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THE MONEY-MOVING SYNDROME
AND THE EFFECTIVENESS OF FOREIGN AID

BY

NARA FRANÇOISE KAMO MONKAM

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree
of
Doctor of Philosophy
in the
Andrew Young School of Policy Studies
of
Georgia State University

GEORGIA STATE UNIVERSITY
2008

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2008

ACCEPTANCE

This dissertation was prepared under the direction of the candidate's Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Economics in the Andrew Young School of Policy Studies of Georgia State University.

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CONTENTS

LIST OF TABLES	viii
LIST OF ILLUSTRATIONS	ix
ABSTRACT	x
CHAPTER	
I. INTRODUCTION	1
Background	
Motivation	
Focus of the Study	
Overview of the Dissertation	
II. LITERATURE REVIEW	17
Aid Effectiveness Literature	
Donor Agencies' Incentive Structures and the Money-Moving Syndrome Literature	
Conclusion	
III. THEORETICAL FRAMEWORK	37
Analytical Framework	
The Theoretical Model	
Conclusion	
IV. EMPIRICAL ANALYSIS	71
Overview	
Variables Description and Data Sources	
Empirical Methodology	

Testable Hypotheses	
Model Specifications	
V. EMPIRICAL RESULTS.....	99
Determinants of Project Loan Size	
Discussion	
VI. CONCLUSIONS AND POLICY IMPLICATIONS	126
APPENDIX	
A. BEYOND QUANTITATIVE AID: THE QUALITY OF AID	132
B. LITERATURE REVIEW ON PREVIOUS AID ALLOCATIONS MODELS	133
C. THEORETICAL MODEL-MAXIMIZATION PROBLEMS.....	135
D. DATA APPENDIX.....	139
E. THE WORLD BANK PROJECT CYCLE.....	151
F. LOAN ALLOCATION CRITERIA: OTHER EMPIRICAL RESULTS	152
REFERENCE LIST	159
VITA.....	167

TABLES

Table	Page
1. Ten Best and Worst per Capita Growth Rates, 1980-2002.....	20
2. Structural Adjustment Loans, Growth, and Inflation in Poor Countries with Most Structural Adjustment Loans Received	25
3. Some Testable Hypotheses Assessing the Money Moving Syndrome	95
4. Determinants of Project Loan Size (Overall Project Outcome).....	101
5. Determinants of Project Loan Size (Project Sustainability)	103
6. Determinants of Project Loan Size (Project Institutional Development Impact)	105
7. Determinants of Project Loan Size (Implementation Completion Report Quality)	107

ILLUSTRATIONS

Figure	Page
1. Aid and Growth in Sub-Saharan Africa, 1965-2004 (5-year averages).....	22
2. Analytical Illustration of the Effects of “Money Moving” Incentives on Aid Effectiveness	68
3. Project Timeline	89

ABSTRACT

THE MONEY-MOVING SYNDROME AND THE EFFECTIVENESS OF FOREIGN AID

BY

NARA FRANÇOISE KAMO MONKAM

May 10, 2008

Committee Chair: Dr. Jorge Martinez-Vazquez

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This dissertation examines in depth one of the potential causes of the low performance of foreign aid; in particular, the role incentive structures within international donor agencies could play in leading to “a push” to disburse money. This pressure to disburse money is termed as the “Money-Moving Syndrome”. In this dissertation, the “Money Moving Syndrome” exists when the quantity of foreign aid committed or disbursed becomes, in itself, an important objective side by side or above the effectiveness of aid.

The theoretical analysis relies on the principal-agent theory to explore how donor agencies’ institutional incentive systems may affect the characteristics of an optimal and efficient incentive contract and thus give rise to the “Money-Moving Syndrome”. We adapted the basic framework developed in Baker (1992) to fit the organizational settings of international development agencies. The model concludes that the extent to which a performance measure based the amount of aid allocated within a specific period of time would lead to the “Money-Moving Syndrome” and affect aid effectiveness depends on

the level of institutional imperatives for survival and growth, the degree of aid agency's accountability for effectiveness, the level of corruption in recipient countries and the degree of difficulty to evaluate development activities.

Due to data unavailability regarding other bilateral and multilateral aid agencies, the empirical framework tests several predictions of the theoretical model by examining whether money moving incentives affect World Bank's decisions regarding project loan size in developing countries. Overall, the empirical results suggest that there seems to be some degree of "Money-Moving Syndrome" in effect within the World Bank.

CHAPTER I

INTRODUCTION

If you spend your own money on yourself, you are very concerned about how much is spent and how it is spent. If you spend your own money on someone else, you are still very much concerned about how much is spent, but somewhat less concerned about how it is spent. If you spend someone else's money on yourself, you are not too concerned about how much is spent, but you are very concerned about how it is spent. However, if you spend someone else's money on someone else, you are not very concerned about how much is spent or how it is spent.

Friedman, *White House ceremony in his honor May 9, 2002*

Aid ineffectiveness, defined as the low performance of aid in promoting economic growth and reducing global poverty, is a problem utterly complex, prevalent and unfortunately still unresolved. For decades now, it has generated a huge literature reaching conflicting conclusions as to the justifications of aid, the impact of aid on growth and institutional reforms, and the role of economic and political institutions in aid effectiveness. Western countries, international donor agencies, recipient countries, and other agents in the aid delivery chain have been pondering why, after \$2.2 trillion of official development assistance transferred to developing countries since 1960 and in spite of countless reform approaches (such as Financial Gap Approach, Sectoral and Structural Adjustments, Poverty Reduction Strategies, the Heavily Indebted Poor Countries Initiative, and so on), many aspects of the performance of international development assistance yet appear dismal.¹

In the discourse of foreign aid, the potential causes of the shortcomings of development assistance to promote economic growth and self-sustainability in poor

¹ See review of literature on aid effectiveness in chapter two of this dissertation.

countries appear to be manifold, ranging from weak policies and institutions in recipient countries to problems within the donor agencies themselves.

The goal of this dissertation is to examine in depth one of the potential causes of the low performance of foreign aid; in particular, the role incentive structures within international donor agencies could play in leading to “a push” to disburse money. This pressure to disburse money is termed as the “Money-Moving Syndrome.” In this dissertation, the “Money-Moving Syndrome” exists when the quantity of foreign aid committed or disbursed becomes, in itself, an important objective side by side or above the effectiveness of aid.

A fundamental reason to limit the scope of this dissertation to institutional framework within donor agencies is that without this transfer of funds to developing countries, there would be not much “foreign aid.” If the objective is to maximize the effectiveness of aid, it would appear essential to enhance the design and objectives of aid resources *at the source*, i.e., at the stage where the funds originate with donors, before considering the causes tainting aid in recipient countries.²

The overall motivation for this dissertation is to uncover to what extent the “Money-Moving Syndrome” (hereafter MMS) may be one major handicap of foreign aid effectiveness and to what extent this syndrome may shape other incentives at the macro and micro levels of the aid delivery chain. In short, donors’ incentives to “move the money” may potentially hinder their genuine intentions to help poor countries, rendering

² Of course, the misuse of aid funds by recipient countries is an equally deserving aspect of aid effectiveness. However, this dissertation does not address this aspect. See Boone (1996), Klitgaard (1991), World Bank (1998), Lancaster (1999), Svensson (2000), Alesina and Weder (2002), and Transparency International (2007) for a discussion of these issues.

these efforts ineffective and possibly in some cases, making an already deplorable situation in developing countries worse.

The theoretical analysis relies on the principal-agent theory to explore how donor agencies' institutional incentive systems may affect the characteristics of an optimal incentive contract and thus give rise to the Money-Moving Syndrome. Additionally, the model derives conditions required to reach an efficient outcome in terms of the impact of aid on poverty reduction and sustainable economic growth. We adapted the basic framework developed in Baker (1992) to fit the organizational settings of international development agencies. In the theoretical model, we assume that, given the difficulty to quantify the overall impact of aid, an aid agency that values its true mission to alleviate poverty and is concerned about organizational imperatives may choose to evaluate staff performance based the amount of aid allocated within a specific period of time. However, the extent to which this performance measure would lead to the "Money-Moving Syndrome" and affect aid effectiveness would depend on the level of institutional imperatives for survival and growth, the degree of aid agency's accountability for effectiveness, the level of corruption in recipient countries and the degree of difficulty to evaluate development activities.

Due to data unavailability regarding other bilateral and multilateral aid agencies, the empirical framework tests several predictions of the theoretical model by examining whether money moving incentives affect the World Bank's decisions regarding project loan size and how these incentives may directly or indirectly affect the effectiveness of aid resources. In this dissertation, we posit that evidence in support of the "Money-Moving Syndrome" can perhaps be used to provide some evidence as to why foreign aid

has not been more effective at reducing global poverty in developing countries despite the large amount of resources involved in achieving this mission over the years. Overall, the empirical results suggest that the quantity of foreign aid committed or disbursed appears as important a mission as the effectiveness of aid, suggesting that there seems to be some degree of “Money-Moving Syndrome” in effect within the World Bank. However, since the empirical analysis especially focuses on the World Bank’s development activities, the scope of the findings and conclusion would be somewhat limited because although the World Bank is one of the world’s largest sources of funding to the developing world, there are yet a multitude of other donors in the development scene.

At this stage, it is important to mention that the intent of this study is not to identify who to blame for the ineffectiveness of foreign aid; the objective is rather to help demystify an undermining problem. No doubt, behind the ineffectiveness of international aid lie the many problems of recipient countries. However, examining the poor performance of the bureaucracies of developing countries is beyond the scope of this study. Thus, the contribution of this dissertation will not necessarily solve the problem of aid ineffectiveness. The scope of this dissertation is also limited to official aid as opposed to private contributions;³ i.e., we focus on money specifically coming from donor countries’ governments and channeled through bilateral and multilateral development

³ For instance, according to the USAID (United States Agency for International Development), the U.S. government provides today only 20 percent of U.S. foreign aid whereas American citizens and corporations provide 80 percent. In 2003, the official development assistance amounted to \$16.3 billion while estimates of private contributions amounted to 62.1 billion (Kerlin 2006).

agencies, as well as money mobilized by multilateral organizations on international capital market.

