing the issue of whether foreign aid can lead to increase production efficiency, this study examines the role of institutional quality in fostering the production efficiency in recipient countries. It has been argued that foreign aid failed to increase production efficiency if it is being used unproductively such as unnecessary government expenditure, rent seeking, corruption and excessive capital output (Chen and Singh, 2014). Technological progress is the one of the major key determinants in improving production efficiency. Technological progress means the expansion of the set of production possibilities; an increase in production efficiency is synonymous to a more efficient use of the existing production inputs and corresponds to a convergence towards the production frontier. However, developing countries typically have lower rate of technological progresses compared to developed countries. Therefore, foreign aid will be efficiently and increased the production efficiency in the country that has good quality of institutions.

As discussed in this section, the effectiveness of foreign aid is depending on the quality of institutions of the recipient countries. Thus, it is important to examine the role of quality institutions on the effectiveness of sectoral allocations of foreign aid: i) aid to social sectors; ii) aid to economic sectors; iii) aid to production sectors; and iv) aid to multi sectors on economic growth, income inequality and production efficiency of selected aid recipient countries.

1.4 Research Questions

Several questions need to be answered from the problems discussed in the previous section:

1) What is the impact of the four main sectoral allocations of foreign aid on economic growth, income inequality and production efficiency of the recipient countries?

2) Do the quality of institutions have significant impact on economic growth, income inequality and production efficiency of the recipient countries?

3) Do the quality of institutions have significant influence to the impact of the four main sectoral allocation of foreign aid (interaction effect) on economic growth, income inequality and production efficiency of recipient countries?

1.5 Objectives of the study

The general objective of this study is to examine the role of four sectoral allocations of foreign aid and quality of institutions on economic growth, income inequality and

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production efficiency in developing countries. The specific objectives of this study are:

1) to investigate the role of institutions quality on the impact of the four main sectoral allocations of foreign aid on economic growth in developing countries;

2) to examine whether the impact of the four main sectoral allocations of foreign aid on income inequality in developing countries depends on institutions quality;

3) to analyze whether institutions quality has any contingent effect on the relationship between four main sectoral allocations of foreign aid and production efficiency in developing countries.

1.6 Significance of the study

Firstly, this study contributes to the empirical studies on the effectiveness of foreign aid by investigating the impact of different sectoral allocation of foreign aid on economic growth, income inequality and production efficiency of the recipient countries. Most of the previous studies used aggregate foreign aid figure to analyze the impact of foreign aid on economic growth, income inequality and production efficiency. One of the main weaknesses in using aggregate aid figure is that it leads to an aggregation bias in findings due to the failure in disentangling the individual effects (Cassen, 1994; White, 1998; Mavrotas, 2002a; 2002b; Clemens et al., 2004; Mavrotas, 2005; Mavrotas and Ouattara, 2006a; 2006b; Doucouliagos and Paldam, 2009a; 2009b). Since there are different types of foreign aid by different donors for different purposes, the nature of the foreign aid becomes a challenge for assessing the effectiveness of aid. Not all foreign aid intends to generate economic growth. Some aid is intended for humanitarian purposes; and some may simply improve the standard of living of people in developing countries (Owen, 2009). Thus, accessing the effectiveness using various types of foreign aid especially at allocation level is needed in order to provide valuable information and evidence to policymakers about the magnitude and significant effect of four sectoral allocations of aid on economic growth, income inequality and production efficiency. This information can be a signal to policy makers and donors to execute a more efficient allocation of foreign aid policies in order to achieve the economic and social development goals in developing countries. Secondly, this study contributes to empirical study on the interaction effects of different sectoral allocation of foreign aid with different institutions indicators provided by International Country Risk Guide (ICRG). Most of the previous studies used aggregate institution indicators as a proxy for quality of institution. However, this study analyzes the impact of six components of institutions indicators from the (ICRG), such as: socioeconomic condition, international conflict, law and order, ethnic tensions, bureaucracy quality and investment profile on four sectoral allocations of aid, i.e: social aid, economic aid, production aid and multi aid on economic growth, income inequality and production efficiency. This study provides more detailed and appropriate information about the impact of a every single institution quality indicator on every single sectoral allocations of foreign aid in affecting economic growth, income inequality and production efficiency. This study will alert policy makers about the institutions quality that have significant influence to the effectiveness of sectoral allocations of aid on economic growth, income inequality and production efficiency.

