The Economics of Official Development Assistance:
A Quantitative and Qualitative Approach
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Introduction

In 1970, 22 members of Organisation for Economic Co-Operation and Development, OECD, committed themselves to apportion 0.7% of their GNP to Official Development Assistance, ODA, or more commonly known as foreign aid. Today, however, the donor countries allocate, roughly on average, 0.3% of their GNI to ODA. Many economists argue that foreign aid can play a considerable role in assisting poor nations’ economic development, and the OECD member nations are often criticized for not dedicating more of their resources to helping poor nations (Burnside and Dollar 2000).

For example, South Korea has been frequently criticized by other developed countries for giving out too little foreign aid (Lumsdaine and Schopf 2007). Despite having one of the world’s largest and affluent economies (its 2009 GDP ranked 14th and GDP per capita 46th in the world), South Korea spent only 0.1% of its GNP on ODA in 2009. Thus, the South Korean foreign aid level was well below the 0.7% target rate set by the OECD member countries in 1970 and also significantly below the 0.3% de facto average rate of its peers. Moreover, most of its ODA flows to its neighbor country: North Korea (Organisation for Economic Co-Operation and Development). Such evidence puts weight behind an allegation that ODA is motivated by political needs of the donor countries rather than economic needs of the recipient countries and that the ODA allocation process is quite inefficient (Alesina and Dollar 46).

Why do the donor countries struggle to meet the 0.7% target rate? Why, for example, is the South Korean government not as committed as the other donor countries in providing foreign aid
to various poor nations? Is the ODA allocation process efficient, and if not, is there a room for an improvement? To shed light upon a world-wide issue that is of significant theoretical and policy interest, this thesis will study several factors that may affect the ODA policies of the developed countries, focusing both on economic issues and on potential idiosyncratic aspects of specific countries’ development-assistance politics.

The existing quantitative literature on ODA explores multiple concurrent economic and political characteristics of the donor and recipient countries and estimates their effects on ODA allocation using regression models. Surprisingly, however, there is a limited amount discussion on how different political variables of the donor countries affect their foreign aid policies. Recognizing that policies are not often implemented overnight but rather shaped over an extended period of time, it is reasonable to hypothesize that historical and political events may have a significant effect on foreign aid policies. Hence, it will be useful to build theory by attempting to inductively discover the historical variables that seem most likely to affect the level and allocation of ODA.

In the following sections, I review the existing literature on ODA and discuss the gap regarding countries’ historical legacies in more detail. To remedy this theoretical oversight, I first select and quantify a few macroeconomic variables that I regard as having a significant effect on ODA allocation and foreign aid policies. After organizing the data, I start narrowing down the list of independent variables and identify a set of key variables for my econometric model. Next, I estimate a pair of regression models with a different mix of the key variables and search for any anomalies; I work on selected case studies targeting anomalous countries and focusing on
idiosyncratic historical developments and their effect on ODA in an attempt to discover political and historical factors that may influence ODA more generally.

A Quick Literature Review

An Empirical Framework:

It is reasonable to hypothesize that the economic state of the donor countries will influence their willingness to offer assistance to the recipient nations. Intuitively, a country with a sound economic base should have enough resources at disposable to help other nations, and vice versa. It is natural, thus, that many economists attempted to find a relationship between various economic variables of the donor countries and ODA outflow (Paul Mosley 373).

Two of the pioneers who empirically examine the significance of such relationship are Michael Beenstock and J. S. Hoadley. In Political Econometry of Official Development Assistance, Beenstock utilizes a multiple-regression technique and finds macroeconomic variables such as unemployment, balance-of-payments position, the central budget and the rate of growth of GNP to have a significant effect on the ODA allocation process; for example, as the unemployment rate climbs up, the central government of a donor country focuses on resolving domestic issues and pay less attention to helping other nations.

In Small States as Aid Donors, J. S. Hoadley finds another macroeconomic variable, GNP per capita, to have a significant effect as well. He divides the donor countries into two groups: small
and large states; Hoadley makes the distinction based on the several attributes such as GNP and population (122). Despite the fact that small states possess less total wealth than the large states, Hoadley finds that a significant number of the small donor countries with a high level of GNP per capita spend a larger portion of their income on ODA than most of the large donor countries with a relatively low level of GNP per capita (126).

Beenstock and Hoadley present evidence that the donor countries’ economic state is correlated to the quantity of ODA flowing from donor to recipient countries. However, their work is not conclusive. They leave out many important non-economic factors, and they merely note conditional correlations between certain economic variables and the donor countries’ ODA level: “[…] these findings are not fitted into any theoretical framework, so it is difficult to work out what they really mean” (Mosley 373). Thus, although it is helpful to learn that economic conditions of the donor countries have an effect on their ODA policies in general, the economic variables alone do not provide a full story about ODA.

_A Theoretical Framework and a Gap in the Existing Literature:_

Surely, the public sentiment towards ODA matters. Even if a country is wealthy enough to economically support another country, if the constituents of the wealthy state are opposed to sharing their wealth, ODA would not flow to another state. In _Individual and Country-Level Factors Affecting Support for Foreign Aid_, Pamela Paxton and Stephen Knack consider the significance of demographics and their effect on the level of ODA flowing from donor to recipient countries.
Paxton and Knack argue that public sentiment is causally important in understanding levels of ODA. For example, they find that individuals who pay attention to international issues are more likely to support foreign aid; if constituents are in general less interested in issues abroad, the country is less likely to support another nation. These results suggest that economic ability alone does not determine the level of ODA flowing from donor to recipient countries. Without a population base supporting foreign aid, the level of ODA outflow is limited.

In *Lobbying by Ethnic Groups and Aid Allocation*, Sajal Lahiri and Pascalis Raimondos-Moller point to a gap in the existing literature: “First, the literature concentrates on international politics, and domestic political factors in donor countries have not been looked at seriously. Second, one notices a serious lack of theoretical studies to examine the political issues associated with ODA” (C76). Although the existing literature reflects on some political factors such as the role of public sentiment of the donor countries, certain political variables have been overlooked.

Lahiri and Raimondos-Moller are especially interested in addressing the first gap they identify. They argue that most of the academic work on ODA focuses its attention on international political variables such as voting pattern in the U.N. or political characteristics of the recipient countries such as the degree of corruption within various developing nations (C62). As a result, the effect of domestic politics of the donor countries on ODA is little known. In their paper, Lahiri and Raimondos-Moller construct a model to shed light on the relationship between domestic political factors of the donor countries and ODA allocation. Realizing the impossibility
of examining the effect of every domestic political characteristic, the authors focus their attention on certain characteristics of their choice.

In the model that Lahiri and Raimondos-Moller develop, a donor country provides assistance to two different recipient countries, and lobbying is legal in the donor country. There are three different ethnic groups within the donor country; two of the three ethnic groups are composed of foreigners and each foreign group corresponds to one of the two recipient countries. The third ethnic group is composed of the natives of the donor country. The natives of the donor country do not favor one recipient nation over another, and they are indifferent about which recipient nation receives more assistance. However, each foreign ethnic group cares only about the recipient country with which it identifies. Each foreign ethnic group lobbies the government of the donor nation to encourage allocating more assistance to the recipient country it prefers; the lobbyists from each foreign ethnic group make political contributions to the political party in power and influence the donor country’s policies ODA policies.

Lahiri and Raimondos-Moller pay close attention to factors such as ethnic composition of and the degree of corruption within the donor countries and whether or not they affect the way donor countries apportion ODA. They find such factors to have a significant effect on ODA allocation, and thus, argue for the importance of considering donor countries’ characteristics.

*Addressing the Gap:*
The allocation of ODA is a very complex process, and there are, of course, many factors that affect the process. In the following sections, I address the limited detail regarding domestic factors’ effects on ODA levels in existing literature by attempting to inductively discover such factors through case studies focused on countries that appear deviant in a cross-national time-series analysis. Similar to Lahiri and Raimondos-Moller, I focus on the characteristics of the donor countries; however, I place an emphasis on various historical events concerning the donor countries and how those events could have influenced future ODA policies.