Background

There are two types of aid from developed countries to developing countries: the Official Development Finance (ODF) and the Official Development Assistance (ODA) also called “foreign aid,” which is a subset of ODF. The ODA, essentially destined to the poorest countries, is constituted of grants and concessional loans containing at least a 25 percent grant component. The ODF encompasses all the inflows of finance to the developing world coming from donor countries and multilateral agencies. This financing is often done at interest rates close to those available on the market (World Bank 1998). Foreign aid is administered by either bilateral aid agencies, such as the United States Agency for International Development (USAID), the United Kingdom’s Department for International Development (DFID), or multilateral aid agencies, such as the World Bank, the United Nations Development Program (UNDP), the International Monetary Fund (IMF), the Regional Development Banks (the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank), the European Commission (EC), the Organization for Economic Co-operation and Development (OECD), the World Health Organization (WHO), the World Trade Organization (WTO) and so on.

Today, foreign aid appears as necessary as ever, although not a panacea. In a context of a thriving global economy, over a billion of people around the world are still afflicted by extreme poverty, living with less than a dollar a day (UNDP 2005). The 2005

World Bank annual report recounts that over 115 million children in developing countries are not educated, maternal mortality amounts to 10,000 women every week, 10.4 million children die every year before their fifth birthday, and more than 8,000 people die every day of AIDS. Even today, malaria has still not been brought under control and continues to kill over 1.1 million people every year. In addition, basic services are lacking; 1.4 billion people in poor countries do not have access to potable water, and 3 billion of them live without electricity (World Bank 1998, 2006).

In the face of such a gloomy reality, many international development agencies have made their overall mission to promote economic growth and eradicate global poverty, generally attempting to do so through the stimulation of democracy, economic and political independence, environment protection, institutional environments, political stability, and so on. These goals have been incorporated into the “raison d’être” of many of these organizations. For instance, the World Bank states that its mission is “to fight poverty with passion and professionalism for lasting results”;⁴ the first Millennium Development Goal (MDG) adopted by 189 countries in the United Nations Millennium Declaration in September 2000 is to “eradicate extreme poverty and hunger by 2015”;⁵ the Asian Development Bank’s vision is “a region free of poverty” and is similar to the African Development Bank’s mission to “combat poverty and improve the lives of people on the continent”;⁶ however, eliminating poverty is not the only objective in the agenda

⁴ The World Bank’s mission statement, available at <http://www.worldbank.org/>, accessed 10 September 2007.

⁵ <http://www.un.org/millenniumgoals/>, accessed 10 September 2007.

⁶ http://www.afdb.org/portal/page?_pageid=473,968615&_dad=portal&_schema=PORTAL, accessed 10 September 2007.

of international development agencies and developing countries. Other aims include promoting sustained development through the achievement of primary education, the reduction of infant mortality and the curtailment of endemic diseases such as AIDS, malaria, and tuberculosis.

In order to achieve these goals, international development institutions have transferred over the last five decades in excess of \$2.3 trillion of foreign aid to developing countries (World Bank 1998; Easterly 2006b).⁷ Since the 1960s, the volume of aid has increased in real terms, at the exception of a period of decline in the 1990s; and the plans are to double development assistance in the near future (World Bank 1998; Bourguignon and Leipziger 2006; Gupta et al. 2006).⁸ In 2006, the World Bank spent \$950 million of its resources to combat poverty in the poorest countries (World Bank, *News and Broadcast*). During the 2005 G8 summit,⁹ world leaders decided to increase foreign aid by over \$50 billion as of 2010 (UN 2005 World Summit, Sept. 2005). In 2002, the White House pledged to increase U.S. foreign aid by \$5 billion per year before 2006 through the Millennium Challenge Corporation.¹⁰ Jeffrey Sachs, professor at Columbia University and chief advisor of the United Nations Millennium Development Project, and others such as the singer Bono and Microsoft's founder Bill Gates, have

⁷ See also "Global aid shortfall" in [globalissues.org](http://www.globalissues.org), (<http://www.globalissues.org/TradeRelated/Development/aid/shortfall/>), accessed 10 September 2007.

⁸ Three factors explain the decline of aid flows in the 1990s: fiscal problems in donor countries, the end of the Cold War and the surge in private capital flows to developing countries (World Bank 1998).

⁹ The G8 countries are Canada, France, Germany, Italy, Japan, Russia, the United Kingdom., and the U.S.

¹⁰ President Bush, Press Release, March 14, 2002, Inter-American Development Bank, Washington, D.C.

made their mission to lobby for more and more foreign aid to the poorest countries. This constant demand for further massive disbursements of aid is referred to in the literature as the “Big Push” (Moss and Subramanian 2006). In his book, *The End of Poverty*, Sachs urged the Rich Nations to undertake a Big Push of twice the current amount of aid (i.e., \$135 billion) by 2006 and a new doubling of aid by 2015 in order to meet the MDGs (Sachs 2005).¹¹ Overall, international aid is registering an unprecedented expansion; but what will be the results of this boom in terms of promoting economic growth and eradicating world poverty?

Evidently, there have been some success stories. In 1980, the WHO announced the eradication of smallpox around the world.¹² From 1974 to 2002 and \$556 million later from donor agencies, the Onchocerciasis Control Program (OCP) launched in West Africa has reduced the transmission of the parasite and prevented more than 200,000 cases of blindness. Overall, 18 million people were prevented from contracting the disease.¹³ Thanks to a child nutrition project financed by the World Bank and the United Nations Children’s Fund (UNICEF) in Tanzania in 1983, severe and moderate malnutrition were reduced by 70 percent and 32 percent respectively; this program has been successfully implemented subsequently in other regions. With the Food for Education program in the early 1990s, the World Bank assisted in doubling female

¹¹ See also *Facts on International Aid* in <http://www.earthinstitute.columbia.edu/endofpoverty/oda.html>, accessed 10 September 2007.

¹² <http://www.cdc.gov/mmwr/preview/mmwrhtml/su48a6.htm>, accessed 10 September 2007.

¹³ Onchocerciasis (or river blindness) is a disease mostly encountered in Africa and Yemen. It is transmitted by a black fly found near rivers. It causes itching, muscle pains and weakness and often leads to permanent blindness. <http://www.ajtmh.org/cgi/content/full/72/1/1>, accessed 10 September 2007.

enrollment in Bangladesh. In 1991, the World Bank helped finance the DOTS (directly observed treatment, short course) program for tuberculosis in China. In 10 years, the cure rate for tuberculosis went from 52 percent to 95 percent. Foreign aid also facilitated the expansion of high-yield variety seeds in Southeast Asia and India during the 1960s and 1970s, which considerably improved agricultural outputs and reduced extreme poverty (World Bank 1998; Sachs 2005; Bourguignon and Leipziger 2006; Easterly 2006b).¹⁴ Collaboration between aid donors, national governments and NGOs led to the near eradication of Guinea worm in many countries in Africa.¹⁵ In general, development assistance has likely played a great role over the years in progress made over life expectancy, child mortality, primary and secondary enrollment; and water and sanitation in the poorest countries. In addition, some countries have often been cited in the literature as successful cases of development fostered by substantial aid flows; these countries are Korea, Taiwan, Ghana, Uganda, Botswana, Mozambique, and Vietnam (World Bank 1998; Devarajan et al. 2001; Bourguignon and Leipziger 2006).¹⁶ Finally, in the literature on the effects of aid on recipient countries, some studies have found evidence that aid spurs growth, albeit under specific conditions (Burnside and Dollar 2000; Hansen and Tarp 2000, 2001; Collier and Dollar 2002; Clemens et. al. 2004; Moreira 2005).¹⁷

¹⁴ <http://www.yaleeconomicreview.com/issues/summer2006/sachs.php>, accessed 10 September 2007.

¹⁵ <http://www.cartercenter.org/healthprograms/program1.htm>, accessed 10 September 2007.

¹⁶ However, controversy remains in the literature over the role played by foreign aid in these success stories (Easterly 2007).

¹⁷ See review of literature on aid effectiveness in chapter two of this dissertation.

Motivation

In spite of the successes listed above and \$2.3 trillion of official development assistance transferred to developing countries since 1960, millions of people are still dying of hunger, malaria and tuberculosis; millions of children are still out of school and made orphans by AIDS; and million of people do not yet have access to clean water and live in unsanitary slums. Why is it that despite all the successes listed above, still international assistance could be considered to be a failure or at least a partial failure?¹⁸ Africa may be interpreted as a striking manifestation of the failure of overseas development assistance to rise million of poor people out of poverty and its devastating consequences. For over five decades, \$1 trillion has been spent on Africa alone since independence, but from many angles, there is too little to show for it (Herbert 2004; Erixon 2005; Govender et al. 2005). Actually, many African countries are even poorer today than they were 50 years ago.¹⁹ Contrary to other poor regions around the world, the number of people living with less than a dollar per day has continued to increase in Africa; so is the number of malnourished children and the number of deaths among children under five years old (United Nations 2005).

One big part of the problem appears to be that the largest part of aid transferred to the poor does not actually reach them. For instance, Cudjoe (2006) reported that based on Jeffrey Sachs' own calculations, "Out of every dollar of aid given to Africa, an estimated 16% went to consultants from donor countries, 26% went into emergency aid and relief operations, and 14% went into debt servicing." By the same token, President Paul

¹⁸ See review of literature on aid effectiveness in chapter two of this dissertation for an answer to this question.

¹⁹ See figure 1 in chapter two of this dissertation.

Kagame of Rwanda declared: “There are projects here worth only \$5m and when I looked at their expenses, I found that \$1m was going into buying these cars, each one of them at \$70,000. Another \$1m goes to buy office furniture, \$1m more for meetings and entertainment, and yet another \$1m as salaries for technical experts, leaving only \$1m for the actual expenditure on a poverty reducing activity. Is this the way to fight poverty?” (Cudjoe 2006) According to Hancock (1989), the simple fact that aid bureaucracies, after more than 50 years of existence, are still growing more than ever is irrefutable proof of the lack of success of earlier efforts.