Thirdly, from the policy perspective, policy recommendations can be developed to improve and strengthen the donors' aid allocation policies based on the empirical results to ensure that aid achieves the development goals.

1.7 Scope of the Study

This study utilizes panel data of 59 for the first objective; 50 for the second objective; and 80 (for the third objective) of developing countries covering the period 1995 to 2009 (refer to Appendix A, B and C). The sample of country selected is based on the availability of data. This study focuses on the impact of four main sectoral allocations of aid, such as aid to social sectors, aid to economic sectors, aid to production sectors and aid to multi sectors on economic growth, income inequality and production efficiency. This study utilizes the six political risk-rating components of the International Political Risk Guide (ICRG), (i.e. law and order, socioeconomic conditions, ethnic tensions, internal conflicts, bureaucracy quality and investment profile) to proxy the quality of institutions.

1.8 Organization of the study

The organization of this study is as follows: Chapter 2 defines aggregate and sectoral allocations of foreign aid and briefly describe about the origin of foreign aid. Then, this Chapter reviews the theoretical and empirical evidences on the linkages between foreign aid and quality of institutions on economic growth, income inequality and production efficiency. The research methodology is presented in Chapter 3. It starts by describing the theoretical framework that outlines the basic model of relationship between foreign aid and economic growth, income inequality and production efficiency. Then, this chapter presents the model specification and econometric equations used to test the impact of sectoral allocations of aid on economic growth, income inequality and production efficiency. Chapter 4 presents the empirical results of the analysis and the interpretation of the results. Finally, summary, conclusion, policy implications and recommendation are described in Chapter 5.

REFERENCES

Aigner D.J., Lovell, C.A., Schmidt P. (1977).Formulation and estimation of stochastic frontier production function models. *Journal of Econometrics*, *6*(1), 21–37.

Alesina, A. and Dollar, D. (1998).*Who gives foreign aid to whom and why?* NBER Working Paper No.6612.Washington, D.C.

Ali, S. and Ahmad, N. (2013). A time series analysis of foreign aid and income inequality in Pakistan. *Global Journal of Management and Business Research Economics and* Commerce, *13*(5),10-20.

Alvi, E. and Senbeta, A. (2012). Does foreign aid reduce poverty? *Journal of International Development*, *24*(8), 955-976.

Amemiya, T.(1973).Regression analysis when the dependent variable is truncated normal.*Econometrica*,*41*(Nov.), 997-1016.

Frank,A. G. (1972). The development of underdevelopment. In James D. C,, Andre Gunder Frank, and Dale Johnson, (Eds.), *Dependence and underdevelopment.* Garden City, New York: Anchor Books, p. 3.

Angeles, L. and Neanidis, K.C. (2009).Aid effectiveness: the role of the local elite. *Journal of Development Economics*, *90*(1), 120–134.

Antipin, J., and Mavrotas G. (2006).*On the empirics of aid and growth.* WIDER Research Paper 2006/05. Helsinki: UNU-WIDER.

Arellano, M., and Bond, S. (1994).Some tests of specifications for panel data: Monte Carlo evidence and an application to panel data to employment equations. *Review of Economic Studies*,*58*(2), 277–297.

Asiedu, E. (2014). Does foreign aid in education promote economic growth? Evidence from Sub-Saharan Africa. *Journal of African Development*, *16*(1), 37-59.

Barro, R.J. (1996). Democracy and growth. *Journal of Economic Growth*, *1*(1), 1-27.

Barro, R.J. (1997). *Determinants of economic growth: a cross-country empirical study*. Cambridge, MA: MIT Press.

Barro, R. J. (2000). Inequality and growth in a panel of countries. *Journal of Economic Growth*, *5*(1), 5-32.

Bassanini, A., Scarpetta, S. and Hemmings, P. (2001). *Economic growth: the role of policies and institutions, panel data evidence from OECD countries.* OECD Working Paper No. 283. OECD, Paris.

© COPYRIGHT UPM

Battese, G. E. and Coelli, T.J. (1992).Frontier production functions, technical efficiency and panel data with applications to paddy farmers in India. *Journal of Productivity Analysis*, *6*(4), 247–268.

Battese, G.E., Coelli T.J.(1995). A model for technical inefficiency effects in a stochastic production function for panel data. *Empirical Economics*, *20*(2), 325-332.