A nation faces numerous challenges throughout the course of its history, and its national identify is shaped and often altered by how the citizens react to and overcome those challenges. For example, a nation might engage in a military conflict for various reasons. It might be motivated by territorial considerations or because of its strong belief in democracy and individual freedom. The reasons might vary, but at the end of the military conflict, the constituents will likely carry out an informal cost and benefit analysis to evaluate the aftermaths and the overall impact on their society; their judgment will certainly alter their willingness to engage themselves in military conflicts in the future.

Likewise, various historical events will undoubtedly have a lasting effect on the kind of foreign aid policies a country and its constituents would like to pursue. A nation might become more interested in another nation’s welfare, or perhaps feel more entitled to a patriarchal role, and take a more interventionist stance after certain historical events such as military conflict takes place in its history; as a paternal figure, it might increase the amount of economic and political support it extends to others. On the contrary, it might grow more reluctant to participate in global conflicts
and other multilateral efforts and decrease the amount of support. Foreign aid policies, very much alike any other policies, will be attuned reacting to various historical events.

Thus, it is in my interest to, in an exploratory vein, explore and attempt to initially account for the way that domestic historical factors may affect a country’s ODA allocation process. My analysis will be divided into two parts: a quantitative component and a qualitative approach. The quantitative component entails building a time-series cross-section regression model. Rather than constructing a regression model that fully incorporates various historical independent variables, however, I focus on a select macroeconomic independent variables; I estimate a pair of regression models to examine the association between those select independent variables and ODA, the dependent variable. Then, I look for any seemingly unintuitive country patterns that depart from global trends and attempt to answer the incongruities among country-specific coefficients by looking back at the histories of the donor countries and how different historical events might have led to such departures from empirical norms.

**The Data**

The data, information regarding both the dependent and independent variables, was provided by OECD; the organization collects ODA data of its member countries and has it publicly available on its official website: http://stats.oecd.org/index.aspx. OECD organizes it data set in various categories, time periods, units, etc., and people are able to easily navigate the website to download the information they are seeking in an Excel spreadsheet; furthermore, OECD assists the general public via e-mail. Note that the choice of unit was not important as the regression
models accounts for the differences in unit across different variables. Thus, the underlying units for both the dependent and independent variables are not discussed in the following sections.

Please refer to the attached Excel spreadsheet for information regarding the unit.

The Dependent Variable:

The dependent variable, *oda*, measuring the quantity of ODA was collected for 29 countries; the data set dates back to the mid 1900s. The 29 subject countries are member nations of the OECD; Mexico was the only OECD member nation left out from the data set due to insufficient amount of information.

The Independent Variables:

The Macroeconomic Independent Variables

I constructed four different independent variables quantifying various macroeconomic characteristics of the subject countries and 29 dummy variables. The macroeconomic independent variables were *gdppercapita*, *gdppercapitat20*, *gdpgrowthrate* and *timetrend*, and all of them date back to the mid 1900s.

The *gdppercapita* independent variable measuring GDP per capita is intended to capture the affluence level of the OECD member countries; it would more or less hint us on the recent
economic conditions of the subject countries. GDP per capita was considered instead of GDP itself as the former is a better measurement of the quality of wealth.

The independent variable of our utmost interest is \textit{gdpcapitat20}, which is a 20-years lag of \textit{gdppercapita}. It is supposed to indicate the historical affluence level of the subject countries and hint us on how their past might dictate current policies regarding ODA. Since my inquiry of ODA was motivated by a lack of emphasis on historical factors, the \textit{gdppercapitat20} variable will be scrutinized very carefully.

The \textit{timetrend} independent variable is expected to neutralize any time-specific trend within the data set. It is fundamental to incorporate such variable because it will help us "clean up" the data set by detecting any time-specific trend and normalizing its effect on the coefficient terms. The \textit{timetrend} variable is built-in by subtracting 1959 from the each year so that \( t = 1, \ldots, 49 \) for every country rather than \( t = 1960, \ldots, 2008 \). Although \textit{timetrend} is not necessarily a macroeconomic variable, such categorization will not distort our analysis and do so for convenience.

The Dummy Variables

I created 29 country dummy variables in addition to the four macroeconomic independent variables to look for any country-specific characteristic: \textit{australia austria belgium canada czechrepublic denmark finland france germany greece hungary iceland ireland italy japan korea luxembourg netherlands newzealand norway poland portugal slovakrepublic spain sweden switzerland turkey unitedkingdom unitedstates}. Their designations are self-explanatory, and the
dummy variables will be useful in capturing any country-specific trend or difference especially if they are interacted with the macroeconomic variables.

There were more independent variables under consideration at the outset. For example, population was one of the independent variables in the original data set, but it was excluded after choosing to use GDP per capita instead of GDP as our measurement of wealth.

Furthermore, there were more dummy variables as well intended to capture country-specific historical factors. Those dummy variables, for example, indicated whether or not the subject countries were founding members of the U.N. Such variables would tell us if a country has been a historically influential nation or if it lacked the resources to compete among the world powers in the past. However, these variables were later dropped to minimize the degree of correlation among the independent variables and simplify the regression models as much as possible.

Refer to the attached Excel spreadsheet for the complete data set.

The Regression Models

Our approach was to i) formulate a relatively simple regression model, ii) construct and add certain interaction terms to the relatively simple model and thus, build a larger model, iii) carry out an F-test to validate the relevance of the larger model and more specifically, the interaction terms that have been added to the relatively simple model and iv) make any intriguing observations regarding the coefficients in the larger model.
Most of the independent variables we were interested in were incorporated in the larger model. The interaction terms in the larger model were of our primary focus. They were generated by multiplying three of the four macroeconomic variables and the country dummy variables; we would try to answer the discrepancies in the coefficients of the interaction terms by looking back at the different histories of the subject countries since the coefficients are country-specific. The simple model was more or less designed as an alternative regression model that the larger model could be tested against in an F-test.

*The Larger Model:*

We incorporated the four macroeconomic independent variables, 29 country dummy variables and 87 interaction terms; we generated the interaction terms by multiplying i) \( gdppercapita \) and the country dummies, ii) \( gdppercapitat20 \) and the country dummies and iii) \( gdpgrowthrate \) and the country dummies:

\[
gdp1 = gdppercapita * australia  
gdplag1 = gdppercapitat20 * australia  
gdprate1 = gdpgrowthrate * australia  
gdp2 = gdppercapita * austria  
gdplag2 = gdppercapitat20 * austria  
gdprate2 = gdpgrowthrate * austria  
gdp3 = gdppercapita * belgium  
gdplag3 = gdppercapitat20 * belgium  
gdprate3 = gdpgrowthrate * belgium  
\]
The interaction terms are intended to capture any country-specific difference; the coefficients of
the interaction terms would tell us how the three macroeconomic variables have varying effects
for the subject countries. For example, the coefficient of $gdp1$ would tell us the effect of
Australia’s GDP per capita on Australia’s ODA level. Likewise, the coefficient of $gdplag1$
would tell us the effect of Australia’s past GDP per capita on Australia’s ODA level, and the
coefficient of $gdprate1$ would tell us the effect of Australia’s GDP growth rate on Australia’s
ODA level. Amongst the interaction terms, the $gdppercapitat20$ * country dummies especially
garner major attention since $gdppercapitat20$ is in itself a historical variable. Below is the larger
model.