Some empirical studies have actually shown that there is no evidence that aid has any positive effect on growth, nor that it affects economic institutions in developing countries (Boone 1996; Easterly 2003; Easterly et al. 2003; Rajan and Subramanian 2005a; Coviello and Islam 2006; Bourguignon and Sundberg 2007).²⁰

In general, it would appear that international aid has failed to eradicate poverty and, in many cases, to promote sustained development in the main aid recipient countries around the world. This begs the question of where has all the money gone? Perhaps the answers to this puzzle of the ineffectiveness of international aid are to be found simultaneously within both recipient countries and development agencies themselves.

For decades now, a common rationale has been repeatedly used in the literature and in the international scene to explain the ineffectiveness of foreign aid in developing countries: poor economic policies, weak institutions, bad governance, chronic corruption, limited human and physical capital accumulations; lack of democracy and transparency,

²⁰ By “economic institutions” the authors refer to corruption, bureaucracy quality, property rights, and regulations; rule of law, repudiation, and expatriation risk (Coviello and Islam 2006). For a more comprehensive and systematic review of the aid effectiveness empirical literature, see chapter 2 of this dissertation.

political instability, civil wars, geography, and many more. In other words, poor countries themselves are obviously one source of the low performance of aid (World Bank 1998; Alesina and Dollar 2000). For example, despite 12 adjustment loans to Zambia between 1980 and 1994, it had experienced inflation above 40 percent every year except two from 1985 to 1996;²¹ Pakistan had a budget deficit of 7 percent of GDP between 1970 and 1997 in spite of 22 adjustment loans throughout this period. In the 1980s and early 1990s, after 9 adjustment loans to Zaire, Mobutu Sese Seko's loot was measured in billions of dollars (Easterly 2002). A number of empirical studies have provided support to the credence that developing countries' circumstances are the root cause of aid ineffectiveness. Specifically, the literature on aid and economic growth took a new turn when Boone (1996) showed that, regardless of political regimes, aid was used for wasteful public consumption instead of financing investment and growth. However, his study ran counter to the usual belief that aid promotes growth. Subsequently, Burnside and Dollar (2000) improved on Boone's paper and found that aid has a positive impact on growth in a good policy environment i.e., with good fiscal, monetary and trade policies; and thus launching the beginning of numerous contradictions in the empirical literature on aid performance. Collier and Dollar (2002), using a broader measure of policy environment (World Bank's Country Policy and Institutional Assessment) and a larger number of countries, confirmed Burnside and Dollar's results. Svensson (1999) showed that foreign aid positively affects long-run growth in democratic countries. Furthermore, the issue of absorptive capacity has been frequently raised in the aid

²¹ Adjustment lending carried conditions on economic policies to developing countries in crisis, in an attempt to induce the recipients to make necessary reforms to promote growth: reduction in inflation, budget deficits, and black market premium, restructuring of state enterprises in difficulty, and tackle corruption (Easterly 2002).

development literature, illustrating that there might be diminishing returns to aid in developing countries. In other words, because of poor countries' characteristics mentioned above, there might be a certain level of aid inflows after which poor countries would have some difficulty to effectively absorb additional amounts of aid (Burnside and Dollar 2000; Collier and Dollar 2002; Clemens and Radelet 2003). It is an undeniable truth that over the years, a chunk of official development assistance has been drained down the pipes of an ill-managed poor world. If not for the above-cited literature, the daily reality of some African countries and other poor countries around the world clearly illustrate it. It would be naïve and unrealistic to assert otherwise.

Nonetheless, recipient countries are only one of numerous actors in the vast aid delivery network with multifaceted interactions and relationships among them; going from donor countries, donors' development agencies, multilateral aid agencies, NGOs, consultants, contractors, to interest groups and civil society organizations.²² Within this complex network, the contribution of each actor is fundamental to achieve a joint outcome: poverty alleviation. What is harder is to hold each and every intervenient responsible and accountable for the results (Ostrom et al. 2001).

For instance, the richest countries of the world (such as the U.S., France, Germany, United Kingdom and Japan) with the largest decision-making power in international organizations, and those behind bilateral aid agencies are the ones mostly formulating aid policies.²³ They have a significant influence over the selection of

²² The aid delivery network is a hierarchy of principal-agent interactions.

²³ For instance, the five largest shareholders in the World Bank and the countries with the higher number of votes in the IMF are the ones listed above. Votes in those two institutions are linked to the extent of financial contributions. Among the 184 member countries of the World Bank, only one selects its president:

potential aid recipients and over the use of funds within those recipients' countries (Clements 2005). They are involved in the design and implementation of development projects; and sometimes (if not most of the time) in "determining" the needs of the poor (Tendler 1975; Dichter 2003). For instance, Lancaster (1999) argued that because of the incapacity of weak institutions in Africa to promote aid, development assistance has become increasingly "donor-driven."²⁴ A declaration by the president of Nigeria, Olusegun Obasanjo well illustrates this "donor-driven" phenomenon: "In education and in industrialization, we have used borrowed ideas, utilized borrowed experiences and funds and engaged borrowed hands. In our development programmes and strategies, not much, if anything, is ours." (Lancaster 1999, 3) In that context, international aid institutions might be implicated in the failure to provide quality aid to the developing world.²⁵ They might therefore be interpreted as being as responsible as developing countries for the ineffectiveness of foreign aid.

Focus of the Study

The purpose of this dissertation is to examine why foreign aid has been largely ineffective at eradicating global poverty and promoting sustained economic growth by focusing in one particular explanation: the extent of the role played by incentive

the United States (Choike.org). See also <http://www.globalissues.org/TradeRelated/Debt/USAid.asp>, accessed 10 September 2007.

²⁴ This term illustrates the fact that projects are "identified, planned, and implemented with minimal input" from recipient countries (Lancaster 1999, 224).

²⁵ *Quality* of foreign aid refers to its output whereas *quantity* of aid refers to its input. See <http://www.globalissues.org/TradeRelated/Debt/USAid.asp>. A complete definition of aid quality is provided in appendix A.

structures, especially incentives to “move the money” (or the “Money-Moving Syndrome”²⁶) within international donor agencies since the inception of foreign aid. In this dissertation, the “Money-Moving Syndrome” exists when the quantity of foreign aid committed or disbursed becomes, in itself, an important objective side by side or above the effectiveness of aid.

But why is this topic important? Over the years, there have been successive calls for a “big push” of foreign aid to assist developing countries in their quest for poverty alleviation and growth. Despite some major achievements, the failures of foreign aid would seem to have continuously outweighed the successes. And with the amount of development assistance likely to considerably increase in the upcoming years, the need for greater caution and awareness, and greater aid effectiveness seem pressing and imperative. Clearly, reducing poverty and promoting sustainable economic growth in developing countries entail much more than just giving money. Nevertheless, wealthy nations continue to provide poor countries with increasing levels of funding and have even pledged to do more in the upcoming decade. Confronted by the apparent inability of aid to deliver the expected results, are aid organizations deliberately pushing ahead and ready to repeat past mistakes? Perhaps it is not feasible to cease aid altogether. But is really disbursing more and more money the ultimate solution in those circumstances? Could it be that while being honestly philanthropic, they are simply hampered in their actions by their institutional framework (Tendler 1975)? This dissertation aims to shed some light into this debate. In particular, the objective of this study is to investigate the prevalence of the “Money-Moving Syndrome” within donor agencies and deduce its

²⁶ This term had been borrowed from Tendler (1975).

impact on the performance of aid. Indeed, if a sizable portion of aid resources allocated to recipient countries is motivated by money moving incentives, there will be a problem in term of aid effectiveness. In other words, we posit that evidence in support of the “Money-Moving Syndrome” can perhaps be used to provide some evidence as to why foreign aid has not been more effective at reducing global poverty in developing countries.

Furthermore, this dissertation is in an attempt to add one piece to the foreign aid puzzle in order to better understand why the effectiveness of aid has not been greater despite all the resources involved in the business of aid over the years.

Overview of the Dissertation

The remainder of the dissertation is organized as follows: chapter two reviews the aid effectiveness literature and the groundbreaking studies that attempted to address the incentive mechanisms within international development agencies as a potential, if not primary, source of the ineffectiveness of foreign aid. In Chapter three, we identify some factors that might provide a motive for money moving behaviors within international development agencies and we develop a principal-agent model to explore how donor agencies’ institutional incentive systems may affect the characteristics of an optimal incentive contract and thus give rise to the Money-Moving Syndrome. Chapter four describes the empirical methodology used as well as the empirical data and their sources. Chapter five discusses the empirical results obtained and chapter six contains concluding remarks and potential policy implications of the analysis conducted.

CHAPTER II

LITERATURE REVIEW

This chapter is divided in two sections. The first section examines to what extent international aid, since the 1950s, has been ineffective in reducing global poverty and promoting sustained economic development in aid-receiving countries.²⁷ In addition, the first section attempts to determine whether there have been possible variations in the level of aid effectiveness across donor organizations and over time. It finally explores previous efforts to explain aid ineffectiveness and their contributions to help clarify the foreign aid puzzle. The second section reviews some of the main studies that have endeavored to shift the focus away from developing country's shortcomings to international donor institutions, in analyzing the partial failure of foreign aid. Specifically, the second section highlights the few studies that attempted to address institutional incentives and incentives to "move the money" as potential sources of the low performance of aid in reaching its objectives.

²⁷ Foreign aid, as we know it today (economic aid to poor countries throughout the world) began when President Truman announced the Point Four Program in his inaugural address on January 20, 1949. The Point Four Program was later formalized in the 1950 Act for International Development. It was the result of the Marshall Plan announced by the U.S. government in 1947 and aimed at the reconstruction of Europe after World War II (Dichter 2003, 55; Roodman 2004, 3). However, the International Bank for Reconstruction and Development (IBRD) and the IMF were initially created in 1945 by the international community to respond to Europe's calls for help.