Bjornskov, C. (2010). Do elites benefit from democracy and foreign aid in developing countries?. *Journal of Development Economics*, *92*(2), 115-124.

Blundell, R., and Bond, S. (1998).Initial conditions and moment restrictions in dynamic panel models. *Journal of Econometrics*, *87*(1), 115–143.

Boone, P. (1994). *The impact of foreign aid on savings and growth*. Centre for Economic Performance Working Paper No. 1265. London School of Economics, London.

Boone, P. (1996). Politics and the effectiveness of foreign aid. *European Economic Review*, *40*(2), 289-329.

Bornschier, V., Chase-Dunn, C., andRubinson, R. (1978). Cross-national evidence of the effects of foreign investment and aid on economic growth and inequality: a survey of findings and a reanalysis. *American Journal of Sociology*, *84*(3), 651-683.

Bourguignon, F, Levin, V., and Rosenblatt, D. (2009).International redistribution of income. *World Development*,*37*(1), 1-10.

Brautigam, Deborah A., and Knack, S. (2004). Foreign aid, institutions, and governance in sub-saharan Africa. *Economic Development & Cultural Change*, *52*(2), 255-285.

Burill, D. (2007). *Modelling and interpreting interactions in multiple regression*. Available at http://www.minitab.com

Burnside, C. and Dollar, D. (2004). Aid, policies and growth: reply. *The American Economic Review*, *94* (3), 774–780.

Burnside, C., and Dollar,D. (2000).Aid, policies, and growth. *American Economic Review*, *90* (4), 847–868.

Burnside, C. and Dollar, D. (1998).*Aid, the incentive regime, and poverty reduction*. Policy Research Working Paper 1937. World Bank, Development Research Group, Washington D.C.

Calderon, C, Chong, A. and Gradstein, M. (2009). Can foreign aid reduce income inequality and poverty? *Public Choice*, *140*(1), 59-84.

© COPYRIGHT UPM

Campos, N.F., and Nugent, J.B. (1998). Institutions and growth: Can human capital be a link? *Cepal Review*, *64*(1), 7–27.

Campos, N.F., and Nugent, J.B. (1999).Development performance and the institutions of governance: Evidence from East Asia and Latin America. *World Development*, *27*(3), 439–452.

Cassen, R. (1994). *Does aid work?* Oxford: Oxford University Press. Centre for Research in Economic Development and International Trade, University of Nottingham, Nottingham.

Castrillo, Anna. (2011). *Foreign aid's impact on economic growth: conditional on accountable institutions?*. (Master of Arts In Political Science), Louisiana State University, United States.

Chang, C. C., Fernandeze-Arias, E. and Serven, L. (1998*). Measuring aid flows: a new approach*. World Bank, Development Research Group, Washington D.C.

Chauvet, L., and Guillaumont, P. (2002). Aid and growth revisited: policy, economic vulnerability and political instability. Paper presented at the *Annual Bank Conference on Development Economics Towards Pro-Poor Policies*, June, Oslo.

Chenery, H. and Strout, A. (1966). Foreign assistance and economic development. *The American Economic Review*, 56(4), 679-733.

Chenery, H. B. and Carter, N. G. (1973).Foreign Assistance and development performance, 1960-1970.*American Economic Association*, 63(2), 459-468.

Chong, A. (2004). Democracy, persistence, and inequality: is there a political Kuznet's curve?.*Economics and Politics*, *16*(2), 189-212.

Christopoulos, D., Siouronis, G. and Vlachaki, I. (2010).*Democratic reforms, foreign aid and production efficiency*. MPRA Working Papers No. 23607. University Liabrary of Munich, Germany.

Clemens, M., Radelet,S. and Bhavnani, R. (2004).*Counting chickens when they hatch: the short-term effect of aid on growth*. Center for Global Development (CGD) Working Paper No. 44, Washington, D.C.

Collier, P., and A. Hoeffler (2002). *Aid, policy, and growth in post-conflict societies.* World Bank Policy Research Working Paper No. 2902. World Bank, Washington, D.C.

Collier, P., and Dollar, D. (2002).Aid allocation and poverty reduction. *European Economic Review*,*46* (8), 1475–1500.

Collier, P., and Dehn J. (2001).*Aid, shocks, and growth*. World Bank Policy Research Working Paper 2688.World Bank, Washington, D.C.

