

International Public Policy and Management, Master thesis.

Developing Governance

A study into the relation between development aid and the quality of government in recipient countries.

Abstract

This study looks into the results of the recent 15-year big development aid push, which occurred under the Millennium Development Goals (MDG's). One of the main topics of the development agenda was and to this day is, a focus on the development of different aspects of governance within the recipient country. By using a recently developed indicator, which claims improved accuracy in measuring the amount of actual development aid provided by donor countries, the effect of aid on the quality of government (QOG) in recipient states is examined. In a cross-country regression of 144 countries and including appropriate lags for the measured aid, this study finds hints for a very weak positive relation of aid on QOG, but fails to uncover statistically significant results.

Master Thesis

International Public Management and Public Policy

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Date:

12-6-2015

Word count (Excl. appendixes & references):

23.732

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1. WHY IS GOVERNANCE IMPORTANT?

This chapter will begin by offering a short introduction into the importance of governance and the debate surrounding it. In the second paragraph the objective of this study will be highlighted briefly, followed by the central research question, academic and practical relevance and a short stipulation of our central research concepts. The last section contains a reading guide.

1.1 THE DEBATE REGARDING AID, DEVELOPMENT AND GOVERNANCE

For over sixty years the major western states have been pouring funds and other resources into a varying set of developing countries, with at best mixed results. There has been an ongoing debate whether development aid works at all between critics and supporters of development aid.

In recent times when many donor countries have been affected by the worst economic crisis since decades, a discussion has been growing about the effects of aid and whether at all it should be provided. Many countries, under (internal) pressure from shrinking budgets and concerns from the public, have altered or limited their development budgets. Even so, last year was the year in which the provisioning of aid reached an all-time global high (TheGuardian, 2014), albeit due to the entry of 'newer' donor countries to the arena of the international development aid community.

Amidst all these developments, another defining occurrence has been taking place, which might very well prove to shape the focal point of developmental policies in the upcoming period.

The declaration of the 2000 millennium development goals, ushered in an era of intensified focus on developing the different institutions and concepts being thought responsible for furthering the quality of government in recipient countries.

With the deadline of 2015, just around the corner, the United Nations Development Program administrator, Ms. Helen Clark has stressed that investing in governance and more important developing strong and qualitative governments remains as important as ever.

"Governance impacts greatly on development outcomes. We hear an increasing demand from civil society to discuss ways of including governance and accountability in the global development agenda, both to ensure the legitimacy of development policies, and as central to achieving human dignity and justice to all.

The feedback from the UN's global consultations to date suggests that capable, fair, and accountable governments are seen as essential for driving development forward. In the poll conducted through the My World website, honest and responsive government is receiving the second largest number of votes, behind education, as the most important issue people want tackled in the Post-2015 agenda. (Helen Clark, 2015)".

Now already a few months into 2015, the time seems perfect to examine the results of 15 years of increased effort on developing governance that took place under the MDG's.

What stands to be examined is the influence of aid on structures and practices of governance within these countries. If good governance and quality institutions are so paramount and conditional for aid to even function properly, is the aid that has been provisioned before this profound understanding even been helpful at all? Can we find evidence to suggest that our good intentions are actually building something at all?

As will come to show, critical remarks can be placed regarding the influence of aid on the governance within the recipient country which, could potentially shed an entirely different light on the presumed effect of development aid on governance within developing countries.

1.2 RESEARCH OBJECTIVES

This study aims to identify whether there is a measurable relation between aid and the different core concepts of governance believed to be imperative for the quality of government (QOG) within these recipient countries. Judging by the previous works of more than one researchers (Knack, 2001; Bräutigam & Knack, 2004; Finkel, 2003; et.al. Moss, Pettersson, & van de Walle, 2008a), it seems pre-conceivable that question marks can and should be placed by the potential effect aid has on QOG in the recipient state.

This study aims to help evaluate the effects of 15 years of improved aid efforts by the west under guidance of the Millennium development goals. In order to achieve this research objective, the following research question has been formulated:

“Does development aid provided by the West lead to higher quality of government in the recipient countries?”

In this study, quality of government is the dependent variable and development aid is the independent variable. The definitions of the central concepts of this research question will be discussed further on in section 1.3. The specific hypotheses and causal mechanisms which will be examined are covered in chapter 3 after the literature review.

1.3 DEFINITION OF RESEARCH CONCEPTS

Measuring or even defining what is meant with the quality of a government is no easy task and the topic of much, at times heated, debate. In the past years several attempts have been made to contribute to a shared definition of the concept and critiques were made on existing ones being used. Rothstein (2008) and Holmberg, Rothstein & Nasiritousi (2009) for example, argue that much of these efforts have failed in its attempts to (accurately) define the quality of government conceptually.

According to them, there are four general problems that can be identified with existing definitions: (1) They are either extremely broad and cover too much, (2) suffer from a functionalist bias, (3) do not distinguish between substantive and procedural definitions, (4) or are far too narrow and deal with only part of the problem, such as e.g. corruption.

That most definitions used by researchers when trying to describe what the notion of QOG entails are indeed quite broad, can be illustrated best by one of the most widely (and frequently) used definitions, that of the World Bank as formulated by Daniel Kauffman:

"The traditions and institutions by which authority in a country is exercised. This includes (1) the process by which governments are selected, monitored and replaced, (2) the capacity of the government to effectively formulate and implement sound policies, and (3) the respect of citizens and the state for the institutions that cover economic and social interactions among them." (Kaufmann, Kraay, & Zoido-Lobaton, 1999)

Rothstein & Teorell (2008) and Holmberg (2009) argue, that this broad definition holds the risk of comparing good governance with anything that produces, or could potentially produce, good outcomes. Furthermore and despite its efforts, this notion's primary focus on institutions and procedures could lead to researchers focusing purely on the procedural existence or output of institutions and policies, instead of examining the more substantive worth of these institutions for its population. Rothstein even goes as far as claiming that the notion has inherent difficulties in distinguishing good governance from 'just' liberal democracy (Rothstein & Teorell, 2008).

Problems with definitions that are too narrow however, can be seen by looking at the work of researchers who have tried to look at narrower notions and indicators for QOG, such as for example the level of corruption present within a country. In agreement with the World Bank that good government is paramount to a country's development, empirical evidence seems to suggest that there must be (much) more to QOG than can be explained by pure levels of corruption alone, as can be seen by comparing Russia with Mali and The Gambia. Three countries that share the same rank (127th from 177 countries) in the 2013 corruption perceptions index (Transparency International, 2013). All three countries are also blessed with high revenues from abundant natural resources. Yet the GDP per capita is almost 30 times higher in Russia (US 14.611 compared to \$715 and \$494 in Mali and The Gambia), suggesting that quality of life in Russia is higher than Mali and The Gambia and that there is more to what influences development levels in a country than just corruption (at least from a socio-economic perspective). If corruption would be the primary dominant factor at work here, we should be able to see some variation but not so much.

That at least some of these objections are shared by others in related scholarly and policy fields, can be seen from the growing inclination of putting the emphasis of both policy and research on a broader notion of QOG, instead of just one element such as for example income, rule of law or levels of corruption.

The concerns raised by Holmberg et al. (2009) regarding potential bias and problems with separating precisely 'what's what', is discussed by others, stating that good governance performance could manifest itself in other indicators such as for example lower inequality, greater diversity, etc. etc. Another concern raised by Roy (2005, as discussed in Holmberg et al., 2009), is that the absence of a shared standard definition, might lead to researchers using, or selecting, a definition that might best support their theories. Thus further complicating the debate and adding to the problem of comparing apples to oranges.

Primarily, the focus of this paper is not to contribute or engage in the conceptual debate regarding the topic(s) at hand any further than mentioning the existence of it.

Also, because the aim of this study is to see if a measurable result of the development aid efforts of the past years can be found, it seems logical to investigate the same definitions and reasoning that was used, to support the provisioning of this aid in the first place.

Most of the aid that was distributed in the period that this study examines, was targeted at promoting largely socio-economic development targets and developing institutions and other notions of good governance, in accordance to the major scholarly and policy consensus. Therefore, the focus will be on the second part of Kauffman's definition (measurable government effectiveness).

Sticking with the dominant and most widely used definition, should only add to diminish concerns of increased heterogeneity between used definitions as mentioned for example by Roy (2005).

The other central concept of this study, development aid or foreign aid, should also be discussed. According to Moyo (2010), on the highest level, aid can roughly be divided into three types: charity-based aid, other humanitarian or emergency aid sent in response to catastrophes and calamities and systemic aid.

The first one, charitable aid, can be defined as aid that is disbursed by charitable institutions to local people or institutions, for example programs aimed at fighting AIDS.

The second type, humanitarian aid, is aid disbursed with the notion of relieving immediate human suffering, for example after severe natural calamities.

Finally, systemic aid is what Moyo (2010) describes as payments that are made directly to governments, be it from one government to another (known as bilateral aid), or by institutions (multilateral aid) such as the world bank. Like Moyo's work, this paper solely examines this last category of aid (systemic). Although the case can be made that charitable aid can have considerable contributions to developing certain notions of good governance in a country, the total amount it constitutes can be neglected compared to the many billions of dollars that are transferred to governments of different countries each year.

As mentioned already, this paper focuses on the aid policies of 'The West', but what constitutes this western world? In this paper The West is used to describe the 'rich governments' in Western Europe and North America who mostly control the international agencies. But also other rich 'First world' nations outside the continents of Europe and North America such as Australia and Japan should be included. An important notion is that in this definition, 'The West' is not just made up of countries, but consists also of the international institutions such as the European Union, World Bank and the International monetary fund.

Finally, for developing countries the classification of the World Bank is followed. According to this classification, developing countries can be defined as countries with low (USD755 or less) to middle (USD756, up to USD9.265 in 1999) GNP levels per capita (World Bank, 2005). This also includes the 49 countries classified as least developed countries (LDC's) by the United

Nations (Doucouliagos & Paldam, 2008). These 144 countries are home to more than 80% of the world's population. A comprehensive list of these countries can be found in appendix C.

1.4 ACADEMIC AND PRACTICAL RELEVANCE

1.4.1 ACADEMIC RELEVANCE

In recent years, many studies have been conducted, investigating the effects of aid on many aspects within developing countries (see chapter 2). A much smaller amount of studies have looked into finding empirical evidence of the effects of aid on levels of QOG within recipient countries.

Much effort has gone into explaining different factors that seem to influence the level of governance within developing countries, why this governance is important and in what ways donor countries should seek to improve this. When looking at potential negative influences on governance within developing countries, many scholarly effort has gone into the influence of factors such as corruption or windfall revenues such as from natural resources or favorable trade shifts. Less attention has been paid to the way development aid could influence governance. In 2001, Knack an economist from the World bank, was one of the first who looked at a possible identifiable link between large sums of development aid and levels of governance shown by recipient countries by using large data sets that covered several countries. His founding and authoritative research, was in subsequent years the source for many discussions regarding presumed measurement flaws in the statistical procedures that were used as will be covered later on in chapter 3. Basically, up until now a relation between aid and QOG has been deemed existent and positive.

Scientific results uncovering empirical evidence for this link has so far yielded limited results and much of it being outdated (as it preceded renewed policy efforts) or being based on outdated/incorrect data and indicators. This study further tests this (theoretical) construct and seeks to add to the body of knowledge whether a structural link can be found between development aid and QOG of recipient countries.

1.4.2 PRACTICAL RELEVANCE

Many have argued the perceived importance of governance on a nations development. In order to address the lagging economic and/or institutional development of development countries, we need to address the problem at its roots. Causes of bad governance need to be established, investigated and subsequently addressed. As argued by some, it might even be possible that aid is one of these causes.

Over 2 trillion USD of aid has been transferred from Western to developing countries in the past 5 decades (Bhagwati, 2010; Dambisa Moyo, 2010). It's a common know fact that a lot of aid is misused and does not end up at its intended destination. Often money has been wasted by recipient governments, for which they unfortunately have not been held accountable.

This study aims to determine whether a relationship between aid and QOG can be found within recipient countries. If it is found that development aid can actually lead to lower levels of QOG, it might have a very unsettling effect on the ideas and motivations behind development aid. If it is found that by trying to assist a country by disbursing aid, its government is actually eroded, one can ask the question whether these assisting practices are helping or making the situation worse than it is.

This will mean that policymakers within donor countries, and organizations alike, private as well as public, need to carefully review their methods of providing development aid in order to ensure the legitimate, efficient and helpful nature of aid. This study helps with this evaluation task by looking at contributing factors of QOG.

Finally, this study can be seen as one of the first evaluations of recent mainstream international developmental policy (the big push that took place under the MDG's).

1.5 DESIGN OF THE STUDY

In this study a hypothesis about what influences governance will be tested using the method of deduction. Deduction is the model:

“In which specific expectations of hypotheses are developed on the basis of general principles” (Johnson & Reynolds, 2012).

Or in other words, a hypothesis is based on a theoretical framework and then tested by observations. This study will investigate whether a link can be found between the amount of aid a country receives and the level of QOG in that particular country. It's an x-oriented explanatory research, does aid (the independent variable x) decrease the level of governance (the dependent variable Y)? Since the research is being conducted on a country level, (development countries to be precise), our unit of analysis are 'countries'.

This paper will employ a non-experimental design as a strategy for collecting data and information, as it is not possible to measure the dependent variable pre and post exposure and to have full control over application of the independent variable (Johnson & Reynolds, 2012). Thus, there is no treatment of variables and we have to rely solely on observations and statistic control.

The study will use a large N design, indicating that a large amount of cases are examined. Out of a population of 144 countries, the largest possible sample will be chosen. The study is a cross-sectional design since both the dependent and the independent variables are measured once at about the same time. This method is chosen since there is no treatment given that there is serious lack of researcher control over application of the dependent variable before and after exposure and it is not possible to measure the dependent variable before and after exposure to the independent variable occurs, since there is obviously not enough valid measurement for this. Therefore the study has to rely entirely on observations and statistic control. Also the independent variables and the conditions under which these independent

variables are experienced are not controlled for, but more on this topic will be discussed further on in this study.

This previous chapter presented the topic and scope of the problem, as well as mapping out the problem. The next chapter will look at several theoretical constructs made by scholars on how they think development aid can influence the level of governance within a country.

This will be followed up by a discussion on other possible influences on governance. This will be followed up by a short discussion handling the topic of the supposed endogeneity of development aid and the ongoing scientific discussion concerning causality and statistical methods in guaranteeing this causality.

Chapter 4, will describe the selection of variables needed to conduct the study, as well as a methodological overview of statistical procedures.

In chapter five, the results of the study will be presented. Also the assumptions for conducting a multiple regression analysis and how these will be met are discussed. Before ending with a discussion of the results and answering of the research question before a conclusion in chapter 6 will be made. Also the policy and academical implications of this study will be discussed.

2. INFLUENCES ON THE QUALITY OF GOVERNMENT

In order to find the deeper mechanisms that influence the QOG, this chapter will examine and discuss previous efforts of scholars describing the way in which good government and its particular, institutions are shaped. Historians, economists, sociologists and political scientists alike, all have contributed to the field. Efforts to explain what influences the development of good government, seems to revolve mostly around how the institutions and policies that make up a nations governance are shaped. Although many of this work seems to use a combination of different theories from different fields, this study follows the division provided by La Porta, Lopez-de-Silanes, Shleifer, & Vishny (1999), who roughly divide the most important research efforts into three broad categories which are economic, political and cultural theories. The chapter will conclude with an overview of previous work examining the specific relation between aid and QOG.

2.1 ECONOMIC FACTORS INFLUENCING THE QUALITY OF GOVERNMENT

Although over the years many economists have looked at potential factors influencing the development of a countries institutions, many of them have used at least a combination of or borrowed theories from other disciplines in order to help explain some of the perceived effects. Classic economic theories hold that institutions are generally created when it's most efficient to create them. Efficient in this sense meaning that the social benefits of building institutions exceed the needed transaction costs of doing so (Demsetz, 1967; North, 1987). Following this reasoning, one can expect institutions to more or less 'naturally' form as a result or an answer to other developments. So then what's most important when trying to develop a nation, would be to stimulate these developments and eventually when needed, intervene and correct where necessary these newly forming institutions. This line of thought can be recognized behind McKinnon's and Chenery & Strout's two-gap model, a model which is now commonly thought of as being 'dead' (Harms & Lutz, 2004).

In more recent years, most research seem to focus around a more combined notion of theories influencing the development of good government in a country, introducing also more political and even cultural notions into the mix (Holmberg et al., 2009; Kornai, Rothstein, & Rose-Ackerman, 2004). This and the motivation for the perceived importance of institutions for a nations development, can be illustrated by looking at the transformation of dominant ideas behind best practices for development and the institutional revolution of more recent years. Historically, the idea prevailed that developing countries were to be stimulated to open up their markets and privatize as much as possible in order to create efficient markets. However, as by now has become apparent this "Shock-therapy" capitalism, as Kornai et al., (2004) calls it, did in many cases not turn out for the best, because the countries lacked the much needed institutions that could prevent unwanted results e.g. corruption (see next section). Thus, identifying the need of sound institutions to support the development of market economies.

Is it possible to find evidence for a relation between economic development and the quality/development of a nations institutions? Many academics seem to agree there is,

although defining the exact contributing factors and, perhaps more important, the direction of the causal relationship involved, seems topic of much more debate (Barro, 1991, 1996; Holmberg et al., 2009; Knack & Keefer, 1995).

Hall and Jones (1999) examined factors such as the size of government, institutional quality, private ownership and openness to trade, as possible determinants of productivity across countries and found that productivity alone, as a measure of economic development, is unlikely to determine the quality of institutions. One of the problems with these theories, is that the quality of government is largely endogenous to the economic development. The majority of economic theories hold that economic development will create a demand for good government. Good institutions however, will also foster further economic development.

The difficulties with determining the exact casual direction of influence between (economic) development and the quality of government, have been addressed by many. Many also, make the case that this relationship is complex and intertwined, flowing alternatively from one side to the other. Rothstein (1998) describes the primacy of institutions side of this debate, by discussing the evidence that can be found in the historic development of the Swedish nation. He identifies how a substantial amount of institutional reforms implemented before the start of the industrialization put the country on the path of economic growth.