Aid Effectiveness Literature

The Extent of Aid Effectiveness Today

To this day, no consensus exists on the magnitude of the effect of aid on growth. Besides many success stories evidenced by micro-level studies,²⁸ the overall impact of aid on macroeconomic variables (such as savings, investment, and growth) evidenced in the aid effectiveness literature, has been weak and often ambiguous (Gibson et al. 2005; Bourguignon and Sundberg 2007). This ambiguous or undetectable impact of aid on macroeconomic outcomes coexisting with successful donor-sponsored aid projects and programs is called the “micro-macro paradox” (Mosley 1986).

The empirical literature on aid effectiveness encompasses three different macroeconomic studies:²⁹ first, the *accumulation models* studying the impact of aid on savings and investment; these macro-studies were influenced by the Harrod-Domar growth model which assumes that investment (i.e., the accumulation of physical capital) is the key determinant of economic growth and, by consequent, the lack of savings financing investment is the main factor impeding growth in developing countries.³⁰ Based on these studies, a positive effect of aid on either savings or investment would mean that

²⁸ These studies evaluate the impact of individual aid projects and programs using cost-benefit analyses. Certainly, there are micro-level cases of failures; however, most micro-level studies reported in the literature have validated the effectiveness of aid. See Hansen and Tarp (2001), Moreira (2005), and Bourguignon and Leipziger (2006) for more details.

²⁹ Hansen and Tarp (2000), Moreira (2005), and Doucouliagos and Paldam (2005) surveyed the literature on aid effectiveness more extensively.

³⁰ The Harrod-Domar growth model was later expanded into the “two-gap model” which assumes that investment, crucial to economic growth, could be constrained either by a lack of domestic saving (saving gap) or by a lack of exports revenues (trade gap). The latter gap assumes that developing countries need to import goods and services necessary for investment and production, but their import costs often exceed their exports revenues (Hansen and Tarp 2000; Moreira 2005).

aid stimulates growth. Second, the *growth models* examining the direct effect of aid on growth; these studies were influenced by both the Harrod-Domar and the Solow growth models. Most of these models, as well as the accumulation models, were cross-countries regressions studies due to limited aid data availability. Finally, the *conditional growth models* which marked a new turn in the aid effectiveness literature in that they are inspired by the “new growth theory”: economic policy, political and institutional variables are included in the regressions of growth on aid; and the insertion of quadratic and interaction terms (e.g., aid square and aid-policy index) captures the possible non-linearity of the effect of aid on growth. In addition, these macro studies often rely on panel data econometrics tools to account for country-specific effects and the endogeneity of aid and other explanatory variables (Hansen and Tarp 2000; Roodman 2004; Doucouliagos and Paldam 2005; Moreira 2005).

An overall analysis of the three types of macro-studies led to the conclusion that aid may have a significantly positive, significantly negative, or a non-significant effect on development outcomes, in statistical terms.³¹ This lack of robust evidence on the macroeconomic effects of aid has often been attributed to underlying theories and/or econometric methodologies applied (Moreira 2005; Bourguignon and Leipziger 2006).

Doucouliagos and Paldam (2005) uncovered that until January 1, 2005, the aid effectiveness literature consisted of 97 studies, each falling in one or more of the three

³¹ Here is a succinct list of authors who analyzed the impact of aid on selected macroeconomic variables (savings, investment, and growth) and their estimated results: (a) *significant positive impact of aid* (Burnside and Dollar 2000; Hansen and Tarp 2000, 2001; Clemens et. al. 2004; Moreira 2005); (b) *significant negative impact of aid* (Mosley et al. 1987); and (c) *zero impact of aid* (Boone 1996; Easterly 2003; Easterly et al. 2003; Roodman 2004; Rajan and Subramanian 2005a). For the most part, studies in (c) showed that there is no robust evidence of the impact of aid on growth even in the presence of sound policy environment, contrary to claims by Burnside and Dollar (2000).

aforementioned approaches. In an attempt to synthesize the conflicting macroeconomic effects of aid, they analyzed all three categories of models using the meta-analysis technique and found that despite a great variation in the findings, aggregate results showed that the average effect of aid is at best positive, but small and non statistically significant.³²

In many instances throughout the years, aid has been negatively associated with growth in developing countries. This negative association does not prove that aid caused the decrease in growth, but it does show that aid has not always been able to halt the deterioration of growth (Easterly 2003) or that success could occur without foreign assistance in aid-receiving countries (see table 1).

Table 1. Ten Best and Worst per Capita Growth Rates, 1980-2002

Country Name	Per Capita Growth, 1980-2002 (%)	Aid/GDP (%) 1980-2002	Percent of time under IMF programs, 1980-2002 (%)
Ten Best Per Capita Growth Rates, 1980-2002			
South Korea	5.9	0.03	36
China	5.6	0.38	8
Taiwan	4.5	0.00	0
Singapore	4.5	0.07	0
Thailand	3.9	0.81	30
India	3.7	0.66	19
Japan	3.6	0.00	0
Hong Kong	3.5	0.02	0
Mauritius	3.2	2.17	23
Malaysia	3.1	0.40	0
<i>Median</i>	<i>3.8</i>	<i>0.23</i>	<i>4</i>
Ten Worst Per Capita Growth Rates, 1980-2002			

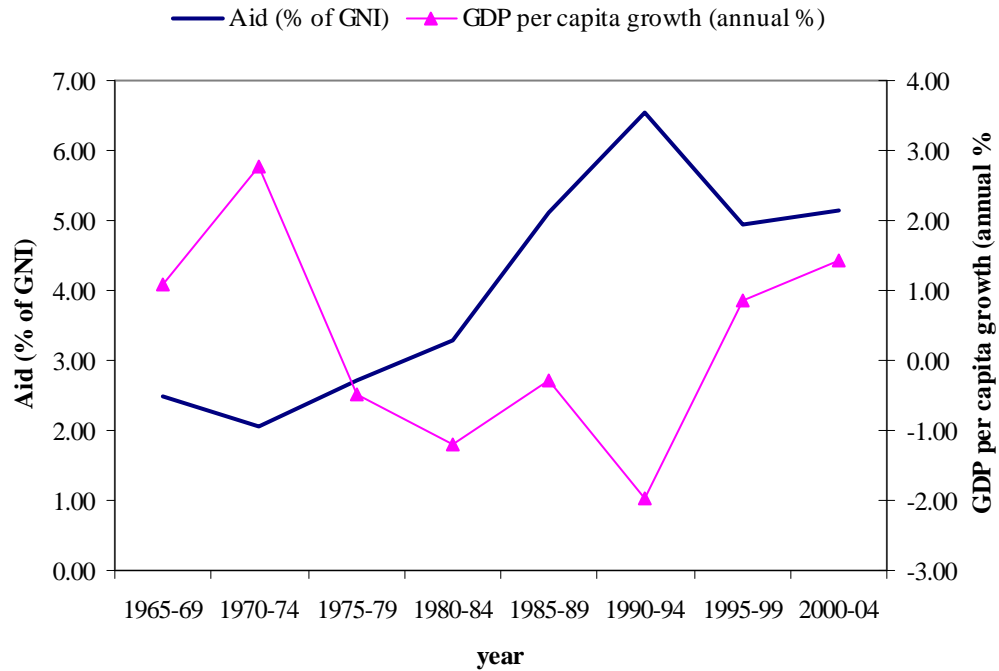
³² The Meta-Analysis covers the aid effectiveness literature in its totality and examines if this literature has established that aid has a positive effect on growth or accumulation (Doucouliagos and Paldam 2005).

Nigeria	-1.6	0.59	20
Niger	-1.7	13.15	63
Togo	-1.8	11.18	72
Zambia	-1.8	19.98	53
Madagascar	-1.9	10.78	71
Cote d'Ivoire	-1.9	5.60	74
Haiti	-2.6	9.41	55
Liberia	-3.9	11.94	22
Congo, Dem. Rep.	-5.0	4.69	39
Sierra Leone	-5.8	15.37	50
Median	-1.9	10.98	54

Source: Easterly (2005).

Figure 1 shows that a steady increase in aid flows in Sub-Saharan Africa since the 1970s has not been successful in preventing the decline in economic performance in that region.

Figure 1. Aid and Growth in Sub-Saharan Africa, 1965-2004 (5-year averages)



Source: World Bank Development Indicators 2006.

Changes in the Level of Aid Effectiveness

Examining the full extent of changes in the level of aid effectiveness across aid agencies and over time would be a formidable task due to many factors such as the lack of a consistent measure of the overall impact of aid, the difficulty to disentangle the marginal effects of a dollar of aid from other factors (attribution problem), and the fungibility of foreign aid (Bourguignon and Sundberg 2007).³³

³³ Supposed infant mortality is used as a key measure of the impact of aid in developing countries; it is practically impossible to say whether an additional child being saved is due to an aid-financed program or many other factors that affect infant mortality such as water quality, mother education, access to clinics, lack of food, and so on (Clemens and Radelet 2003). Aid is fungible when a recipient country reduces its own resources in the sector receiving aid and transfers them to non-targeted sectors.