Collier, P., and Dollar, . (2001).Can the world cut poverty in half? how policy reform and effective aid can meet the international development goals?.*World Development*, *29*(11), 1787–1802.

Collier, P. and Dehn, J. (2001). *Aid, shocks, and growth.* World Bank Policy Research Working Paper. Washington, D.C.

Collier, Paul and Dollar, David. *Aid allocation and poverty reduction*. Development Research Group, World Bank. Washington, D.C.

Collier, P. and Gunning, J. (1999). Explaining African economic performance. *Journal of Economic Literature*, *37* (1), 64-111.

Cordella, T., and Dell'Ariccia, G. (2003). *Budget support versus project aid.* IMF Working Paper 03/88. International Monetary Fund, Washington, D.C.

Cordon and Neary (1982). Booming sector and de-industrialization in a small open economy. *Economic Journal*, *92*(368), 825-48.

Deininger, K.and Squire, L. (1998). New ways of looking at old issues: inequality and growth. *Journal of Development Economics*, *57*(2), 259–287.

Dacy, D. C. (1975). Foreign aid, government consumption, saving and growth in less-developed countries. *The Economic Journal*, *85*(339), 548-561.

Dalgaard, C., and Hansen, H. (2001).On aid, growth and good policies. *Journal of Development Studies*,*37* (6), 17–41.

Dalgaard, C., Hansen, H., and Tarp, F. (2004).On the empirics of foreign aid and growth. *Economic Journal*,*114* (496),191–216.

Darlington, R. (1990). *Regression and Linear Models*. McGraw-Hill, New York.

Dietrich, S. (2011). The politics of public health aid: why corrupt governments have incentives to implement aid effectively. *World Development*, *39*(1), 55-63.

Doucouliagos, H. and Paldam, M. (2008). Aid effectiveness on growth: a meta study. *European Journal of Political Economy*, *24*(1), 1–24.

Downs, A. (1957).*An economic theory of democracy*. New York: Harper.

Dreher, A. and Gaston, N. (2007). Has globalization increased inequality? *Review of International Economics*, *16*(3), 516-536.

Doucouliagos, H. and Paldam, M. (2010).Conditional aid effectiveness: a meta-study. *Journal of International Development*, *22*(4), 391-410.

Downs, A. (1964). *Inside bureaucracy*. Boston: Little, Brown and Company.

Drine, I. and Nabi, M.S. (2010). Public external debt, informality and production efficiency in developing countries. *Economic Modelling*,*27*(2), 487-495.

Durbarry, R., Gemmell, N., and Greenaway, D. (1998).*New Evidence on the impact of foreign aid on economic growth*. CREDIT Research Paper 98/9.

Ear, S. (2006). *The Political economy of aid, governance, and policy-making: Cambodia in global, national, and sectoral perspectives*. (Doctor of Philosophy in Political Science), University of California, Berkeley.

Easterly, W., Levine, R., and Roodman, D. (2004).Aid, policies and growth: acomment. *American Economic Review*, *94*(3), 774–780.

Easterly, W. (1997).*The ghost of financing gap*. Policy Research Working Paper No. 1807. World Bank, Development Research Group, Washington D.C.

Easterly, W., Levine, R. and Roodman, D. (2003). *NewData, New Doubts: A Comment on Burnside and Dollar's Aid, Policies and Growth*. NBER Working Paper No.9846.Washington, D.C.

Erikson, F.(2005).*Aid and development: Will it work this time?* International Policy Network 2005 Great Britain: Hanway Print Centre.

Fayissa, B. and El-Kaissy, M. I. (1999). Foreign aid and economic growth of developing countries (LDCs): further evidence. *Studies in Comparative International Development*, *34*(3), 37-50.

Feeny, S. and Rogers, M. (2008). Public sector efficiency, foreign aid and small island developing states. *Journal of International Development*, *20*(4), 526 546.

Fielding D., and Mavrotas, G. (2005). *The volatility of aid*. WIDER Discussion Paper 2005/06. UNU-WIDER, Helsinki.

Gallup, J. L., and Sachs, J. D. (1999).*Geography and economic development*. In B. Pleshovic and J. E. Stiglitz (eds.), Annual World Bank Conference in Development Economics, 1998 Proceedings. Washington, D.C.: World Bank.