Regress oda on gdppercapita gdppercapitat20 gdpgrowthrate timetrend australia austria
belgium canada czechrepublic denmark finland france germany greece hungary iceland ireland
italy japan korea luxembourg netherlands newzealand norway poland portugal slovakrepublic
spain sweden switzerland turkey unitedkingdom unitedstates gdp1 gdp2 gdp3 gdp4 gdp5 gdp6
gdp7 gdp8 gdp9 gdp10 gdp11 gdp12 gdp13 gdp14 gdp15 gdp16 gdp17 gdp18 gdp19 gdp20
gdp21 gdp22 gdp23 gdp24 gdp25 gdp26 gdp27 gdp28 gdp29 gdplag1 gdplag2 gdplag3 gdplag4
gdplag5 gdplag6 gdplag7 gdplag8 gdplag9 gdplag10 gdplag11 gdplag12 gdplag13 gdplag14
gdplag15 gdplag16 gdplag17 gdplag18 gdplag19 gdplag20 gdplag21 gdplag22 gdplag23
gdplag24 gdplag25 gdplag26 gdplag27 gdplag28 gdplag29 gdprate1 gdprate2 gdprate3
gdprate4 gdprate5 gdprate6 gdprate7 gdprate8 gdprate9 gdprate10 gdprate11 gdprate12
gdprate13 gdprate14 gdprate15 gdprate16 gdprate17 gdprate18 gdprate19 gdprate20 gdprate21
gdprate22 gdprate23 gdprate24 gdprate25 gdprate26 gdprate27 gdprate28 gdprate29

The Relatively Simple Model:

Below is the relatively simple model we formulated. The independent variables were the four
macroeconomic measurements and the 29 dummy variables. We excluded the 87 interaction
terms because it is our intention to verify the significance of them; an F-test of the larger model against the relatively simple model would tell us whether or not the interaction terms are relevant.

Regress oda on gdppercapita gdppercapitat20 gdpgrowthrate timetrend australia austria belgium canada czechrepublic denmark finland france germany greece hungary iceland ireland italy japan korea luxembourg netherlands newzealand norway poland portugal slovakrepublic spain sweden switzerland turkey unitedkingdom unitedstates

Please note that since STATA automatically corrects for perfect linear dependence among the independent variables in a regression model, I included all country dummy variables in both the larger and relatively simple models and did not choose a base country. STATA will drop certain country dummy variables when asked to construct the models I formulated.

An F-test indicated the larger model was indeed significant, which was expected, and thus, we looked for any incongruity in the coefficients that seemed to be rather unintuitive. Interestingly enough, a few gdppercapitat20 * country dummies interaction terms had negative coefficients. Such anomalies definitely garner further attention.

Furthermore, the linearity assumption seems to be intact. If the observed values are plotted against the predicted values or the residuals against the predicted values, except for a few outliers, the plots appeared to be systematically distributed along a diagonal line in the former and a horizontal line in the latter; such “systematic distribution” was judged by human observation, however, and I admit not utilizing a more scientific approach.

Lastly, to detect and account for any inconsistency in the data set that might skew the coefficients in the larger model, I generated a corresponding Cook’s distance for each data point
and looked for any outlier. Of the approximately 500 total observations, very few proved to an outlier; I considered a data point to be an outlier if the corresponding Cook's distance > 4/(n-k-1). Since it was not in my interest to build a comprehensive regression model with an accurate predictability power, I did not make any major adjustment to the larger model. However, I again admit such negligence is unsatisfactory and could prove to be dangerous.

Please refer to the Appendix for the complete set of regression runs, the F-test and the Cook’s distance outliers.

**The Case Studies**

The quantitative analysis provides evidence regarding how different economic variables are associated with the ODA levels for various countries. Yet questions remain regarding the causal patterns underlying these results; the regression in itself cannot explain why there are such large differences in the magnitudes of the coefficients across subject countries. Thus, it would be interesting and, more significantly, appropriate to conduct a qualitative study to grasp a thorough understanding of various elements influencing ODA. Although it would be truly exhaustive only if a careful study was implemented for all 29 countries, such comprehensive analysis would be too demanding in terms of time and resources, and would produce results that may be too complex to communicate efficiently; the regression models are instead used to systematically narrow down the list of potential case studies.
Case studies will focus on various historical events and how they might have affected policies regarding ODA. Since the case studies will place a heavy emphasis on history, it is critical to recall the range of the data set before proceeding with the actual case studies; the data set dates back to the mid 1900s. Thus, it would be important to understand the consequences of various events that affected the subject countries during the 20th century. Those developments might be either world-wide occurrences or country-specific events.

In 1960, many nations around the world were recuperating from a series of misfortunes that had a deteriorating and lasting effects on them. Only a few years after the greatest world-wide recession in the history of mankind, various European nations, Japan and the U.S. engaged themselves in another round of devastating world war that took away the lives of approximately 60 million soldiers and civilians. On top of the large number of casualties, the European continent was left desolate, and various Asian countries that Japan occupied prior to and during World War II were bombarded and destroyed. A long road to recovery was ahead, but there were various issues that complicated the mending process.

Allies during the war, the U.S. and the Soviet Union now competed for the leading role in the world politics. With their economic and military prowess, both countries were suited to play the leading role, and they certainly had some right to claim such position. Russia had the largest number of casualty with almost of half of the 60 million coming from the largest country on earth, and the U.S. sent troops overseas to various countries in order to liberate them from Hitler and his followers.
Thus, the era of Cold War began. As the champion for democracy, the U.S. extended support to those struggling to fend off communist sentiment within and pressure from leading communist countries. Taking advantage of its long border that used to encompass America, Asia and Europe before the sale of Alaska to the U.S. and thus, an easy access to various countries that were struggling to recover from a long period of devastation and imperial dominance, Russia provided necessary economic supplies and political support to communist parties around the world.

It is important not to forget the country-specific events as well in order to carry out a thorough study on the countries. Of the countries of our interest, some were already a dominant force in the world stage and played a significant role in World War II, and for those that emerged as victors, their place among the leading nations became even more formidable. On the other hand, some were a dominant force before the war but, as losers, faced significant military and political restrictions as well as financial reparation to the victors.

With various historical factors influencing the subject countries, their domestic and foreign policies were affected in many ways. And it is my desire to study the countries that generate a seemingly incongruent coefficient terms in depth to supplement the quantitative analysis conducted. The countries that I will focus on are Italy and the United States of America.

The data set and the regression runs suggest Italy's ODA level is inversely correlated to its past GDP per capita; the coefficient of the interaction term between the Italy country dummy variable and past GDP per capita, \( gdppercapitat20 \times italy \), was negative, an interesting but somewhat
confounding result. It is more likely suppose a country with a long history of economic prosperity would be inclined to provide help to other nations. A historically affluent country with a considerable amount of wealth accumulated over a long period of time should have more resources at its disposal to share. Thus, it would be more probable to assume that past GDP level would be positively associated with current ODA amount than vice versa; such was the case for most of the OECD member countries. However, Italy, along with five other nations, suggested otherwise.

Such intriguing set of results was the motivation behind to focus on the countries with a negative GDP lag interaction term in the case studies that follow. With a high t-stat in an absolute term, Italy and the U.S. were logical choices for a careful study among the countries with a negative coefficient. After observing the regression results, it would not be unusual for someone to ask why would a high past GDP per capita push a downward pressure on Italy's current ODA level? Or, why would a low past GDP per capita encourage Italy to provide more foreign assistance today? It should be noted, however, that regression runs merely point out an association between two variables, not a causation. Thus, we should avoid trying to establish a causal relationship without strong reasons to believe there is a direct cause and effect linkage.

Italy

*Historical Background:*

**The Years of Lead**
Italy’s early 20th century history can be characterized as a repetition of i) seemingly dominant role in the context of international politics followed by ii) economic and political instabilities within its border. After the unification of the small autonomous states in 1861, Italy was prepared to ascertain itself as one of the military authorities in the European continent. In a matter of a couple of decades, the young independent nation developed into a colonial power, extending its power into Northern Africa and Eastern Europe. However, their economic and military prowess quickly vanished following the First World War.