Despite the absence of a consistent measure required to efficiently assess changes in the level of aid effectiveness, there are nonetheless a few factors that could cause variations in the impact of aid in developing countries; variations across donor agencies and over time:

1. Changes in the development discourse and in donor agencies' practices

Throughout the history of foreign aid, a multitude of development approaches have been implemented which may have had the consequence of changing the level of aid effectiveness. In the 1950s, capital accumulation was thought to be the motor of economic growth. Development assistance during that period took the form of large aid-financed projects to build roads, dams, factories, ports, irrigations canals, and so on. In the 1960s, knowledge transfer and skills began to be recognized for their capacity to create growth. As such, while the emphasis remained on capital formation, physical infrastructure, and large projects, development policies and projects started targeting social infrastructures, such as schools and universities. It was the beginning of technical assistance. During the 1970s, while the international development assistance experienced extensive growth, it became evident that the gap between rich and poor was widening. Development assistance strategies began targeting the poor to alleviate poverty by attempting to provide for their basic needs (food, water, health). By the mid-1970s, poverty reduction was as much an important goal as economic growth in the development arena. Basic human needs and quality of life joined the rank of GDP as yardsticks of success. In the early 1980s, developing countries, facing severe debt crises, turned to the World Bank and the IMF for an increase in foreign aid and a debt relief. Inspired by the

Asian Tigers' success,³⁴ the World Bank and the IMF instituted the stabilization and structural adjustment programs to ensure debt repayment and economic restructuring. These programs aimed at reducing inflation, correcting government deficits, removing price distortions, and reducing trade barriers. Unfortunately, the stabilization and structural adjustment programs did not yield the expected results (see table 2). By the end of the 1980s and early 1990s, the development assistance field had started to recognize the need for sound institutions like good governance, property rights, and democratic accountability. This change gradually led to a new aid architecture characterized by: a greater emphasis on selectivity in allocating aid; a growing recognition of the importance of governance, institutions, and local ownership of reforms; enhancement of aid coordination and donor alignment with country strategies; greater considerations for absorptive capacity constraints; measuring and monitoring of results (Easterly 2007; Bourguignon and Leipziger 2006; Pitman et al. 2005; Ellerman 2005; Dichter 2003).

³⁴ Between the 1960s and 1990s, Hong Kong, Singapore, South Korea, and Taiwan (the four Asian Tigers) achieved rapid economic growth mainly due to high levels of human and physical capital accumulation, an export-driven model of economic development, macroeconomic stability (World Bank 1993).

Table 2. Structural Adjustment Loans, Growth, and Inflation in Poor countries with Most Structural Adjustment Loans Received

	Number of IMF and World Bank Adjustment loans 1980- 99	Annual per capita growth rate from the date of first Structural adjustment loan (%)	Annual Inflation rate from first adjustment loan to 1999 (%)
African countries that were in the world's top 20 of structural adjustment loans received 1980-99			
Niger	14	-2.30	2
Zambia	18	-2.10	58
Madagascar	17	-1.80	17
Togo	15	-1.60	5
Cote d'Ivoire	26	-1.40	6
Malawi	18	-0.20	23
Mali	15	-0.10	4
Mauritania	16	0.10	7
Senegal	21	0.10	5
Kenya	19	0.10	14
Ghana	26	1.20	32
Uganda	20	2.30	50
Top ten recipients of structural adjustment Loans over 1990-1999 among Ex-Communist countries (growth and inflation measured from first adjustment loan to 1999)			
Ukraine	10	-8.4	215
Russian Federation	13	-5.7	141
Kyrgyz Republic	10	-4.4	25
Kazakhstan	9	-3.1	117
Bulgaria	13	-2.2	124
Romania	11	-1.2	114
Hungary	14	1.0	16
Poland	9	3.4	52
Albania	8	4.4	40
Georgia	7	6.4	37

Source: Easterly (2006b, 67).

In addition to changes in the development discourse, donor agencies' institutional reforms may also affect the level of aid effectiveness. For instance, subsequent to major environmental disasters in Brazil and Indonesian caused by a series of World Bank lending blunders in the early 1980s, the Bank adopted dramatic institutional reforms such as increased reporting requirements and police-patrol oversight. The World Bank also significantly altered its lending portfolio by increasing environmental lending and

reducing “traditional” loans in energy and transportation causing environmental damages (Nielson and Tierney 2003).

2. Changes in recipient countries’ circumstances

The development assistance world is gradually realizing that development is a very complex phenomenon that occurs as a result of an accumulation of and a complicated interaction between multitudes of resources: (a) “public capital” such as political, legal, and economic institutions of society; (b) infrastructure, physical and human capital; and (c) “cultural and social capital” such as mentalities, beliefs, values, and social institutions (Dichter 2003). Therefore, different combinations and levels of these resources within and across aid recipient countries will result in different levels of aid effectiveness across countries and over time.

Previous Explanations of Aid Ineffectiveness

One explanation of aid ineffectiveness commonly used in the literature focuses on the shortcomings of aid-receiving countries. On the one hand, problems like corrupt leadership, misguided government policies, weak policies and institutions, and political instability have been frequently raised to explain the disappointing performance of aid in developing countries (World Bank 1998; Lancaster 1999; Easterly 2006b); On the other hand, some authors like Sachs (2005) argued that bad governments constitute only a small part of the explanation of the low performance of aid in poor countries and stressed other problems like diseases, vulnerability to climate shocks, and geographical distress.

Another widespread explanation of the aid ineffectiveness used in the literature emphasizes that donor country strategic interests have frequently dominated recipient

countries' needs and merits as *aid allocation criteria* within aid agencies.³⁵ Donor strategic interests generally include *diplomatic interests* (e.g., establishing military bases, securing UN votes, supporting a preferred regime); *commercial interests* (e.g., "tied" aid, providing exports subsidies to donor countries firms, focusing on projects with high foreign exchange components; and *cultural interests* usually provided to promote a donor's religion, language, or values (Lancaster 1999).

The preponderance of donor interests over recipients' needs and merits, as aid allocation criteria, appears to be present within both bilateral and multilateral aid agencies, though with less intensity in the latter.

Many empirical studies investigating the determinants of aid, especially which donor country gives to which recipient country and why, concluded that *bilateral aid* most of the time favored former colonies and political allies over recipient countries' needs or policy and institutional environments. For instance, empirical evidence showed that the U.S. allocation of aid is mostly influenced by its interests in the Middle East; France mainly employs foreign aid as a tool to maintain and foster its cultural, economic and political ties with former colonies; and Japan tends to give more aid to investment and trade partners. Only smaller donors such as Netherlands and the Scandinavian countries provide aid to poor countries according to economic necessity and sound management (Maizels and Nissanke 1984; World Bank 1998; Alesina and Dollar 2000; Fleck and Kilby 2005b; Allen 2006).

³⁵ This is the part of the aid literature that studies the determinants of foreign aid, in particular the reasons why certain donors give to certain recipient countries..

If bilateral aid giving appears to be tied to donor interests and less sensitive to recipients' need, *multilateral development agencies*, however, tend to be more need-based oriented in their aid allocations (Maizels and Nissanke 1984; Roodman 2006; Burnside and Dollar 2000; Alesina and Dollar 2000; Milner 2006; Allen 2006). Unfortunately, multilateral aid agencies, albeit "independent" and "apolitical,"³⁶ have nonetheless been known to further the interests of their most prominent member countries. For instance, Frey and Schneider (1986) analyzed the lending behavior of the World Bank between 1972 and 1981. They found that the "politico-economic model," which assumes among other things that the Bank extends more credits to poor countries to which top member countries export a large share of goods, explains best the World Bank behavior. In a more recent paper, Fleck and Kilby (2005a) showed that not only U.S. interests (e.g., recipient countries' importance to the U.S. as trade partners, U.S. commercial financial flows into and out of poor countries) influence the World Bank lending patterns; but that influence varies across presidential administrations. More recently, Kilby (2006), using a panel data for less developed Asian countries from 1968 to 2002, revealed that the Asian Development Bank (ADB) aid giving is tied to Japan and the United States' interests. Consequently, the autonomy of multilateral aid agencies may be somewhat circumscribed as the autonomy of bilateral aid agencies, but certainly to a lesser extent.³⁷

³⁶ See Fleck and Kilby (2005a) for more details.

³⁷ The autonomy of the World Bank for instance might be limited through the vehicle of triennial IDA (International Development Association) replenishment negotiations (Frey and Schneider 1986; Lancaster 1999; Fleck and Kilby 2005a).

Finally, the third set of explanations of the ineffectiveness of aid encountered in the literature has been more aid agency-centered. They posit that because international aid organizations are involved in the identification, design, and implementation of development assistance activities, they ought to be partially responsible of the low performance of aid in promoting economic growth and reducing poverty in developing countries. The next section analyses in depth this third set of explanations.

Donor Agencies' Incentive Structures and the "Money-Moving Syndrome"

Literature

While there has been a proliferation of studies on the impact of aid based on recipient countries performance, very few studies have attempted to address the incentive mechanisms within international development agencies as a potential, if not primary, source of the low performance of foreign aid.

This restricted but growing literature may possibly be divided in two ways: (a) studies on how incentives and constraints faced by aid organizations affect the performance of aid (*macro-institutional approach*);³⁸ (b) studies on how incentives and constraints faced by staff in those organizations affect the performance of aid (*micro-institutional approach*).³⁹

This section highlights the major studies that broached the subject of incentive structures and, in particular, incentives to "move the money" in analyzing aid agencies'

³⁸ These organizations in the aid business encompass "taxpayers, donor organizations, politicians, lobby groups, donor agencies and consultants in donor countries and recipient organizations in beneficiary countries" (Martens et al. 2002, 1).

³⁹ In the macro-institutional approach, a donor institution is considered as a single homogenous agent, whereas in the in the micro-institutional approach, the donor institution is made of different individuals with different interests. Those concepts are well developed by Frey et al. (1985).

shortcomings in delivering aid. Although frequently acknowledged as a problem in donor agencies, the incentive to “move the money” has nevertheless been very often treated in an incidental manner in the aid literature.

In this dissertation, incentives are defined as the set of “rewards and punishments that are perceived by individuals to be related to their actions and those of others” (Ostrom et al. 2001).

Macro-Institutional Approach and the Incentives to “Move the Money”

Back in the 1970s, Tendler (1975) was already alerting the international scene to how multilateral agencies and bilateral agencies’ organizational environments, in particular USAID, could impinge upon foreign aid outcomes. Among USAID shortcomings hindering the effectiveness of aid, Tendler (1975) mentioned the pressures to move out the money. Aid agents were considered bright and dynamic based on how they excelled in moving the money; their accomplishments and career advancements in the institution were determined by their ability to “move” a certain amount of funds within a limited time. Tendler also added that the “Money-Moving Syndrome” was not unique to development agencies funded by annual government appropriations like the USAID; indeed the pressures to spend were just as great in the World Bank as in the USAID. In Tendler’s view, the existence of money moving behavior may have the consequence of switching a donor organization’s sense of mission away from economic development to the commitment of resources. She argued that a potential explanation of the “Money-Moving Syndrome” lies on the standards by which development agencies

judge their performance (i.e., the quantitative estimates of development assistance needs) and how the agencies are judged by the outside world.

