MANAGING FOR RESULTS: ANALYSING THE FACTORS THAT AFFECT EFFECTIVENESS OF FOREIGN AID IN MYANMAR

By

THIDA, WIN

THESIS

Submitted to

KDI School of Public Policy and Management

In Partial Fulfillment of the Requirements

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Committee in charge:

Professor Yoon Cheong CHO, Supervisor

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Approval as of December, 2017

DEDICATION

To my family

ABSTRACT

MANAGING FOR RESULTS: ANALYSING THE FACTORS THAT AFFECT EFFECTIVENESS OF FOREIGN AID IN MYANMAR

By

THIDA WIN

This study examines the effectiveness of foreign aid in Myanmar especially in health sector. This study also examines the relationship between foreign aid and infant mortality rate of Myanmar, Cambodia and Viet Nam for 2002 -2015. The empirical results show that there is negative relationship between foreign aid and infant mortality rate. The foreign aid can be effective with sound governance and lower rate of corruption. Infant mortality rate can be reduced with good sanitation facilities and decreasing number of HIV/AIDS addicted person. This study uses the SPSS regression method for analyzing the relationship between factors.

Keywords: foreign aid, infant mortality rate, corruption, governance effectiveness, HIV/AIDS, sanitation facilities, GDP growth

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TABLE OF CONTENTS

LISTS OF TABLES

LISTS OF FIGURES

I. Introduction

1.1 Background of the Study

Last fifty years ago, the major challenges of the system of official development assistance are simple country-focused assistance and understanding of theses ineffectiveness of assistance and changing to effective and achieve the poverty reduction and development objectives (Kanbur and Sandler, 1999). Official development assistance consists of two parts namely official and concessional provisions. ODA is highly used to measure aid performance (http://www.oecd.org). ODA performs as main player to contribute the financial development (Dollar and Levin, 2006). Official development assistance is regarded as the strategic tool in the developing countries to enhance economic conditions and social welfares. However, the positive impact of foreign aid on economic stability remained as a questionable issue (Durbarry, Gemmell and Greenaway, 2008).

Foreign aid is defined in different ways such financial assistance, goods or services from international organizations to the recipient countries (Tsikat, 1998). Aid provided to poor or developing countries has various objectives such as: aid provided as a moral or ethical responsibility to help the poor (Humanitarian aid); or to support strategic self -interests of the donor (Political); and to develop sound financial markets in benefit of both nations (Economic) and the financial aid could be provided either through the government, which is then called Official Development Assistance (ODA), and aims to enhance the development of the economic and the welfare of the recipient, or through capital market or private grants (private flows) (Boone, 1996).

Since its independence, Myanmar has been the recipient of varying types and levels of aid from different regions, including official development assistance and humanitarian assistance

from UN institutions and aid to Myanmar increased annually until the 1988 uprising (Banki, 2009). Myanmar has been receiving support from the international community through different methods to help improve the human rights situation in the country and raise the welfare of its people. During military government period till 2011, Myanmar could not receive much international assistance. From 2011, the government of Myanmar has profound political, social, and economic changes in the country in the process of its transformational reform.

Myanmar government is also aware of the importance of international cooperation in the achievement of speedy economic growth. Consequently, international development organizations focus on Myanmar for development aid and projects.

Aid is a strategic tool if it is practiced in line with the National Strategic Development Plan (Chanboreth & Hach, 2008). Cho (2011) mentioned that aid effectiveness is a key issue in delivering aid together with expansion of aid volume. In order to attract more international aid, Myanmar is required to employ aids transparently. On the other hand, it also needs to reveal the transparency and accountability of the projects. In this way, it can grasp the attention of international organizations and derives economic benefits into the building of democratic and modernized nation.

1.2 Problem of Statement

This paper has focused on analyzing the factors that lead to effectiveness of international aid especially in the health sector in Myanmar. It is impossible to analyze the overall amount that flowed to Myanmar in overall sectors. But little research has been done yet to completely identify the aid effectiveness in Myanmar. Many donors were interested in giving more aid to health sector in Myanmar by different ways such as Non-governmental Organizations (NGOs),

International Non-governmental Organizations (INGOs) and Civil Society Organization. Therefore, this study will fill the gap in the research on international aid effectiveness in Myanmar especially in the health sector using theoretical and empirical analysis between the years 2002-2014 and also aim to give an overview of the situation of Myanmar regarding international assistance. On the basis of its findings, this paper aims to make aid policy recommendations to Myanmar's aid policy makers on how to manage international aid in an effective way.

1.3 Research Objectives and Research Questions

The main objective of this study is to build on previous studies to examine the effectiveness of foreign aid especially in the public health sector in Myanmar. This study will be exploring the empirical evidence on the effectiveness of foreign aid in Myanmar by using dependent variables such as the infant mortality rate and explanatory variables such as foreign aid, GDP growth, population, corruption, HIV/AIDS, sanitation facilities and governance effectiveness during the period of 2002 to 2015. In this paper, the author aims to answer the research questions.

Based on research objectives, research questions are: Is international aid effective in Myanmar's health sector? Which factors strongly reduce infant mortality rate? In particular, this study investigates effects of foreign aid on reducing infant mortality rate. Then, it studies the other factors such as foreign aid, GDP growth, population, corruption, HIV/AIDS, sanitation facilities and governance effectiveness.

1.4 Organization of paper

This study is structured into 4 chapters, part one is about the introduction and background of the study. Part two will review a brief on both theoretical and empirical literature. Part three will explain the empirical analysis of the results and discussion. Part four will feature a summary, conclusions and policy implications.

II. Literature Review

2.1 Foreign Aid in Developing Countries

Aid needs to be defined as more than a source of cash flow into a nation. It can strengthen the international ties with donor countries. It can also be regarded as the channel of wealth. If functions as a business, taking the role of import in the accepted nations and export in the delivered ones (IDA). Foreign aid is aimed at promoting the economic growth and has helped the transformation process of the recipient countries in various ways. Aid is utilized as the carrier of development in the recovery process of a conflict-plagued nation. It can also be applied as a strategic tool to bring commercial interests of the donor agencies (Collier and Dollar, 2001).

Nowadays, international organization presses the importance of removing developing countries out of poverty. They find out various ways such as providing financial assistance and offering to lighten the burden of international debts to meet MDGs goals (Aiyar, Berg and Hussain, 2005). For instance, the bigger the volume of foreign aid, the more it is able to enhance the economic growth in the long run. Foreign aid is considered to have an important role in improving not only economic growth but also the national development goals of developing countries (Chanboreth & Hach, 2008).

2.1.1 Development of Foreign Aid in Developing Countries

In 1960 the Organization for Economic Cooperation and Development (OECD) has established the Development Assistance Committee (DAC) which consists of 23 developed countries who agreed to offer Official Development Assistance (ODA) to the developing countries and the LDCs (OECD, 2006). Foreign aid functions as a business, taking the role of import in the accepted nations and export in the delivered ones. What has aid financed in

developing countries? There are a lot of analysts who endeavor to reduce the gap between the poor and rich nations (Pokorná and Smutka, 2009). Aid means more than economic and political cooperation. It also represents the effective and attentive aid of developed and international organization nations. Aid can be offered to promote food security, finance and developments of poor countries (Pokorná and Smutka, 2009). Foreign aid makes a contribution to the transformation processes of a nation, policy implementation processes, reform nationwide and providing of public services (World Bank, 1998). The countries which employ aid effectively should be priority for allocations (Lee, Seon and Park, 2012).