On the other side of the debate Goldsmith (2007) states that this primacy of institutions is quite often overestimated. He looks at the historic institutional and economic development of the United States, Argentina, Mauritius and Jamaica for shared links between the different cases. Not only does he find that major economic growth took off in the United States and Argentina many years before major governance reforms had been adopted, but also that the cases of Jamaica and Mauritius share a lot of similarity between institutions, but differ greatly in their respective development paths. The differences between these examples help to show that contrary to popular claims about the importance of institutions, improvements in the quality of institutions such as greater accountability, transparency and participation are often a result instead of a direct cause of greater development. A focus on the development of institutions, although important to sustain development in the long run, is not as fundamental for growth as often believed. When other conditions are favorable, considerable growth can be accomplished even whilst institutional development is 'lagging behind'. This view, which holds that economic growth and accumulation of social capital (more on this in next sections) above all has an influence on institutional improvement and the development of good governance, is shared by others who argue that methodological issues have led to an over appreciation of the effects of good governance (Glaeser, La Porta, Lopez-de-Silanes, & Shleifer, 2004; Przeworski, 2004). By examining the large body of previous research and available indicators for institutional quality, Glaeser et al. (2004) & Przeworski (2004) above all find many potential worries with commonly used techniques and indicators, leading them to question earlier conclusions made by others.

While looking for causality between institutional measures and growth, Chong & Calderón (2000) find a statistically significant and negative relation between institutional quality and poverty. Their results showed the poorer the country, the bigger the effect of institutional development that could be measured. Their result however, also uncovered evidence for the

existence of reverse causality, suggesting that (economic) growth itself causes institutional quality.

By looking at measures of civil liberties, number of veto players and the quality of government as indicators of institutional quality, Valeriani & Peluso (2011), find statistically significant and robust proof for a relation between economic growth and quality institutions. In accordance to Chong & Calderón (2000), they also find that the impact is greater in countries with lower economic development. However, Valeriani & Peluso (2011) do not find evidence for reverse causality, the direction remains the same although they do present methodological concerns with regard to the construction of the used indicators.

It seems conceivable that in reality both sides of the debate can be encountered in different nations. Looking at historical Europe, cases and evidence can be interpreted to support arguments from both camps. As Holmberg et al. (2009) in accordance with Grindle (2004) argues it is not likely that a very straightforward and sequential logic can be encountered here. However, it seems unlikely that a country can first set up a complex and elaborate set of good governance institutions and then sit back and watch (economic) development ensue as a result. Due to the enormous size and required cooperation throughout all levels of society, this would be a daunting task indeed. Or as North (1987) points out: better institutions become affordable as economic activity in a country expands. Empirical evidence pointed out by Borner, Bodmer, & Kobler (2004) amongst others, seems to support this notion and uncover the importance of economic development on the quality of a nations institutions.

2.1.1 CORRUPTION

In recent debate, corruption is regarded as one of the leading factors that hampers good governance and erodes the quality of institutions, although much can be said about the way it does and how corruption should be labeled among scholars and policymakers alike.

One of the first dilemmas is how to label corruption. Should it be regarded as a mere (economic) given, and considered an economic occurrence, a side effect of certain economic developments? Or should it be regarded as a cultural occurrence, with causes rooted deep inside a nation's history and culture? It seems conceivable that it's a combination of both. The World Bank struggled with this problem for many years, outlawing the topic and making it somewhat of a taboo inside the organization. Holmberg, et al. (2009), summarizes two reasons to explain the existence of this taboo. On the one hand, there were real fears by Western countries that by pointing out the 'C-problem', they would be perceived as trying to put the blame on the victim. On the other hand there were concerns that exposing or even discussing the topic would lead to diminished support for the case of development aid. Contributing to this was the fact that the World Bank labeled corruption as an internal problem and therefore, as it was strictly forbidden for the organization to interfere with internal politics, would regard it as 'out of scope' (Holmberg et al., 2009).

This was cleverly addressed halfway the 1990's by former World Bank president Wolfensohn's redefinition or rebranding of corruption as an economic problem. A redefinition that proved to be paramount to catapult the topic as one of the spear points of future and current policy

and increasing interest in studying this institutional problem of malfunctioning government and society (Levi, 2006).

The debate regarding the many potential influences corruption has on good governance nowadays is vast and has also seen scholars who claimed it can have positive influences on the development of a country (Jain, 2001). Most however seem to agree that it is a profoundly negative influence. Literature has looked at many different ways in which corruption negatively affects governance. By looking at the impact of the level of corruption on institutional development as measured by life expectancy, educational attainment and standard of living, Akcay (2006) found that higher levels of corruption negatively affect the level of economic growth and human development. Others have found direct evidence that corruption erodes institutions (Gupta, Davoodi, & Alonso-Terme, 1998; Mauro, 1995). They find that corruption has a direct influence on what the government spends on health and educational institutions. This is further acknowledged by Kaufmann (2004, as cited by Holmberg et al., 2009) who finds that an improvement of just one standard deviation in control of corruption, would lead to significant gains in literacy and a reduction of child mortality by 75%.

Rose-Ackerman (1997, as cited in Jain, 2001) describe how corruption damages institutions in a structural and nationwide fashion by eroding the efficiency of the bureaucracy. The reason for this is twofold. First of all, a corrupt bureaucracy will have less motivation to award services or contracts to the best suited or efficient producer. Even when the best bidder is able to provide the most competitive price for a quality product, the distorting influence of a bribe, might motivate officials to overlook problems with quality of product enabling the other manufacturer to go even lower than would be possible in a 'fair' market environment. Second, Rose-Ackerman (1997) argues that corrupt bidders could prevent market entry of new parties at all by exploiting their corrupt relations with officials or deterring potential contestants to enter in such an uncertain and hostile market environment. Those newcomers might furthermore hesitate to discuss the possibilities of corruption, further favoring the incumbent parties with long ties to bureaucratic parties over potential more productively efficient parties. Ultimately, this corruption will have its effect on the quality of institutions when its officials start being affected by these acts of corruption. Bureaucrats may feel tempted for example, to delay transactions in order to extract further rents from involved parties hoping to hurry along the process. Although privatization might seem as a logic measure to remove (faulty) bureaucratic structures from the process and decrease the involvement of government officials, the very act of privatization might actually increase the motivation for corruption (Jain, 2001). Securing control over the process of privatization yields considerable rents, so in the presence of corruption privatization might end up creating even more imperfections than there were before.

Several researchers (Tanzi and Davoodi, 1997; Jain, 2001; Mauro, 1997; Bhagwati, 1984) have argued how corruption effects the allocation of resources. Firstly, corruption tends to change the assessment of mostly private investors about the potential payback on various investments. This change in perception, comes from the influence of corruption on the relative prices and availability of goods and services and resources of production, including talent. Secondly and in line with the abovementioned argument, corruption can lead to the

misallocation of resources when decisions on how to spend public funds or what private investments will be permitted are taken by a corrupt government. The misallocation is a result then from the decision-maker taking a potential bribe into account as one of the factors influencing the decision.

As mentioned earlier, there are those who have claimed corruption can actually be beneficial to the development of a country (Bardhan, 1997; Leff, 1964; Leys 1970; Lui, 1985; Acemoglu & Verdier, 1998; as cited in Jain, 2001) . Although it would probably be too much to claim that they support corruption, they argue that a cost-benefit analysis should be carried out in order to establish the overall effect of corruption. According to their view, corruption can take many forms, some harmful and some which might actually help as an informal redistributive mechanism or as a sort of economic lubricant to help smooth things along a bit.

These claims are examined by Ades and Di Tella (1997) and Kaufmann and Wei (2000, as cited in Jain, 2001), who test this so called 'greasing the wheels hypothesis. Their research finds no evidence corruption improved performance or benefits related to corruption in countries with abundant red tape and conclude corruption works more likely as ' sand-in-the-machine'.

The potential benefit corruption has as being a sort of redistributive mechanism is countered by Rose Ackerman (1996) and Kurer (1993, as cited in Jain, 2001) amongst others, who describe the problem with petty corruption escalating into grand widespread corruption destabilizing for entire societies. They show how even petty corruption, as far as it can be kept in check, leads to other distortions in the economy (Jain, 2001) by describing the escalation of corruption within the Italian administrative system.

As the arguments displayed above indicate, the principal notion of corruption nowadays, is that it has a profoundly negative effect on quality institutions. Reasoning that would hope to suggest otherwise, or tries to diminish the destabilizing effect it has should not count on receiving much serious support amongst scholars in the current aid arena.

2.1.2 REVENUES

Fully agreeing with a report from the OECD, Knack (2009) argues that the manner in which governments choose to generate their needed revenues is a key determinant of accountability relations between ruler and subject. Through different mechanisms it has a profound effect on the quality of a nations institutions.

Knack (2009) describes how European rulers throughout history had to cede ever more rights to their subjects in order to be able to extract higher tax revenues. England provides a prototypical example in this case, whereas Spain is a case for the exact opposite (more on this in the next section). In England, through prominent events such as the Magna Carta and the Glorious revolution, accountability to elites increased in a process which continued steadily in later years with expanding suffrage following for the rest of the populace. In Spain the opposite happened. While in England during the 16th and 17th centuries power of the parliament grew considerably, over in Spain the monarch held a tight grip, under the influence of windfall revenues from Gold and Silver from the New World (Knack, 2009). Remnants of

these agreements are still prevalent in modern day society, albeit that the specific scrutiny and accountability contracts between regimes and their electorates have taken on different forms. Either way, paying taxes is still seen as one of the primary ways of giving legislators the mandate they claim to rule by. Satisfaction with quality of provided services and trust in the government will lead to higher tax payer compliancy (Knack, 2009).

In contrast to this, Knack (2009) among others (Moss, Pettersson, & van de Walle, 2008b; R. Rajan & Subramanian, 2007; Stotsky & WoldeMariam, 1997) mentions how governments who are less reliant on domestic tax revenue, are less responsive, accountable and efficient. In many ways this is also a concise summary of the main argument that can be found throughout the abundant so called 'resource curse' literature. States that have the ability to benefit from large incomes from natural resources such as oil or valuable ores, tend to be more corrupt, less democratic and less interested in providing services and developing institutional capacity or quality.

Knack (2009) describes how the administration will use its internal revenues (mostly from taxes) in order to build political support for the regime. These revenues can be used to provide public goods to a broad group of constituencies and 'buy' broad support. They can also be used to build targeted support amongst more specific, favored groups of constituents. Such benefits can consist of certain exemptions or even specific diversion of funds to personal accounts of top level military or bureaucratic officials.

In his model Knack (2009) shows that because these funds in one way or another are extracted from the population, there will be a certain limit to the amount of taxes the government can extract until the resistance against further taxation starts to outweigh the additional support gained. I.e., at some point the extra public goods and services will purchase less public support (votes) at the margin. Governments that are less dependent on votes, because it has a more concentrated power base for example, may also see the further provision of political and economic freedom to a greater part of the populace as a cost. Thus creating a natural equilibrium. In this model, the availability of other windfall revenues, will decrease the importance of taxes for internal revenue generation while increasing the ability of the government to 'buy support'.

Knack (2009) has illustrated his argument with Chaudhry's case of institutional capacity in Saudi Arabia. From 1930 up to 1973 and in the period after, its oil sales skyrocketed from around \$4 billion in 1973 to around \$120 billion in 1981. During this period public employment also tripled. Chaudhry (as cited in Knack, 2009) describes how the focus shifted from raising revenues and providing essential services toward redistributing revenues. The nations formerly powerful institutions for religious and income tax stopped functioning and had most of its offices closed. By the end of the 1970's the regime had become unable to collect taxes as the former institutions simply lacked the required organizational, institutional and informal characteristics. The end of this tax structure marked the further weakening of already troubled public accountability mechanisms and relations. Where previously taxpayers had struggled long and hard against the fiscal demands of the extractive state, now the distributive state shaped society without triggering any resistance at all.

These dramatic changes in tax systems have been described by others as well. These countries where a majority of government revenues can be attributed to oil or other minerals exhibit a fairly consistent pattern of extensive, random exemptions and inconsistent and discretionary application of tax laws and regulations.

Interestingly Gabon is responding to declines in its oil production and subsequent revenues, by building taxation capacity, reduce tax and customs exemptions and improve uniform enforcement of tax law and regulation (Knack, 2009).

Several large cross-sectional studies have found evidence between countries that depend on exports of fuels and other minerals and low scores on institutional ratings and measures against corruption, rule of law and property rights (Di Tella & Ades, 1999; Isham, 2005; Leite & Weidmann, 2001; Treisman, 2007). Stotsky & WoldeMariam, (1997) find this relation even when including tax returns from resource mining in their model.

As Knack (2009) argues, it's not necessarily bad policy neither surprising if governments are found to be using windfall revenues to develop public services or try to stimulate private sector by reducing tax rates. Worrying is that these governments tend to start relying primarily on the revenues provided by these rents, and thus not act against, or actively contribute to the erosion of governance and institutions. As the Saudi case has shown, inefficient practices are not as easily reversed after the revenues dry up. When oil rents dropped between 1982 and 1986, the Saudi state did not have the adequate institutions needed to be able to collect any type of direct tax and had to resort to inefficient, but administratively less demanding solutions such as increasing visa and passport prices (Knack, 2009).

Windfall revenues from abundant natural resources or sudden favorable shifts in trade behave, are believed to cause some negative macro-economic effects, especially on smaller economies. This so-called "Dutch disease" effect has counteractive effects on growth by weakening agricultural and manufacturing sectors (Knack, 2001).

In his piece, Knack (2001) presents how other studies have found how windfall revenues from natural resources, ODA or favorable shifts in trade, lead to worsening indicators on measures of institutional quality and governance in ways unrelated to the Dutch disease effect. In what has been dubbed the 'Zairian disease'. A name after the striking example of the sub-Saharan country that after years and years of extensive development aid levels, showed no progress at all and instigated incompetent, corrupt and misguided policies. Bräutigam (2000) describes the largely failed efforts of Sweden's 15 year efforts of building Tanzania's auditing capacity. After 15 year still no impact on public sector accountability could be seen. Others have argued that large flows of revenues can even lead to increased political instability by increasing the value of seizing control of the government in its form as a large revenue machine (Acemoglu, Johnson, & Robinson, 2005). This instability adds to the problems by encouraging regimes to grab everything they can get their hands on during their term of power, as was shown by the case of Somalia according to Knack, (2004). He makes a case for Somalia's several conflicts resulting from the ongoing competition to secure control of the large scale food aid programs.

It's not difficult to recognize many comparable traits within large inflows of ODA and other windfall revenues and this link is frequently encountered throughout the literature. As with

other windfall revenues, it can help to make governments less dependent on its own citizens for income generation, weakening governance and accountability relations and eroding institutions. Collier (2006) and Auty (2007) describe how these 'sovereign rents' encourage dysfunctional 'rent-seeking behavior' and tends to be subject to less scrutiny from citizens and legislators alike than other revenue streams. However as Collier (2006) mentions, when examining this link it has to be taken into account that aid will also seek to encourage favorable developments. Budget support for example, will usually come with certain policy conditions that are intended to strengthen or develop local institutional quality. If these efforts are effective, the benefits may outweigh the potential downsides.

2.2 POLITICAL FACTORS INFLUENCING THE QUALITY OF GOVERNMENT

Political theories broadly state that institutions and policies are created by groups and individuals in power in order to hold on to and increase that power and gain greater wealth (La Porta et al., 1999). For earlier political scholars such as Marx, these groups and individuals are the ruling class. More modern scholars have a more nuanced view in which they include in these groups all types of groups active in society such as ethnic groups, religions, lobby groups along with rulers and bureaucracies. Whenever a group in society becomes powerful enough, it will shape policies to its own advantage, rather than for the advantage of society as a whole (Acemoglu et al., 2005; Becker, 1983; La Porta et al., 1999). In general governments tends to become very redistributive (i.e. divide the 'spoils' that have been 'captured'), if there are relatively very little powerful groups with differing interests, but not if there are a lot of fragmented groups all pushing in their own direction.

Becker (1983) notes how the power struggle between groups also has another effect. He argues that interactions of many small groups each pushing in its own direction will lead to efficient outcomes. Olson (1993) on the other hand however, reasons that increasing numbers of such small lobbies will reduce efficiency and outcomes as it leads to increasing political stalemate. Either way, the general idea is, that when a group or individual becomes more powerful in society, it tends to start shaping policy and institutions to its own advantage instead of society as a whole.

Finer (1997, as cited in La Porta et al., 1999) for instance, recounts how the history of sovereign state building by the Ottoman sultans, Tokugawa Shoguns and Russian czars enables them to have almost absolute and unchecked power over the nation through complete control over aristocracy, religion, bureaucracy and military. Thus effectively reshaping and reforming all elements of state policy and institutions in order to maximize their own power.

These nations were characterized by a lot of government intervention, very few property rights for its subjects and very low government efficiency as well. There were very few laws or civil rights and had very small ineffective governments.

In contrast to this oriental despotism, Finer (1997) describes what he defines as European absolutism. In the European states, the power of the monarch historically seemed to be at least partially checked by law and aristocracy and the church (at least in Catholic countries)

acted at least to some extent to restrict autocratic control. As a result of this, Finer (1997) argues that these countries tended to have more political rights for subjects and more secure property rights, even though monarchs continuously tried to restrict those in their everlasting quests to increase their own revenues. As a result of this restrained control sovereigns could execute over their subjects, Civil law developed in Western Europe.

Finally, contrasting developments that led to European absolutism, British government took form as a result of the victory of the aristocracy over the British crown, which resulted in a more limited government, enabling greater political freedoms for its subjects and an even more efficient bureaucracy. Common law was developed as a means of protecting achieved freedoms and rights from the crown.

Or as Brewer (1998, as cited in La Porta et al., 1999) states it, the British government was bigger, but less interventionist than that of likewise states. It operated in service of and with consent of the people instead of over them in order to exert power. In general political theories predict that as ethnic heterogeneity increases, governments become more internationalist and less efficient and the quality of public goods falls as does the size of government and political freedom.

Specific historical nuances aside, the broader image that appears from this historic evidence is that from a political perspective institutions are shaped mostly as a result of conflict of certain power struggles between different groups with different interests and less as a result from specific efficiency considerations (La Porta et al., 1999). The institutions are a formal shape, a means to an end to exert power and redistribute or extract certain rents. This conclusion is mostly shared by Acemoglu et al. (2005) who argue that differences in institutions are the most important determinants of differences in economic development. They also examine evidence provided by historical cases and the quasi-natural experiment provided by the historic cases of North and South Korea. They claim that institutions are the result of deliberate action by actors who aim to shape their potential outcomes. As such these institutions are a result of deliberate action and social decisions. They are a form of de jure political power, next to the de facto power (force or other ways of exerting power) that is available in society. Nationwide development is achieved when political institutions allocate power to groups with interests in broad-based enforcements of rights who create effective constraints on power-holders and when there are relatively few rents that can be captured by power holders (thus eliminating a lot of need for social strife) (Acemoglu et al., 2005).