Tendler's views were corroborated in a more recent book by Lancaster (1999). Lancaster argued that there are two sides of the aid effectiveness equation: (a) on the one hand, there are recipient countries with limited natural resources, political instability, corrupt and incompetent governments; and weak policies and institutions; and (b) on the other hand, there are donor agencies often constrained in their autonomy and/or capacity.⁴⁰ Lancaster identified pressures to spend available funds as one factor limiting the capacity of both the USAID and the World Bank to "identify and design policies, projects, and programs and implement them" in such a way as to take into account the circumstances of recipient countries. For instance, in Lancaster's view, "the Bank's pervasive preoccupation with new lending" had been incorporated in the criteria used to evaluate the World Bank's staff. In general, staff's performance is assessed according to whether they achieved the targeted number of lending operations agreed in their annual performance contracts. Furthermore, pressures to spend contributed to an "excessive optimism" on the part of the staff about conditions in recipient countries and about the likely impact of the Bank's development projects and programs.

Three major reports also acknowledged this problem. The World Bank's Wapenhans Report, analyzing the factors that affect the development impact of the World Bank operations, found that a "pervasive culture of approval" for loans and "pressure to lend" resulted in a decline in project quality (World Bank 1992). Another report, issued

⁴⁰ Lancaster (1999) defined *autonomy* as the "ability (or freedom) of an organization to make policy and allocative decisions to achieve its missions and purposes" and *capacity* refers to the "the capacity to identify and design policies, projects, and programs and implement them to achieve overall purposes."

by the World Bank in 1998, revealed that aid agencies' ability to work in distorted economies has been hampered by their disbursement culture. Indeed, because aid agencies' primary objective was to "dish out money," much went to countries with poor institutional and policy environments (World Bank 1998). The Meltzer Commission Report (2000) found that incentives to "move money" are built in the structure of the Development Banks, and "internal budget resources are awarded where loan volumes are high, not where the number of worthwhile projects is highest or where technical assistance and knowledge transfer are favored over funding."⁴¹ This report concludes that "rewards for lending and no penalties for project failure dilute concern about project performance."

In a book recently published, Easterly (2006b) argued that one reason why foreign aid has continuously failed to reach the poor is the *planning* approach adopted by aid bureaucracies throughout the history of development assistance. *Planners*, with their top-down mind-set, lack two essential elements: feedback and accountability. Easterly brought up other explanations of the nonperformance of aid such as internal bureaucratic incentives to serve the "West" rather than serving the "Rest," and the absence of truly independent evaluations of aid agencies' development projects and programs. He also showed how development agencies apply the volume of foreign aid as a measure of success, and as such consciously confuse aid disbursements as an output to development rather than an input. Easterly did not propose a panacea to reform the foreign aid system

⁴¹ The Meltzer Report (2000) was commissioned by the U.S. Congress as part of the legislation authorizing \$18 billion of additional U.S. funding for the IMF. Development Banks are the World Bank Group, the African Development Bank, the Asian Development Bank and the Inter-American Development Bank. Note that the World Bank Group includes five institutions: the International Bank for Reconstruction and Development (IBRD); the International Development Association (IDA); the International Finance Corporation (IFC); the Multilateral Investment Guarantee Agency (MIGA); and the International Centre for Settlement of Investment Disputes (ICSID). See <http://www.house.gov/jec/imf/ifiac.htm>.

but claimed that, would donor agencies acquire a searcher-like mentality, foreign aid will certainly be successful in finding solutions to piecemeal projects and programs

Micro-Institutional Approach and the Incentives to “Move the Money”

In 2001, the Swedish International Development Agency (SIDA) published a report examining the link between aid, incentives, and sustainability in an attempt to improve the performance and sustainability of its development assistance (Ostrom et al. 2001). The report provides an extensive account of the importance of incentives as they underpin aid performance and recommends strategies to mitigate perverse incentives. The SIDA study constitutes the first attempt to collect data on the behavior of staff members and other agents involved in the delivery of aid. The authors interviewed over 175 SIDA staff and other people involved in the aid process, and found that there is no evidence supporting the argument that incentives within SIDA are oriented towards individual learning about sustainability, nor there is evidence of incentives to use evaluations for organizational learning about sustainability. The interviews also revealed that SIDA is not immune to the incentives to “move the money”; in fact, SIDA officers feel a strong pressure to disburse money, especially at the end of the budget year. The report offers some explanations of the SIDA’s resource-driven environment: the Swedish’s commitment to increase aid allocations to reach 1 percent of GNP and the fear that uncommitted resources will be considered unnecessary and not re-budgeted in subsequent years. Given these results, SIDA reports that the agency is constantly making great efforts to give a new direction to its development assistance.

Martens et al. (2002), using the principal-agent model and its variants, explained that for decades foreign aid failed to achieve its goals because of incentive structures affecting agents' behavior in the aid delivery processes.⁴² They argued that most of the problems encountered in the aid business stem from two elements: one element is the fact that the beneficiaries of aid are not the same as the taxpayers in rich countries providing aid. This "broken feedback loop" deprives aid recipients of the power to reward or punish public official and/or aid organization. The second element is the multiplicity of principals and objectives, which restrains the efficiency of aid. In the view of these authors, a broken information feedback loop combined with difficulties to measure performance have pushed aid officials towards an excessive focus on "input" activities, such as budget and personnel, rather than the quality of output. They also noted that careers within aid agencies are often determined by the staff's performance in easily monitorable tasks such as "committing and spending budgets." In this context, they argued that straightforward independent evaluations of foreign aid projects and programs appear crucial to reestablish information feedback between donors and recipients and to improve aid performance.

In a more recent paper, Wane (2004), an economist at the World Bank, recently wrote a paper where he argues that donor agencies' internal incentive system in the design of aid projects affects the quality of aid and thus its effectiveness. Wane showed theoretically and empirically that the quality of aid depends on the capacity and accountability of aid recipients. It also depends on the impact the incentive system has on the effort the staff put in designing development projects. If the incentive system within

⁴² Incentives are determined by institutions which are defined as "the formal and informal rules of behavior that constitute incentives for all agents involved in the aid delivery process" (Martens et al. 2002, 1).

the aid agency is such that staff promotion depends on project approval rather than project performance (“spend the budget incentive system”); and if the aid recipient government has a weak screening capacity (i.e., the ability to screen projects), then the recipient government will receive poorly designed aid projects. However, if the recipient government has a high screening capacity, it will only accept bad projects if it has a low accountability.

The above discussion does not necessarily constitute a complete review of studies in the aid effectiveness literature that have raised the issue of the “Money-Moving Syndrome” in development agencies.

Conclusion

The empirical literature mentioned in this chapter has been critical in assessing the performance of official development assistance in developing countries. In particular, previous aid effectiveness studies focusing on international development agencies have corroborated the idea that, not only aid allocations respond to donor country preferences but also, aid agencies institutional frameworks may hinder their genuine intentions to help the poor. These studies helped our understanding of the fact that aid organizations are bureaucracies making their own set of formal and informal rules. These organizational rules structure incentives for all agents involved in the chain of aid delivery, may make aid agencies powerful, or lead them to inefficient behaviors (Barnett and Finnemore 1999). The purpose of this dissertation is to contribute to this literature by analyzing in depth one particular set of incentives common to many international aid organizations: the incentives to “move the money.” Although frequently

acknowledged as a problem in donor agencies, these incentives have nevertheless been very often treated in an incidental manner in the aid literature. To the extent of our knowledge, this dissertation represents the first attempt to explicitly focus, theoretically and empirically, on the “Money-Moving Syndrome” in analyzing aid agencies’ shortcomings in delivering aid.

The primary reason to focus on these incentives is that without the “money,” there would not be “foreign aid”; and if the objective is to maximize the effectiveness of aid, it would appear essential to enhance the effectiveness of aid resources *at the source*, for instance by creating the right incentives in providing development assistance to poor countries. This research proposes a simple theoretical framework examining some adjustment mechanisms that could reduce both institutional incentives to “move the money,” and windows of opportunities for money moving behaviors.

CHAPTER III

THEORETICAL FRAMEWORK

It is difficult to get a man to understand something when his salary depends upon his not understanding it.

Upton Beall Sinclair *I, Candidate for Governor: And How I Got Licked* (1935)

The theoretical analysis in this chapter identifies aid agencies' institutional incentives that may lead individuals to engage in money moving behaviors and it provides examples of such behaviors (section 1). In the theoretical model (section 2), we develop the hypothesis that the money-moving syndrome may be one major handicap of foreign aid. The basic rationale for the model is that if the pressures to move out the money are strong enough, they might lead to an inefficient allocation of aid resources whether or not international aid agencies and staff are well-intentioned and have the interest of aid recipients at heart.

Analytical Framework

As mentioned in Chapter two, since its inception in the 1950s, foreign aid has been used for two not always reconcilable purposes:⁴³ (a) serve the interests of donor countries and their domestic constituencies;⁴⁴ and (b) increase the well-being of the poor in developing countries. This dichotomy in the objectives of aid could be illustrated by President Ronald Reagan's words: "Our foreign aid is not only a symbol of America's

⁴³ This aid can be in the form of tied-aid, grants, loans, and soft loans or concessional loans.