The issue of reducing poverty is the main problem of globalization and should pay attention to this issue. Rich nations make effort to assist the developing nations in different ways. They use aid for poor nations to counteract the poverty. They scale up the amount of aid. As another way, they also provide financial assistance to relieve foreign debt. They open the necessary channel to increase the access of exports from developing countries. What important most is their actions to raise the hope of reducing gap between poor nations and themselves (Heller, 2005).

Foreign aid is aimed at promoting the economic growth and has helped the transformation process of the recipient countries in various ways. Aid is utilized as the carrier of development in the recovery process of a conflict-plagued nation. It can also be applied as a strategic tool to bring commercial interests of the donor agencies (Collier and Dollar, 2001). Donor countries have more tendencies to assist the countries which possess the capable institutions, the control on per capita income, the policy for population and other systems for aid allocations (Dollar and Levin, 2006).

2.2 Foreign Aid in Myanmar

Since 1988, Myanmar has been receiving support from the international community through different methods to help improve the human rights situation in the country and raise the welfare of its people. During the military government till 2011, Myanmar did not receive much international assistance. There have been economic, political and social changes in Myanmar since 2011. After the first post-military new government (2011-2015) was established, the government's budget was insufficient. So, international assistance was invited in and an enormous amount of international aid entered Myanmar.

It is crucial for Myanmar to find out adequate policy and management to accept incoming aid. In this way, foreign aid policy will be major determinant of economic growth in the long run in Myanmar. In particular, foreign aid comes to Myanmar in different patterns, sometimes marker-oriented purposes. However, in the follow-up, Myanmar has been weak in its monitoring and evaluation process - one of the measurements of the effectiveness of international aid.

2.2.2 Development of Foreign Aid in Myanmar

It is widely accepted that Myanmar has four constraints regarding with land-locked, military government, conflict and natural resources. Moreover, it still has economic obstacles. In considering how to move out of poverty, international aid becomes important. Civilian government took over the authority and practiced market economy which is different from military government. From that time onward, there is an increase in foreign aid which performs the big role in reducing poverty rate in Myanmar.

The report of ADB (2012) emphasized that macroeconomic instability hinders the prospects of investment in both local and international scenario. This system failure also leads to

a fall in ODA about 2.6 billion of US dollars with a year (1988-1989). It showed 1.46 billion of US dollars by 2006 (the World Bank, 2009). In order to address the financial issues, Myanmar government needs to employ development aid as strategic tool. It is required to invite development projects and attracts international investors with impressive macroeconomic performance.

Tsikat (1998) stated that aid can be categorized into development aid (program aid, project aid and technical assistance) and emergency assistance broadly.

2.3 Governance and Foreign Aid

Matthias and Steffen (2010) pointed out that many studies have proved governance matters for economic and social development of the country. In empirical view, Busse and Groning (2009) defined the relationship between aid as the main interest and control variables such as trade openness, freedom of press, conflicts and population through empirical results. By increasing the amount of aid, it was seen that there was a worsening of governance. In considering of aid provision, it is crucial to put the countries with adequate policies to utilize again in the first place (Burnside and Dollar, 2000). Dollar and Levin (2006) pointed out the own policies and institutions of the developing countries are keys to be sustainable development and good policies and good governance at every level are essential to enhance the ODA effectiveness. Lack of capacities in institutions, sound rules and regulations, transparencies can hinder the flow of foreign aids. In addition, high corruption in the country can also reduce the extent of aid contributions (Brautigam and Knack, 2004).

2.4 Corruption and Foreign Aid

Corruption means that the presence of discretionary decision making. Corruption has the underlying meaning that resources are eroded unnoticeable and sometimes they are attributed to the higher positions. There is no transparency in the allocation processes.

Conventional wisdom suggested that foreign aid is more effective in less corrupt states. But Simone Dietrich pointed out this conclusion is too broad because it based on the aggregate aid flows. So, the researcher focused on public health sector and developed an argument for corrupt recipients governments have incentives to comply with donor objectives.

According to the studies of Svensson (2000), previous research expressed that high corruption stems from the competitiveness between social groups which attempt desperately to achieve the aid projects. Knack (2001) pointed out that in technical assistance aid, reduction in the efficiencies of bureaucracy and soundness of laws has no significant impact on corruption. On the other hand, Tavares (2002) showed that aid could decrease corruption and their results were statistically and economically significant. Alesina and Weder (2002), it was found that the more a country received aid, the more likely the country would get corrupted.

Burnside and Dollar (2000) noted that foreign aid correlated positively with growth when it is merged with good economic policies, it would become more effective in increasing growth. Conversely, Busse and Groning (2009) also noted that there was a negative impact of official development assistance on governance.

Unqualified institutions, very poor rule of law, lack of accountability and no transparence on information and high rate of corruption can reduce the levels of aids (Brautigam and Knack,

2004).

2.5 Foreign Aid and Infant Mortality Rate

To reach the MDGs for health, a lot of analysis can be performed to discover how to enhance health sector. Infant mortality rate is widely accepted indicator of socioeconomic performance (Schell, Reilly, Rosling, Peterson and Ekstrom, 2007).

Infant mortality is observed as an indicator for both health statuses of poor nations' and people's life styles. Furthermore, it is also used to measure the relations with economic situations of a nation such as free trade and investment. Debt dependency is highlighted to have negative impact on infant mortality in the free trade theory and gender inequality theory (Shen and Williamson, 2000).

In theoretical view, Waldmann (1992) showed countries that are unequal income distribution have higher infant mortality rate than equal income distribution countries. Because of infant mortality rate is focused on poor. Wagstaff (2000) discussed that reducing the gap of health imbalance between the poor and rich population becomes the major concern for the international organizations such as the World Bank and World Health Organizations. These institutions regard this issue as a tool for implementation of domestic policies and development assistance programme.

Mishra and Newhouse (2009) examined the relationship between health aid and infant mortality rate over 118 countries from 1973 to 2004. In addition, Burnell (1997) mentioned that aid could be creating problems such as debt formation, unemployment and corruption if it does not attempt to address the needs and wants of poor and public in any developing country.

In turn, Boone examined that for instance, with infant mortality, foreign aid could effect on primary schooling ratios and life expectancy according to basic human development indicators. The achievement of MDGs that could be evaluated by the aid effectiveness of donor countries would measure the relations between foreign aid and the improvement of social exhibition i.e. human development indicators instead of macroeconomic variables.

Contagious diseases can be eliminated to some extent with the better system of sewage and drainage. Privatization in the health sector can have constructive impact on health status and child mortality (Galiani, Gertler and Schargrodsky, 2002).

As such, a key motivation behind this paper is that infant mortality rate is a main indicator of health sector. Data for this is readily available and more reliable than other indicators. In economic conditions, it is more responsive to life expectancy, and therefore, can be assumed to be a prominent variable for pointing out the health level of the low-income families (Boone, 1996).

Deaton (2006) analyzed that poverty traps can be removed when economy is running smoothly. However, it cannot be regarded that economic growth relates to an increase of health status in the country if there are no suitable conditions. Improvements in the education system and in the capability of the institutions are also the main contributors of the negative relation between economic developments and infant mortality rate. Reidpath and Allotey (2003) agreed with the views that infant mortality determines significantly health status for the entire population.

2.6 Population and Infant Mortality Rate

The infant mortality rate is not a suitable indicator of health standard for the whole population as it just emphasizes on a small portion out of the total (Reidpath and Allotey, 2003). The researchers examined the infant mortality rate and disability adjusted life expectancy (DALE) and showed that the results that is strong linear relationship between these two variables.

Fertility declines lead to falls in child mortality (LeGrand and Phillips, 1996). The management of family is essential in controlling the rate of child mortality (Bongaarts, 1987). Infant mortality rate negatively affects older groups in the population (Reidpath and Allotey, 2003).