A significant relation between quality institutions and checks and balances and other measures of openness and transparency is indeed found among others (Adsera, 2003; Baland, Moene, & Robinson, 2010; Glaeser et al., 2004; Knack, 2001, 2004; Olson, 1993; Valeriani & Peluso, 2011) by Islam & Montenegro (2002). Looking at the largest cross-sectional data set available and thus controlling as much as possible for potential selection bias, they find that openness, checks and balances and freedom of the press are indeed related to higher quality institutions. In contradiction with Acemoglu et al. (2005) they do not find significant relation between indicators of social inequality and quality institutions. In a 2006 cross-country regression, Islam finds a strong and causal relation between a newly constructed indicator for government transparency and institutional quality. As an explanation for the perceived

relation Islam (2002) refers to Djankov's et al. (2001) argument that the existence of checks and balances will constrain political changes to a certain degree. This contributes to enhanced stability and thus improved (perceptions of institutional quality. Furthermore, the presence of institutional constraints may lead to a government that is less occupied with political redistribution of benefits and more concerned with strengthening the environment for economic activities (Islam & Montenegro, 2002).

Throughout history and different societies, the press has played a sizable role in the above mentioned process of providing restraint on power. A well-functioning press will provide others in society with the necessary information in order to be able to execute checks and balances on each other's behavior and government activities. By looking at 97 countries Djankov et al. (2002), found that countries with weaker and less open (especially government owned) press, had generally weaker governance, institutions and policy outcomes.

A form of government that strongly identifies with these characteristics is democracy and its link with institutional quality has been examined. Treisman (2000) in a large cross-sectional study, found that nations with democratic governments showed less corruption. Knack & Keefer (1997) also find a strong connection between democracy and quality of institutions that can be traced back to constraint that are placed on the power of the executive. Straub (2000) when reconstructing earlier work and using a more comprehensive database, can find however no robust results when dealing with endogeneity problems. He attributes this to issues concerning the underlying theoretical explanations and problems with the quality of existing data. Borner et al., (2004), in a large cross-sectional study of 133 countries in the period 1960-1989, also finds strong evidence for a relation between full-fledged democracies, that place emphasis on checks and balances accountability and higher institutional quality.

Several cross-country analyses (for an overview see Borner et al., 2004) have found empiric evidence that inequality and strong ethnic division, will lead to high political instability. Vicious struggles can ensue over the redistribution of land or other assets between different social or ethnic groups. Institutional quality can be severely hampered as different groups pursue redistribution among their own group instead of the country as a whole. However in later work (not mentioned by Borner et al.), Islam and Montenegro (2002) identify some methodological and theoretical pitfalls in earlier work. By using the largest possible data set and by incorporating control variables against potential regional bias of earlier studies earlier findings were no longer robust.

2.3 CULTURAL FACTORS INFLUENCING THE QUALITY OF GOVERNMENT

Cultural theories concentrate on *why* certain outcomes are being pursued and less on *what* that outcome may be. The notion is that certain ways of organizing a society, will encourage people to take risks, to innovate, to find better ways of doing things, to save for the future, solve problems that require collective action, to learn and educate themselves and others and to provide public goods (La Porta et al., 1999).

The idea that different ethnic groups or races have different cultures due to differences in religion and shared experiences has been pointed out as a key determinant for variation by

many throughout history. One of the more famous links between culture and the socio-economic development of different societies is probably the one proposed by Weber (1930). He argues that the origins of the European industrialization can be traced back to the Protestant reformation and more particular the rise of Calvinism. He sees the set of beliefs about the world that are intrinsic to Calvinism as crucial for the development of Capitalism. As he describes, Protestantism emphasizes the idea of 'predestination', a belief people hold that some individuals are chosen while others are not. Calvin's choice of formulation however according to Weber left room for interpretation regarding as to exactly who was meant with those described chosen few. Therefore, whenever this doctrine of predestination prevailed, the question arose with it of which criteria could betray membership to this group of selected individuals. Weber argues that a solution to this dilemma was offered by regarding 'intense worldly activity' as one of the best precursors in order to secure one's selection. Therefore, good works and economic success as a clear indicator of one's willingness to work hard became the technical means to attaining salvation, or at the very least getting rid of the fear of damnation during life. It's important to mention however, that although pursuing the creation of great wealth was admirable, enjoying the fruits of such labor was absolutely not. Because each individual's lifespan in which one can prove his right to salvation is infinitely short, wasting time away by idle indulgence in earthly matters such luxury, idle talk or more sleep than absolutely needed for one's health was regarded as one of the most terrible sins possible. Thus as he argues, Protestantism rooted a set of beliefs in society which created a focus on hard work, soberness, austerity and where economic activity and more importantly attaining wealth, was regarded as a signal of being one of the chosen few, selected by god. In his work, Weber contrasted Protestantism with other religions such as Catholicism which he argues did little to promote capitalism and Indian caste based religion which actually blocked capitalist development.

In more recent and well cited work, Landes (1998) agrees with Weber's notions. Landes describes how during the period in history that protestant countries made great steps in their development, countries of other religions, notably those with a Catholic or Muslim origin, adopted cultures and stances of closed-mindedness, intolerance and xenophobia which severely hampered their development. As he describes, at some time during the 15th century the catholic countries of southern Europe and their respective South American colonies in its wake, under the pressure of the catholic church started to lock up their societies. By aggressively persecuting specific groups and individuals, restricting the spread of knowledge and closing their culture to influence of new knowledge and learnings. What moved the catholic church to do this, was on the one hand the fear of other and upcoming religions such as Protestantism. On the other hand it was an effort to extent its influence over these nations even further by a deeper penetration of daily social and political processes and creating and empowering their own institutions capable of extending this influence. This resulted in a substantial increase of power that could be executed by the church but at a huge cost (besides the evident loss of freedom and other comparable aspects) of resources of the state being spent in keeping other influences and new ideas out, thus seriously hampering the ability of catholic countries to learn from others in the process. This intolerance is what can be identified as the leading cause of the decline of countries such as Italy, Spain and Portugal and the even to this day clearly visible lower economic performance of countries in South America

and South Europe. Evenly so, the decline of the many great Muslim nations after the 13th century can be explained likewise by identifying a comparable mechanism at work (a golden age of openness and prosperity, followed by a dark period of intolerance as a means of religious and political control). Interestingly, Landes creates a parallel here between culture and politics, as many other scholars do and indeed it can be argued that many cultural explanations of policies and institutions have a political element to them (La Porta et al., 1999).

Further empirical evidence is pointed out by La Porta et al. (1999) who use religion as a proxy both for work ethic and tolerance and find that sizable populations of Catholics or Muslims indeed predict lower institutional scores. La Porta et al. (1999) also look at the influence of different legal origins as a typical part of cultural heritage of former colonies and find inferior government performance in countries with continental European or Social legal traditions. British legal origin is associated with higher institutional quality. However, this link is examined in later work of among others, Klerman, Mahoney, Spamann, & Weinstein (2011) who point out that legal origin often is almost perfectly correlated with other potentially relevant historical variables. They offer strong evidence that non-legal colonial explanations are often better predictors for differences between countries.

Religion is also believed to have a strong influence in the creation of social capital (Coleman, 1990; Fukuyama, 2002). Putnam (1993, as cited in La Porta et al., 1999) argues the importance of trust in strangers as an enabler of collective actions, which is in turn paramount for the provisioning of collective goods within a society. He states that in Italy the catholic church affected trust adversely due to the emphasis of the church on 'vertical bonds of authority instead of horizontal bonds of fellowship'. By comparing the state of a variety of social outcomes and institutions between low trust southern Italy and high trust northern Italy, he finds a statistically relevant difference and thus a confirmation of his views. This result is followed up and confirmed by scholars such as La Porta et al (1999) and by Knack & Keefer (1997), who examine the importance of trust and find empirical evidence across different countries. However, as indicated by Durlauf and Fafchamps (2003) and Knack & Keefer (1997), caution must be taken as to not confuse this correlation with an actual causal effect, given the potential endogeneity surrounding measures of social capital.

A better educated population is also presumed to be related better institutional performance. Chong and Calderón (2000) argue that a better educated population is likely to produce an educated, less corrupted bureaucracy and hence more efficient institutions. Furthermore an educated population is believed to demand more transparency and dynamic institutions and permits to build them (Alonso & Garcimartín, 2013). Even though this variable is rarely considered in most work, empirical evidence is found by Alesina & Perotti (1996) and Alonso and Garcimartin (2013) in a recent and large cross-sectional study.

Perhaps a more 'remarkable' but nonetheless often discussed and examined factor of a nations development, revolves around its geographical factors. Where previous discussed theories emphasized the effect of man-made factors and circumstances influencing the development of a culture and nations, geographical theories look at the effect of natural and outside factors on such topics as culture and development. Acemoglu et al. (2005) divides

three main versions of this so called geography hypothesis, each stressing a different mechanism of how geography can affect development.

Firstly, by looking at geography as an important influencer of culture, a classic view on geography holds that geographical factors, such as climate, can influence the work ethic of people. Early scholars such as Montesquieu and Marshall who argued that climate can determine the work ethic of an entire nation, even going so far as to claiming that warmer climates will make people weak, passive and lazy like old men. On the other hand the inhabitants of colder climates who are more vigorous and brave like young men (Acemoglu et al., 2005).

Second, Myrdal (1968, as cited in Acemoglu et al., 2005) argued that geography might influence the type of technology available to a society. He claimed that study into the proponents of underdevelopment should take into account the potential influence geographical factors such as climate could have on for example soil conditions, agricultural output, disease and other living conditions. A much more acceptable and rational sounding reasoning compared to the first line of thought, these arguments have received more recent follow up (Alonso & Garcimartín, 2013; Hall & Jones, 1999).

The final variant of these geographical constructs, looks at the possible link between poverty stricken regions and their inherent 'disease burden', as mentioned by Myrdal (1968, as cited in Acemoglu et al., (2005). Notable work from Sachs (2000) and Bloom and Sachs (1998) looks at the prevalence of one particular disease, malaria, in sub-Saharan Africa killing millions of children each year. In an effort to quantify the impact of this on the economic development of affected nations, they find that these deaths reduce the annual growth rate by 1.3 percent each year. Thus implying that should this large effect have been abolished for example by eradicating the disease in 1950, the per capita income would be double what it is today (as cited in Acemoglu et al., 2005).

In recent years, the geography debate has all but passed from interest as a potential explanation for cross-country differences in economic development. Even when controlling for a wide range of other considerations such as economic, social and institutional factors, Redding & Venables (2004) find significant and positive correlation between geography and economic variation. More recently, the catastrophic 2014 Ebola outbreak in West-Africa has made this topic very actual indeed once more.

However Rodrik, Subramanian, & Trebbi (2004), when revisiting the geography argument by using a newer set of instrumental variables as measurement to examine economic and institutional development, find only weak results at best. Interestingly the perceived effect can be traced back almost entirely to the influence of institutions which trumps even that of trade. Alternatively they do find strong evidence for geographical influence on the quality of institutions they used to control for, thus possibly hinting back to one of the earlier described historical/cultural mechanisms through which these institutions were shaped. In more recent work Alonso & Garcimartín (2013) also found no statistical evidence for a relationship between institutional quality and geographical location or religion.

2.4 INFLUENCES OF AID ON THE QUALITY OF GOVERNMENT

The final influence and main topic of this study that will be examined is development aid. Aid is meant to build and promote better governance and it (aid) cannot achieve its intended results without quality institutions and good policies according to the development community (Goldin, Rogers, & Stern, 2002).

The field of research examining the results of +/- 50 years of development aid provisioning is quite large and although a mostly negative trend can be discovered, it is not nearly as aligned as some researchers portray it to be. According to Doucouliagos & Paldam (2008) the Field of Aid Effectiveness Literature (AEL) consisted of around 97 studies by the end of 2004. The results of four meta-studies into this AEL literature, left them convinced that: 'aid has mostly failed in its primary task (Doucouliagos & Paldam, 2008)'. They even believe that a mixture of researcher bias and reluctance to publish too many negative results and neglecting negative effects of aid such as the Dutch disease, has led to published results being even more positive than they probably actually are. This Dutch disease effect is examined by others as a potential factor of aid causing negative results (for example, Booth, 2011; Doucouliagos & Paldam, 2008; Moss et al., 2008). However, as mentioned by Booth (2011), studies into the matter exposing an actual empirical evidence have been relatively limited with almost no reflection on the institutional factors likely to be influenced by it.

By far the majority of abovementioned research literature, revolves around the relation between development aid and whether or not it causes measurable (economic) growth. The link between development aid and the quality of governance has been looked at to a far lesser degree, even though it is identified by almost everyone as one of, if not the most important factors and mechanisms for successful development of a country.

Several researchers (Bräutigam, 2000; Knack & Rahman, 2007; Moss et al., 2008b; Resnick, 2013) have pointed out various mechanisms how aid contributes to a decline in the incentive governments have to tackle difficult so-called 'collective action problems', underlying the institutional barriers to faster and more equitable growth (Booth, 2011).

Bräutigam (2000) In a statistical analyses finds a statistically significant negative relationship between aid and quality of government even when controlling for several economic variables. He finds evidence for a negative impact of aid on governance and institutional elements such as declining institutional capacity, bureaucratic competence, higher levels of corruption, decline of institutions such as tax administration, political leadership erosion of incentives to solve collective action problems and political accountability. He uses a large sample of countries over a period between 1982 and 1995. Interestingly he finds no evidence for any presence of reversed causality between aid and governance in his study.

Knack (2001) examines the influence of development aid on the quality of governance and public sector institutions. By looking at indicators for bureaucratic quality, corruption and rule of law he finds significant evidence that large flows of ODA indeed erode the quality of governance. He finds that aid weakens accountability, encourages rent seeking behavior, stimulates corruption, erodes bureaucratic quality and capacity (by siphoning of scarce talent and by alleviating pressures to reform inefficient policies and institutions).

Rajan & Subramanian (2007) examine a large sample of countries between 1981 and 1990 and also find a significant relation between aid and eroding quality of institutions, particularly tax institutions. Several other sizeable cross-sectional studies also (Knack, 2009; Remmer, 2004) find further evidence that large flows of aid have an eroding effect on quality of tax systems in a country.

In 2002 (Goldin et al., 2002), the World Bank attempted to provide an explanation as to why a lot of research so far failed to uncover measurable results of development aid. Among other reasons, they argue that an important cause of why measurable results have not been discovered yet, is because most studies lump together all different forms of financing and aid into one indicator (for example the previously discussed ODA indicator), masking any potential result. Previous work has used indicators for aid contacting also disaster relief or funds provisioned that had in mind political and economic effects. They argue that aid works best when provided to countries with reasonably well developed institutions and policies. However, provisioning aid to fragile countries with very weak institutions, policies and governance (LICUS countries), will not likely lead to many measurable results even though these countries need the most help and a lot of the international development assistance budget is channeled to these recipients. It is hard not to recognize a certain amount of 'self-fulfilling prophecy' in their reasoning, although some of their claims have been recognized by others as well.

Bauhr & Nasiritousi (2009) agree on several issues with the World Bank. They describe how conceptual and methodical lack of clarity can explain why many empirical studies have failed to find a (positive) correlation between international efforts and better government institutions. Busse & Groening (2010) find significant evidence for a negative relation between aid and governance in a sample of 106 countries. They use lagged indicators and employ quite a considerable number of economic, political and cultural control variables. However, they do raise concerns by the validity of regular used ODA indicators (such as for example the World Bank indicator) as an adequate measure for development aid. This indicator usually also encompasses several other money flows such as debt relief, which can hardly be regarded as targeted aid. This critique on popular ODA indicators has also been voiced by Harms & Lutz (2004), who find it a wonder that studies have been able to find any relation at all when looking at such a broad indicator containing such diverse components as emergency food aid, salaries of teachers, construction of village wells and airports, etc.

According to the World Bank, aid is providing measurable results and will only continue to get better, as donor are starting to focus more and more on good governance. According to their work, before 1990 so-called 'bad policy countries' (according to WB specifications) received actually more aid per capita than 'good policy countries', giving weight to the argument that aid only started being truly effective onward from the nineties. This is also shown by Zanger (2000) who looks at data between 1980 and 1995 and finds that good governance did not even play a significant role at all in the provisioning of aid at all for the examined European donors. Indeed, Honda (2008) finds evidence that IMF concessional programs lead to measurable growth and economic performance and governance factors such as enhanced rule of law and reduced corruption.

According to the World Bank, measurable effects of aid can be pointed out, although, they mention only economic growth and not so much. In their study the WB claims that around 97-98 productivity of ODA had nearly tripled lifting 284,000 people out of poverty for every \$ 1 billion of aid. Also, they present measurable economy wide growth effects (such as increased investments).

Ear (2007) in a large time series cross-sectional study, looks at the evidence for a link between aid and governance, using lagged variables to control for potential endogeneity and reverse causality and several control variables to control for potential other causes. He finds evidence for a positive relation, when a better division between different elements of aid is made (than regularly used ODA indicators do). He claims that the frequently identified negative link between aid and governance is 'tenuous' at best (Ear, 2007).

This study will add to the existing literature in two ways. First, this study, as one of the first ones to do so will examine the WB's claim that due to the use of inadequate ODA indicators, many previous studies have not been able to find empirical evidence. For this end, a relative new indicator will be used to measure levels of provided development aid, namely CPA.

Second, this study will be among the first to evaluate and analyze the effect of 15 years of concentrated and renewed development efforts under the millennium development goals, but at the same time taking into account the most generally recognized lessons learned in the research nexus of the past years.

3. DEVELOPMENT AID AND THE QUALITY OF GOVERNMENT

This chapter will highlight the theoretical constructs that are examined throughout the study. Chapter 3.1 presents the primary theoretical argument on which the study is founded and the examined hypothesis is explained. In the second chapter, the control variables are presented and discussed. They are used to control for potential other causes of QOG in a country besides the received aid.

3.1 HYPOTHESIS

Figure 1 shows the hypothesized relation between aid and QOG. Several researchers regard a link between aid and governance to be existent and mostly negative as supported by multiple arguments and thus far uncovered empirical evidence. Negative, meaning that through different mechanisms and observed effects, aid will erode the quality of government in recipient countries.

Therefore and in direct contrast to the commonly used arguments for justifying the spenditure of aid, the following hypothesis will be tested:

H: *“More development aid provided by donor countries leads to lower quality of government in the recipient countries.”*

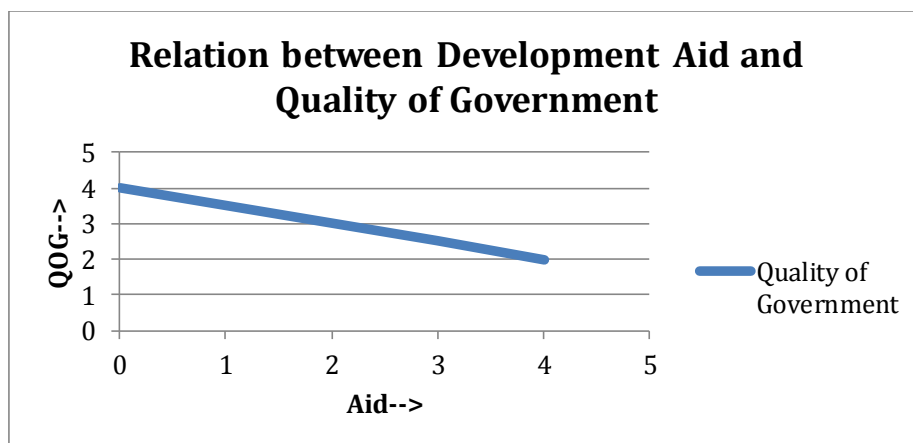


Figure 1: Relation between development aid and quality of government.