⁴⁴ Taxpayers, political leaders of the donor countries, donor agencies, commercial businesses (contractors, consultants, and suppliers), experts, private contributors, lobby groups, and non-governmental organizations.

tradition of generosity and good will, but also a servant of our national interest”; or by the USAID’s declaration: “Foreign aid doesn’t cost Americans, it pays!” (Hancock 1989, 161). According to the empirical literature on the determinants of foreign aid, it would seem that the former has more than often outweighed the latter (especially in bilateral aid), thus undermining the ability of aid to successfully promote growth and reduce poverty.⁴⁵ Although the main objective of this dissertation is to analyze the extent to which aid agencies’ self-created incentives to “move the money” may affect foreign aid performance, and thus focuses on aid once it reaches the “hands” of development agencies, this research nonetheless indirectly examines options for the elimination of donor countries’ strategic interests behind aid giving.

Incentives to “Move the Money” in Donor Agencies

Three factors might be identified as providing a motive to money moving behaviors within international development agencies: (1) the organizational imperatives to survive and grow and its corollary the remunerative incentive to move the money; (2) the “warm glow” effect; and (3) the lack of checks and balances and the constraints in the delivery of aid which potentially allow the money-moving syndrome to set in and thrive.

1. Organizational Imperatives to Survive and Grow

According to Ditcher (2003) and Ellerman (2005), “organizing” international development assistance, while being necessary and inevitable, appears to be one factor preventing the achievement of its ultimate goals: poverty alleviation and economic growth. First, “organizing” development assistance has led to unavoidable organizational

⁴⁵ See chapter two of this dissertation, section one.

imperatives, such as employees' determination to maintain their jobs and succeed within the organization, and organizational imperatives for "survival," perpetuation, recognition, and growth.⁴⁶ Second, because organizations in the same line of work tend to conglomerate, development assistance has become an "industry." As such, it has furthered its imperatives to protect the interests of its members and ensure its own survival, sometimes, over its fundamental mission.

Dichter's characterization of development organizations might provide a strong motive for "money moving" at the agent and organizational levels, and might plausibly explain why aid organizations would be as equally concerned with moving the money as with the effectiveness of the development assistance they provide.⁴⁷ A probable important corollary of the organizational imperative to survive and grow would be the remunerative incentive to move the money: as evidenced by the literature review in chapter two, aid providers are evaluated and rewarded according to the level of aid resources they disbursed rather than the ability of these resources to promote economic growth and reduce poverty.⁴⁸

⁴⁶ Hancock (1989, 72) called these "bureaucratic survivalism." These self-perpetuation imperatives run counter to donor agencies' objective to bring development to poor countries. In fact, Dichter (2003) argued that if development were successful in developing countries, donor agencies would no longer have a *raison d'être*, and thus questioned the fact that aid agencies *will voluntarily go out of business* by bringing development to the Third World.

⁴⁷ Dichter (2003) acknowledged that survival imperatives can also incite donor agencies to be more effective and undertake activities such as self-examination retreats, strategic planning workshops, and internal reviews to help them achieve effectiveness; but according to Dichter more of these internal reviews are about prospects of survival than they are about concern for effectiveness.

⁴⁸ See also Transparency International (2007) and OECD/DAC (1999).

2. The “Warm Glow” Effect

According to Andreoni (1990), pure altruism is not the only factor explaining observed patterns of giving; when people make donations, they can also be motivated by “warm glow.” The “warm glow” effect is the utility or psychological benefits (e.g., feeling of gratification) people derived from the “act of giving” itself. Considering this utility essentially arises from the act of giving and not from its impact, Andreoni (1990) argued that it is “egoistic” or “impurely altruistic.”

Ostrom et al. (2001) and Gibson et al. (2005) applied Andreoni’s theory to partially explain why foreign aid does not seem to generate the expected results. To the extent that aid agents get a “warm glow” from giving, all that matters is the amount of aid spent or “moved.” In this situation, considerable amounts of aid resources may be given to aid-receiving countries with little concern about the actual impact of aid.

3. Lack of Checks and Balances and Constraints in the Delivery of Aid

They are (a) limited feedback and accountability, and (b) difficulty to evaluate and quantify the performance of aid. Those elements could possibly allow in aid agents’ perverse behaviors we generally observe in the aid delivery chain.

One essential characteristic of foreign aid appears to be a “broken information feedback loop” existing between taxpayers in western industrialized nations generating aid resources and intended beneficiaries in poor countries. Associated with this broken feedback may be a limited final accountability both at the aid bureaucracy level and at the staff level (Martens et al. 2002). In this chapter, *aid agency accountability* or *staff accountability* is defined as an aid agency’s or aid agent’s “obligation to demonstrate that work has been conducted in compliance with agreed rules and standards or to report

fairly and accurately on performance results vis a vis mandated roles and/or plans” (OECD/DAC 2002).

According to Martens et al. (2002), the geographic and political separation between taxpayers and beneficiaries result in the fact that aid recipients have no means to communicate their own needs, or to communicate whether those needs have been met, to “reward” or “punish” donors’ actions, or to question the adequacy of what donor agencies provide them. This is seemingly unlike the political process in modern democracies where the taxpayers (voters) are the same as the beneficiaries and could therefore, to some extent, exercise political pressure on public bureaucracies to improve performance and satisfy their needs.

Evidently, feedback without accountability would lead to inefficient outcomes. And there seems to be limited accountability both at the aid institution level and at the aid agency’s staff level. An illustration of why there may be a limited final accountability at a donor institution level is as follows: in a particular country where numerous aid agencies operate simultaneously and jointly to promote its economic development, the outcomes of their individual efforts would be difficult to evaluate, and thus no specific agency could be held accountable. Unfortunately, many developing countries seem to have at one point or another experienced this situation. For instance, after twenty years and 2 billion dollars spent in Tanzania to building roads, the road system appears to have been little improved and none of the numerous aid agencies operating in Tanzania has been held

accountable; for it is simply difficult to observe or even evaluate the effects of their individual efforts (Easterly 2006b; Birdsall 2004; Radelet 2003; World Bank 1998).⁴⁹

If there is staff accountability in a donor agency, a top executive or country manager for example, is liable to being called to account for: first, the disappointed performance of a specific aid project or program he/she directs (in case of short time-bound projects); and second, the deficiencies in a specific project phase involving the said staff (in case of development projects requiring long periods of time).⁵⁰ However, for such a system to be effective, two elements ought to be present. First, the executive or manager should be held accountable for not only projects at hand, but also for past projects he/she supervised (*retroactive individual accountability with positive or unlimited prescription*). Long project cycles make it difficult to assess the accountability of the staff. Aid agents in charge of those projects would have moved on before a systematic evaluation is conducted. In addition, short-term assignments to field positions and high employee rotation across departments at headquarters are usually frequent in most aid agencies. While they expose the staff to a variety of experiences, short-term assignments prevent them to see all phases of a particular project, from design to evaluation stage (Gibson et al. 2005). Second, if found somewhat responsible for the bad results of a development

⁴⁹ Aid institutions have financed more than 1,300 projects in Tanzania between 2000 and 2002 alone, with an estimated 1,000 missions of donor officials per year and over 2,400 reports to donors per quarter (Easterly 2006b; Birdsall 2004; Radelet 2003).

⁵⁰ The World Bank identifies the following phases in a project cycle: Country Assistance Strategies, the Identification Phase, the Preparation Phase, the Appraisal Phase, the Negotiation and Approval Phase, the Implementation and Supervision Phase, the Implementation and Completion Phase, and the Evaluation Phase (<http://go.worldbank.org/GI967K75D0>).

project, the top executive or country manager should liable to be “punished.”⁵¹ In this regard, we might unfortunately observe that if there has often been a system of checks and balances ex-ante in the aid delivery process, an ex-post mechanism of checks and balances would not seem to be always in place (Ostrom et al. 2001). A corollary of such a system would be that once the top executive or country manager is accountable, he/she would hold accountable all staff members under his/her chain of command and carry out punishment.

Another characteristic of foreign aid would be the difficulty to evaluate and quantify the overall impact of aid, but also the costs and time a rigorous evaluation would entail. Very often, the lack of comparable baseline database and controlled experiments would make it impossible to tease out the influence of a particular aid project or program from the influence of environmental factors or random shocks. Furthermore, establishing such control and treatment groups might not only prove to be costly and time consuming, but also unfeasible for the project at hand, due to methodological or ethical constraints. For instance, it would be inappropriate to establish randomization methods with development projects such as universal primary education and anti-retroviral HIV/AIDS drugs interventions (Bourguignon and Sundberg 2007; Birdsall 2004; Radelet 2003). Under these murky conditions, it might be very difficult to attribute the failure of development projects or programs to donor agencies involved in them, thus providing them with a fair amount of latitude in their design of development policies in the Third World.

⁵¹ Punishment could involve removal from a project or program, elimination of certain perquisites, or even dismissal.

In conclusion, organizational imperatives to survive and grow and its corollary the remunerative incentive to move the money, the “warm glow” effect, and the lack of checks and balances are incentives at the aid agency level that might allow the “Money-Moving Syndrome” to set in and thrive. Beyond recipient countries’ shortcomings and donor countries’ strategic interests plaguing aid, these aid agency incentives, and the act of “moving the money” itself, may constitute another important factor explaining why aid does not seem to generate the desired results.

Emergence of the Money-Moving Syndrome

The probable consequences of the above-mentioned factors in terms of pressure to spend the available funds appear manifold and in themselves would seem to establish a vicious circle where excessive attention is placed on the quantity of aid rather than the quality of aid outcomes or its effect in beneficiary countries. Alimented by one or more of the aforementioned factors, the following money moving behaviors could be frequently observed in the development field in general and in international donor agencies in particular.

Taxpayers in developed countries may be truly concerned about the poor in the Third World, but the broken information feedback loop is such that they could not directly observe the impacts of aid and would therefore be inclined to rely on aid volumes disbursed to evaluate the performance of aid agencies (Ostrom et al. 2001, 124). Aid institutions would also tend to judge their performance on the basis of the volume of aid disbursed.⁵² In this context, the case of the World Bank and other multilateral regional

⁵² This tendency towards processes rather than results seems to manifest itself in the fact that success is often defined in terms of the volume of aid disbursed on visible short-run inputs such as: conferences,

banks are often cited; first and foremost, these institutions are banks, and as such, they are in the business of lending money to developing countries. To continue justifying their existence and their primordial role in the international scene, they might be under the pressure to make big loans, and as quickly and frequently as possible (Hancock 1989; Wane 2004).