2.7 HIV/AIDS and Infant Mortality Rate

Lopez et.al (2006) asserted the major diseases for the cause of 10.6 million of children death in 2001. The attempts of researchers to find out the sources of child mortality contribute to better health security. Moreover, they can also reduce the gap of health status between the poor and rich countries.

2.8 Sanitations Facilities and Infant Mortality Rate

United Nations General Assembly declared the 1980s were the International Drinking-Water, Supply and Sanitation Decade (IDWSSD). So, water and sanitation have been the great attention to be considered. The main objective of water and sanitation was to elevate the health system of population and got interventions. The researchers showed that the effects of interventions for water and sanitation on diseases. Shiff et.al (1991) discovered that the more indoor facilities are provided, the larger mortality reduction occurs. The services which can pave

the way to reduce mortality are also recommended. They also described about the more importance of indoor facilities than public ones.

III. Hypotheses Development

Figure 1 shows the proposed model for analyzing the relationship of the variables. The dependent variable, infant mortality rate is to analyze the effective of foreign aid in Myanmar, Cambodia and Viet Nam. The reason why this study used this variable is that the effectiveness of foreign aid can show the result in the specific area like infant mortality rate. Infant mortality is observed as an indicator for both health statuses of poor nations' and people's life styles. Furthermore, it is also used to measure the relations with economic situations of a nation such as free trade and investment. Debt dependency is highlighted to have negative impact on infant mortality in the free trade theory and gender inequality theory (Shen and Williamson, 2000).

One of the explained variables, foreign aid is to analyze that how increase the foreign can reduce the infant mortality rate. This is this study main interest. Foreign aid can affect the other factors. But the main interest of this study is the relationship between infant mortality rate and foreign aid.

Another explain variable, population is another control variable to analyze the relationship between population and infant mortality rate. If infant mortality rate decreases, the population will increase.

Corruption also used as a variable to analyze the effectiveness of how governance with low corruption rate can reduce the infant mortality rate. Because of the country with low corruption rate can use the resources in efficiently and effectively way.

Sanitation facilities, water and sanitation have been the great attention to be considered. The main objective of water and sanitation was to improve the health outcomes of population and got interventions. The researchers showed that the effects of interventions for water and sanitation on diseases. Shiff et.al (1991) discovered that the more indoor facilities are provided, the larger mortality reduction occurs. The services which can pave the way to reduce mortality are also recommended. They also described about the more importance of indoor facilities than public ones.

Another variable, HIV/AIDS used as control to analyze how the rate of HIV/AIDS can affect the rate of infant mortality rate. According to Lopez et.al, HIV/AIDS is one of the causes of child death in 2001. Their findings persuade the author to include HIV/AIDS as a control variable in the empirical analysis.

All these variables will analyze the relationship between dependent and independent variables of Myanmar, Cambodia and Viet Nam. The main reasons that this study examined these three countries are that firstly Myanmar and Cambodia are similar in culture, not too different in economic development. Some problems that they faced are same and same condition trying to have development in not only economy but also politics. For example, school teachers are opening the tuition classes illegally to make money because their salaries are not enough for their lives. Moreover, other conditions such as Myanmar is 157 and Cambodia is 160 in corruption perceptions index by 2013 and Cambodia stands 136 and Myanmar 150 in human development reports by UNDP (http://blog.aseankorea.org/?p=324).

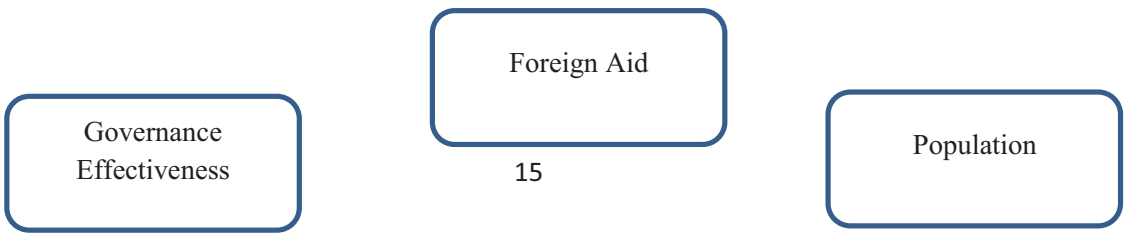
Myanmar's income level is lower middle-income country. It has domestic credit 28.3%, net foreign direct investment 4.9%, remittances 5% and net official development assistance 2.2%.

Its NPI is 25.6% of population. Future sustainable development is dependent on unlocking the full potential of Myanmar's agriculture and natural resources improving infrastructure and expanding access to health and education. They did not participate in 2014 monitoring plan. It has national cooperation policy.

Cambodia's National Poverty Index is 13.5% of population, GINI index is 32.10, official development assistance/ capital formation is 21.7% and income level category is lower middle-income country. Inflow of GDP is tax revenue 15%, domestic credit 47%, external debt 26%, net foreign investment 10%, remittances 2% and net official development 5%. It had made social progress in health and education. But it still faces persistent rural poverty and high vulnerability of rural households. They participate in 2014 monitoring process as a governance and management of development finance and cooperation. It has a national cooperation policy.

Viet Nam's NPI is 13.5% of population, GINI is 39, official development assistance is 8%, domestic credit is 114%, external debt is 22%, net foreign direct investment is 5%, remittances is 6% and net official development assistance is 2%. Viet Nam has been outstanding improvement of all economic and social level and is now working on remaining areas such as poverty reduction among ethnic groups, gender equality and civil society organizing. They participate in 2014 monitoring process as a governance and management of development finance and cooperation. It has a national cooperation policy.

Figure1. The proposed Model of the study



3.1 Effect of Foreign Aid on Infant Mortality Rate

In order to reach the MDGs for health sector, international organizations suggest toprovide more resources such as medical treatment. Besides infant mortality rate, there are also determinants to measure health status. However, these variables are less indicative of health sector (Schell, Reilly, Rosling, Peterson and Ekstrom, 2007).

Mishra and Newhouse (2009) examined the relationship between health aid and infant mortality rate over 118 countries from 1973 to 2004. In addition, Burnell (1997) mentioned that aid could be creating problems such as debt formation, unemployment and corruption if it does not attempt to address the needs and wants of poor and public in any developing country. In turn, Boone examined that for instance, with infant mortality, foreign aid could have an effect on primary schooling ratios and life expectancy according to basic human development indicators. The achievement of Millennium Development Goals (MDGs) that could be evaluated by the aid effectiveness of donor countries would measure the impact of foreign aid on the improvement of social indicators i.e. human development indicators instead of macroeconomic variables.

Infant mortality rate and health aid have statistically significant effect and 2 times of GDP per capita health aid can reduce the 2 percent of infant mortality and the estimated coefficient lagged value is negatively significant (Mishra and Newhouse, 2009).

This study hypothesized foreign aid effects on infant mortality rate. This study analyzed three countries Myanmar, Cambodia and Viet Nam because these countries are CLMV countries and aid recipient countries.

H1a: foreign aid affects infant mortality rate in Myanmar

H1b: foreign aid affects infant mortality rate in Cambodia

H1c: foreign aid affects infant mortality rate in Viet Nam

3.2 Effect of GDP growth and Infant Mortality Rate

In industrialized nations, public policies and income inequality affect to infant mortality rates. What attract the most attentions are allocations of economic sources, the stages of economic outcomes and public policy. Prior studies emphasized the less dependence of infant mortality rate on economic growth. In this case, imbalances of income and poverty traps are emphasized to have more impacts on infant mortality rate than economic growth. They can lead to the fluctuations in the infant mortality rate. Moreover, another indicator of the infant mortality rates is unemployment rate and poor social security. They cannot allocate earnings to improve health conditions if they are out of jobs. Their lack of heed can raise infant mortality rate.