Gallup, J. L., Jeffrey, S. D., and Mellinger, A. D. (1999). Geography and economic development. *International Regional Science Review*,*22*(2), 179-232.

Giles, J. A. (1994). Another look at the evidence on foreign aid led economic growth. *Applied Economics Letters*, *1* (11), 194-199.

Gong, L. and Zou, Heng-fu. (2001). Foreign aid reduces labor supply and capital accumulation. *Review of Development Economics*, 5(1), 105-118.

Graham, C. and O'Hanlon, M. (2001). Making foreign aid works. *Foreign Affairs*, *July/August Issue*.

Hansen, H., and F. Tarp (2000). Aid effectiveness disputed. *Journal of International Development,12*(3), 375–398.

Hansen, H., and F. Tarp (2001).Aid and growth regressions. *Journal of Development Economics,64*(2), 547–570.

Herzer, D. and Nunnenkamp, P. (2012). The effect of foreign aid on income inequality: evidence from panel cointegration. *Structural Change and Economic Dynamics*, *23*(3), 245–255.

Hodler, R. (2007). Rent seeking and aid effectiveness. *International Tax and Public Finance*, *14*(5), 525-54.

Honore, B. E. (1992). Trimmed lad and least squares estimation of truncated and censored regression models with fixed effects. *Econometrica*, *60* (3), 533-565.

Hirano, Y. (2013). *Aid, institutions, and growth: building institutions matter for development effectiveness*. Graduate School of International Development (GSID) Discussion Paper No. 192. Japan.

International Monetary Fund (IMF)(2003). *International Financial Statistics Database.IMF in Sub-Saharan Africa.* IMF Working Paper WP/01/112, Washington, D.C.

Islam, A. (1992). Foreign aid and economic growth: an econometric study of Bangladesh. *Applied Econometrics*, *24*(5), 541-544.

Jondraw, J., Lovell, C.A.K., Materov, I., and Schmidt, P. (1982). On the estimation of technical inefficiency in stochastic production function model. *Journal of Econometrics,19*(2-3), 233–238.

Khan, M.A. and Ahmed, A. (2007). Foreign aid—blessing or curse: evidence from Pakistan. *The Pakistan Development Review*, *46*(3), 215–240.

Khieu, S. (2013). *Essays on the impact of aid and institutions on income inequality and human welfare*. (Doctor of Philosophy in Public Policy), Georgia State University.

Knack, S. (2004). Does foreign aid promote democracy? *International Studies Quarterly*, *48*(1), 251-266.

Knack, S. (2001). Aid dependence and the quality of governance: cross-country empirical tests. *Southern Economic Journal*, *68*(2), 310-329.

Knack, S. (2000). *Aid dependence and the quality of governance: a cross-country empirical analysis*. World Bank Policy Research Paper.

Krugman, P. R. and Obsfeld, M. (2003).*International Economics: Theory and Policy*. Pearson Education, Boston, USA.

Layton, T., and Nielson, D. (2009). *Aiding Inequality: the effect of foreign aid on income inequality*. Brigham Young University.

Lensink, R., and White, H. (2001). Are there negative returns to aid?.*Journal of Development Studies*, *37*(6), 42–65.

Lensink, R., and Morrissey,O. (2000).Aid instability as a measure of uncertainty and the positive impact of aid on growth.*Journal of Development Studies*,*36*(3), 31–49.

Li, H., Squire, L., and Zou, H. F. (1998).Explaining international and inter temporal variations in income inequality. *Economic Journal*,*108*(446), 26–43.

Liew, Chung-Yee, Mohamed, M R., and Mzee, S. S. (2012). The impact of foreign aid and economic growth in east African countries. *Journal of Economics and Sustainable Development*, *3*(12), 129-188.

Mavrotas, G. (2002a). Aid and growth in india: some evidence from disaggregated aid data. *South Asia Economic Journal*, *3*(1),19–49.

Mavrotas, G. (2002b). Foreign aid and fiscal response: does aid disaggregation matter?.*Review of World Economics*, *138* (3), 534-559.

Mavrotas, G. (2005). Aid heterogeneity: looking at aid effectiveness from a different angle. *Journal of International Development*, *17*(8), 1019-1036.

Mavrotas, G., and Ouattara,B. (2006a). Aid disaggregation, endogenous aid and the public sector in aid-recipient economies: evidence from côte d'ivoire. *Review of Development Economics*,*10*(3), 434–451.