Several mechanisms theorizing the potential effects of aid, have been pointed out in the literature. Around the end of the 90's, Political scientists started exploring the possibility that development aid will actually weaken governmental accountability, by seriously hindering or damaging development of a 'healthy civil society as is known in western 'democratic' states. This then leads to a serious undermining of QOG within the country and notions such as the rule of law. They state that in the west, evolution of notions such as democracy, rule of law and good governance was a process historically shaped by ongoing need of Kings and rulers to finance their military campaigns and other costly state affairs (Acemoglu et al., 2005; Bräutigam, 2000; Knack, 2001, 2009). This income was demanded from their subjects who in turn demanded an increasing share in decision making as to have a little bit of influence about their own money. This demanded accountability that elites gradually received from their

monarchs in return for money, was then gradually shared with the rest of the population within these nations. Bräutigam (2000, as cited in Knack, 2001) mentions England as a prime example of this process with first the creation of the Magna Carta and the Glorious Revolution as two of the most prominent events in the process of the ever increasing accountability of monarchs to elites. This was eventually and gradually extended to the rest of the population to the universal suffrage. This process is obstructed in developing countries receiving large quantities of development aid because of the large inflow of alternate resource it represents. These incomes from aid make the receiving governments less dependent from their own citizens for revenues, much in the same way as other rents can do (see chapter 2).

Instead of this recipient governments tend to focus on the demands of the donors, as was illustrated by Marin (as cited in Alonso & Garcimartín, 2013), who described the way in which development aid systematically undermined Somalia's civil society throughout the 80's a period in which the country received large sums of foreign aid. In other words, those worth the most influence regarding revenue and expenditure decisions become international lending agencies, thus seriously undermining the accountability shown by the recipient government to its own citizens (Knack, 2001). Bräutigam and Meyer (as discussed in Knack, 2001) describe the case of the Dominican Republic where a series of donor-funded projects which were designed to build rural institutions, were geared more towards the wishes and demands of donor needs instead of local needs. Government officials had more to gain from shaping institutions according to donor demands instead of domestic needs and thus subsequently when external funding dried up, the institutions stopped to exist.

The interesting mechanism here, is that by creating governments that are dependent more on international partners (both other nations and international institutions) dispersing aid than from tax payers for their income, in a way the very nature of aid creates the perfect environment for eroding QOG as it 'drives' governments further away from its own citizens.

Governments that can be held accountable by their own tax payers can be controlled much more on its actions and distribution of funds. International partners however, have much different ways of monitoring and controlling recipient countries and tend to be less strict when it comes to 'punishing' failing governments (Knack, 2001; Wilmer, 2010). This in all creates very little incentive for governments to strive to do better. Moreover, because the money is gained fairly 'easy', instead of being the result of hard work and careful and skillful planning, it is 'easier' to spend. Again, a parallel to other 'windfall' incomes from natural resources can be discerned.

Moyo (2010) describes how the fungible nature of aid makes it prone to destabilize the country in a set of different manners. For one, it can increase the level of corruption as these funds are easily stolen, redirected or extracted by all manner of interested parties. Furthermore, these funds are easily used to "reorder overall spending priorities and (re)finance a range of non-developmental projects and programs. In other words this means, that when aid is provided for a certain purpose, it is easier for governments to reallocate the funds originally intended for that purpose in order to pursue other (their own) goals.

In theory this could be a good thing, when ruling parties use this opportunity to develop other aspects of a countries structures and institutions however, it is more often used for less

virtuous goals. This problem that in particular project and food aid are prone to fungibility gives aid the potential to erode QOG through its fungibility. Only when governments use aid as extra funds to invest instead as a supplement in order to retract their own funds, is aid effective in helping to develop the structures and institutions as it is intended to do (Bräutigam, 2000; Clemens, Radelet, Bhavnani, & Bazzi, 2012; H. Doucouliagos & Paldam, 2008; Ear, 2007; Goldin et al., 2002; Harms & Lutz, 2004; Headey, 2005; Knack, 2001, 2009; R. G. Rajan & Subramanian, 2008; Reddy & Minoiu, 2006; Remmer, 2004; Tamura, 2005; Wilmer, 2010).

Furthermore, in the case where development agencies execute projects that would have been undertaken by the government anyway, the administration gets deprived of building valid administrative capacity (Bräutigam, 2000; Knack, 2001)

Finally, some have argued that development aid can weaken bureaucracy in a nation because it will siphon off the 'best' available resources in a market (Ear, 2007; Knack, 2001). With this they mean both the best imaginable service providers as well as the highest skilled workers. A foreign organization is often capable of offering salaries many times what can be offered by the government of the country itself.

Naturally, there is also a sizable field of scholars who report on the positive effects of aid on QOG. They state many reasons and offer several observations that aid has a positive impact on improving governance (see Mimicopoulos, Kyj, & Sormani, 2007 for an excellent overview). In some nations for example, the effect that aid has had on improved training and salaries for public officials and employees, leads to better trained and more competent personnel (Knack, 2001). Recruiting these better trained officials could lead to better quality of institutional structures legislative environment and less bribe solicitation. This resulting improved investment climate and more reliable tax collecting create additional revenues, improving the governments capacity and creditworthiness, thus bringing an end to or reversing a vicious cycle (Harms & Lutz, 2004; Knack, 2001). In some instances aid also succeeds in strengthening the legal system, financial structure or other aspects of governance (Honda, 2008).

3.2 CONTROL VARIABLES

As the abundant body of preceding literature shows, the development of a nations institutions and QOG, is likely to be influenced by many factors. It should be assumed therefore that aid cannot be the sole benefactor of QOG. Should this study be successful in showing a relation between aid and QOG, it must examine if the found relation is significant and not primarily caused by the other factors present in the country. Therefore, in order to demonstrate a causal relationship between the independent indicator quality of government and the dependent indicator aid, other possible explanations need to be eliminated as much as possible. For this purpose, several control variables will be used in this study, in order to test if QOG is better explained through these other independent variables than by the main variable aid. These control variables are selected from the available body of preceding research, of which a selection of the most predominant topics can be found in chapter 2.

Tempting as it might seem to add a great number of control variables, introducing too much of them into our model will actually lead to lower reliability of the results found (Osborne & Waters, 2002; Straub, 2000). Therefore, a careful selection of variables that are used has to be made. Variables are selected for use in this study only if they can meet at least two of the following 3 criteria, which are:

1. At least two scholars have to be in agreement regarding the connection of the variable to QOG.
2. No-multicollinearity should exist between different variables, meaning that no two indicators should attempt to measure more or less the same.
3. Finally, enough (recent) data should be available to cover enough of the countries in the population of this study. Variables which meet these three requirements are included into the study, variables that fail to meet at least two or more criteria are excluded.

3.2.1 ECONOMIC CONTROL VARIABLES

In order to control for economic factors influencing QOG, the following control variables meet all requirements set and are therefore included in this study: *economic development, income from rents and the level of corruption*.

The income from rents developing countries enjoy is difficult to measure. Leading databases such as for example the World Development Indicators from the World Bank or the Global competitiveness index from the World Economic Forum, hold remarkably little valid data, even for recent years (2010-2015), on incomes from natural resources such as oil and minerals. The WDI, holds enough data for only 89 countries of our population, whereas the GCI has data available for even less countries (71).

A potential workaround for this problem could be to use information regarding the amount taxes make up of the total internal revenues of examined nations. Remarkably however, this data is available for even fewer countries (87). Therefore there is little choice but to accept the smaller sample available when using the available indicators for income from rents. The total share that tax has in national revenues will not be used.

3.2.2 POLITICAL CONTROL VARIABLES

In order to control for the political factors influencing QOG, the following control variables meet all requirements set and are therefore included in this study: *the level of political stability, transparency and accountability of the government and the checks and balances in place*. This study will not include specific, separate measures to control for democracy, social inequality and freedom of the press other than the effects that might already be measured by the other used indicators.

Social inequality does not meet the requirements as there is not enough agreement between different scholars about how this correlates to QOG.

Freedom of the press, same as levels of democracy, will not be controlled for as it is likely to align to much which the already used measure for transparency and checks and balances. For this we will use a compound indicator from our dataset, which likely also measures certain effects related to openness of the press among other causes for improved transparency.

3.2.3 CULTURAL CONTROL VARIABLES

In order to control for the cultural factors influencing QOG, the following variables meet all requirements set and are therefore included in this study: *religion and education*.

Social capital and different mechanisms related to geographical location, do not meet the requirements as there is not enough agreement between different scholars about how they correlate to QOG. Also, several researchers have placed considerable concerns regarding the very high endogeneity of notions such as social capital.

As such, Geographical location, disease burden and legal origin are not included into the model.

Furthermore, as will be discussed in the next chapter, disturbingly few available data can be found for these factors. Of the abovementioned factors, education has the ‘best’ availability and is therefore included into the study, albeit with some concern mentioned by the author regarding its ability to meet the 3rd variable criterion.

Figure 2 presents an overview of all the variables that are used in this study.

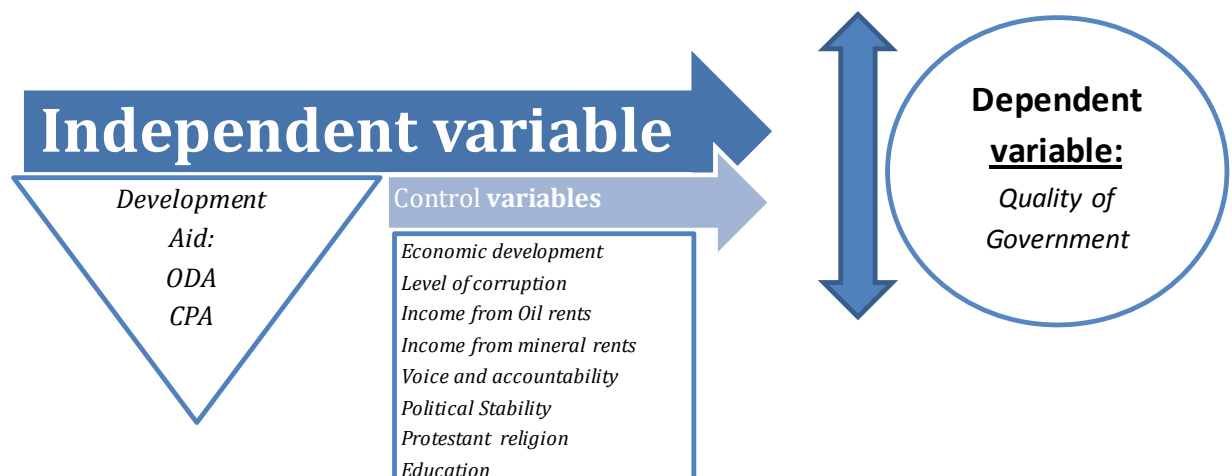


Figure 2: Overview of variables and influences on quality of government

4. DATA AND METHODS

In this chapter the design of the study will be outlined. The first paragraph highlights the chosen research design and statistical method. The second paragraph will state the operational definitions of the used concepts as well as discuss validity and reliability of the sources used to measure the dependent and independent variables.

4.1 RESEARCH DESIGN

4.1.1 NON-EXPERIMENTAL CROSS-SECTIONAL LARGE N DESIGN

As has been discussed throughout this article and by many scholars throughout the years, examining potential cause and effect relationships with regard to this topic is a challenging affair. Ideally when examining the effect of certain occurrences on a situation, a researcher would create a controlled experiment in which the undeniable influence of the examined topic on the test subject is shown. Or as Kellstedt & Whitten (2013) describe an experimental research design: “a research design in which the researcher both controls and randomly assigns values of the independent variable to the participants.”

This would require far reaching control of exposure to an independent variable, the assignment of subjects into different groups and the observation or measurement of responses and behavior. Carrying out a (quasi-) experiment in this case will be a difficult feat to achieve, as we are dealing with a subjective topic as QOG and with the unit of our analysis being countries. Countries are inheritably difficult to use in (quasi) experiments, since it is nearly impossible to isolate exposure to just the specific independent variable and because it's nearly impossible to assign subjects to different groups (i.e. identify groups that had absolutely no exposure at all).

Kellstedt & Whitten (2013) argue non-experimental designs are not as strong in making causal inferences. As they state: “...in an observational study, the comparison between groups with different values of the independent variable may very well be polluted by other factors, interfering with our ability to make conclusive statements about whether X causes Y” (Kellstedt & Whitten, 2013).

This is reason for concern taking into account the issues regarding causality that haven been raised before by others in the field (see chapter 2). However, it is the only research design that will allow insight into a complex relation as the one between aid and QOG. Concerns regarding causal relation will be adequately addressed by introducing both proven statistical controls as provided by earlier research as well as using a new approach (using a different, new indicator to measure levels of aid). Therefore, taking into account all limitations such as the intended scope of this thesis and difficulties raised by the empirical situation, the choice is made to utilize a non-experimental design.

A large population (N), in this case a large number of countries, is examined instead of using a comparative or (single) case study that looks at just one or a few countries. Given the complex nature of something as QOG, concerns regarding endogeneity and taking into mind

that even the definition of concepts itself can be very different between different countries, it would be difficult to generalize the results to a larger population should only a few cases be investigated. A large N design study, although it's possible disadvantages, corrects for some of the inherent differences between and identifies general trends, making it's results better equipped to generalize to a larger population increasing it's external validity. This study's case selection allows for the possibility to generalize to the entire population, following the logic that when results are based on the vast majority, the remaining cases are likely to display similar results, given that certain technical requirements are met (more on this in the next chapter).

Using a cross-sectional design has the added advantage that compared to an experiment it makes it possible for the examined phenomena to be observed in a more realistic, natural setting (Kellstedt & Whitten, 2013). The increased size and representativeness of the studied population increases the external validity, although this comes at a cost of internal validity as casual effects get harder to measure. Furthermore size and representativeness of the examined population can be increased and finally, hypotheses which do not lend themselves easily to experimental treatment can be tested.

Within the category of observational studies, Kellstedt & Whitten (2013) divide between two 'pure' types. Alternatively to a cross-sectional design, it is possible to employ a time-series design examining data at several points in history. By looking at the levels of the different variables over a longer period in time, the differences between them might be exposed. This can give a better understanding of the direction in which the casual relationship flows. The amount of work required to execute such a design however, places it outside the scope of this thesis. Furthermore, the much larger dataset required for a design like this seems problematic in our case due to the unavailability of required data. For example, data for the new CPA indicator is not available for such a large time period. Even though it might be possible to enrich the dataset by gathering the missing data from other sources (or perhaps even in the field), such an endeavor should be regarded as being far outside the scope of this thesis.

In a cross-sectional design it is imperative that all measurements are taken at roughly the same moment in time. Therefore, all of the used data is from the year 2009, except for data regarding aid and the level of QOG. For both indicators measuring levels of aid (ODA and CPA), the three-year average level of aid is calculated, using the years immediately preceding and following 2009.

This is done in order to account for potential distorting fluctuations in measured levels, caused by freak occurrences such as for example natural disasters or quick flaring (brief) national conflict. Also, in some cases there are countries which received no aid in 2009, but did receive aid the immediate year before or after. In order to counter these distorting occurrences following earlier work (Bräutigam, 2000; Busse & Groening, 2010; Knack, 2001; R. Rajan & Subramanian, 2007; Reddy & Minoiu, 2006; Remmer, 2004; Tamura, 2005), these calculated averages are used.

The aim of this study is to investigate the influence of aid on the level of QOG. It is however unlikely that effects of aid will be visible right away, as it will take some time before efforts to improve and strengthen government institutions are visible. It seems highly likely that there

will be a so called lag-effect. Using data from 2009 to measure QOG, the same year as the other variables, would not be sufficient as it would not at all account for any lagged effects. Therefore, following previous work, 2012 will be used to measure QOG. A three-year average is also calculated following the same logic as previously described for the aid variables, in order to account for incidental variation.

The two most widely used statistical methods to analyze a relationship between several variables are correlation and regression (De Vocht, 2005; Graddy, 1999). This study will employ both techniques, which will be discussed more in depth in the next chapter.

4.1.2 BIVARIATE CORRELATION COEFFICIENT

In order to assess whether aid and QOG are related, certain steps need to be taken and certain statistical procedures need to be carried out. SPSS will be used in order to carry out these statistical procedures. After presenting a short description of the used data, the first statistical procedure that shall be carried out is calculating the bivariate correlation between aid and QOG. This will help to answer the questions whether less aid is correlated to higher QOG, or more aid is correlated to higher QOG, or whether the variables are not significantly correlated at all. This correlation indicates the direction and intensity of the relation between the variables. Pearson's correlation coefficient will be used, as this measure is constrained to lie between 0 (no effect) and 1 (a perfect effect) and it shows the measurable linear relation between ratio (scale) and interval variables. It is also possible to use categorical variables with Pearson's correlation coefficient, provided they only have two categories. The bivariate correlation can be used to show the relation between variables, but it does not provide information about the direction of this causality, nor does it examine whether the perceived result is significant when other variables are included into the model.

4.1.3 MULTIPLE REGRESSION ANALYSIS

In order to control for a potential relation between other variables, multiple regression analysis will be used. Graddy (1999) describes it as essentially a toolbox to describe how strong and under which conditions a dependent and independent variable are associated. De Vocht (2005) describes how simple linear regression can be used to calculate the causality between independent variable X and dependent variable Y.

However, this study has identified several different independent variables, which means there are several values of X. Therefore, following De Vocht (2005), the statistical procedure of multiple linear regression analysis should be used and the following equation must be filled out:

$$\text{Predicted } Y_i = B_0 + B_1 * X_{i1} + B_2 * X_{i2} + \dots + B_k * X_{ik} + e_i$$

In this model:

Y denotes the dependent variable

X_j denotes the independent variables, $j=1,2 \dots, k$

B_j denote the coefficients that measure the effect of the independent variables on the dependent variable.

e_i denotes the error term, which represents stochastic, or random, influences on the dependent variable (Graddy, 1999). These variables (and the entire equation) will be filled in the next section effectively providing the model for our study. The data sources used for these variables will be explained in section 4.2.