Then, the well-being of a family can also mitigate infant mortality rate (Wennemo, 1993). This study hypothesized the GDP growth effects on infant mortality rate. And then, this study analyzed three countries Myanmar, Cambodia and Viet Nam because these three countries are

lower middle income countries and how GDP growth can effect on infant mortality rate.

H2a: GDP growth effects on infant mortality rate in Myanmar

H2b: GDP growth effects on infant mortality rate in Cambodia

H2c: GDP growth effects on infant mortality rate in Viet Nam

3.3 Effect of Governance Effectiveness and Infant Mortality Rate

Despite its impact on infant mortality is described in the studies, it is not as strong as economic growth (Burnside and Dollar, 1998). Matthias and Steffen (2010) pointed out that many studies have proved governance matters for economic and social development of the country. In considering of aid provision, it is crucial to put the countries with adequate policies to utilize again in the first place (Burnside and Dollar, 2000).

This study hypothesized governance effectiveness effects on infant mortality rate. This study analyzed three countries Myanmar, Cambodia and Viet Nam because these three countries are almost same as many thing such as governance.

H3a: governance effectiveness effects on infant mortality rate in Myanmar

H3b: governance effectiveness effects on infant mortality rate in Cambodia

H3c: governance effectiveness effects on infant mortality rate in Viet Nam

3.4 Effect of Corruption and Infant Mortality Rate

There is no direct relationship between corruption and infant mortality rate. My main interest is relationship between the ODA and infant mortality rate. It was rare to find the

previous literature between these variables. There is relationship between corruption and foreign aid. Corruption means that the presence of discretionary decision making. It has two types namely cost reducing and the surplus-division. Corruption can be raised the situations where resources are gone in substantial discretion without accountability to the higher levels.

Conventional wisdom suggested that foreign aid is more effective in less corrupt states. But Simone Dietrich pointed out this conclusion is too broad because it based on the aggregate aid flows. So, the researcher focused on public health sector and developed an argument for corrupt recipients governments have incentives to comply with donor objectives.

Svensson (2000) provided preliminary empirical evidence in support of the hypothesis that foreign aid and windfalls are on average associated with higher corruption in countries more likely to suffer from competing social groups. Knack (2001) pointed out that in technical assistance aid, erosion of bureaucratic quality and rule of laws are not significantly related to corruption. On the other hand, Tavares (2002) showed that aid could decrease corruption and their results were statistically and economically significant. Alesina and Weder (2002), it was found that the more a country received aid, the more likely the country would get corrupted.

Burnside and Dollar (2000) noted that foreign aid and growth have had a positive and significant correlation and when it is merged with good economic policies, it would become more effective in increasing growth. Conversely, Busse and Groning (2009) also noted that there was a negative impact of official development assistance on governance. Unqualified institutions, very poor rule of law, lack of accountability and no transparence on information and high rate of corruption can reduce the levels of aids (Brautigam and Knack, 2004).

This study hypothesized corruption effects on infant mortality rate. This study analyzed

three countries Myanmar, Cambodia and Viet Nam because these three countries' corruption indices are almost same.

H4a: corruption effects on infant mortality rate in Myanmar

H4b: corruption effects on infant mortality rate in Cambodia

H4c: corruption effects on infant mortality rate in Viet Nam

3.5 Effect of Sanitation Facilities and Infant Mortality Rate

United Nations General Assembly declared the 1980s were the International Drinking-Water, Supply and Sanitation Decade (IDWSSD). So, water and sanitation have been the great attention to be considered. The main objective of water and sanitation was to improve the health outcomes of population and got interventions. The researchers showed that the effects of interventions for water and sanitation on diseases. Shiff et.al (1991) discovered that the more indoor facilities are provided, the larger mortality reduction occurs. The services which can pave the way to reduce mortality are also recommended. They also described about the more importance of indoor facilities than public ones.

This study hypothesized sanitation facilities effects on infant mortality rate. Moreover, this study analyzed three countries Myanmar, Cambodia and Viet Nam because these three countries are developing countries and sanitation facilities are not too much different.

H5a: sanitation facilities effects on infant mortality rate in Myanmar

H4b: corruption effects on infant mortality rate in Cambodia

H5c: sanitation facilities effect on infant mortality rate in Viet Nam

3.6 HIV/AIDS and Infant Mortality Rate

Lopez et al .,(2006) asserted the major diseases for the cause of 10.6 million of children death in 2001. The attempts of researchers to find out the sources of child mortality contribute to better health security. Moreover, they can also reduce the gap of health status between the poor and rich countries.

This study hypothesized HIV/AIDS effects on infant mortality rate. And then, this study analyzed two countries Myanmar and Viet Nam because Myanmar's HIV/AIDS rate is higher than Viet Nam. So, how much can the rate of HIV/AIDS effect on infant mortality rate.

H6a: HIV/AIDS effects on infant mortality rate in Myanmar

H6b: HIV/AIDS effects on infant mortality rate Cambodia

H6c: HIV/AIDS effects on infant mortality rate Viet Nam

3.7 Population and Infant Mortality Rate

The infant mortality rate is not a suitable indicator of health standard for the whole population as it just emphasizes on a small portion out of the total (Reidpath and Allotey, 2003). The researchers examined the infant mortality rate and disability adjusted life expectancy (DALE) and showed that the results that is strong linear relationship between these two variables. There is little direct evidence which shows that decreases in fertility have a net positive impact on child survival (LeGrand and Phillips, 1996). Recent reviews of relevant evidence have confirmed that an increase in the practice of family planning can reduce infant and child mortality rate (Bongaarts, 1987). There is little evidence that the use of IMR as a measure of population health has a negative impact on older groups in the population (Reidpath and Allotey, 2003).

H7a: population effects infant mortality rate in Myanmar

H7b: population effects infant mortality rate in Cambodia

H7c: population effects infant mortality rate in Viet Nam

IV. Theoretical Background

Since 1960, a handful of bilateral and multilateral institutions have mainly through been flowed about $ 3.2 trillion of aid from rich countries to poor countries. New international donors such as China, INGOs, foundations and private co-operations have been delivered as new instruments (budget support, debt relief, public private partnerships and South-South Cooperation. Even though new donors have brought fresh energy, resources and approaches to the delivery of aid, they have been wasted, overlapped and uncoordinated efforts to the development. These aids might be individually successful but not add up to impact for systematic transformation (Fengler and Kharas, 2010).

Donor countries distribute aids in various patterns and target their donations to different recipients. Sometimes, distribution of aid can be occurred between the countries with no regular ties. An example case is the contribution of rice from South Korea and Japan to North Korea North Korea's receipt of rice aid from South Korea and Japan. Aid needs to be distributed with no returned expectations. There should not be hopes of self-interest and trade businesses like export (Burnell, 1997).

In theoretical of foreign aid for conflict in the presence of arms trade, the researchers showed that can foreign aid reduce conflict? Wars are waged in order to occupy the disputed land and other valuable properties. Increasing foreign aids prompt a nation to participate in the

wars more. They can utilize aid with the purpose of achieving more arms and protecting the citizens. An increase in foreign aid to the warring countries may increase war efforts when arms protect lives in a significant way. Among developing nations, wars have been fought on a smaller scale, switching from international conflicts among a variety of nations to mainly intra-national conflicts. Rises of incoming aid to war-plagued nations accumulate their income and their marginal disutility from loss of life increase. Foreign aid can provide financial assistance and increase the number of the soldiers. On the other hand, it can assist a conflicted country to produce or import the weapons necessary in the front (Lahiri, 2007).