World War I left the Apennine peninsula in economic despair, and Italy lost more than half a million men from years of military conflicts. Such instability naturally led way to dissatisfaction among its constituents and ultimately helping the rise of Mussolini who would go on to institute a dictatorship for himself. During Mussolini's tenure as the head of the Apennine peninsula, Italy would observe a quick change in its international status. A chain of victories following its invasion of Albania in 1939, Italy emerged as a major player during World War II, aligning itself with the Germans by supporting Hitler and the Nazi party.

It would yet experience another change in its fortune, however. Contradictory to its early successes in the battlefields, Italy would lose a couple of key battles in Africa, and its power would quickly diminish. Four years after the victory at Albania and entering World War II, Italy surrendered to the Allies in 1943 after military forces led by the U.S. invaded the peninsula. Approximately another half a million lives were lost, and the country was left desolate.
In the 1950s, the Marshall Plan would help revive the Italian economy, and the country was one of the founding members of the European Economic Community, EEC, a predecessor to the European Union, EU. Italy would go on to experience tremendous economic growth during the 1960; it was short-lived, however.

Relating it Back to the Data:

Recall the range of the data set. The GDP per capita lag independent variable dates back to the mid 1970s; thus, we can only observe the effect of past wealth on ODA levels during the last quarter of the 20th century. Accordingly, the case study should focus on why a high or low level of past wealth from the 1950s to the mid 1970s would correlate to a low or high level of ODA from the mid 1970s to the 21st century. Considering Italy’s dire economic conditions during most of the 20th century, it would be appropriate to study the latter association: why would a low level of past wealth translate into a high level of ODA.

A case study on Italy hints us on three different possible hypotheses concerning the negative relationship between past wealth and future ODA level. First, the negative relationship might be explained by Italy’s late industrialization which was completed in the 1980s; harsh economic and political conditions delayed Italy’s development into an industrialized nation, and when it finally became one, it lacked a technological edge; to compete against its Western European peers which already had a sound economic base with an emphasis on manufacturing, Italy utilized ODA to build key trade partners to sustain its young economy. Second, Italy’s consistent ambition to establish itself as a world power during the 20th century might explain the negative
relationship. Weary of its past economic and political struggles and dissatisfied with its diminishing role on the international stage, Italy utilized ODA to maintain and strengthen political ties with various African countries; ODA, rather than military force, was used to extend its influence abroad. Third, a psychological and behavioral factor might explain the negative relationship; with a long history of economic and political turmoil, Italy perhaps understands those countries besieged with many afflictions today and is more sympathetic towards various developing nations compared to other OECD members; thus, it is motivated to offer more help.

Seeking an Edge in a Competitive Environment—Strengthening Economic Ties via ODA

Delayed by years of harsh economic conditions and political instability, the final stages of industrialization took place fairly late in Italy. When it sought to compete against its Western European peers in the late 1900s, the inhabitants of the Apennine peninsula found themselves lacking a competitive edge; many countries had far more advanced technologies and large economies of scale. To sustain its vulnerable economy, Italy strengthened its economic ties with much needed trade partners via ODA.

Up until the 1960s, Italy was a relatively poor nation compared to its European peers. The country suffered a devastating defeat during the Second World War, and most of its factories located in the northern region of Italy such as Milan and Naples were bombarded and destroyed. Italy had yet been an industrialized country in the 1940s. Although many of its European peers went through multiple transformations in the 18th century during which their economies became
highly industrialized, Italy had an agriculture-based economy prior to World War II, and the bombardment during World War II hindered Italy’s economic transition.

Italy in the 1960s and the 1970s perhaps can be characterized as a period of incongruity during which seemingly disjoint events took place simultaneously. With much needed help from other nations which included the Marshall Plan, Italy would experience a tremendous amount of economic development hailed as the Italian Economic Miracle during the 1960s; Italy would begin its transformation into a highly industrialized country.

Notwithstanding the perceived economic success due to high GDP growth rates, however, the standard of living was still fairly low in Italy (a high economic growth rate does not necessarily translate into a high standard of living; in fact, a high growth rate is frequently observed in poor nations), and growth was failing to meet its potential. Political Scientists Daron Acemoglu and James Robinson suggest that political turmoil is more likely to occur in the context of poor economic conditions as individuals have low opportunity costs and thus, less to lose (938-940). This was certainly the case in Italy during the 1960s and the 1970s. Thus, the period of economic growth ironically coincided with a period of societal distress as many years of economic and political instability following the war led way to an era of socio-political turmoil, the Years of Lead, delaying Italy’s complete transformation into a highly industrialized nation.

Many historians including Professor Edward Muir of the Northwestern University History Department agree that despite experiencing a great deal of transformation in the 1960s and the 1970s, Italy would more or less achieve the last phases of industrialization by the 1980s. Such
development culminated in “Il Sorpasso” or the surpass in 1987 when Italy’s GDP overtook that of Great Britain’s.

Although Italy observed its economy transform into a manufacturing-based economy by the mid 1980s, its technological level was rather low compared to Western European nations’, and Italy had a relatively uncompetitive economy. The inhabitants of the Apennine Peninsula would seek its competitive edge in ODA.

For example, Italy produced a large number of tractors during the 1980s and the 1990s. Its tractors, however, were those that were often utilized by countries in less developed economies such as those in Africa. Italy lacked the technology to produce high-tech tractors that large scale farmers would use to develop their immense land area. Likewise, a significant portion of Italy’s final goods it produced was sought and purchased by many countries in Africa that had small farm-based economies.

The existing literature on ODA finds evidence on how donor countries provide assistance to strengthen its political ties and build a more accommodating and friendlier foreign relationship with countries that have economic values. Italy would certainly utilize its ODA policies on top of leveraging its existing relationship with North African countries from the imperial period to establish key trade partners; data suggests that most of Italy’s ODA flew into North African countries (Organisation for Economic Co-Operation and Development).
Thus, the negative association between the GDP lag variable and current ODA level could be explained as follows. Despite achieving tremendous growth in the 1960s, economic and political instability remained unresolved during the same time period and led to an era of societal distress hindering Italy’s transformation into an industrialized country. When it finally achieved the final stages of industrialization in the 1980s, Italy found itself lagging behind in technical expertise and uncompetitive. In order to provide a competitive edge for itself and find key trade partners, Italy most likely resorted to ODA on top of its continuing political ties to its former North African colonies.

**Persistent Ambition to be a World Power—Strengthening Political Ties via ODA**

It is no secret that Italy wants to be a dominant world power (Muir 2010). The descendants of the Roman Civilization, the Italians sought a leadership role among their European counterparts throughout the 20th century. Whenever presented with an opportunity to vie for such position, the inhabitants of the Apennine Peninsula did not shy away from engaging themselves in military conflicts with others; in the late 1900s, when military tactics became an unpopular choice, Italy resorted to political and economic means to extend its influence: ODA

Italy’s inclination for power is quite apparent in several occasions. It entered the First World War dreaming of a larger territory within its boundary. Due to its proximity to and strategic location of North Africa, the Italian constituents hoped to establish a strong presence in African countries across the Mediterranean Sea. However, Italy was not able to gain control of most of
the North African nations it was promised before the war, and its mission was far from accomplished.

World War II offered Italians another chance to ascend and become a superpower. The Italians did not pass up such opportunity. It entered the Second World War and allied itself with Germany and Japan, which were themselves seeking to ascend their position in the international stage. The Italians would fail once again, however, and the country would face various struggles ever since its defeat from the war.

Such ambition perhaps offers an explanation to the negative association between Italy’s past GDP per capita and current ODA level. Professor Muir remarks that Italy’s strong taste for power and influence might hint us on another possible answer to the inverse relationship: dissatisfied with its economic and political struggles during the 1960s and the 1970s and fearful of its diminishing role among the world powers, the public sentiment favored the central government apportioning a larger piece of the federal budget to ODA to strengthen ties with tactically important nations and gain international recognition.