Mavrotas, G., and Ouattara, B. (2006b). Public fiscal behaviour and aid heterogeneity in aid recipient economies. *Journal of Developing Areas*,*39*(2), 1–15.

Mavrotas, G. (2003). *Which types of aid have most impact?* Paper presented at WIDER (*World Institute for Development Economic Research*) Conference on Sharing Global Prosperity, in Helsinki, Finland.

Mbaku, J.M. (1993). Foreign Aid and Economic Growth in Cameroon. *Applied Economics*, *25*(10),1309-1314.

McGillivray M (2006). *Aid allocation to fragile states*. WIDER Discussion Paper 2006/01, World Institute for Development Economics Research, United Nations University, Helsinki.

Mohamed, M. R., Kaliappan, S. R., Ismail, N. W., Azman-Saini, W. W. N. (2014). impact of foreign aid and foreign direct investment on economic growth: evidence from Sub-Saharan African countries. *Jurnal Ekonomi Malaysia*, *48*(1), 63-73.

Morrissey, O. (2001). Does aid increase growth?. *Progress in Development Studies, 1*(1), 37-50.

Mosley, P. (1980). Aid, savings and growth revisited. *Bulletin of the Oxford Institute of Economics and Statistics*, *42*(2), 79–95.

Mosley, P., Hudson, J. and Horrell, S. (1987).Aid, the public sector and the market in less developed countries. *Economic Journal,97*(387), 616–641.

Mosley, P. (1980). Aid, savings and growth revisited. *Bulletin of the Oxford University Institute of Economics and Statistics*, *42*(2), 79-95.

Nelson, R. (1956). A theory of the low-level equilibrium trap in underdeveloped economies. *American Economic Review*, *46*(5), 894-908.

Organization for Economic Co-operation and Development (OECD).(n.d.a). Aid statistics. Official development assistance – definition and coverage, Available Online:http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm#Definition [Accessed 30th November 2013]

Organization for Economic Co-operation and Development (OECD). (n.d.b). CPA data series by sector, Available Online: http://www.oecd.org/development/aid-architecture/cpa.htm [Accessed 30th November 2013]

Organization for Economic Co-operation and Development (OECD).(n.d.c). Development Co-operation Directorate (DCD-DAC). DAC members, Available Online: http://www.oecd.org/dac/dacmembers.htm [Accessed 30th November 2013]

Organization for Economic Co-operation and Development (OECD). (n.d.d). The Paris Declaration on Aid Effectiveness and the Accra Agenda for Action [pdf] Available Online:http://www.oecd.org/dac/effectiveness/parisdeclarationandaccraagendaforactionfullrelateddocumentatio n.htm [Accessed 11th November 2013]

Organization for Economic Co-operation and Development (OECD), Query Wizard for International Development Statistics. (n.d.e). QWIDS data query, Available Online: http://stats.oecd.org/qwids/ [Accessed 2 December 2013]

Sunkel, O. (1969). National development policy and external dependence in Latin America, *The Journal of Development Studies*, *6*(1), 23-48.

Ouattara, B. (2005). A New Database on Project and Program Aid Disbursement and Its Application the Savings Displacement Hypothesis. *Economics Department Discussion Papers* 0501. The University of Manchester, Manchester.

Ouattara, B. (2007). Foreign aid, public savings displacement, and aid dependency in cote d'ivoire: an aid disaggregation approach. *Oxford DevelopmentStudies,35*(1), 33–46.

© COPYRIGHT UPM

Outtara, B. (2003). *Foreign Aid, saving displacement and aid dependency in cote d'ivoire: an aid disaggregation approach*. University of Manchester, School of Economic Studies.

Papanek, G. (1972). The effect of aid and other resource transfers on savings and growth in less developed countries. *Economics Journal*, *82*(327), 934-950.

Papanek, G. F. (1973). Aid, Foreign Private Investment, Savings and Growth in Less Developed Countries. *Journal of Political Economy*, *81*(1), 121–130.

Pedersen, K. R.(1996). Aid, investment and incentives. *Scandinavian Journal of Economics*, *98*(3), 423-438.

Peter, H. and White, H.(1998). *Survey of Foreign Aid: History, Trends and Allocation*. paper presented to the Development Economics Research Group in Copenhagen.