The theory aims for the importance of poverty, use of aid and corruption in the sector of reallocation policies. Governments with poor economic situations have no willing to implement appropriate policies which can render economic growth rate. The foreign aid programs run by different countries and international agencies showed that there is no significant correlation between aid and growth. The governments in the poor economies with large-scale unemployment are pursued redistributive policies that are for populist and help them to win the election. In the poor economies, more aid increases the level of corruption but in the richer economies, more aid reduces the level of corruption (Lahiri, 2007).

One theory for foreign aid is to impede foreign investment. Foreign aid can impact on foreign investment when it is used to finance public consumption goods. The researchers formulated and analyzed with three-good equilibrium model and showed that foreign aid could crowd out foreign investment in a given factor intensity condition (Lahiri, 2007).

V. Methodology

The research is based on various books, references, journals, reports, publications,

internet and documents. This study tried to secure the secondary sources which obtained from international organization like World Bank and other aid providing agencies. Secondary data for panel data series of Myanmar, Cambodia and Viet Nam were collected from OECD websites, WDIs websites and Central Statistical Organization (CSO) under the Ministry of Planning and Finance. The internet is another excellent source of data. The reasons why this study chose these three countries are these three countries are not only CLMV countries but also aid recipient countries. More reasons for my data are the data for this thesis used from OECD are reliable and validity. In order to provide reliable data, the WB data and OECD date are analyzed in this study. OECD is the one of the most supportive organizations in the world. It provides assistance to countries from various aspects. It recommends how to address the general concerns facing the nations. It holds the forum which requires the governments to join hands in the emergence of successful trade community, social security, environments and investments. On the whole, it can press the importance how to scale up the social and financial status of the people in the world (http://www.oecd.org/about/). According my data, this study will use SPSS regression to analyze dependent and independent variables for three countries about twelve years (2002-2014).

The Republic of the Union of Myanmar is a lower middle-income country with a GDP per capita of US$1,203 and a population of 51.5 million (both figures from 2015). In 2011, Myanmar embarked upon a historic multifaceted transition involving fundamental economic reforms focused on creating a diversified, market-oriented and internationally integrated economy and a democratic and inclusive political system. Throughout this transition, Myanmar's economy experienced strong and dynamic growth of 8.4% in 2013 and 8.7% in 2014. Despite growth slowing to 7.2% in 2015 due to flooding, the Asian Development Bank (ADB) forecasts growth of 8.4% in 2016. According to the ADB, 25.6% of Myanmar's population lives below the

poverty line, with poverty particularly concentrated in rural areas. Myanmar's human development stands at a 0.536, thereby ranking 148th among the 188 countries of the 2015 Human Development Index. For this year's monitoring round, 15 development partners reported a total of US$562 million disbursed in 2015. Contributing 38% of total development, Japan is the largest development partner, followed by the United Kingdom (18%) and the United States (14%) (http://effectivecooperation.org).

Cambodia has achieved impressive socio-economic progress with an average annual growth rate of 7% over the last two decades. Poverty has been greatly reduced from 53.2% in 2004 to 13.5% in 2014. With a population of 15 million (2015) and a GDP per capita of US$1,218 (2015), Cambodia has now moved up to become a lower middle-income economy and aspires to reach the status of an upper middle-income country by 2030. Nonetheless, Cambodia is still categorized as a Least-Developed Country with a low human development, ranked 143rd in the 2015 Human Development Index. Moreover, a high level of vulnerability for rural households, notably due to climate change shocks, remains a significant issue in pursuing more inclusive growth. Extreme climatic events, mainly droughts and some floods, hit Cambodians again in recent years. According to the data captured in this year's monitoring round, development co-operation with Cambodia amounted to US$1.117 billion in 2015, with China (29%), the Asian Development Bank (12%) and Japan (12%) being the most important partners (http://effectivecooperation.org).

Representing one of Asia's most outstanding development stories, the Socialist Republic of Viet Nam is today a striving and stable lower middle-income country with a population of 92 million and a GDP per capita of US$2,052. Economic performance and social progress

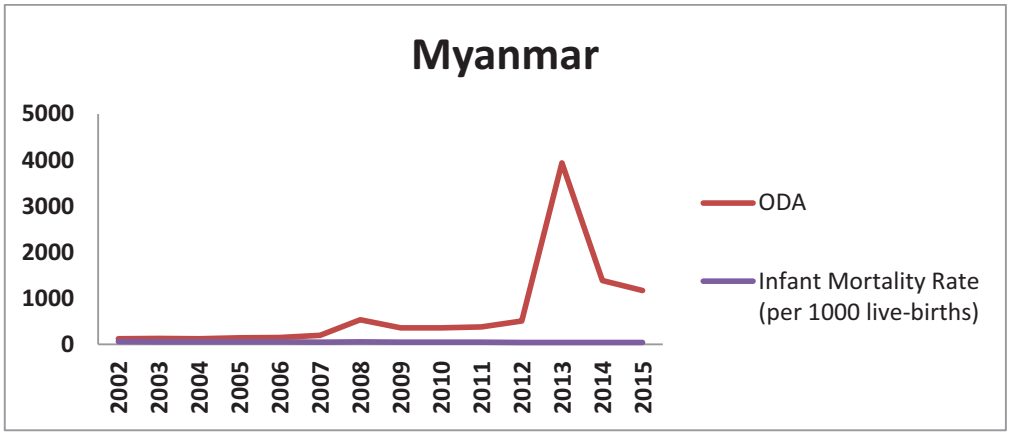
continued to be substantial in the past years, with a GDP growth of 6.0% in 2014 and an estimated 6.7% in 2015 as well as an important poverty reduction from 20.7% in 2010 to 13.5% in 2014. Social progress has led to a medium human development with a value of 0.666 and Viet Nam ranking 116th among all 188 countries of the 2015 Human Development Index. The Government of Viet Nam and its development partners report in this year's monitoring round co-operation totaling US$4,207 million. The three major partners (Japan, World Bank and Asian Development Bank) contribute 80%. The remaining 20% is distributed among 28 other partners, reflecting a relatively high fragmentation and diversity of players. Primary sectors addressed by development co-operation include health, energy, agriculture, water/sanitation and transport (http://effectivecooperation.org).

Among CLMV countries, Viet Nam is most developed. Viet Nam is observed as to enjoy improving health and education and declining in poverty rate. It is most famous in implementing effective and efficient use of aid policy. Viet Nam government attempts to perform aid programs in line with policy making process in health sector. Aid reforms should regard as both technocratic agenda and political process. Moreover, donor countries are required to simplify the processes of aid delivery. Viet Nam is one of the most successful developing countries according to World Bank. They lifted their millions of people out of poverty while ensuring the benefits of its vibrant market economy are fairly distribute. Moreover, Viet Nam can apply foreign aid in accordance with the relevant agenda. Unbalanced distribution of power hinders the analysis and countries that rely on aid reforms are regarded as donor dependent (Dodda and Olive, 2011).