Historians generally agree that the rise of Mussolini and his fascist followers during the 1930s and the 1940s was especially triggered by Italy’s disappointment following World War I when it failed to establish itself as a leader among its European counterparts (Muir). Afraid to be forgotten from the international stage, a history of perceived weakness could have encouraged Italy to provide a higher level of foreign assistance to remind others of its existence. Through ODA, Italy would seek to exert political influence and at last fulfill its ambition.
Another likely answer to the negative association might be evident in Italy’s dire past economic conditions. The fact that Italy experienced numerous economic recessions during its reputed but often troubled history probably had a significant effect on its constituents and their mindset. The Italians perhaps understand what it is like to go through severe recessions and observe high unemployment rate; they are perhaps more likely to be sympathetic towards those facing similar difficulties today.

In the field of psychology, many studies have established or at least enlightened us on human tendency to feel more sympathetic towards those of similar backgrounds. Professor Sara Broaders of the Northwestern University Psychology Department recounts how a recent study found evidence that individuals who used to be homeless are more likely to help those who are currently homeless. It is a rather surprising result considering that the probability the people who used to be homeless having enough wealth to share today is most likely low. Regardless of the seemingly unintuitive finding, however, such study illustrates that people understand and are more sympathetic to those who went through or are currently facing similar challenges and difficulties.

Furthermore, behavioral economists have shown in multiple studies that familiarity has a significant effect on one’s decision making process. For example, a consumer is more likely to purchase a brand that he or she is familiar with due to past experiences even if it meant acquiring
at a relatively higher cost (Eliose Coupey, Julie Irwin and John Payne 1998). Such finding reaffirms the fact that individuals are inclined to show more affection to those of familiar backgrounds whether they are by themselves in an individual setting or collectively in a group environment.

The inhabitants of the Apennine Peninsula could have found themselves feeling relatively more sympathetic towards poor nations compared to its OECD counterparts after all those economic and political struggles they went through, and it might explain the negative correlation between past wealth and ODA level.

**The United States of America**

*Historical Background:*

**The Age of Affluence**

Looking back at the history of mankind, the countries that exerted significant level of political authority on a global scale at various time periods were the nations that enjoyed economic prosperity and had access to various natural and human resources. Put in other words, wealthy states were more likely to play a vital role on the international stage; such evidence and conclusion are self-explanatory as thriving nations would have had more resources to pay attention to various non-domestic issues.
Beginning in the 20th century, the United States of America emerged as one of the most affluent and ultimately, influential countries in the world. Its abundant labor supply helped the U.S. rank second in the world in industrial production. Furthermore, its large population base and relatively easy access to i) a variety of natural resources due to its sheer size and ii) technology provided America the capacity and opportunity to build a strong military presence; the Civil War ironically had provided a chance to study and implement various military tactics.

Its immense accumulation of wealth and a potential to assemble a large military force in the near future laid the foundation for the U.S. to become a superpower in the international setting. The Americans had always been fond of broadening its territory; during the 19th century, the majority of the U.S. constituents were strongly behind its century long westward expansion to the Pacific Ocean. Such fondness often manifested itself in the U.S. through its interventionist foreign policies in the 1900s; the country’s strong belief in democracy and individual freedom provided a support to the prevailing sentiment during this time period.

Relating Back to the Data:

The data suggests a negative affiliation between past GDP per capita and present-day ODA. Either a high GDP per capita is related to a low ODA today or a low GDP per capita is related to a high ODA today. Considering the range of the data, it is more relevant to analyze the former relation. Recall that the data set goes back to the mid 1900s, and remember America was able to emerge as one of the most affluent countries in the world during that time period.
A logical next step might seem to establish a direct correlation between past wealth and current ODA. Rather than trying to do so, however, it would be more appropriate to i) study the effects of becoming an affluent country and ii) their likely consequences on future ODA policies. Remember that the regression run does not tell us whether or not there is a direct cause and effect relationship between two variables; it merely establishes an association.

A case study on the United States of America hints us on three different possible hypotheses as well. First, the negative relationship might be explained by America’s frequent participation in various international issues; a great accumulation of wealth and having access to various resources enabled the U.S. to intervene in various multi-national affairs, but the American people became tired and even weary of such involvement; such prevailing sentiment perhaps discouraged ODA allocation. Second, as the wealthiest nation in the world, the U.S. provided assistance to various developing nations in the past; however, ODA proved to be inefficient in serving its intended purpose, and the American public became skeptical of utilizing foreign aid to help poor nations. Third, in the 1960s and the 1970s, while America emerged as a wealthy nation, certain economic and ethnic minority groups faced various difficulties, and their afflictions were much more apparent compared to those riding along the great economic boom; international issues became a secondary concern, and the U.S. had to fix its own domestic problems in the late 20th century before turning back their attention abroad and extending assistance to other nations.
Historians often dub the period from 1945 to 1960 as the “Age of Affluence” (James Henretta and David Brody 795). It is during this time period when the U.S. truly surfaced as a global economic power, and America would enjoy a great amount of prosperity ever since. As a victor in the Second World War and with an accumulation of large wealth in the years following the war, America unsurprisingly took a leadership role during the Cold War era against communist threats.

However, a significant portion of the American public was somewhat skeptical of the country’s dominant role on the international stage and was growing increasingly concerned with too much foreign involvement. The U.S. constituents were not welcoming some of the elements that immense wealth and a leadership position among its peers had brought along.

Such backlash against foreign involvement existed even in the early 20th century as the U.S. was finding its role among the world leaders while it was still emerging as an economic and military prowess. Despite President Woodrow Wilson’s efforts to continue America’s involvement in international affairs, a set of measures was introduced during the 1920s and 1930s that reflected a strong anti-interventionist sentiment throughout the country.

After the First World War, President Wilson was optimistic about continuing the American support to its European allies, but the United States Congress was not particularly in favor of the Treaty of Versailles. It criticized the accord as unrepresentative of Americans’ welfare and decided it was in the best interest of the U.S. not to join the League of Nations much to President Wilson’s disappointment. After all, the war turned out to be expensive to the Americans in many
ways; billions of dollars were spent and, more importantly, millions of lives were lost. If the United States was neutral before entering the First World War, its foreign policies took a step backward after the war.

The number of immigrants flowing into America was restricted, and quotas were introduced for different ethnic groups. Prior to World War I, the U.S. was perceived as a land of opportunity and security, and many Europeans migrated to America seeking a better life they had not had a chance to experience back in their home countries. However, World War I undoubtedly had a disturbing impact on how the American society viewed anything or anyone “un-American,” and following the war, the U.S. became increasingly unfavorable towards foreigners. Starting in 1929, only 150,000 immigrants were allowed every year. Furthermore, other legislations were introduced to “protect” the Americans. For example, tariffs were imposed on foreign goods in order to help the American manufacturers.

On top of such political back step, young Americans who were direct participants in the First World War isolated themselves from the society. The prevailing sense of confusion and indifference among the young American generation is best described by Gertrude Stein’s remark in the prefix to the book, The Sun Also Rises, by Earnest Hemingway. Stein denotes the group as the “Lost Generation” (Hemingway 7).

Despite such anti-interventionist sentiment following World War I, the American public was supportive of its foreign involvement in the 1960s; a public poll indicates increasing support in the early and mid 1960s (American National Election Studies). Professor Michael Sherry from
the Northwestern University History Department explains that the U.S. constituents were less opposed to aggressive foreign policies in the 1950s and the early 1960s when they enjoyed a great deal of economic prosperity and did not mind the new leadership position. However, he notes that the American public started to increasingly grow tired of such policies and wanted other countries to share the burden when it came to foreign aid as countries like Germany and Japan accumulated immense wealth during the 1970s.