Rajan, R. G., and Subramaniam, A. (2005a). *Aid and growth: what does the cross-country evidence really show?* IMF Working Paper 05/127.International Monetary Fund, Washington D.C.

Rajan, R. G., and A. Subramanian (2005b).*What undermines aid's impact on growth?*I MF Working Paper 05/126.International Monetary Fund, Washington, D.C.

Cassen,R.,(1994). *Does Aid Work, Second Edition*. Oxford: Clarendon Press.

Rodrik, D., Subramanian, A., and Trebbi, F. (2004). Institutions rule: the primacy of institutions over geography and integration in economic development. *Journal of Economic Growth*, *9*(6), 131-165.

Roodman, D. (2004). The *anarchy of numbers: aid, development, and cross-country empirics*.CGD Working Paper 32.Center for Global Development, Washington, D.C.

Roodman, D. (2007). The anarchy of numbers: aid, development and cross-country empirics. *The World Bank Economic Review*, *21*(2), 255-277.

Sachs, J. D., and Warner, A. (1995). Economic reform and the process of global integration. *Brooking Papers on Economic Activities*, *26*(1), 1-118.

Sachs, J. D. (2005). *The end of poverty: economic possibilities for our time*, The Penguin Press: New York.

Sala-i-Martin, Xavier (1994). Economic growth cross-sectional regressions and the empirics economic growth. *European Economic Review*, *38*(3), 739-747.

Sala-i-Martin, Xavier (1996). The classical approach to convergence analysis. *The Economic Journal*, *106*(437), 1019-1036.

Shafiullah, M.(2011).Foreign Aid and its Impact on Income Inequality. *International Review of Business Research Papers*, *7*(2), 91-105.

Singh, R.D. (1985). State Intervention, foreign economic aid, savings and growth in LDCS: some recent evidence.*KYKLOS*, *38*(2), 216-232.

Solt, F., (2009). Standardizing the world income inequality database. *Social Science Quarterly*, *90*(2), 231-242.

Solt, F. (2011). The standardized world income inequality database, SWIID Version 3.1, December 2011. http://dvn.iq.harvard.edu/dvn/dv/fsolt/faces/study/StudyPage.xhtml?studyId=36908&tab=files. [Accessed September 2014]

Solt, F. (2013a). The standardized world income inequality database, SWIID Version 4.0, September 2013, Available Online: http://hdl.handle.net/1902.1/11992 [Accessed 12th November 2014]

Solt, F. (2013b). Using the standardized world income inequality database [pdf], SWIID Version 4.0, September 2013, Available Online: http://hdl.handle.net/1902.1/11992 [Accessed 12th November 2014] Summers, H., and R. Heston (1991).

Santos, T. D. (1971). The structure of dependence in K.T. Fann and Donald C. Hodges, eds., *Readings in U.S. Imperialism.* Boston: Porter Sargent.

Tezanos, S., Quiñones, A. andGuijarro, M. (2013). Inequality, aid and growth: macroeconomic impact of aid grants and loans in Latin America and the Caribbean. *Journal of Applied Economics*, *16*(1), 153-177.

The Penn World Table: An extended set of international comparisons, 1950–1988. *Quarterly Journal of Economics*, *106*(2), 327–368.

Pham, T. H. H. (2015). *Income inequality and foreign aid*, (LEMNA) No.EA 4272, Institute of Economics and Management, University of Nantes, France.

Tobin, J. (1958). Estimation of relationships for limited dependent variables. *Econometrica*, *26*(1) 24-36.

Veiderpass, A. and Anderson, P. A. (2007). *Foreign aid, economic growth and o efficiency development*, Swedich Agency for Development Evaluation (SADEV) Report.

Voivodas, C. S. (1973). Exports, foreign capital inflow and economic growth. *Journal of International Economics*, *3*(4), 337–349.

Wacziarg, R., and K. H. Welch (2002).*Trade liberalization and growth: new evidence*. Mimeo. Stanford University, Stanford, C.A.

© COPYRIGHT UPM

White, H. (1998). *Aid and macroeconomic performance: theory, empirical evidence and four countries cases*. London: Macmillan.

Windmeijer, F. (2000). *A finite sample correction for the variance of linear two- step gmm estimators*.IFS Working Paper 00/19. Institute for Fiscal Studies.

World Bank (1998).*Assessing aid: what works, what doesn't, and why*. Washington, DC: World Bank.

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