Table 1: Data and their sources

Variables	Description	Sources
Infant Mortality Rate (per 1000 live birth)	Dependent Variable	WDI
Foreign Aid	Independent variable	OECD
GDP growth	Independent variable	WDI
Corruption	Independent variable	WDI
Governance Effectiveness	Independent variable	WDI
HIV/AIDS	Independent variable	WDI
Population	Independent variable	WDI

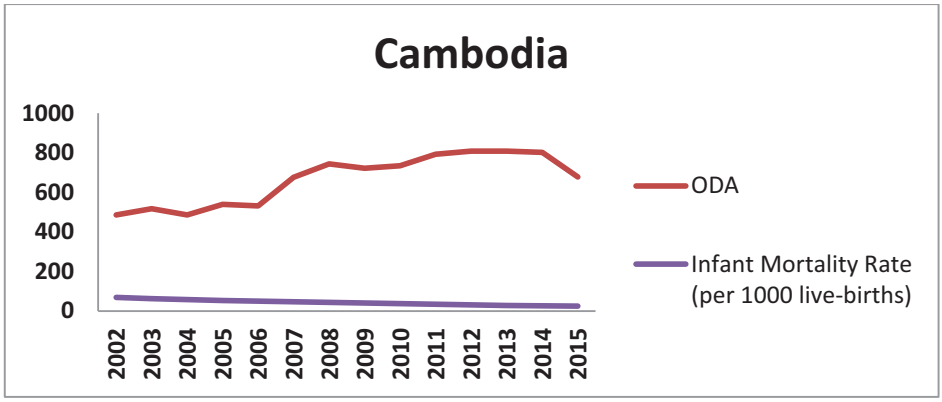
Figure 2: Relationship between Foreign Aid and Infant Mortality Rate in Myanmar



This figure shows the trends of ODA and infant mortality rate. This graph shows the amount of ODA is high during 2013. This is because this time is middle term of new administration and government held the cooperation forum between Myanmar government and development partners (donor agencies). From this forum, government received the commitment

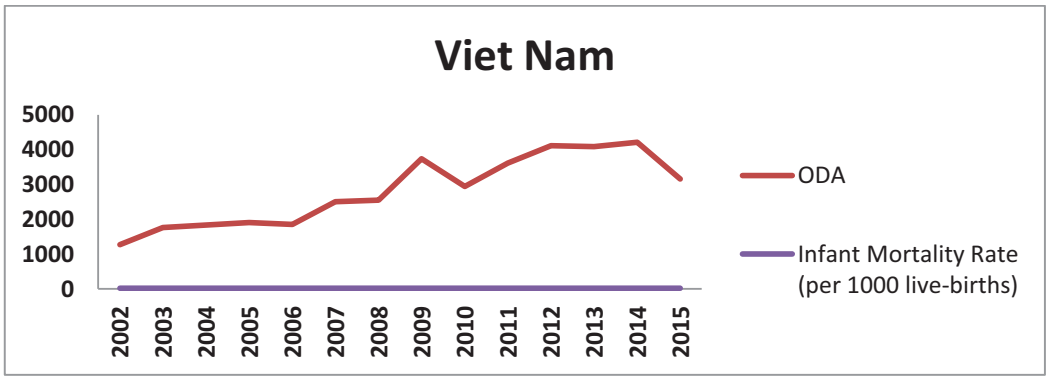
from development partners to contribute in Myanmar transformation period. According the results the more the aid, the rate of infant mortality rate is not declining too much.

Figure 3: Relationship between Foreign Aid and Infant Mortality Rate in Cambodia



This figure shows the trends of ODA and infant mortality rate in year 2002-2015. Cambodia received more amount of foreign aid gradually. The rate of infant mortality is declining obviously after 2008.

Figure 4: The relationship between Foreign Aid and Infant Mortality Rate in Viet Nam



This figure shows the trends of ODA and infant mortality rate in Viet Nam from 2002 to 2015. According the results the more the aid, the rate of infant mortality rate is declining too much.

VI. Data Analysis

6.1 Data Analysis for Myanmar

6.1.1 Infant Mortality rate and foreign aid

The below table indicated that infant mortality rate and foreign aid are negatively correlated at the 0.05 level with F= 6.113 (R^2 = 0.337). According to the ANOVA results, hypothesis H1a was accepted. So, the country that received more amount of foreign aid can reduce the infant mortality rate.

Table 2: Effects of Foreign Aid on Infant Mortality Rate in Myanmar

Variable (Independent ⟹ dependent)	Standardized coefficient (t-value –Sig)
ODA -> Infant Mortality Rate (H1a)	-0.581 (-2.472)**

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.1.2 Infant Mortality Rate and GDP Growth

The positively correlation of infant mortality rate and GDP growth are significant at the 0.01 level with F= 22.202 (R^2 = 0.649). According to these results, hypothesis H2a was accepted. In explanations, the country with high GDP growth rate cannot reduce the level of infant mortality rate. This means that GDP growth does not affect reducing infant mortality rate.

Table 3: Effects of GDP growth on Infant Mortality Rate in Myanmar

Variable (Independent ➡ dependent)	Standardized coefficient (t-value –Sig)
GDP growth -> Infant Mortality Rate (H2a)	0.806(4.712)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.1.3 Infant Mortality Rate and Governance Effectiveness

The results showed that the correlation of infant mortality rate and governance effectiveness negatively related but it is not significant because P-value is so high. So, H0a was accepted. According to results, governance effectiveness cannot reduce the infant mortality rate. But the country with sound governance and effective governance can control the foreign aid effectively and can use efficiently. It may be reducing infant mortality rate.

Table 4: Effects of Governance Effectiveness on Infant Mortality Rate in Myanmar

Variable (Independent ➡ dependent)	Standardized coefficient (t-value –Sig)
Governance effectiveness -> Infant Mortality Rate (H3a)	-0.153(-0.538)

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.1.4 Infant Mortality Rate and Corruption

The below table indicated that the models were significant at the 0.01 level with F= 11.782 (R^2= 0.495). These two variables are negatively correlated with each other. According to hypothesized results, hypothesis H4a was accepted. So, the high rate of corruption can reduce the infant mortality rate. Because of most of the countries are facing with these corruption problems.

When the projects have been started, the corruption may include. But they are trying to reduce the corruption.

Table 5: Effects on Corruption on Infant Mortality Rate in Myanmar

Variable (Independent ⟹ dependent)	Standardized coefficient (t-value –Sig)
Corruption -> Infant Mortality Rate (H4a)	-0.704 (-3.432)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.1.5 Infant Mortality Rate and Sanitation Facilities

The following table indicated that the negatively correlation between infant mortality rate and sanitation facilities. These models were significant at the 0.01 level of F= 151.624 (R^2= 0.927). According the results, hypothesis H5a was accepted. Based on these results, sanitation facilities for health are strongly affected in reducing infant mortality rate. The country with high pay attention to sanitation facilities may strongly affect reducing infant mortality rate. So, sanitation facilities are the one of the important factors for upgrading health sectors.

Table 6: Effects of Sanitation Facilities on Infant Mortality Rate in Myanmar

Variable (Independent ⟹ dependent)	Standardized coefficient (t-value –Sig)
Sanitation Facilities -> Infant Mortality Rate (H5a)	-0.963 (-12.314)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.1.6 Infant Mortality Rate and HIV/AIDS

The below table indicated that the negatively correlated with the infant mortality rate and HIV/AIDS among children. These models were significant at the 0.01 level with F= 28.684 (R^2 = 0.705). Based on hypothesis results, hypothesis H6a was accepted. In explanation, reducing the

addicted HIV/AIDS rate can affect decreasing number of infant mortality rate. Myanmar has a high rate of HIV/AIDS among children.