A strong anti-interventionist sentiment would re-emerge during and following the Cold War. The Korean and the Vietnamese Wars had cost thousands of American lives and drained a huge amount of resource. The Counterculture of the 1960s represented such American public sentiment against foreign involvement. Among the factors contributing to the Counterculture of the 1960s was America’s consistent participation in international affairs during and following World War II. Despite a prevailing sense of isolationism among the U.S. constituents after the First World War, the United States government upturned its policies in the December of 1941. Even after the Axis Power surrendered and the magnitude of threat diminished, the U.S. continued to maintain a strong international presence. It joined the U.N. in 1945 as a founding member, and as the champion of democracy, America supported those defending themselves against communism; the U.S. was fighting for a noble cause, but many American soldiers lost their invaluable lives fighting abroad.

Reacting to such sacrifices, a strong cultural movement that attempted to address a set of societal concerns was cultivated in the 1960s throughout America. Such concerns included grating equal rights to all American citizens, honoring the First Amendment and thus, guaranteeing the
Freedom of Speech, etc. At the core was a strong anti-war sentiment as well, and the American public strongly supported pulling out of Vietnam.

The anti-interventionist sentiment fostered during the 1960s continued to increase in the 1970s and beyond. The American National Election Studies’ public poll illustrates such change in public sentiment; the number of Americans disproving foreign involvement started to grow in the 1970s and continued to increase until the early 1990s. The American public, which did not mind paying attention to issues abroad only a few years ago, now favored otherwise. In an interview with The New Yorker, Professor Jeffery Sachs of the University of Michigan Economics Department asserts how we could discern what the American public wants by following the presidential debates. In the latter half of the 20th century, presidential debates were often dominated by foreign policy and international development issues. However, Professor Sachs is disappointed to see a lack of discussion on such issues in recent presidential debates and is concerned with the apathy and indifference of the American public (Sachs).

Thus, a strong anti-interventionist sentiment prevailed in the 1970s and the 1980s, and it could have fueled the negative association between past wealth and future ODA. Wealth helped the U.S. emerge as a world power in the mid 1900s. However, playing a leadership role among the world powers entailed many responsibilities and casualties. A strong anti-interventionist sentiment was fostered within the U.S. as a result, and such force could have put a downward pressure on the amount of ODA flowing from the U.S. to various developing nations. Without the much needed public support, the U.S. government could only offer limited assistance.
Some would dispute the claim that public sentiment had a significant effect on the direction of the U.S. foreign policies. Many Americans suspect that the government policies are decided by an elite group of people controlling the federal government (Michael Allen 2010). However, studies have shown that the so-called elites do consider the general public sentiment when devising the government policies (Douglas Foyle 165). Professor Sherry adds that long-term policies such as those regarding foreign aid are more likely to be influenced by the public as the Congressmen and women, who represent and are elected by the American people, are the ones voting on the issues.

What is interesting about the U.S. and its involvements in various international conflicts is the fact that most of the battles it fought were away from its home front. The First World War was fought on the European continent, and while the U.S. lost many of its soldiers during the war, the constituents back home never experienced the effects of combats first hand. Moreover, except for the attack on Pearl Harbor, the U.S. fought most, if not all, of its battles abroad during World War II. It sent troops to Europe and Asia to fight off the Axis power. The distance from Pearl Harbor to the U.S. mainland certainly had a significant effect on how the U.S. constituents perceived the war: 3,839 miles.

To some Americans back home, the war perhaps felt like a foreign matter. The world wars were hardly fought on U.S. soil, and although the stakes were high during the Cold War, the U.S. constituents most likely did not directly experience the threat of communism. To those parents who lost their beloved sons and family members who lost their dearest brothers, the U.S. involvement abroad probably felt like of a waste of the lives of their love ones. Such sentiment
conceivably had a lasting effect on many Americans’ mindset and how the U.S. perceive
intervening or, perhaps as some might argue, interfering with foreign matters. The U.S. became
wealthy, and its vast amount of resources enabled America to surface as a military prowess.
However, some U.S. constituents did not welcome the responsibilities or consequences it
entailed, and the tired American public could have had an effect on future policies regarding
ODA which are often utilized for political concerns.

Official Development Aid and its Effects

Studying the effectiveness of the ODA in serving its intended purpose might provide another
explanation to the negative association between past wealth level and current ODA level.
Countries are more likely to give out foreign aid with more economic resources available, and
people do expect wealthy countries to offer more assistance; surely, the rich nations are ones that
are under constant scrutiny regarding their foreign aid level. Thus, it is plausible to suppose
countries are more inclined to help others as they become wealthier. The data certainly presents
such evidence; higher the current GDP per capita, higher the ODA level today. In the mid 1900s,
the United States became extremely wealthy, and it was well positioned to assist other nations.

The ODA was to strengthen political ties, and at the same time, promote economic growth for
the recipient countries. Today, we are not quite sure if those purposes were served by ODA.
Several research articles point to its negligible effect on promoting democracy (Stephen Knack
257-261). Such result might concern the American public; what is the use of spending billions
of dollars helping others if such effort turns out to be futile.
Worsening the matter, there are studies that show how foreign aid actually increased the income gap within the recipient countries and did not encourage economic growth (Alberto Chong, Mark Gradstein and Cecilia Calderon 69). If this is the case, the ODA serves the exact opposite of its intended purpose, and providing aid would require more aid in the future to “decrease” a wider income gap. Rather than promoting individual freedom by encouraging democracy and providing more economic resources to the recipient countries, aid flowing to poor nations was abused by corruption prevalent in third world nations.

With such evidence, the American public might be reluctant to provide help in the future. After all, the Americans worked hard to accumulate such wealth, and if data suggests the opposite of what the American people had expected, it would most definitely discourage additional amounts of spending on foreign aid.

Thus, a negative association might be the result of the ineffectiveness of ODA. As America grew wealthier and had more resources at its disposable to help other nations, it actually gave out more aid. However, as the U.S. constituents found out later that their efforts to promote democracy and encourage economic growth in poor nations did not actually materialize, they became more reserved when it came to making decisions regarding foreign aid in the future.

The Civil Rights Movements
Named after Nobel Laureate Simon Kuznets, the Kuznets Curve shows an inverse relationship between income inequality and income per capita. According to his study, the income gap between the wealthy and the poor initially widens as countries accumulate more wealth and their per capita income rises. Although the inequality eventually diminishes and the reflection point varies for different countries, Kuznets points out a potential complication that a society might have to face as it strives for an overall higher standard of living.

Such was the case for the United States during the 1960s. Although the country surfaced as a dominant economic force during the mid 1900s, a stark contrast among different income groups became quite apparent and social tension heightened. Worsening the matter, the poor were concentrated among a few ethnic groups, and income inequality was not the only issue standing in front of the Americans. Although the U.S. was founded upon certain fundamental rights such as equal representation, many Americans would have to fight hard for them. As certain groups enjoyed an unprecedented level of wealth and even more societal privileges, those who did not
became increasingly aware of their dismal situation and the existence of a stark contrast among different groups within the U.S. society. Such increase in awareness and call for equality would lead to various civil rights movements in the 1970s.

By the mid 1900s, the United States enjoyed a great deal of economic growth and prosperity. However, such wealth brought about new societal issues and shed light on existing problems, and those concerns would attract a great deal of attention, if not dominate the U.S. politics, during the latter half of the 20th century. For example, during the late 1960s and 1970s, mayors of major cities across the U.S. called for a domestic version of the Marshall Plan, emphasizing the need to take care of the issues afflicting the people back at home. With numerous domestic issues to resolve, it is plausible to suppose helping other nations was a secondary concern to the Americans.

Former Secretary of State Warren Christopher once remarked that without the consent of or providing satisfactory solution to the domestic public, the government finds itself in a difficult position to pursue foreign policies (Grant and Nijman 1997). America became wealthy, but affluence introduced various social problems to the American public. Those problems perhaps influenced the direction of the governmental policies, resulting in an emphasis on constructing appropriate domestic policies ahead of offering support to other nations. Such emphasis could have put a downward pressure on the quantity of ODA.