Predictor selection can be done using two basic methods available: the stepwise method and forced entry method (De Vocht, 2005; Graddy, 1999). In this study, the forced entry model is used. In this model all predictors, including the non-significant ones are introduced (forced) into the model simultaneously. It's only possible to go for the stepwise method when there is a certain hierarchy in importance between the independent variables. For this study, it's paramount that not just the significant variables are included, but all of them and therefore forced entry method will be used.

4.1.4 PREDICTION REGRESSION EQUATION

The se dependent and independent variables, provide us with the following regression equations (models for ODA and CPA):

ODA:

$$\text{Predicted QOG12} = B0 + B1(\text{ODA}) + (B2*\text{ED09}) + (B3*\text{COR09}) + (B4*\text{RTO09}) + (B5*\text{RTM09}) + (B6*\text{VA09}) + (B7*\text{PS09}) + (B8*\text{PR09}) + (B9*\text{ED09}).$$

CPA:

$$\text{Predicted QOG12} = B0 + B1(\text{CPA}) + (B2*\text{ED09}) + (B3*\text{COR09}) + (B4*\text{RTO09}) + (B5*\text{RTM09}) + (B6*\text{VA09}) + (B7*\text{PS09}) + (B8*\text{PR09}) + (B9*\text{ED09}).$$

QOG12 measures the quality of government in a country.

ODA is the amount of aid per capita as measured by the World Bank's ODA indicator.

CPA is the amount of aid per capita as measured by the OECD CPA indicator.

ED09 is the value of GDP per capita.

COR09 seeks to measure the level of corruption.

RTO09 indicates the amount of rents received from oil income.

RTM09 indicates the amount of rents received from income from minerals.

VA09 measures the value for voice and accountability.

PS09 measures the level of political stability.

PR09 measures the amount of protestant people in a country

ED09 measures the level of education in a country.

An overview of all variables can be found in appendix A

4.1.5 POPULATION AND SAMPLE

For this study, our total population exists of all 144 developing countries as classified by the World Bank (See appendix C for further reference). Preferably, the sample used is as large as possible in order to increase the external validity of the study. Therefore, only those countries for which not all values of the primary independent and dependent variables are available are excluded. For this study, enough data is available to examine 113 out of the 144 countries. Our sample therefore consists of 113 developing countries from all parts of the world. The sample used in this study includes developing countries from all regions: 12 out of 23 developing countries in East Asia and the Pacific; 22 out of 30 developing countries in Latin America and the Caribbean; 17 out 25 developing countries in Europe and Central Asia; 12 out of 13 developing countries in the Middle East and North Africa; 42 out of 47 developing countries in Sub Saharan Africa. 7 out of 9 developing countries in South Asia. The specific countries used in this study are further detailed in appendix C. Including a sample of countries from all regions helps to control for potential regional effects such as development influencing 'spill-over effects' from neighboring countries, such as for example economic cooperation packs. Furthermore, it makes the results more plausible to generalization from the sample to the population. If only some regions were covered, the external validity would be decreased due to the possible occurrence of a regional bias.

4.2 OPERATIONALIZATION OF VARIABLES

4.2.1 *DEPENDENT VARIABLE QUALITY OF GOVERNMENT*

The dependent variable QOG is theoretically defined as “the capacity of the government to effectively formulate and implement sound policies and the respect of citizens and the state for the institutions that cover economic and social interactions among them.” Measurement validity is a hard thing to ensure when looking at a concept such as QOG, as it is challenging to obtain solid, objective data. Looking at just the number of policies an administration outputs per year for example tells us something about the administrative capacities of that particular government, but isn’t effective government more than just producing regulations? Is the government output effective? Is it being enforced and does it actually contribute to the greater good of the entire population?

Kaufmanns Worldwide Governance Indicators offer a solution to this issue. They use two different sources, polls of experts and surveys, for their indicators (Maurseth, 2008). By compiling cross-country data from different sources, they are able to include important data often not captured by objective indicators alone, especially for a complex topic such as QOG.

The challenge with perception based measurements such as for example surveys and polls, is that the measured levels are based on the perception of the person that fills out the survey. This makes it difficult to obtain identical results when the trials are repeated. To this end, the WDI ensure reliability by compiling the results of the large number of existing indicators. Data is obtained from 37 different data sources from 31 independent organizations. Their method of aggregation allows them to provide confidence intervals that give a quantified indication of the inherent uncertainty indicate how precise the indicators are in explaining variation across different sources.

The countries included in this index have been given a score ranging from -2.5 (worst level of governance) to 2.5 (highest level of governance). Countries are also ranked on a global scale. For this study however, the scores are used as it is believed and argued that the intervals between the different scores have a certain econometric value that allows them to be compared to each other in multi regression analysis. Therefore, the level of these measured scores is the ratio level.

4.2.2 INDEPENDENT VARIABLE AID

Aid has been theoretically defined in this study as “support payments that are made directly to governments, be it from one government to another (known as bilateral aid), or by institutions (multilateral aid) such as the world bank (Moyo, 2010).

One of the most frequently used indicators for development aid received by a country, is that given by the World Bank in its World Development Indicators Database. This indicators validity is excellent with 210 countries covered, amongst all the developing countries and composed from its own and over 30 other international, officially recognized sources. This leads to a high level of consistency in the presented data, meaning a high level of reliability. Furthermore, as this study follows the categorization of developed countries as given by the Word Bank, it seems straightforward to use the WDI as our only and primary data source.

There are however, several who argue that not all is well when using this indicator to measure the effect of development aid, one of whom being the World Bank itself. In order to examine their claim that many studies cannot find results due to the fact that they lump together all forms of aid (see also chapter 2), this study will also use an alternative, recently developed indicator provided by the OECD called Country Programmable Aid (CPA) (Benn, Rogerson, 2010).

Both CPA and ODA are measured per capita instead of on a country level. This is because larger countries could receive higher absolute numbers of aid, but in comparison to their potential much larger population numbers, per capita it would be less. In order to be able to compare the aid levels of different countries in a meaningful way, it is important the indicator is measured on the per capita level.

This value is calculated by dividing the net received aid on the country level, by the World Bank mid-year population estimate. The resulting indicators, Net ODA and Net CPA received per capita in current US\$ has a ratio measurement level. The higher ODA or CPA score displayed by a case, the more it receives in absolute numbers.

With more than 900 economic, social and environmental indicators gathered by the World Bank from more than 30 different sources, the data has a high level of reliability. The measurement validity of the data is contested by some however. Although it would appear that ODA measures the level of aid a country receives very specifically, it is argued that it measures much more than just aid (Benn, Rogerson, 2010). In recognition of these concerns, the CPA indicator, based on the WB and OECD data has been developed in 2007, excluding items from the mix such as for example debt relief, imputed student costs, aid administration, and technical cooperation.

The measurement validity level of the indicator is very high, as CPA should succeed in more accurately measuring the received level of specific development aid a country receives than for example ODA indicators.

Furthermore, to account for potential long term effects of the provisioning of aid and potential endogeneity of aid, as argued by several, both indicators will be lagged. This will be

achieved by taking the three-year average of Net CPA and Net ODA received per capita in current US\$ in the years immediately before and after 2009.

4.2.3 INDEPENDENT CONTROL VARIABLES

Economic Development

Most previous work into QOG measures economic development by the level of GDP, which stands for the value of all final goods and services produced in one country during one year (The world bank, 2007). In this study, economic development will be measured as GDP per capita in current USD. The high level of measurement validity comes from the careful selection of the World Bank in calculating these figures and by selecting the right GDP indicator, measuring the correct items.

First of all, we need to measure GDP per capita and not for the entire population in a country. In the same way as earlier with levels of ODA, countries can have a high absolute GDP, but if it also has a very large population, the relative GDP might be less than a smaller country.

Secondly, as growth will probably be quite high in developing countries, using constant GDP will make sure we are not comparing apples to oranges. Also, GDP will be measured in real prices as compared to Purchasing power (PPP) as this comparison in this case dilutes the value of the figure we're examining.

Finally, GDP will be measured in current USD, making it similar and thus comparable to the values for ODA and CPA, disregarding inflation.

GDP per capita (in current USD) is ratio scale variable. A higher value means an absolute higher amount of GDP. A problem concerning the variable however, is the high distance between the lowest and highest case in the available data. This means that in our model, if you increase the observed GDP with one value, the perceived increase or decrease of other variables that are measured on much smaller scales have a high possibility of not being visible or 0. The regression coefficient will show a score of 0, whilst in fact there actually is a score higher than 0, albeit too small to detect. Therefore, the level of GDP per capita is divided by 1000, in order to make these changes observable.

The data is taken from the WDI as well and therefore has the same level of reliability as explained in the previous section.

Level of corruption

Corruption is theoretically defined in this study as "abusing public office for private gain"(Transparency International, 2013).

Measurement validity has comparable difficulties as discussed earlier regarding quality of government, as this is a difficult notion to obtain objective information about. The corruptions index therefore is based on perceptions of 13 different surveys from 10 independent organizations. Only those countries for which data is available from at least three different sources are included.

The 180 countries that are included in the index have each been given a score from 1 to 10, with 1 being the highest level of corruption and 10 the lowest. In order to be able to compare them, the scales of all variables have to be in the same direction. Therefore, the values of this indicator are inverted so that 1 means lowest levels of corruption and 10 the highest. This indicator has a ratio measurement level.

Income from rents

The WDI database also provides information about incomes from oil and mineral rents. Rents are measured as percentages of total GDP, with a higher value symbolizing a larger amount of revenue being made by income from rents. In accordance to the predominant literature, the World Bank divides these rents into revenues from oil and revenues from minerals. Therefore these two ratio scale indicators are also used in this study. Given the already mentioned large amount of data that the WDI is based on, measurement validity is high. It must be noted however, that the amount of data available is somewhat disappointing. There is only data available for 89 countries. In our sample making these indicators together with religion the most restricting for our total usable sample size.

Investigation reveals however that the WGI is the most 'extensive' dataset available for these indicators. The Quality of Government database for example, has data available for an even smaller amount of countries, probably because uses the same (or less) sources as the WGI. Employing a different proxy indicator such as for example the quality of the tax institutions as offered by the literature, is also not an option as it is available for only 78 countries.

Voice and Accountability

In order to measure transparency, the voice and accountability indicator from the Worldwide Governance indicators (WGI) will be used. This indicator measures the extent to which citizens in a country are able to take part in political processes. It measures the level of transparency and accountability in a country (Maurseth, 2008). The WGI offers data for 212 countries which is an aggregate of hundreds of individual variables that measure various governance dimensions. These variables are collected from 35 sources from 33 different organizations. This makes the data reliable as the results are likely to be reproduced when repeated.

These countries are given a score ranging from 1 to 100, where 1 stands for the lowest level of voice and accountability and 100 for the highest. Although 10 would constitute a higher value than 1, the intervals between the values have a certain meaning. However, no assumption can be made that a 0 would constitute absolutely no amount of voice and accountability at all, therefore the level of measurement is on the interval level.

The voice and accountability indicator includes among others measures about political processes, civil liberties, political right and independence of the media, free press, elections, trade unionism, transparency of the business community and the role of military in politics, increasing the measurement validity of the indicator (Maurseth, 2008).

Political stability

In order to measure political stability, another indicator from the Worldwide Governance indicators (WGI) will be used. The WGI Political Stability indicator measures the likelihood that

existing governments will be overthrown by unconstitutional or violent means (Maurseth, 2008).

As with the previous indicator, these countries are given a score ranging from 1 to 100, where 1 stands for the lowest level of voice and accountability and 100 for the highest. This indicator's measurement scale is also on an interval level.

The indicator is based on perceptions rather than just counting the amount of incidences where a government was overthrown, increasing its measurement validity. It is for example possible for a country to have never had a government overthrown, but still the threat could be very high.

Religion

This indicator is measured using data from the Quality of Government database from the University of Gothenburg. In their very extensive database, among others it is listed how many people in a country are Protestant, Catholic, Muslim or of another religion. This database combines data from different cross-sectional sources and can be seen as a reliable source.

In accordance with the examined literature, we look at the amount of people that are Protestant in a country, measured as a percentage of the total population. The indicator is on the ratio level of measurement. A higher number, means a greater number of people in the country are Protestant.

Education

The WDI also provide data regarding education levels in different countries. Following the literature, it is argued that a well educated population is more engaged and active in demanding better governance. As such, tertiary school enrollment measured as a percentage of the total population will be used.

Together with data regarding rents, this indicator has the smallest amount of data available. The WDI are used, as this database has even more data as compared to the Quality of Government database of the OECD.

As this indicator is also derived from the WDI, reliability is ensured as already explained. The indicator is on a ratio level. A higher number indicates a greater amount of people in that country have been or currently are enrolled in a form of tertiary education.

In order to be able to carry out a multiple linear regression analysis and in order to be able to generalize the regression to a wider population several assumptions must be met. These assumptions will be discussed in the next section before proceeding with the analysis.

5. DATA ANALYSIS

This chapter discussed the results of performed analysis. The first part will present a descriptive analysis, used to investigate and summarize the data. This is followed by the explanatory analysis in the next paragraph and finally the results of our multiple regression model.

5.1 DESCRIPTIVE ANALYSIS

Figure 3 displays a summary of the descriptive statistics of our database. The descriptive statistics of the two main variables, aid (as measured by ODA and CPA) and quality of government will be shortly examined.

	N	Minimum	Maximum	Mean	Std. Deviation
Aid (ODAAVG)	141	-3,56	702,82	102,1950	126,51783
Aid (CPAAVG)	113	-11,80	381,93	37,9036	48,51694
Quality of Government (QOG12)	139	-2,20	1,42	-,4797	,68435
Corruption (COR09)	141	2,60	10,00	7,2206	1,39476
Rents from oil (RTO09)	89	,00	56,07	6,9168	12,89349
Rents from minerals (RTM09)	137	,00	30,57	1,8669	4,76676
Voice and accountability (VA09)	140	-2,24	1,23	-,3923	,84150
Political stability (PS09)	140	-3,32	1,47	-,3725	,96039
Religion (PR09)	112	,00	64,20	8,4491	14,12503
Education (EDU09)	89	1,19	114,78	26,3492	22,53146
Valid N (listwise)	56				

Figure 3: Descriptive Statistics

In regard to our main variable, figure 3 shows the lowest amount of aid received per capita is USD -3,56, in the country of Thailand. This is due to the ODA (and CPA) indicator measuring ODA as a net value (there is no total/gross ODA available). According to the World Bank the ODA indicator can be a negative value if a country is actually repaying larger sums than it receives. The country with the highest amount of ODA per capita received is the small nation of Palau, with USD 1715,25 average in our three year time span. The country with the lowest amount of CPA per capita received is the Central African Republic with an average of USD -11,80 for the examined three year timespan. Upon closer examination, it is revealed that this is attributable to 2009 a year in which according to the CPA indicator a net payback of funds of USD 90,14 per capita was made. The ODA indicator for the same year however, shows an increasing aid amount for the same country, a sizable difference between the two indicators. The country with the highest amount of CPA per capita received is Gaza and the West Bank, with USD 381,93. This shows that there is a sizable difference in the amount of aid that residents of different countries receive. Such an amount of variation could be explained by

neediness of different countries or because certain countries are favorite, the so-called donor darlings.

Data is available for a sample of 89 countries. This can be attributed to limited data available for indicators regarding incomes from oil rents and education (as discussed in the previous section). Clear differences between ODA and CPA indicators can already be seen and will be discussed further in next section.

Figures 3 and 4 graphically displays the above-mentioned division of aid funds per country divided in classes of USD 50,-. It clearly shows that most countries receive a relatively small amount of aid. Around 95 countries receive less than USD 100,- per capita. Around 30 countries receive less than USD 250,- and only a few as much as USD 500,-. 4 nations have already been removed from this data (further explained in next section), but still one potential outlier can be seen. This is Gaza and the West Bank, with an amount of USD 702,82 per capita. It might be tempting to outright remove perceived outliers, as it can lead to improved accuracy of estimates and reduce the probability of Type I and Type II errors (Osborne & Waters, 2002). However, this should be done deliberately as not to remove cases that should have been incorporated into the regression.

The histogram of aid as measured by the CPA indicator seems to tell a different story altogether. Amounts of aid per capita received are considerably lower, with the absolute majority of 80 countries receiving less than USD 50,- per capita. Very few countries receive more than USD 100,- per capita and only one country receives a sizable amount more than other countries. Further investigation into this potential outlier reveals that this is Gaza and the West bank, with an amount of USD 381,93 per capita received average for the three year timespan. In the next section, these potential outliers will be examined further.

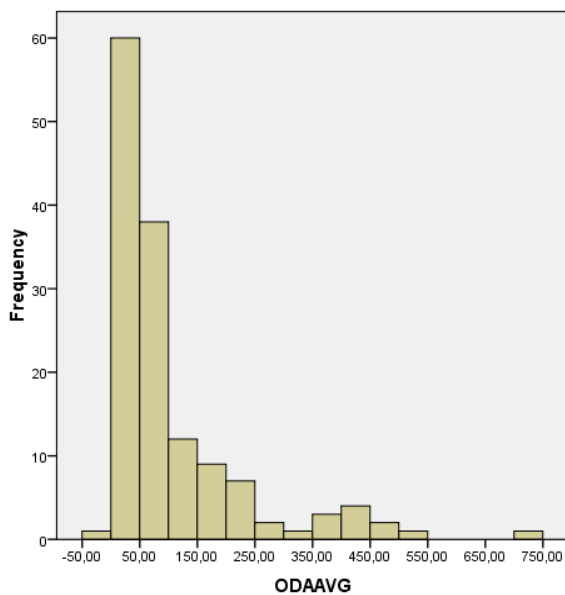


Figure 4: Histogram of independent variable aid (ODA)

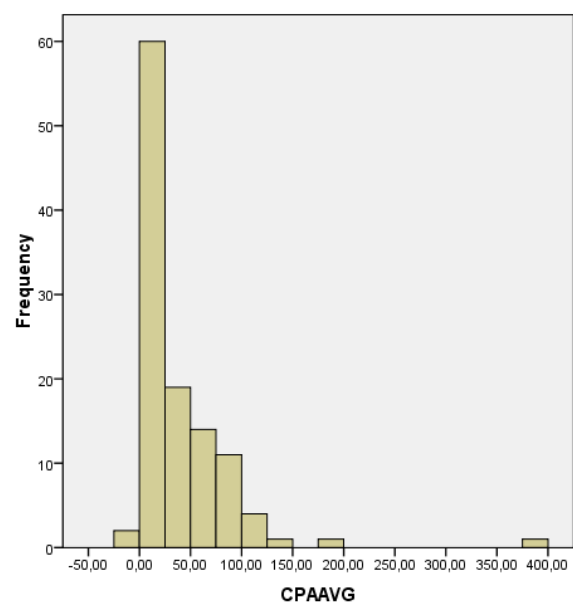


Figure 5: Histogram of independent aid (CPA)

5.2 EXPLANATORY ANALYSIS

5.2.1 BIVARIATE CORRELATION COEFFICIENT

The correlation between aid and QOG is tested using Pearson's correlation. Pearson is used, because we are testing interval/ratio level variables. Testing the correlation for ODA using Pearson's shows that there is a very weak negative relation between ODA and QOG, however the statistical significance is none existing ($r = -.007$ $n=143$ $p=,934$). CPA shows a slightly stronger but still weak positive relationship between CPA and QOG ($r = ,111$ $n=113$ $p=,240$), but also not of a statistical significance.