Table 7: Effects of HIV/AIDS on Infant Mortality Rate in Myanmar

Variable (Independent → dependent)	Standardized coefficient (t-value –Sig)
HIV/AIDS -> Infant Mortality Rate (H6a)	-0.840 (-5.356)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.1.7 Infant Mortality Rate and Population

The below table indicated that the negative relation between infant mortality rate and population. So, the models were significant at the 0.001 level with F= 268.841 (R^2 = 0.957). Based on these results, hypothesis H7a was accepted. It can explain that increasing the population means that the reducing amount of infant mortality and number of child survival increase. Because of infant mortality is the main indicator for population.

Table 8: Effects of Population on Infant Mortality Rate in Myanmar

Variable (Independent → dependent)	Standardized coefficient (t-value –Sig)
Population -> Infant Mortality Rate (H7a)	-0.978 (-16.396)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.2 Data Analysis for Cambodia

6.2.1 Infant Mortality Rate and Foreign Aid

The following table indicated that the negative correlation between infant mortality rate and foreign aid in Cambodia. These models were significant at the 0.01 level with F= 42.745 (R^2 = 0.884). According to findings, hypothesis H1b was accepted. The country that received more

amount of foreign aid can reduce the infant mortality rate. It means that Cambodia has been used the foreign aid in health sector in effectively.

Table 9: Effects of Foreign Aid on Infant Mortality Rate in Cambodia

Variable (Independent ⟶ dependent)	Standardized coefficient (t-value –Sig)
ODA -> Infant Mortality Rate (H1b)	-0.884 (-6.538)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.2.2 Infant Mortality Rate and GDP Growth

The below table indicated that positive relation between infant mortality rate and GDP growth. The models were not significant at the level with F= 1.519 (R^2 = 0.112). According to these findings, hypothesis H2b was rejected. In explanations, the country with high GDP growth rate cannot reduce the level of infant mortality rate. This means that GDP growth does not affect reducing infant mortality rate.

Table 10: Effects of GDP growth on Infant Mortality Rate in Cambodia

Variable (Independent ⟶ dependent)	Standardized coefficient (t-value –Sig)
GDP growth -> Infant Mortality Rate (H2a)	0.335(1.233)

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.2.3 Infant Mortality Rate and Governance Effectiveness

The following table indicated that the negative relation between infant mortality rate and governance effectiveness. These models were significant at the 0.01 level with F= 53.206 (R^2 = 0.816). According to these results, hypothesis H3b was accepted. It shows that, governance

effectiveness can effectively reduce the infant mortality rate in Cambodia. Governance effectiveness in Cambodia is strongly affected to reducing infant mortality rate.

Table 11: Effects of Governance Effectiveness on Infant Mortality Rate in Cambodia

Variable (Independent ⟹ dependent)	Standardized coefficient (t-value –Sig)
Governance effectiveness -> Infant Mortality Rate (H3b)	-0.903(-7.294)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.2.4 Infant Mortality Rate and Corruption

The below table indicated that the positively relationship between infant mortality rate and corruption. These models were significant at the 0.01 level with F= 16.650 (R^2 = 0.581). These results showed hypothesis H4b was accepted. In other words, the country that has low corruption can reduce the infant mortality rate.

Table 12: Effects of Corruption on Infant Mortality Rate in Cambodia

Variable (Independent ⟹ dependent)	Standardized coefficient (t-value –Sig)
Corruption -> Infant Mortality Rate (H4b)	0.762 (4.080)**

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.2.5 Infant Mortality Rate and Sanitation Facilities

The following table indicated that the negative correlation between infant mortality rate and sanitation facilities. These models were significant at the 0.01 level with F= 653.478 (R^2 =

0.982). According to these findings, hypothesis H5b was accepted. Sanitation facilities are one of the most important factors that can impact on infant mortality rate. Because of the sanitation facilities play an important role to upgrade the health system.

Table 13: Effects of Sanitation Facilities on Infant Mortality Rate in Cambodia

Variable (Independent ⟹ dependent)	Standardized coefficient (t-value –Sig)
Sanitation Facilities -> Infant Mortality Rate (H5b)	-0.991 (-25.563)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.2.6 Infant Mortality Rate and Population

The results of the table indicated that the population and infant mortality rate have negative correlation between these two variables. These models were significant at the 0.01 level with F= 454.537 (R^2 = 0.974). Based on these findings, hypothesis H7b was accepted. In other words, increasing the population means that infant mortality rate is reducing.

Table 14: Effects of Population on Infant Mortality Rate in Cambodia

Variable (Independent ⟹ dependent)	Standardized coefficient (t-value –Sig)
Population -> Infant Mortality Rate (H7b)	-0.987 (-21.320)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.3 Data Analysis for Viet Nam

6.3.1 Infant Mortality Rate and Foreign Aid

The result of following table indicated that the negative correlation between infant mortality and foreign aid. These models were significant at the 0.01 level with F= 51.761 (R^2 = 0.812). According these findings, hypothesis H1c was accepted. The country that received more amount of foreign aid can reduce the infant mortality rate.

Table 15: Effects of Foreign Aid on Infant Mortality Rate in Viet Nam

Variable (Independent ➡ dependent)	Standardized coefficient (t-value –Sig)
ODA -> Infant Mortality Rate (H1c)	-0.901 (-7.195)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.3.2 Infant Mortality Rate and GDP Growth

The ANOVA table results indicated that the positive correlation between infant mortality and GDP growth. These models were significant at the 0.05 level with F= 5.247 (R^2 = 0.304). According to these hypothesized results, hypothesis H2c was accepted. The level of GDP growth has a strong but positive impact on the infant mortality rate.

Table 16: Effects of GDP growth on Infant Mortality Rate in Viet Nam

Variable (Independent ➡ dependent)	Standardized coefficient (t-value –Sig)
GDP growth -> Infant Mortality Rate (H2a)	0.552 (2.291)**

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.3.3 Infant Mortality Rate and Governance Effectiveness

The following table indicated that the negative correlation between infant mortality rate and governance effectiveness. These models were significant at the 0.01 level with F= 83.151

(R^2 = 0.874). These results provided hypothesis H1c was accepted. In other words, governance effectiveness can effectively reduce the infant mortality rate in Viet Nam.

Table 17: Effects of Governance Effectiveness on Infant Mortality Rate in Viet Nam

Variable (Independent ⟹ dependent)	Standardized coefficient (t-value –Sig)
Governance effectiveness -> Infant Mortality Rate (H3a)	-0.935(-9.119)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.3.4 Infant Mortality Rate and Corruption

The results of the below table indicated that the positive relationship between infant mortality and corruption. These models were significant at the 0.01 level with F= 34.810 (R^2 = 0.744). According to these findings, hypothesis H4c was accepted. The increasing rate of corruption can positively effect on increasing the infant mortality rate.

Table 18: Effects of Corruption on Infant Mortality Rate in Viet Nam

Variable (Independent ⟹ dependent)	Standardized coefficient (t-value –Sig)
Corruption -> Infant Mortality Rate (H4c)	0.862 (5.900)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.3.5 Infant Mortality Rate and Sanitation Facilities

The table indicated that the negatively relationship between infant mortality rate and sanitation facilities. These models were significant at the 0.01 level with F= 3733.800 (R^2 = 0.997). According to these findings, hypothesis H5c was accepted. Sanitation facilities for health are strongly affected in reducing infant mortality rate. These factors are most important thing to

reduce the infant mortality rate. Sanitation facilities is low, it may increase the infant mortality rate.

Table 19: Effects of Sanitation Facilities on Infant Mortality Rate in Viet Nam

Variable (Independent ➡ dependent)	Standardized coefficient (t-value –Sig)
Sanitation Facilities -> Infant Mortality Rate (H5c)	-0.998 (-61.105)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.3.6 Infant Mortality Rate and HIV/AIDS

The below table indicated that the negative relationship between infant mortality rate and HIV/AIDS. These models were significant at the 0.01 level with F= 1829.689 (R^2 = 0.993). This finding showed that hypothesis H6a was accepted. In explanation, reducing the addicted HIV/AIDS rate can affect decreasing number of infant mortality rate.