**Summing up the Case Studies**
The case studies attempt to account for various historical events and study their effect on the ODA allocation process. Through a quantitative reasoning, Italy and the U.S. were selected for a more in-depth qualitative analysis, and examining the histories of Italy and the U.S. enlightened us on possible factors that might influence the foreign aid policies of the two countries today and in the future. For example, a key factor turned out to be the role of public sentiment; without much support from the public, government officials cannot implement ODA policies favorable towards the developing nations.

Thus, a more thorough analysis that accurately reflects the change in the public sentiment in Italy and the U.S. might help us provide more satisfactory evidences to various hypotheses proposed in the case studies. Instead of relying on and accepting the data set available through various organizations, I could perhaps conduct a survey myself. However, it would not be unsafe to assume that various historical events discussed in the preceding sections did have a lasting effect on the Italian and American public. A public policy often reflects the prevailing public opinion at the time of implementation, but the public opinion is developed over a long period of time reacting to different historical events. The historical events mentioned in the previous sections were significant enough to have a lasting impact on Italian and American constituents’ perspectives.

**Questions for Future Studies**

This paper reflects on a few questions that the regression models present. There are, however, several areas that garner further attention. It would definitely be interesting and, more
significantly, exhaustive to try to answer those questions left unanswered. Below is a list of topics that requires additional consideration.

*Marginal Effect:*

This paper has attempted to explain the general negative association between past wealth and current ODA level for Italy and the United States of America. It has not, however, studied the marginal relationship between the two variables: why would an incremental decrease or increase in past wealth have a marginal positive or negative effect on current ODA level? Would the magnitude of the marginal effect stay put as the constant coefficient suggests or vary at different past GDP per capita levels?

Looking further into the marginal relationship between the two variables for Italy and United States would definitely be an interesting study. Examining the such relationship was not the interest of this paper, however. Without a strong rationale to infer past GDP per capita has a direct causal effect on the current ODA level, considering the incremental relationship was deemed rather unnecessary.

*GDP Growth Rate:*

The coefficient term for the GDP growth rate independent variable was negative, an interesting but confounding result. It would be hasty to argue that developing nations experience a higher growth rate, and such countries do not in general have enough resources to spare to other less
developed nations. However, considering that the subject countries are OECD nations and some of the wealthiest in the world, the negative correlation was rather confusing. It would be an interesting study to look further into such association.

*Multicollinearity:*

Due to a strong correlation between the GDP per capita variable and GDP per capita lag variable, studying the effect of the lag variable on the ODA level was rather limited. If a 5- or a 10-years lag variable was used in place of the 20-years lag variable, the regression run would blow up; the coefficient terms would economically not make sense, and furthermore, the t-stats for most, if not all, of the independent variables were not significant.

Such multicollinearity was of great concern during the study, and because of limited knowledge or rather limited range in the data set, the problem was not remedied. This paper occasionally assumes the negative correlation between past GDP per capita and ODA level would by and large exist regardless of the magnitude of the lag; for example, I assume a shorter lag of approximately 10 years in the section *Civil Rights Movements*. Accounting for the multicollinearity problem and showing evidence that the negative association applies to a shorter or a greater lag would provide greater support to the case studies.

**Conclusion**
The existing literature on ODA places an emphasis on i) contemporary economic variables of the donor countries and ii) political characteristics of the recipient countries; it often ignores how different economic variables of the donor countries were developed over the course of their histories, and furthermore, important political characteristics of the donor countries are overlooked. It was in my interest to explore the latter; I wanted to examine how various historical events have a lasting impact on public policies today and in the future.

In an attempt to address the perceived gap in the existing literature, I constructed a pair of regression models and tried to explain certain incongruities in the coefficients by looking back at the histories of the donor countries. Various historical events took place during the 20th century and they seem to hint us on likely answers to such incongruities. For example, the data and the regression models suggest a negative association between i) past wealth and ii) future ODA level for the United States; its history tells us why that might be the case. With a long history of wealth and a leadership position among the world powers that naturally accompanied wealth, the U.S. constituents perhaps grew tired of many responsibilities such leadership position entailed. With too much foreign involvement in the past and casualties that followed, the American public is probably weary of interventionist foreign policies today and will be hesitant in the future as well.

This paper attempts to present various perspectives regarding the ODA allocation process. What I can only conclude with great confidence, however, is the fact that applying a common guideline to all OECD member countries might not be a realistic approach after all; certainly criticizing a nation based on such common goal would be unfortunate and ignorant. Different
countries pursue different agendas that are tailored towards their own constituents’ needs. However, at the same time, it is impractical, time-consuming and expensive to set up varying standards for different countries. The ODA allocation process is a complex problem that might not have a definite answer and requires close cooperation among, but not limited to, the donor countries.
Work Cited


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Work Consulted


<http://www.globalissues.org/TradeRelated/Debt/USAid.asp#ForeignAidNumbersinChartsandGraphs>.


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<td>F(101, 381) = 72.53</td>
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<td>381</td>
<td>1288224.83</td>
<td>Prob &gt; F = 0.0000</td>
</tr>
<tr>
<td>Total</td>
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<td>482</td>
<td>20595789.9</td>
<td>R-squared = 0.9506</td>
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<tr>
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</tbody>
</table>

---

**B.**

*The Relatively Simple Regression Model:*

```
   . reg oda gdppercapita gdppercapitat20 gdpgrowthrate timetrend australia austria belgium canada czechrepublic denmark finland france germany greece hungary iceland ireland italy japan korea luxembourg netherlands newzealand norway poland portugal slovakrepublic spain sweden switzerland turkey unitedkingdom unitedstates
   
   note: czechrepublic omitted because of collinearity
   note: hungary omitted because of collinearity
   note: luxembourg omitted because of collinearity
   note: poland omitted because of collinearity
   note: slovakrepublic omitted because of collinearity
```

<table>
<thead>
<tr>
<th>Source</th>
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<th>MS</th>
<th>Number of obs = 483</th>
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</thead>
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<td>Model</td>
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<td>Residual</td>
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<td>Adj R-squared = 0.8675</td>
</tr>
</tbody>
</table>