If we examine the scatterplot for ODA and QOG, we can see 4 outliers who receive a sizable amount of aid per capita more than other countries. Upon examining the data, we can see that these nations are Palau, Micronesia the Marshall Islands and Tuvalu. Further examination reveals that these nations receive sizable military funds from the U.S . It is therefore decided to leave out these cases. Although it can be argued that these kind of funds will have some sort of impact on the QOG, it is not the focus of this study to examine the effect of these kind of military funds. It also seems not correct to consider these kind of funds in the same breath as other, NGO provisioned aid payments

The CPA indicator has no records for these countries, giving further weight to the claim made by, perhaps ironically, the World Bank itself that previous studies (and indicators) lumped together too many financial flows as aid, obscuring potential results.

Looking at the scatterplot for CPA, 1 peculiar case can be identified, which is Gaza and the West Bank. This sizable difference in aid received by this country is also discussed by others.

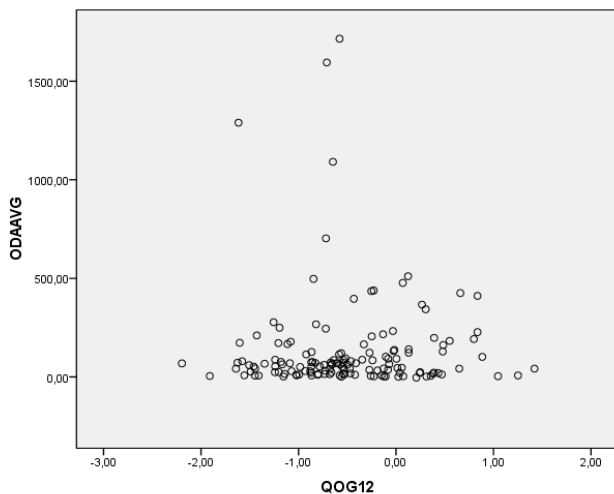


Figure 6: Bivariate correlation Scatterplot ODA

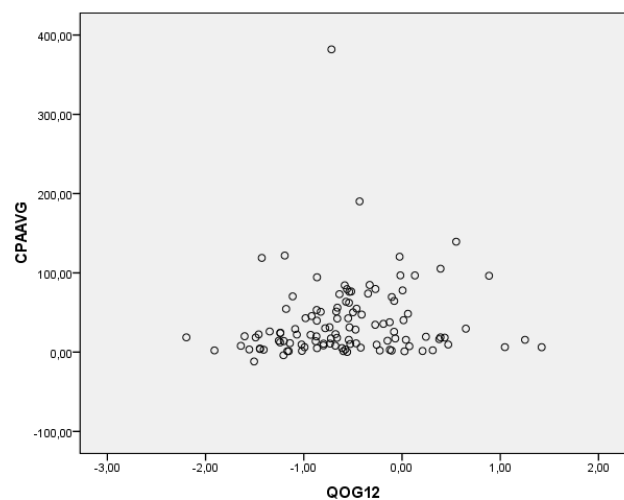


Figure 7: Bivariate correlation Scatterplot CPA

Frisch (2014), calls this difference 'blatant discrimination in aid provisioning. He argues that so much is paid by donor countries in order to keep the Palestinians at the negotiating table and the entire issue 'off their minds'. It is chosen not to remove this country from the database yet. Even though the reasons for this aid provisioning might be politically charged, it is considerably different than for example Palau where the US is paying large amounts with primarily military motivations.

After removing these outliers, Pearson’s correlation shows rather different results for the relation between QOG and aid as measured by ODA. Although still weak the direction changes to a stronger positive relation with noticeably improved although still no statistical significant result ($r = .151$ $n=139$ $p=.076$). No cases were removed for CPA, therefore nothing changes.

Correlations ODA

		QOG12	ODAAVG
QOG12	Pearson Correlation	1	.151
	Sig. (2-tailed)		.076
	N	139	139
ODAAVG	Pearson Correlation	.151	1
	Sig. (2-tailed)	.076	
	N	139	141

Figure 8: Bivariate correlation ODA

Correlations CPA

		QOG12	CPAAVG
QOG12	Pearson Correlation	1	.111
	Sig. (2-tailed)		.240
	N	139	113
CPAAVG	Pearson Correlation	.111	1
	Sig. (2-tailed)	.240	
	N	113	113

Figure 9: Bivariate correlation CPA

5.2.2 ASSUMPTIONS FOR MULTIPLE REGRESSION ANALYSIS

In order to be able to make any inference about abovementioned correlation and to see whether aid is harmful to QOG, 10 control variables are introduced to the model. This technique will be used to model the relationships between several other variables which are commonly seen as other important influences on the quality of government. Most statistical test rely on certain assumptions about the variables used in the analysis. If these assumptions are not met, the results may not be trustworthy. This might result in a type I or type II error or lead to a misinterpretation of the significance or effect size (Osborne & Waters, 2002).

As Osborne and Waters (2002) critically argue, many studies fail to report having tested assumptions of the statistical tests they rely on for the presented results, making it almost impossible to check the reliability of this work. The full set of identified assumptions underlying regression techniques is quite large and there is some dispute as to the consequences of running an analysis that fails to meet them (Gorard, 2003). This study will follow the most important assumptions as outlined by Osborne and Waters (2002) and De Vocht (2008), increasing the representatives of our sample to the larger population of 145 countries under ODA and 113 under CPA. Should we fail to meet these assumptions, the results cannot be generalized to a wider population.

Assumption 1: Measurement level & Theoretical causal relation

The first assumption deals with certain ‘ground rules’ so to say. Are we not comparing apples to oranges? When carrying out regression analysis, all variables should be on an interval/ratio, or dichotomous (for independent variables) scale (De Vocht, 2008). As explained in the previous section, all variables are either on a ratio or interval level.

Also there should be a theoretical causation between dependent variable A and all independent variables used. Chapter 2 points out earlier theoretical work into influences on QOG and previous empirical result into the relation between aid and QOG. Chapter 3 points

out the deeper suspected theoretical mechanisms between aid and QOG. Therefore a theoretical causal relationship between aid and all the independent variables is present and the assumption is met.

Assumption 2: Variables are normally distributed

Regression assumes that variables have normal distributions (Osborne & Waters, 2002). The assumption is met when all residuals are more or less normally distributed. Residuals are the difference between predicted scores by the model and actual scores. They illustrate the extent to which the model is incorrect. Smaller residuals point to a stronger relation between

the variables and thus higher quality of the model used, whereas non-normally distributed variables (high skew or kurtosis, or substantial outliers) can distort relationships and significance tests (Osborne & Waters, 2002). There are several statistical tools available to provide the needed information to test this assumption: Visual inspection of standardized residual data plots and histograms and bivariate/multivariate data inspection. The latter method has been addressed already in the previous section. Figures 10 and 11 show the histograms based on the standardized residuals and the predicted standardized residuals for both ODA and CPA measures of aid.

Normal distribution can be assumed when the histogram shows a normal curve and when the residuals in the normal probability plot are located around the center line.

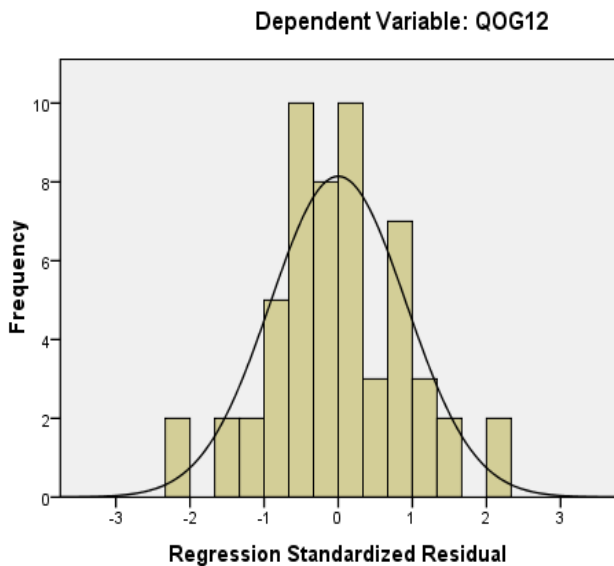


Figure 11: Standardized residual ODA

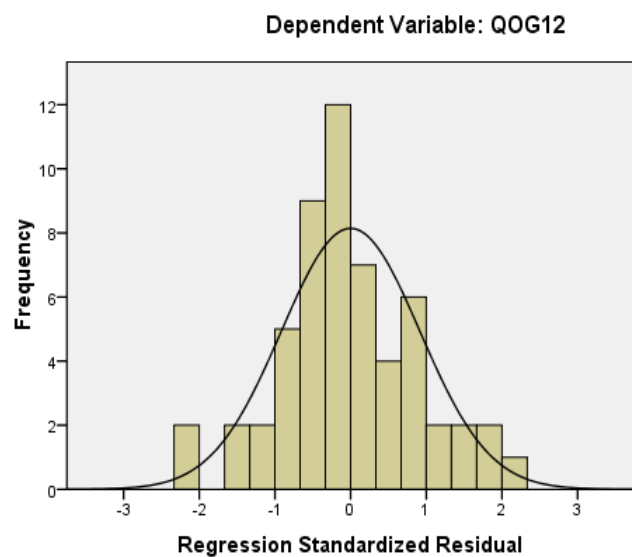


Figure 10: Standardized residual CPA

Both histograms display comparable characteristics. Both histograms show a slight positive kurtosis or “peakedness” shape (leptokurtic), which might indicate that some of the variance might be contributed to infrequent, heavy deviations. However, no clear negative or positive skew is visible, suggesting that scores are symmetrically distributed. There are also no clear outliers visible, however the existence of which cannot be ruled out by means of this histogram alone. Judging from the observed distribution, it is believed that normal distribution will provide an accurate model.

In order to get further information regarding potential outliers and to see if the residuals are normally distributed, normal probability plots for ODA and CPA are generated and residual statistics are calculated.

Assumption 3: Linear relationship between the independent and dependent variable(s)

Standard multiple regression will only accurately estimate the relationship between variables if the relationships are linear in nature. If this is not the case, the regression analysis will underestimate the true relationship, increasing the change of type I and II errors for multiple regression (Osborne & Waters, 2002).

Figures 12 and 13 show the plots for ODA and CPA. When the points are situated on a more or less straight line, this is further evidence that the residuals are normally distributed.

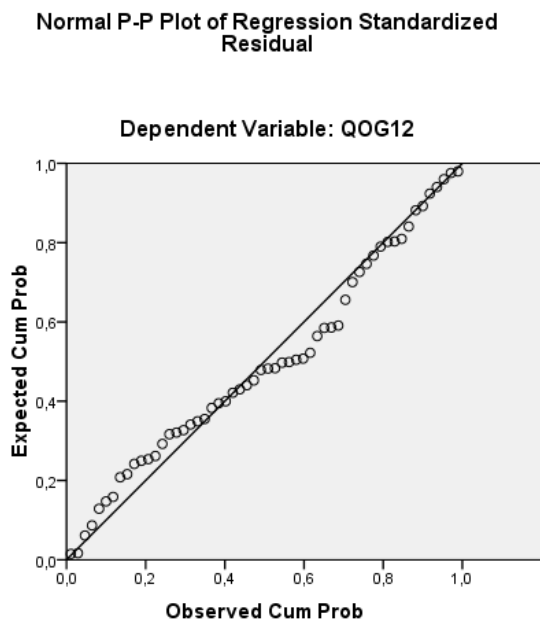


Figure 13: Normal probability plot ODA

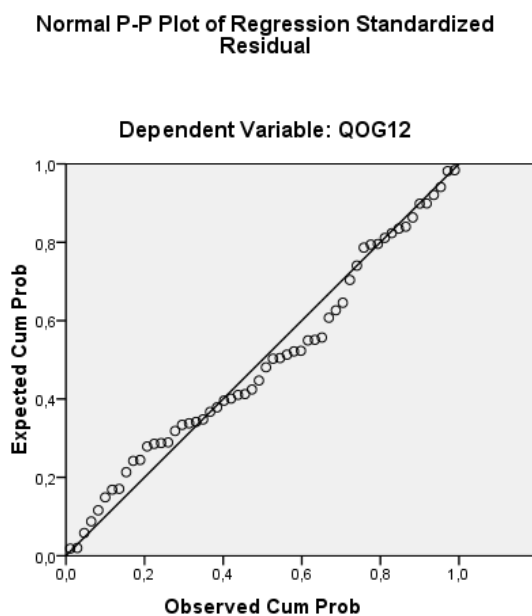


Figure 12: Normal probability plot CPA

Both plots show points on a relatively straight line with a small deviation in the middle. However, this deviation is not deemed problematic and further evidence for a normal distribution is perceived.

Figure 14 shows the residual statistics for aid as measured by ODA. The predicted value displays the expected Y value, while the residual displays the difference between the predicted and observed Y values. As shown in the table, the biggest outliers amongst the residuals are - ,708 and ,667 with standardized values of -2,172 and 2,046. In order to examine the exact values of the residuals, casewise diagnostics are also calculated.

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-1,2598	1,2651	-,3734	,50577	56
Residual	-,70872	,66747	,00000	,29841	56
Std. Predicted Value	-1,753	3,240	,000	1,000	56
Std. Residual	-2,172	2,046	,000	,915	56

Figure 14: Residual statistics ODA

Figure 15 shows the residuals with a value greater than 2.0. Three cases have a value greater than 2.0. This is far less than the accepted value of 5% and therefore no (further) outliers have to be excluded from the sample (De Vocht, 2008).

Case Number	Std. Residual	QOQ12	Predicted Value	Residual
31	-2,128	-1,64	-,9471	-,69429
78	2,046	1,05	,3788	,66747
133	-2,172	,47	1,1783	-,70872

Figure 15: Casewise Diagnostics ODA

Figure 16 shows the residual statistics for CPA. As shown in the table, the biggest outliers amongst the residuals are - ,675 and ,694 with standardized values of -2,088 and 2,144.

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-1,2473	1,2405	-,3734	,50713	56
Residual	-,67594	,69416	,00000	,29609	56
Std. Predicted Value	-1,723	3,182	,000	1,000	56
Std. Residual	-2,088	2,144	,000	,915	56

Figure 16: Residual Statistics CPA

In order to examine the exact values of the residuals, casewise diagnostics are also calculated in Figure 17. Four cases have a value higher of 2, which is exactly the 5% allowed. Therefore no cases have to be excluded.

Casewise Diagnostics^a

Case Number	Std. Residual	QOG12	Predicted Value	Residual
31	-2,057	-1,64	-,9755	-,66588
78	2,144	1,05	,3521	,69416
102	2,090	,07	-,6031	,67681
133	-2,088	,47	1,1455	-,67594

Figure 17: Casewise Diagnostics CPA

It is also assumed that all residuals display a linear relationship, which according to the De Vocht (2008) can be shown using a scatterplot of the residuals. If the values are randomly distributed and do not hold a recognizable shape, the model seems linear. Figures 5.8 and 5.9 show the scatterplots for ODA and CPA

As can be seen, both figures show randomly distributed positioning of values with no clear pattern that can be recognized among the residuals.

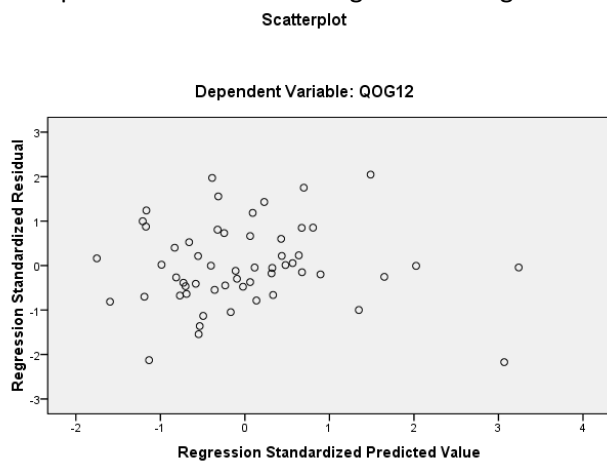


Figure 18: Residual scatterplot ODA

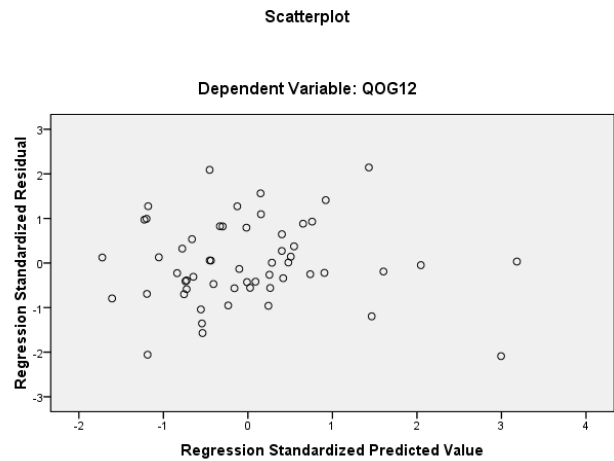


Figure 19: Residual scatterplot CPA

Assumption 4: Homoscedasticity

The final assumption holds, that the variance of errors should be the same for all levels of the independent variables (Osborne & Waters, 2002). If the variance differs at all levels of the independent variable, heteroscedasticity is indicated. A little heteroscedasticity has little effect, however too much can seriously distort findings and weaken the analysis, leading to type I errors. According to Osborne and Waters (2002) and De Vocht (2008), this assumption can be checked by examining the scatterplot of the standardized residuals. .3.

Ideally if we draw a plot all values should be situated more or less equally around the horizontal zero line there. If the values are not scattered evenly around the zero line there is heteroscedasticity. Heteroscedasticity can take on many different form such as a 'bow-tie' or 'trumpet'. Figures 5.8 and 5.9 can be used to interpret the residuals for this assumption. No clear pattern is visible, making it safe to state that the assumption is met.