Table 20: Effects of HIV/AIDS on Infant Mortality Rate in Viet Nam

Variable (Independent ➡ dependent)	Standardized coefficient (t-value –Sig)
HIV/AIDS -> Infant Mortality Rate (H6c)	-0.997 (-42.775)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

6.3.7 Infant Mortality Rate and Population

The following table indicated that the negatively correlation between infant mortality rate and population. These models were significant at the 0.01 level with F= 2998.688 (R^2= 0.996). According to these findings, hypothesis H7c was accepted. Decreasing the infant mortality rate can increase the number of population. So, infant mortality rate is the one of the main characters to show the growth rate of the population.

Table 21: Effects of Population on Infant Mortality Rate in Viet Nam

Variable (Independent ➡ dependent)	Standardized coefficient (t-value –Sig)
Population -> Infant Mortality Rate (H7c)	-0.998 (-54.760)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

Table 22: Summary for results of Myanmar, Cambodia and Viet Nam

Infant Mortality Rate	Myanmar	Cambodia	Viet Nam
Foreign Aid	-0.581 (2.472)**	-0.884 (6.538)***	-0.901 (7.195)***
GDP growth	0.806(4.712)***	0.335(1.233)	0.806(4.712)***
Corruption	-0.704 (3.432)***	0.762 (4.080)***	0.862 (5.900)***
Governance Effectiveness	-0.153(0.538)	-0.903(7.294)***	-0.935(9.119)***
HIV/AIDS	-0.840 (5.356)***	Limitation	-0.997 (42.775)***
Sanitation Facilities	-0.963 (12.314)***	-0.991 (25.563)***	-0.998 (61.105)***
Population	-0.978 (16.396)***	-0.987 (21.320)***	-0.998 (54.760)***

*= Significant at 0.10 level; **= Significant at 0.05 level; *** = Significant at 0.01 level

From this result, the relationship between infant mortality rate and governance effectiveness in Myanmar is not significant. Because of the governance effectiveness in Myanmar is not strong before 2011, its transformation process. Moreover, the data that this study examined is from 2002-2015. The governance effectiveness to each sector is not effective and could not provide the successful outcomes. After 2011, Myanmar is more transparent among ministries and international organization during new government's turn. Now Myanmar keeps

going its transform in momentum and tries to be effective in every sector not only in economic but also governance.

For Myanmar, there are negative correlations between infant mortality rate and foreign aid, corruption, governance effectiveness, sanitation facilities, HIV/AIDS and population and positively correlation with the GDP growth.

For Cambodia, the result shows that there is no significant between GDP growth and infant mortality rate. It means that even though GDP growth is high, there is no effective use to reduce the infant mortality rate. The data for HIV/AIDS for children could not get from the website. So, this can show only limitation.

For Viet Nam, there are negatively correlations between infant mortality rate and foreign aid, governance effectiveness, sanitation facilities, HIV/AIDS and population and positively correlation with the corruption and GDP growth.

VII. Conclusions

This study will find out the effectiveness of foreign aid in health sector of Myanmar especially reducing in infant mortality rate by using data from 2002-2014. To make a good policy implication and conclusion for Myanmar, this study analyzed two compared countries Cambodia and Viet Nam. For Myanmar, the effect of foreign aid to infant mortality rate was significant. It has negative effect on infant mortality rate. The GDP growth, corruption on infant mortality rate was significant. But governance effectiveness on infant mortality rate was not significant. HIV/AIDS, sanitation facilities and population on infant mortality rate was significant.

For Cambodia, the effect of foreign aid to infant mortality rate was significant. But GDP growth on infant mortality rate was not significant. Corruption, governance effectiveness, sanitation facilities and population on infant mortality rate was significant.

For Viet Nam, the effect of foreign aid to infant mortality rate was significant. It has negative effect on infant mortality rate. The GDP growth, corruption on infant mortality rate was significant. Governance effectiveness, HIV/AIDS, sanitation facilities and population on infant mortality rate was significant.

Myanmar and Cambodia has almost the same result according to the data. Viet Nam is one of the most successful developing countries according to World Bank. They lifted their millions of people out of poverty while ensuring the benefits of its vibrant market economy are fairly distribute. Moreover, Viet Nam can apply foreign aid in accordance with the relevant agenda. So, it's all results showed the strongly significant between dependent and independent variables.

According to the results Myanmar government effectiveness could not effect on reducing infant mortality rate. Government is the main player of transforming of country situation. According to Paris Declaration of aid effectiveness, foreign aid aims to achieve the Millennium Development Goals. To reach their targets, government is required to be both ownership and partner countries. In this way, it can exert the control to design the effective development policies. Moreover, government needs to perform in line with donor-based national development strategies. On the other hand, government needs to harmonize with donors' actions and are more transparent and collectively effective. Finally, government needs to manage resources and improve decision-making for results. But at the same time, Myanmar should learn from the

successful development stages of Korea and Viet Nam and it needs to follow the steps of these two countries. Myanmar needs to take these countries as an example to design effective aid projects and derive the economic benefits from those kinds of developments. In saying so, human capital is another factor to take into consideration. Hence, Myanmar is also necessary to develop capacities of the people to participate in foreign aid projects. And also, Myanmar should learn the other countries that are implementing the strong aid policies.

7.1 Academic and Policy Implications

There is a limited number of researches on official development assistance and economic growth rate of Myanmar**.** So, this study would like to show the effectiveness of foreign aid in specific and found out the relationship between foreign aid and infant mortality rate**.** According to the results of this paper, the following implications are provided.

First, economic growth is widely utilized as a measure of aid effectiveness of the country. It is important for Myanmar to take first priority for successful outcomes-based projects rather than policy-based ones and focuses on outputs that can promote ownership and accountability;

Second, donor countries need not to interfere with policy processes of recipients. They need to respect the freedom of a country and allow for transparent policies. In this way, both can achieve the reliable and efficient implementation of the aid projects.

Third, the recipient countries should have full control of national plans.

Fourth, the main target of aid programs is to meet the MDGs assessments within the given time frame. This progress should lead to further assistances.

Fifth, analyzing the factors that affect the effectiveness of foreign aid of health sector in Myanmar especially in reducing infant mortality rate is one of the important tasks of Myanmar government to achieve adequate health sector. Donor agencies play a crucial role in assisting government to materialize constructive health policies.

When development partners worked with respective ministries in their projects, they are facing the implementation constraints. To get permission for projects, it takes long time. These constraints may cause the less interest of donor agencies. These constraints are essential not only for government but also donor agencies. Because of donor agencies want to do according their priorities. But government must have ownership.

7.2 Limitation of the study

Though the result is statistically significant, the author experienced a lot of limitations. Data availability is the main obstacle in this study. Although the research applied the data from the CSO of Myanmar and other international organizations like a secondary sources, the database system of Ministries from Myanmar are weak and cannot be accessible. But some ministries are trying to build up information system regarding the foreign aid; this study was worrying about data of different sources. So, instead of using data from ministry side, this study used valid data from OECD and World Development Indicators. The role of foreign aid is still prominent throughout Myanmar economic growth. With regard to this limitation, the researcher recommend for the further researches, rather than the foreign aid on economic growth more precisely analyze the specific area such as health, infrastructure and education. By doing these researches, further studies can easily know the effective use of foreign aid on every areas.

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