| oda  | Coef.  | Std. Err. | t     | P>|t|   | [95% Conf. Interval] |
|------|--------|-----------|-------|-------|---------------------|
| gdppercapita | -2.687003 | 28.25352 | -0.10 | 0.924 | -58.2109 | 52.83689 |
| gdppercap-20 | 275.9855 | 72.25431 | 3.82 | 0.000 | 133.9911 | 417.9799 |
| gdpgrowthrate | -4640.996 | 2754.69 | -1.68 | 0.093 | -10054.52 | 772.5292 |
| timeperiod | -25.8328 | 42.21215 | -0.61 | 0.541 | -108.7882 | 57.12664 |
| australia | 2263.768 | 789.1348 | 2.87 | 0.004 | 712.9582 | 3814.578 |
| austria | 1290.384 | 810.2665 | 1.59 | 0.112 | -301.9537 | 2822.722 |
| belgium | 1830.268 | 828.4884 | 2.21 | 0.028 | 202.1204 | 3458.416 |
| canada | 2962.819 | 815.3811 | 3.63 | 0.000 | 1360.43 | 4565.208 |
| czechrepublic | (omitted) | |
| denmark | 2406.088 | 794.723 | 3.03 | 0.003 | 844.297 | 3967.881 |
| finland | 1435.363 | 862.9136 | 1.66 | 0.097 | -260.4377 | 3131.163 |
| france | 8407.787 | 807.4467 | 10.41 | 0.000 | 6820.99 | 9994.583 |
| germany | 8847.974 | 870.0369 | 10.17 | 0.000 | 7138.175 | 10557.77 |
| Country      | GDP 2020 | GDP 2021 | GDP 2022 | GDP 2023 | GDP 2024 | GDP 2025 | GDP 2026 | GDP 2027 | GDP 2028 | GDP 2029 | GDP 2030 | GDP 2031 | GDP 2032 | GDP 2033 | GDP 2034 | GDP 2035 | GDP 2036 | GDP 2037 | GDP 2038 | GDP 2039 | GDP 2040 |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| greece      | 1191.648 | 1020.628 | 1.17     | 0.244    | -814.0927 | 3197.389 |
| hungary     | (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)|
| iceland     | -1183.609 | 1083.545 | -1.09    | 0.275    | -3312.995 | 945.7768 |
| ireland     | 2187.65   | 838.3308 | 2.61     | 0.009    | 540.1596  | 3835.14  |
| italy       | 15307.27  | 838.5329 | 18.25    | 0.000    | 13659.39  | 16955.16 |
| japan       | 4656.248  | 798.5368 | 5.83     | 0.000    | 3086.961  | 4225.239 |
| korea       | 990.1963  | 950.4368 | 1.04     | 0.298    | -877.6049 | 2857.997 |
| luxembourg  | (omitted) | (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)|
| netherlands | 2676.981  | 703.9681 | 3.80     | 0.000    | 1293.541  | 4060.421 |
| newzealand  | 3793.256  | 927.908  | 4.09     | 0.000    | 1969.728  | 5616.784 |
| norway      | 2927.722  | 789.6601 | 3.71     | 0.000    | 1375.879  | 4479.564 |
| poland      | 736.5709  | 799.7711 | 0.92     | 0.358    | -835.1417 | 2308.283 |
| portugal    | 2649.752  | 1300.575 | 2.04     | 0.042    | 93.85837  | 5205.646 |
| slovakrepu-c| 6781.47   | 845.3459 | 8.02     | 0.000    | 5120.194  | 8442.747 |
| spain       | 15549.65  | 717.2573 | 21.68    | 0.000    | 14140.1   | 16959.21 |
| sweden      | 2216.092  | 1022.361 | 2.17     | 0.031    | 206.9447  | 4225.239 |
| switzerland | 2835.486  | 1042.684 | 2.72     | 0.007    | 786.3998  | 4884.573 |
| turkey      | 1191.648  | 1020.628 | 1.17     | 0.244    | -814.0927 | 3197.389 |
| unitedking-m| (omitted) | (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)| (omitted)|
| unitedstates| 15494.65  | 717.2573 | 21.68    | 0.000    | 14140.1   | 16959.21 |
| _cons       | -1894.059 | 1216.919 | -1.56    | 0.120    | -4285.553 | 497.4347 |

C.

The F-test Results:

. test gdp1 = gdp2 = gdp3 = gdp4 = gdp5 = gdp6 = gdp7 = gdp8 = gdp9 = gdp10 = gdp11 =
gdp12 = gdp13 = gdp14 = gdp15 = gdp16 = gdp17 = gdp18 = gdp19 = gdp20 = gdp21 = gdp22 =
gdp23 = gdp24 = gdp25 = gdp26 = gdp27 = gdp28 = gdp29 = gdplag1 = gdplag2 = gdplag3 =
gdplag4 = gdplag5 = gdplag6 = gdplag7 = gdplag8 = gdplag9 = gdplag10 = gdplag11 =
gdplag12 = gdplag13 = gdplag14 = gdplag15 = gdplag16 = gdplag17 = gdplag18 = gdplag19 =
gdplag20 = gdplag21 = gdplag22 = gdplag23 = gdplag24 = gdplag25 = gdplag26 =
gdplag27 = gdplag28 = gdplag29 = gdprate1 = gdprate2 = gdprate3 = gdprate4 = gdprate5 =
gdprate6 = gdprate7 = gdprate8 = gdprate9 = gdprate10 = gdprate11 = gdprate12 =
gdprate13 = gdprate14 = gdprate15 = gdprate16 = gdprate17 = gdprate18 = gdprate19 =
gdprate20 = gdprate21 = gdprate22 = gdprate23 = gdprate24 = gdprate25 = gdprate26 =
gdprate27 = gdprate28 = gdprate29

( 1)  gdp1 - gdp2 = 0
( 2)  gdp1 - gdp3 = 0
( 3)  gdp1 - gdp4 = 0
( 4)  gdp1 - gdp5 = 0
( 5)  gdp1 - gdp6 = 0
( 6)  gdp1 - gdp7 = 0
( 7)  gdp1 - gdp8 = 0
( 8)  gdp1 - gdp9 = 0
( 9)  gdp1 - gdp10 = 0
(10)  gdp1 - gdp11 = 0
(11)  gdp1 - gdp12 = 0
(12)  gdp1 - gdp13 = 0
(13)  gdp1 - gdp14 = 0
(14)  gdp1 - gdp15 = 0
(15)  gdp1 - gdp16 = 0
(16)  gdp1 - gdp17 = 0
(17)  gdp1 - gdp18 = 0
(18)  gdp1 - gdp19 = 0
(19)  gdp1 - gdp20 = 0
(20)  gdp1 - gdp21 = 0
(21)  gdp1 - gdp22 = 0
(22)  gdp1 - gdp23 = 0
(23)  gdp1 - gdp24 = 0
(24)  gdp1 - gdp25 = 0
(25)  gdp1 - gdp26 = 0
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(27)  gdp1 - gdp28 = 0
(28)  gdp1 - gdp29 = 0
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\[(42) \quad \text{gdp1} = \text{gdplag14} = 0\]
\[(43) \quad \text{gdp1} = \text{gdplag15} = 0\]
\[(44) \quad \text{gdp1} = \text{gdplag16} = 0\]
\[(45) \quad \text{gdp1} = \text{gdplag17} = 0\]
\[(46) \quad \text{gdp1} = \text{gdplag18} = 0\]
\[(47) \quad \text{gdp1} = \text{gdplag19} = 0\]
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\[(65) \quad \text{gdp1} = \text{gdprate8} = 0\]
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\[(67) \quad \text{gdp1} = \text{gdprate10} = 0\]
\[(68) \quad \text{gdp1} = o.\text{gdprate11} = 0\]
\[(69) \quad \text{gdp1} = \text{gdprate12} = 0\]
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\[(73) \quad \text{gdp1} = \text{gdprate16} = 0\]
\[(74) \quad \text{gdp1} = \text{gdprate17} = 0\]
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\[(76) \quad \text{gdp1} = \text{gdprate19} = 0\]
\[(77) \quad \text{gdp1} = \text{gdprate20} = 0\]
\[(78) \quad \text{gdp1} = o.\text{gdprate21} = 0\]
\[(79) \quad \text{gdp1} = \text{gdprate22} = 0\]
\[(80) \quad \text{gdp1} = o.\text{gdprate23} = 0\]
\[(81) \quad \text{gdp1} = \text{gdprate24} = 0\]
\[(82) \quad \text{gdp1} = \text{gdprate25} = 0\]
\[(83) \quad \text{gdp1} = \text{gdprate26} = 0\]
\[(84) \quad \text{gdp1} = \text{gdprate27} = 0\]
\[(85) \quad \text{gdp1} = \text{gdprate28} = 0\]
\[(86) \quad \text{gdp1} = o.\text{gdprate29} = 0\]

Constraint 10 dropped
Constraint 20 dropped
Constraint 22 dropped
Constraint 26 dropped
Constraint 33 dropped
Constraint 39 dropped
Constraint 49 dropped
Constraint 51 dropped
Constraint 62 dropped
Constraint 68 dropped
Constraint 78 dropped
Constraint 80 dropped
Constraint 86 dropped

\[F(73, 381) = 7.95\]
\[\text{Prob > F} = 0.0000\]
D.

Cook’s Distance Outliers:

France: 2000 and 2001
Italy: 2002
Spain: 2008
Switzerland: 2008
The United Kingdom: 1990 and 2006