5.2.3 MULTIPLE REGRESSION MODEL

Then multiple regression analysis is carried out using the forced entry method. Figure 20 shows the model summary, which provides information about the quality of the model and its independent variables. In this summary, R stands for the multiple correlation which is the correlation between observed values for Y and the predicted Y values.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,861 ^a	,742	,691	,32629	,742	14,683	9	46	,000

a. Predictors: (Constant), ODAAVG, COR091, PR09, RTM09, PS09, RTO09, EDU09, VA09, ED09

b. Dependent Variable: QOG12

Figure 20: Model Summary ODA

Our model has a reasonably high correlation between the variables of 0.861. This contributes to a reasonably high R square value of 0,742 which is the total variance of our dependent variable between different cases that be explained by the independent variables. This means that approximately 74% of variation can be explained by the currently used independent variables of this study.

Because it seems unlogical to assume that another introduced variable will have zero correlation with our dependent variable and adjusted value of R square in the total population the is measured: the adjusted R square. This reduced value of R square takes into account the effect an additional introduced variable into the model might have. The summary shows an adjusted R square of 0,691, which means that 69% of the variance of QOG is determined by our used independent variables.

The model summary for CPA in figure 21 shows comparable figures with a high correlation of ,864 leading to an R square of ,746 meaning that 74% of variation can be explained by the used variables and 70% percent under adjusted R square. This very small difference between aid measured by ODA and aid measured by CPA, seems to indicate that in our model, most variance can be explained by other variables.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,864 ^a	,746	,696	,32376	,746	14,993	9	46	,000

a. Predictors: (Constant), CPAAVG, EDU09, RTM09, VA09, PR09, PS09, COR091, RTO09, ED09

b. Dependent Variable: QOG12

Figure 21: Model Summary CPA

Tables Figures 22 and 23 shows the ANOVA for both models (ODA and CPA), which contains the variance analysis. This shows the total amount of variance within our dependent variable. The last column displays the statistical significance of the model as a whole. With a significance level of 0.00, which trumps even the 0.05 level, for both models, we can conclude that both models as a whole are statistically significant.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14,069	9	1,563	14,683	,000 ^a
	Residual	4,898	46	,106		
	Total	18,967	55			

a. Predictors: (Constant), ODAVG, COR091, PR09, RTM09, PS09, RTO09, EDU09, VA09, ED09

b. Dependent Variable: QOG12

Figure 22: Anova ODA

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14,145	9	1,572	14,993	,000 ^a
	Residual	4,822	46	,105		
	Total	18,967	55			

a. Predictors: (Constant), CPAAVG, EDU09, RTM09, VA09, PR09, PS09, COR091, RTO09, ED09

b. Dependent Variable: QOG12

Figure 23: Anova CPA

Figures 24 and 25 contain the coefficients of the multiple regression. In this table, the unstandardized B shows the regression coefficients for the constant term and for each of the independent variables, corrected for the influence of other independent variables. It indicates the amount that QOG (Y) changes when a specific independent variable is increased with 1 unit of measurement, whilst the effect of the other independent variables is held constant. The constant term is the quality of government or Y when all other indicators are zero.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	1,989	,435		4,574	,000					
	ED09	7,318E-5	,000	,397	3,344	,002	,551	,442	,251	,398	2,513
	COR091	-,335	,057	-,618	-5,885	,000	-,815	-,655	-,441	,510	1,963
	RTO09	-,011	,005	-,199	-2,216	,032	-,352	-,311	-,166	,696	1,438
	RTM09	,000	,014	-,003	-,040	,968	,094	-,006	-,003	,903	1,107
	VA09	-,007	,070	-,010	-,106	,916	,323	-,016	-,008	,603	1,659
	PS09	,061	,063	,086	,961	,341	,263	,140	,072	,694	1,440
	PR09	-,002	,005	-,034	-,421	,676	-,139	-,062	-,032	,845	1,184
	EDU09	-,006	,003	-,250	-2,339	,024	,298	-,326	-,175	,491	2,036
	ODAAVG	4,695E-5	,001	,004	,050	,961	-,052	,007	,004	,942	1,061

a. Dependent Variable: QOG12

Figure 25: Coefficients multiple regression ODA

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	1,907	,433		4,400	,000					
	ED09	7,553E-5	,000	,410	3,491	,001	,551	,458	,260	,401	2,495
	COR091	-,331	,057	-,610	-5,857	,000	-,815	-,654	-,435	,510	1,960
	RTO09	-,010	,005	-,179	-1,945	,058	-,352	-,276	-,145	,655	1,527
	RTM09	,000	,014	-,004	-,052	,959	,094	-,008	-,004	,904	1,106
	VA09	-,005	,069	-,006	-,065	,948	,323	-,010	-,005	,601	1,663
	PS09	,058	,063	,082	,922	,362	,263	,135	,069	,692	1,444
	PR09	-,002	,005	-,031	-,378	,707	-,139	-,056	-,028	,847	1,181
	EDU09	-,006	,003	-,249	-2,350	,023	,298	-,327	-,175	,491	2,037
	CPAAVG	,001	,001	,069	,851	,399	,157	,125	,063	,852	1,173

a. Dependent Variable: QOG12

Figure 24: Coefficients multiple regression CPA

6. DISCUSSION

In this chapter the statistical evidence for the causes of the quality of government as shown by our multiple regression will be discussed. First of all, the effect of aid on the quality of government will be discussed, followed by the perceived effect of the control variables on the level of QOG.

6.1 AID AND QUALITY OF GOVERNMENT

In the previous section, it has already been shown that the correlation coefficient between aid both measured as ODA and as CPA suggests a very weak positive relation, but for both the regression coefficient is not of a statistical significant level. This means it is not possible to accept or reject the formulated hypothesis using either model.

The multiple regression analysis displays an unstandardized B of 0,000047. This extremely weak positive relationship corresponds to the literature stating that very weak evidence can be found that suggests that higher amount of aid (as measured by ODA) correlates to higher quality of government in the recipient country. The statistical significance level for the coefficient however, is ,961 making it absolutely not significant. Which such a weak relation and low significance, the change that this result occurred by change is very high and it is not likely to be representative of the true population value. As such, it cannot possibly be seen as an accurate predictor for the quality of government.

CPA shows a little stronger relation with an unstandardized B of 0,001, but even though it has a much higher significance level than ODA, is also not statistically significant. The differences between aid as measured by ODA and CPA, do seem to suggest that CPA is a more accurate indicator for something. However because CPA is also not significant, the change this variation is caused by chance is too high to make a confident claim about either indicator.

6.2 ECONOMIC DEVELOPMENT AND QUALITY OF GOVERNMENT

The unstandardized B for both models show a very weak and positive, however significant relation between the level of economic development and QOG (B=0,00007, $p < ,002$) for ODA and (B=0,00007, $p < ,001$). The positive relationship indicates that higher values of economic development correspond with higher perceived values of QOG. This is in accordance with many of the previous studies into the relation between economic development and the quality of government. The Beta in both models is relatively high at ,397 for ODA and ,410 for CPA. Only corruption has a higher score in both models. This means that after controlling for different units of measurements, the level of economic development is one of the most important influences on QOG

Again in the model containing CPA as a measure for aid, this variable is on a slightly higher significance level, suggesting that this variable is able to better explain the variation caused in the CPA model.

6.3 CORRUPTION AND QUALITY OF GOVERNMENT

The regression coefficient between corruption and QOG shows a negative and significant relation. Higher levels of corruption are associated with lower levels of QOG. These findings are significant on the highest statistical level and of all the measured variables in the model ($B = -.335$, $p < .000$) for ODA and ($B = -.331$, $p < .000$) for CPA. This is in accordance with results from previous studies which argue that corruption is harmful to QOG.

The beta of this variables in both models is of the highest of all examined variables at ,618 for the ODA and ,610 for the CPA model. This indicates that corruption in both models is the most important influence on QOG.

6.4 REVENUES AND QUALITY OF GOVERNMENT

The regression coefficient for revenues from oil in the ODA model show a negative and significant relation meaning that higher incomes from oil rents are associated with lower QOG ($B = -.011$, $p < .032$). This is in compliance with the majority of the previous research.

The relation between revenues from minerals and QOG in the same model however, show almost no relation at all ($B = 0.000$, $p = .968$).

A similar occurrence can be seen in the CPA model. Revenues from oil show a negative relationship with QOG, however this result is not significant ($B = -.010$, $p < .058$). Revenues from minerals also show almost no relation in the CPA model ($B = 0.000$, $p = .959$). Therefore somewhat in contrast to what might be expected based on previous scholarly work, income from rents are not necessarily related to lower quality of government. Only rents from oil in our model where aid is measured by using ODA, it is a significant predictor.

6.5 TRANSPARENCY AND QUALITY OF GOVERNMENT

Measures of transparency and accountability are thought to positively affect the quality of government. The regression coefficient in our multiple regression analysis however is negative ($B = -.007$, $p = .916$ and $B = -.005$, $p = .948$), which would assume that higher values of voice and accountability would relate to lower QOG. This is not only in stark contrast to previous literature, but also seems to defy all logic. However because this result is not significant, the possibility that it has occurred by chance is too high and therefore the result cannot be used.

6.6 POLITICAL STABILITY AND QUALITY OF GOVERNMENT

The regression coefficient for political stability in both models is positive, meaning that higher levels of political stability correlate to higher levels of QOG. This would correspond to earlier findings by other researchers. However the result for both models is not significant therefore political stability cannot be identified as an important influence on Qog in this model.

6.7 RELIGION AND QUALITY OF GOVERNMENT

The regression coefficient between religion and QOG shows a negative relation. Higher levels of protestants in a country are associated with lower levels of QOG. These findings would not correspond with most findings from earlier work. The results are however not significant.

6.8 EDUCATION AND QUALITY OF GOVERNMENT

Both models show a negative and significant regression coefficient for education. This means that in our models, higher levels of education are associated with lower scores of QOG ($B = -.006$, $p < .05$) ($B = -.006$, $p < .05$). This is certainly contradictory to what has been found in previous literature so far and should definitely be further examined.

7. CONCLUSION

This final chapter answers our central topic of research and discusses possible explanations for the discovered results, followed by the limitations of this study. A brief discussion on potential implications and possibilities for further research conclude the chapter.

7.1 CENTRAL RESEARCH QUESTION

The aim of this study from the outset and throughout, was to uncover measurable evidence of results of development aid on the quality of the government in the recipient countries. To this end, the following research question was posed:

“Does development aid provided by the West lead to higher quality of government in the recipient countries?”

In order to isolate the effect of development aid and to point out as much as possible the specific role played by development aid on any QOG performances in the recipient nation, the most important, commonly identified other factors influencing QOG were introduced into the model as control variables in order to control for their influence. The factors were chosen from the predominant previous literature into the topic, which state that QOG is influenced predominantly by: the level of economic development, levels of corruption, income from oil and mineral rents, levels of voice and accountability, political stability, the dominant religion and levels of education.

After calculating the bivariate correlation between aid and QOG, a very weak positive, but statistically not significant relation is found, both when using ODA as an indicator as well as using CPA. When CPA is used however, the strength of the found relation changes from very weak to medium, suggesting CPA is a little better at explaining at least part of the variation within the model.

However for CPA also, the found relationship is not statistically significant and therefore no conclusions can be drawn from the results. As the chance is too high that any relation encountered in the data was purely by chance, our hypothesis can neither be accepted nor rejected and thus the main research question cannot be answered.

This result follows a long line of studies failing to uncover measurable results achieved by decades of international funding. But although this study does not provide conclusive evidence that aid can develop QOG, it does provide more information about the influence of other factors that we used in our model. The regression shows that QOG is influenced by: economic development, corruption, rents from oil and education. These results are statistically significant in both models.

Remarkable is the finding that in our model higher levels of education seem to relate to lower levels of QOG. This seems counterintuitive and is conflicting with the predominant body of knowledge. An explanation for this strange occurrence is not easily given. It is possible that these results were influenced by the fact that only tertiary enrollment data was used to measure education levels, or that the limited amount of data available for use, played a role.

Further efforts into this topic and the availability of more and higher quality data is definitely needed here.

7.2 LIMITATIONS OF THE RESEARCH

Certain limitations to this this research and consequently the extent to which it can be generalized, must be recognized.

First of all, this study uses a cross-sectional design and therefore only examines a rather short, fixed time period of about one year. In order to adjust for some matter of radical deviation in measured levels, three-year average levels have been used for aid and QOG. Furthermore, in recognizing the fact that funds need some time before any measurable effects can be determined, adequate lags have been incorporated into the design, taking into account a lag-effect between aid provided and the examined indicators for QOG.

Nevertheless, it might be argued that this relation is better suited for analysis under a time series design, especially given the nature of the millennium development goals program of the past 15 years. Such a design might be better equipped to examine the deeper development of the relation between aid and QOG. This was however not a possible due to the limitation provided by the scope of this thesis.

A second sizable concern that has been highlighted several times already, are the difficulties surrounding the causal relationship between aid and QOG. Regression analysis can provide insight by revealing evidence for a certain relationship, however the regression coefficient for aid proved to be not significant. Therefore no solid conclusions can be drawn from this. In relation to the first concern, a time series design might also help in this respect by providing even more information about the casual direction of the included variables.

An often heard concern with regard to this topic, is that frequently used indicators, such as for example ODA, are not specialized enough in order to adequately measure examined effects and thus making it harder to determine what came first (QOG or aid).

This reasoning is used by the World bank as one of the leading causes of the lack of uniform results after 6 decades of research into the topic. In order to examine this complaint and to make a first careful examination of the effects of different indicators, part from ODA, this study also used a relatively new indicator to measure the levels of aid (CPA).

Although this indicator was also not able to overcome the hurdle of uncovering statistically relevant correlation, the results did show sizable difference in the outcomes between the two different indicators. Often, the CPA indicator showed a little bit more adequacy in explaining the total variation in the model.

This might indicate that in accordance with the claims made, this indicator is indeed measuring more concise total levels of aid than other indicators, creating new potential for future research revisiting for example previous work while using this new indicator.

7.3 POLICY IMPLICATIONS AND DIRECTIONS FOR FURTHER RESEARCH

Unfortunately this study proved unable to overcome the lack of significant results that has been plaguing the aid effectiveness theory nexus for several decades. However, what sets this study apart, is that it is one of the first ones to examine the results of a 15 year period of renewed and intensified efforts into the development of the world's poorest nations.

Secondly, it also shed some light on concerns raised by some of the principal proponents of aid such as the World Bank and others throughout the field, regarding the adequacy of previously used indicators. Be that as it may, it proved not enough to find a significant and measurable relation between aid and QOG.

In the current policy and social climate of the Netherlands, and indeed of many other western countries, this might be reason for concern more than ever before. The Netherlands has throughout history always provided sizable amounts of its GDP on international development efforts. In more recent years though, this has become topic of much, heated debate.

Coming out of a severe economic crisis, in 2008 and following necessary budget reforms in the years before, development aid figures already saw a cutback in the Netherlands. With new elections in 2016 just around the corner and set to a background of a deteriorating internal and global social situation, the need for measurable success might be stronger than ever.

Although unable to find a statistically significant causal relation between aid and QOG, this study did nevertheless uncover several promising insights worthy for further study. Employing a time series design to look at the historical development of QOG and especially a measurable effect before and after 15 years of MDG's, could uncover a deeper relation between aid and QOG and perhaps provide a better, more conclusive 'before and after overview'. It might be better suited as well to overcome the problems regarding reversed causality. Previous time-series work, focusses on outdated data and also not (yet) on the results of the recent MDG period, so in this area work is still much needed.

What even the most well-designed study cannot do however, is magically erase problems related to faulty or incomplete data and indicators, a third important notion regarding past and future research uncovered by this study.

Objections raised regarding competency and availability of data/indicators seem further backed by some of the findings in this study. Comparing models based on ODA and on CPA showed noticeable differences, with the latter indicator showing potential in being able to explain more variation. More work in this field is absolutely needed.

Lastly, more efforts have to be made into developing the available data and indicators needed for solid research and consequently evaluation of international development efforts. Comparing the results of four leading international databases, this study was not able to uncover relevant data regarding income from oil revenues for more than 89 countries. Information regarding education levels proved even harder to find with accurate data available for only 76 countries for something as basic as school enrollment figures.

Probably unstable or clandestine governments have something to gain by covering up the composition of their revenue streams, or even by obscuring the fact that they are denying a basic right such as education to large parts of their population. Nevertheless if education for all, or the development of solid national institutions are as important spearheads of international developmental efforts as they have been made under the millennium development goals, gathering the needed data to measure impact, should be as important as procuring the money to pump in.

It is important to stress again the fact that this study only examined the effect the enormous flows of systemic aid over the years has had. The effects of other efforts such as for example charity work and initiatives of different local citizens and institutions around the globe are not discussed nor in any way evaluated here.

The reason for this is not because these alternative streams of aid are not important or relevant. On the contrary. They might even turn out to be some of the most promising potential alternatives for the future. The reason this study looks only at systemic aid, is naturally foremost because this is what made up most of the funding needed for the development program set out under the Millennium Development Goals.

However, also important is the fact that the sheer size of the systemic aid budgets being spent worldwide at the moment all but dwarves the other two categories, making this the category of choice to start when attempting to investigate effects on a large scale.

There should be no question that there is an obligation to help, but after 6 decades of various efforts, is there not also an equal obligation to show that what is being done is actually helping? It seems stubborn, almost unwise to blindly follow through with wild treatments without putting emphasis on achieving insight into results as well.

Within the field of medicine, a doctor surely would look for alternatives if the used treatments are not showing results and a manager of any company who keeps pouring funds into a branch without measureable results would have been relieved of his duties a long time ago. As such, a question that seems relevant to ask would be: Why are such different standards used in the field of international development?

8. LITERATURE

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APPENDIX A: OVERVIEW OF VARIABLES AND DATA

Variable name	Variable code	Description	Level of measurement	Database	URL
Development aid	ODA	Net Official Development Assistance in current USD per capita in 2009	Ratio	World Development indicators	http://data.worldbank.org/indicator/DT.ODA.ODAT.PC.ZS/countries/1W?display=graph
Country programmable aid	CPA	Net Country Programmable Aid in current USD per capita in 2009	Ratio	Brookings institute, fully based on OECD data	http://www.brookings.edu/research/interactives/development-aid-governance-indicators
Quality of the government (GI)	QOG12	The quality of government based on measurements of 3 years (2011, 2012 and 2013) in order to adjust for ad hoc occurrences	Ratio	Worldwide Governance Indicators	http://info.worldbank.org/governance/wgi/index.aspx#home
Economic development	ED09	GDP per capita in current USD in 2009.	Ratio	World Development indicators	http://data.worldbank.org/indicator/NY.GDP.PCAP.CD?display=graph
Level of corruption	COR09	The level of perceived corruption, based on different varying surveys per country. Average # of sources: 5,8 per country. Initial scale is reversed so that on a scale from 1 to 10, 1 corresponds to the lowest level of corruption and 10 corresponds to an extreme amount of corruption.	Ratio (Initial scale is reversed)	Corruption Perception Index	http://www.transparency.org/research/cpi/cpi_2009#results
Income from Oil rents	RTO09	Rents from national oil production in % of GDP in USD in 2009.	Ratio	World Development indicators	http://data.worldbank.org/indicator/NY.GDP.PETR.RT.ZS
Income from mineral rents	RTM09	Rents from national mineral production other than oil in % of GDP in USD in 2009.	Ratio	World Development indicators	http://data.worldbank.org/indicator/NY.GDP.MINR.RT.ZS?page=1
Voice and accountability	VA09	Measures several characteristics regarding transparency, existence of checks and balances within a countries political process in 2009.	Interval	Worldwide Governance Indicators	http://info.worldbank.org/governance/wgi/index.aspx#home
Political Stability	PS09	Measures the likelihood of violent outbursts of nationwide governmental destabilizing events in 2009.	Interval	Worldwide Governance Indicators	http://info.worldbank.org/governance/wgi/index.aspx#home
Protestant religion	PR09	The amount of protestant people in a country in 2005 (database works with 5 years intervals)	Ratio	Quality of Government Database	http://qog.pol.gu.se/data/dataset/downloads/qogstandarddata
Education	ED09	The # of average schooling years of male and female population in a country (15+) in 2005 (database works with 5 years intervals)	Ratio	Quality of Government Database	http://qog.pol.gu.se/data/dataset/downloads/qogstandarddata

APPENDIX B: DATABASE

	ODAAVG	CPAAVG	QOG12	ED09	COR09	RTO09	RTM09	VA09	PS09	PR09	EDU09
Afghanistan	210,5582	118,85	-1,43	450,6592	8,7		0	-1,46	-2,70	0	3,9114
Albania	122,5832	79,60	-0,27	4175,778	6,8	1,658043	0,154382	0,13	-0,05	0	33,1062
Algeria	7,735784	3,33	-0,58	3771,285	7,2	15,6179	0,139119	-1,06	-1,22	0	28,59671
Angola	14,97894	11,32	-1,14	3988,683	8,1	38,26968	0	-1,13	-0,37	19,8	
Argentina	3,152488	2,01	-0,23	9456,816	7,1	2,980067	0,393303	0,24	-0,24	2,7	71,25094
Armenia	131,5082	120,32	-0,03	2913,574	7,3	0	1,22554	-0,88	0,23	0	49,11955
Azerbaijan	23,43479	18,08	-0,66	4950,295	7,7	37,78423	0,016651	-1,21	-0,29	0	19,05771
Bangladesh	10,51854	8,49	-0,80	685,456	7,6	0	0	-0,30	-1,54	0,2	10,46633
Barbados	42,09572	6,22	1,42	16460,76	2,6		0	1,20	1,06	33,2	70,45052
Belarus	12,11999	6,22	-0,99	5176,045	7,6	1,209721	0	-1,53	0,47	0	73,59158
Benin	72,58687	62,31	-0,54	712,5454	7,1	0	0,006345	0,33	0,38	2,8	9,87016
Bolivia	69,79153	47,38	-0,41	1735,143	7,3	4,05716	2,280105	-0,03	-0,53	2,3	
Bosnia and Herzegovina	120,3831	79,46	-0,56	4480,378	7	0	0,437618	-0,04	-0,65	4	36,36577
Botswana	198,2642	105,24	0,39	5178,439	4,4	0	3,025777	0,42	0,93	26,8	
Brazil	2,154709	1,92	-0,11	8373,458	6,3	2,058057	1,514388	0,49	0,16	4	
Burkina Faso	69,46261	1,24	-0,60	553,0424	6,4		2,900218	-0,32	0,01	1,6	3,53401
Burundi	63,89006	1,24	-1,17	194,8967	8,2		0,855945	-0,71	-1,27	4,9	2,72363
Cambodia	51,78984	39,64	-0,87	735,4193	8	0	0	-0,91	-0,59	0,1	11,72333
Cameroon	28,81756	13,76	-0,88	1163,013	7,8	6,297818	0,14332	-1,06	-0,48	18,1	8,95189
Central African Republic	59,4033	-11,80	-1,51	464,5132	8		0,061114	-1,01	-1,88	5	2,49129
Chad	43,00361	3,88	-1,45	813,756	8,4	24,84249	0,022578	-1,42	-1,69	11,6	2,02686
Chile	7,519094	15,54	1,25	10141,6	3,3	0,036407	14,16309	1,01	0,59	1,9	59,0127
China	0,816108	0,97	0,02	3748,504	6,4	1,244525	1,253762	-1,66	-0,43	0	21,82372

Colombia	21,35297	15,54	0,04	5104,991	6,3	5,209843	0,721151	-0,16	-1,83	0,9	36,95747
Congo, Dem, Rep,	41,68146	7,93	-1,64	301,9309	8,1	2,254186	7,958007	-1,45	-1,99	29	6,77371
Congo, Rep,	171,6621	-3,93	-1,21	2401,298	8,1	53,55856	0,020695	-1,10	-0,28	24,9	6,51998
Costa Rica	19,51086	18,32	0,43	6385,565	4,7	0	0,012764	-0,33	1,28	5,8	
Cote d'Ivoire	69,29995	29,17	-1,09	1305,147	7,9	3,671695	0,6299	1,00	0,57	4,7	9,02872
Croatia	42,236	29,61	0,65	14142,15	5,9	0,371121	0	-1,11	-1,28	0,4	50,43702
Cuba	10,97504	5,68	-0,42	5499,12	5,6	1,550566	1,170635	0,44	0,59	0,8	114,784
Dominican Republic	15,17655	15,43	-0,54	4844,974	7	0	0,105862	0,06	-0,01	1,4	
Ecuador	13,48284	10,30	-0,53	4236,778	7,8	14,91538	0,059804	-0,28	-0,68	1,9	
Egypt, Arab Rep,	14,60425	10,70	-0,73	2461,531	7,2	6,426384	0,243728	-1,12	-0,62	0,2	32,36041
El Salvador	42,71543	37,69	-0,13	3341,32	6,6	0	0	0,05	-0,02	2,4	22,95872
Eritrea	26,82492	18,47	-1,49	334,0649	7,4	0	0,033757	-2,16	-0,67		1,70942
Ethiopia	41,92574	28,45	-0,47	382,3449	7,3	0	0,389749	-1,28	-1,62		
Gabon	53,16604	30,20	-0,78	7919,711	7,1	37,16649	0,049507	-1,00	0,12	18,8	
Gambia, The	69,78236	5,13	-0,61	553,1065	7,1		0	-1,01	0,14	0,4	1,1901
Georgia	182,855	139,34	0,55	2440,961	5,9	0,163938	0,415173	-0,22	-0,94	0	25,21715
Ghana	64,3593	17,25	-0,07	1096,531	6,1	0	6,131976	0,49	0,04	25,8	8,78976
Guatemala	31,18728	17,25	-0,73	2697,383	6,6	0,68748	0,492609	-0,27	-0,94	4,9	
Guinea	24,02619	12,30	-1,24	435,1757	8,2		13,37209	-1,30	-2,09	0,1	9,03526
Guinea-Bissau	87,23817	23,93	-1,24	532,4613	8,1		0	-0,81	-0,65		
Haiti	172,9934	20,05	-1,60	674,3007	8,2	0	0	-0,68	-1,00	12,8	
Honduras	73,64112	51,22	-0,67	1952,85	7,5	0	0,63878	-0,55	-0,33	2,6	
India	2,076976	2,89	-0,13	1147,239	6,6	0,873607	1,14473	0,45	-1,33	1,1	16,39657
Indonesia	5,148698	9,36	-0,26	2272,041	7,2	2,645278	1,900019	-0,03	-0,76	4,8	23,74035
Iran, Islamic Rep,	1,411457	0,24	-0,56	4931,283	8,2	21,41105	0,644555	-1,55	-1,55	0	36,82046
Iraq	166,3942	70,36	-1,11	3701,89	8,5	40,58335	0,001061	-1,10	-2,19	0	
Jamaica	46,76042	48,43	0,06	4521,924	7	0	1,324247	0,55	-0,35	55,5	25,21812

Jordan	136,8561	96,79	-0,02	4026,766	5	0,001553	1,501544	-0,78	-0,36	0,3	45,11951
Kazakhstan	17,86855	11,07	-0,47	7165,277	7,3	24,72225	2,19586	-1,04	0,75	2	40,77455
Kenya	39,87974	31,25	-0,54	929,6109	7,8	0	0,068193	-0,34	-1,43	19,3	4,04812
Korea, Dem, Rep,	4,799583	2,15	-1,91		10			-2,24	-0,03	0	
Kosovo	396,3503	190,21	-0,43	3209,733	10	0	1,512866	-0,11	0,47		
Kyrgyz Republic	65,22765	42,32	-0,66	871,2244	8,1	0,568212	7,550547	-1,00	-0,64	0	44,26985
Lao PDR	70,75637	50,85	-0,83	930,5859	8		9,399078	-1,64	-0,17	0,2	15,99353
Lebanon	165,133	84,72	-0,33	8274,138	7,5	0	0	-0,38	-1,58	1	48,20804
Lesotho	87,32202	73,88	-0,35	858,7346	6,7		0	-0,12	0,34	29,8	
Liberia	277,5866	14,40	-1,26	302,2804	6,9		0,900635	-0,20	-1,08	18,6	
Libya	6,974646	4,52	-1,45	10455,57	7,5	42,28938	0	-1,86	0,81	0,1	
Macedonia, FYR	92,73359	64,53	-0,08	4433,857	6,2	0	1,925424	0,15	-0,29	1	38,98286
Madagascar	28,74791	22,09	-1,07	417,1785	7		0,007198	-0,86	-0,75	22	3,57722
Malawi	62,12935	50,26	-0,50	345,1948	6,7		0	-0,16	0,05	31,5	
Malaysia	3,625437	6,30	1,05	7277,763	5,5	5,866702	0,071094	-0,49	-0,07	1,4	35,72051
Mali	74,60522	53,13	-0,87	661,1317	7,2		9,873228	0,04	-0,08	0,2	6,29994
Mauritania	114,015	45,45	-0,92	860,9084	7,5		30,2683	-0,97	-0,88	0	3,86735
Mauritius	101,9302	96,36	0,88	6928,972	4,6		0	0,81	0,66	0,9	32,19262
Mexico	2,292475	2,32	0,31	7690,191	6,7	5,318364	0,393184	0,18	-0,70	1,2	25,65348
Moldova	94,57066	76,48	-0,52	1525,526	6,7	0,108167	0	-0,32	-0,59	0	38,29286
Mongolia	114,737	84,29	-0,58	1715,364	7,3	2,092815	17,04856	0,09	0,60	0	51,4514
Morocco	35,98971	25,68	-0,08	2861,027	6,7	0,00327	1,764439	-0,78	-0,41	0	13,45325
Mozambique	85,09099	73,11	-0,64	459,1678	7,5	0,103699	0,110889	-0,11	0,59	6,8	3,79617
Myanmar	8,061594	3,34	-1,56		8,6			-2,15	-1,28	3,2	
Namibia	123,0406	96,73	0,13	4140,877	5,5	0	1,66186	0,37	0,90	64,2	
Nepal	29,73441	21,77	-0,93	485,9552	7,7	0	0	-0,47	-1,62	0	11,21704
Nicaragua	126,3224	94,45	-0,87	1459,212	7,5	0	0,622819	-0,45	-0,33	4,4	

Niger	39,68517	22,79	-0,68	352,6851	7,1		0,768397	-0,78	-1,16	0	1,45036
Nigeria	10,70258	9,61	-1,02	1090,746	7,5	22,42154	0,00704	-0,87	-1,95	15,8	
Pakistan	14,32006	10,68	-0,80	986,9541	7,6	0,670035	0,050966	1,22	1,47	0,8	6,63953
Panama	20,3492	19,36	0,24	7169,857	6,6	0	0,435172	0,02	-0,81	5,2	43,03004
Papua New Guinea	60,69553	31,37	-0,74	1180,432	7,9		30,56583	-0,17	-0,87	58,4	
Paraguay	21,13076	19,88	-0,87	2509,68	7,9	0	0	0,04	-1,18	1,9	36,5878
Peru	7,558917	14,41	-0,15	4188,813	6,3	1,557819	7,229422	-0,03	-1,71	2,7	
Philippines	3,193793	7,42	0,07	1831,974	7,6	0,252888	1,494266	1,01	0,90	3,8	28,19964
Rwanda	91,74265	77,88	0,00	504,1935	6,7		0,013382	-1,28	-0,47	11,6	4,98875
Senegal	79,89173	54,87	-0,46	1017,969	7	0	1,383309	-0,33	-0,20	0,1	8,03581
Serbia	102,6974	69,55	-0,10	5821,305	6,5	0,570101	0,177457	0,32	-0,49		49,84967
Sierra Leone	76,33048	54,50	-1,18	435,0104	7,8		0,572979	-0,26	-0,30	4,8	
Somalia	68,65004	18,63	-2,20		8,9			-2,09	-3,32	0	
South Africa	21,44876	18,69	0,39	5658,426	5,3	0	2,896402	0,55	-0,11	39	
Sri Lanka	32,86533	35,68	-0,19	2057,114	6,9	0	0,005774	-0,49	-1,35	0,4	
Sudan	52,65604	22,36	-1,46	1197,768	8,5	16,69161	0,560384	-1,66	-2,65	0,1	
Swaziland	61,65059	63,62	-0,57	2679,339	6,4		0	-1,20	0,01	33,9	
Syrian Arab Republic	7,955824	1,48	-1,02		7,4			-1,64	-0,49	0,2	24,21231
Tajikistan	50,57607	42,89	-0,98	668,6205	8	0,180712	0,58861	0,82	0,53	0	22,62217
Tanzania	62,67879	56,09	-0,66	504,2002	7,4	0	3,681976	-1,30	-1,00	11,2	
Thailand	-3,56335	1,42	0,21	3978,905	6,6	1,695241	0,050492	-0,16	0,07	0,2	48,64748
Timor-Leste	249,511	121,81	-1,19	779,6743	7,8		0	-0,46	-1,42		16,46423
Togo	66,77735	26,02	-1,35	514,773	7,2	0	1,73436	0,07	-0,58	6,1	
Tunisia	45,54504	40,27	0,01	4162,51	5,8	3,346559	1,133951	0,53	-0,14	0	34,56495
Turkey	16,4967	16,29	0,38	8626,398	5,6	0,135273	0,153009	-1,31	0,06	0	46,12795
Turkmenistan	6,84803	3,01	-1,41	4059,96	8,2	16,3526	0	-0,09	-1,03	0	
Uganda	52,22248	42,68	-0,55	451,0816	7,5		1,43E-06	-0,50	-0,99	1,9	4,17587

Ukraine	13,82411	8,15	-0,68	2545,48	7,8	0,857363	0	0,03	-0,31	0	78,01468
Uruguay	12,89365	9,56	0,47	9064,707	3,3	0	0,115911	1,10	0,77	1,9	63,23914
Uzbekistan	7,258897	5,03	-0,87	1181,847	8,3	4,745854	6,903226	-2,08	-0,96	0	9,94655
Venezuela, RB	2,080939	1,18	-1,15	11524,99	8,1	17,05181	0,445642	-0,89	-1,27	1	78,10754
Vietnam	35,72632	34,50	-0,27	1232,37	7,3	5,917109	0,31939	-1,46	0,24	0,2	19,86936
West Bank and Gaza	702,816	381,93	-0,72	1963,202	10		0	-0,93	-2,03		48,96578
Yemen, Rep,	24,68986	13,97	-1,20	1252,325	7,9	17,71206	0	-1,28	-2,32	0,1	11,37982
Zambia	85,86272	76,09	-0,54	1195,187	7	0	17,90889	-0,32	0,53	31,9	
Zimbabwe	53,6792	24,50	-1,24	632,8753	7,8	0	1,881864	-1,54	-1,16	21,4	

APPENDIX C: OVERVIEW OF COUNTRIES IN SAMPLE

East Asia and the Pacific

Developing countries: 23, sample contains: 12

American Samoa	Korea, Dem. Rep.	Myanmar	Thailand
Cambodia	Lao PDR	Palau	Timor-Leste
China	Malaysia	Papua New Guinea	Tonga
Fiji	Marshall Islands	Philippines	Vanuatu
Indonesia	Micronesia	Samoa	Vietnam
Kiribati	Mongolia	Solomon Islands	

Europe & Central Asia

Developing countries :25, sample contains: 17

Albania	Georgia	Moldova	Turkey
Armenia	Kazakhstan	Montenegro	Turkmenistan
Azerbaijan	Kosovo	Poland	Ukraine
Belarus	Kyrgyz Republic	Romania	Uzbekistan
Bosnia and Herzegovina	Latvia	Russian Federation	
Bulgaria	Lithuania	Serbia	
Croatia	Macedonia, FYR	Tajikistan	

Latin America & the Caribbean

Developing countries: 30, sample contains: 22

Argentina	Cuba	Haiti	St. Kitts and Nevis
Belize	Dominica	Honduras	St. Lucia
Bolivia	Dominican Republic	Jamaica	St. Vincent and the Grenadines
Brazil	Ecuador	Mexico	Surinam
Barbados	El Salvador	Nicaragua	Uruguay
Chile	Grenada	Panama	Venezuela
Colombia	Guatemala	Paraguay	
Costa Rica	Guyana	Peru	

Middle East & North Africa

Developing countries: 13, sample contains: 12

Algeria	Iraq	Morocco	Yemen, Rep.
Djibouti	Jordan	Syrian Arab Rep.	
Egypt, Arab rep.	Lebanon	Tunisia	
Iran, Islamic Rep.	Libya	West Bank & Gaza	

South Asia

Developing countries: 9, sample contains: 7

Afghanistan	India	Nepal	
Bangladesh	Korea, Dem, Rep	Pakistan	
Bhutan	Maldives	Sri Lanka	

Sub-Saharan Africa

Developing countries: 47, sample contains: 42

Angola	Cote d'Ivoire	Malawi	Seychelles
Benin	Eritrea	Mali	Sierra Leone
Botswana	Ethiopia	Mauritania	Somalia
Burkina Faso	Gabon	Mauritius	South Africa
Burundi	Gambia, The	Mayotte	Sudan
Cameroon	Ghana	Mozambique	Swaziland
Cape Verde	Guinea	Namibia	Tanzania
Central African Rep.	Guinea-Bissau	Niger	Togo
Chad	Kenya	Nigeria	Uganda
Comoros	Lesotho	Rwanda	Zambia
Congo, Dem. Rep.	Liberia	Sao Tomé and Príncipe	Zimbabwe
Congo, Rep	Madagascar	Senegal	