In the search of plausible explanations to the ineffectiveness of aid, there would seem to be a tendency to emphasize the insufficiency of funds rather than questioning the organizational structures of aid bureaucracies (Tendler 1975); leading rich industrialized nations to often make pledges of more and more aid resources. Concerns for development effectiveness have also led some donor countries and donor agencies to demonstrate their effectiveness through tangible outcomes. For instance, in 2003, the World Bank developed a conceptual framework and action plan on “managing for development results” (World Bank 2004, 84). In addition, the 2005 Paris Declaration on Aid Effectiveness⁵³ stressed the importance of “results” and “mutual accountability” to reform the ways donors deliver and manage aid. However, this recent shift towards “management-by-result” may or may not help close the gap between donor agencies and their clients. For one, it may exacerbate pressures to spend the money on large-scale development interventions that would guarantee the delivery of “fast, concrete and visible results” to the detriment of local initiatives requiring little external funding and which

commissions, committees, publications, missions, foreign experts, advisers, consultants, purchase of goods, issuing of contracts, etc. (Hancock 1989; Birdsall 2004).

⁵³ http://www.oecd.org/document/18/0,2340,en_2649_3236398_35401554_1_1_1_1,00.html, accessed 1 September 2007.

could bring sustainable development but in a long and less visible manner (Crespin 2006).

The broken feedback loop and the limited accountability would seem to facilitate the transformation of domestic suppliers of aid into the direct beneficiaries of aid since they possess both political power over donors' politicians and information on the needs of the poor and the outcomes of development assistance in developing countries (Martens et al. 2002).⁵⁴ Therefore, they would seem to be free to pursue their self-interest, move the money or compel governments and aid agencies to appropriate more funds to aid, thus cultivating a resource-focused rather than a quality-driven international development assistance.

Seeking possibilities of career advancements and positions of power, aid officials might also be willing to respond to pressure to spend the monies to the detriment of the quality of development projects they manage. They may tend to select large and quick-disbursing infrastructure projects, which on the other hand, may in general involve donor countries' contractors and may not necessarily reflect the poor's needs. Perhaps, subject to the same behaviors are aid officials working in the field.

Other money moving behaviors could be found in the fact that donor agencies seem to feel the imperative to always "do" something (Dichter 2003).⁵⁵ This imperative

⁵⁴ Domestic suppliers of aid are consultant firms, experts, lobbyists, contractors, NGOS, private firms, and academic institutions. They form a vast chain of principal-agent relationships. In general, they make profit out of providing goods and services used in the delivery of aid, gain access to foreign markets, and are able to function thanks to official aid funds channeled through them (Martens et al. 2002).

⁵⁵ Dichter (2003, 7) argued that the key to development lies "in the realm of the policies, laws, and institutions of a society, and to change these requires indirect kinds of approaches (stimulating, fostering, convincing) rather than *doing things directly*." A similar idea was raised by Jerve (2002).

to “act” could be explained by the “warm-glow” altruism or by aid agencies’ need for survival and growth. It can also be explained by the fact that they partially or totally depend on “other people’s money,” and as such, they are forced to satisfy the constraints attached to this type of money (Dichter 2003). In addition, the amount of aid resources spent by the international development industry into producing annual reports, publications, brochures, reports, and organizing frameworks, conferences, and summits, has often been considered as wasteful because they appear more to further the self-interests of development agencies (perpetuation, recognition, and growth) rather than the interests of the poor (Hancock 1989; Dichter 2003; Easterly 2006b).

Finally, motivated by the above mentioned incentives, aid agencies might also be willing to respond to recipient country pressures to “move the money.” Aid dependency and the volatility of aid flows explain why most developing countries would be eager to do whatever is necessary to receive as much aid as possible (Azam et al. 1999; Jerve 2002).

Certainly, the money moving behaviors cited above do not constitute a generalization. One might expect the “Money-Moving Syndrome” to vary across development agencies and over time. Different aid organizations have different incentive structures, at least on the margin, and they are also likely to differ in terms of their approach to feedback, accountability, and evaluations problems encountered in the delivery of aid. By the same token, incentives for money moving behaviors might change over time within any aid agency as it incorporates lessons learned into future planning or adopts institutional reforms.

In conclusion, when the world decided in September 2000 in New York to launch an attack on global poverty, donors committed to a substantial aid increase, under the UN Millennium Declaration, with many promising to raise aid to 0.7 percent of their GNI.⁵⁶ These commitments were later reaffirmed at subsequent UN summits: the UN summits in Monterrey, Mexico (March 2002) and in Johannesburg (September 2002); the International Forum on Aid Harmonization in Rome (February 2003); the Marrakech Round Table on Financing for Development (2004); the High Level Forum on Aid Effectiveness in Paris (2005) and the 2005 World Summit. As donor countries begin to answer those calls for more aid, the need for greater aid effectiveness appears crucial as ever. The previous section explored one important incentive problem in aid relationships, namely the pressure to spend the money; and it provided some examples of this phenomenon. The next section formally examines whether and how this incentive problem, by sacrificing quality for quantity, might hinder foreign aid's development impact in poor countries.

The Theoretical Model

This section proposes a simple theoretical model that explores how incentive structures within international donor agencies may lead to “a push” to disburse money; it also examines the extent to which these incentives may inhibit the ability of foreign aid to promote economic growth and reduce poverty.

⁵⁶ This promise by donor governments to spend 0.7% of GNI on official development assistance was initially made at the UN General Assembly in 1970, available from globalissues.org.

The general approach we use to model the problem at hand is the principal-agent model (Baker 1992; Gibbons 1998; Prendergast 1999; Courty and Marschke 2003). Other approaches are possible (such as surveys of development agencies incentive systems, or case studies), but we believe the principal-agent framework best fits the main dimension of the problem and can provide a wealth of insights and implications.

Let us assume there is an international aid organization (the principal) whose mission is to allocate aid so as to maximize poverty reduction and economic growth in poor countries. To achieve this objective, the aid agency relies on its staff members or the bureaucrats (the agents) to allocate aid funds to aid-receiving countries. The aid agency also establishes its internal incentive structure within which its personnel operate.⁵⁷ This is a fundamental aspect since the aid institution incentive system determines the performance evaluation criteria that would be used to design incentive contracts of staff members.

An ideal performance measure in an incentive contract reflects an employee's contribution to the organization's total value.⁵⁸ However, in many organizations (non-profit organizations and government agencies), employees' contribution to the organization's total value function is not objectively measurable; it is either too complex or too subtle to be objectively evaluated and thus cannot be used in an enforceable contract with employees. In other words, the principal's value function cannot be

⁵⁷ This is borrowed from Wane (2004) who showed that both the incentive system prevailing within an aid agency and a recipient country's characteristics affect the quality of aid. The importance of incentives was emphasized by the Sida Studies in Evaluation: "A successful approach to the problem of development must focus on how to generate appropriate incentives so that the time, skill, knowledge, and genuine effort of multiple individuals are channeled in ways that produce jointly valued outcomes" (Ostrom et al. 2001 p. xiii).

⁵⁸ The organization's total value refers to its fundamental objective or mission.

objectively measured (Baker 1992; Baker, Gibbons, and Murphy 1993; Gibbons 1998; Prendergast 1999; van Praag and Cools 2001; Courty and Marschke 2003).

The inability to use the organization's objective (total value) as a basis for incentive contracts leads to the use of various alternative methods of performance evaluation which have the ability to be objectively measured.⁵⁹ The relevant issue when using (imperfect) performance measurements is whether the measure used in the incentive scheme may lead to dysfunctional behavioral responses that will deteriorate or not further the true goal of the organization due to the prospect that agents tend to focus only on those aspects of the performance measure that are rewarded (Lindsay 1976; Baker, Gibbons, and Murphy 1993; Prendergast 1999; Courty and Marschke 2003).

As Baker (1992) has argued, in these circumstances, to avoid distorted incentives and obtain a contract that yields first-best outcomes, the performance measure should accurately reflect the organization's objective; in other words, the marginal product of effort (or agent's actions) on the performance measure should be perfectly correlated with the marginal product of effort (or agent's actions) on the organization's objective.

Here, we will follow the framework developed in Baker (1992). We first develop the basic approach and later, we adapt the model to our specific goals. In the Baker's model (1992), $V(e, \varepsilon)$ denotes the organization's objective (or the organization's total value or the agent's total contribution to the organization value) as a function of the agent's effort e (unobservable) and a vector of random variables ε . $V(e, \varepsilon)$ is not contractible, i.e., it cannot be directly implemented in a contract. Let $P(e, \varepsilon)$ denote the

⁵⁹ The principal can also rely on discretionary subjective performance measures, such as worker's cooperation, innovation, and dependability, which may complement or improve on the available objective performance measurements (Baker, Gibbons, and Murphy 1993).

(alternative) contractible performance measure as a function of the same variables.

$P(e, \varepsilon)$ is scaled such that the expected marginal product of effort on performance measure equals the expected marginal product of effort on value:

$E[P_e(e, \varepsilon)] = E[V_e(e, \varepsilon)]$.⁶⁰ The principal uses this performance measure to determine a linear incentive contract as follows:

$$w = s + bP(e, \varepsilon),$$

where w is the agent's compensation, s is a fixed payment or the agent's base salary,⁶¹ and b is the "piece rate" the agent receives for each unit of P . An important assumption is that the agent is asymmetrically informed about the state of the world (ε) and his informational advantage affects the choice of his effort.

Neither the principal nor the agent knows ε before signing the binding contract, but the realization of ε is known to the agent before he chooses his effort. Furthermore, it is assumed that at least some components of ε affect the marginal product of the agent's effort level on both the performance measure (P_e) and the value function (V_e). Hence, from the perspective of the principal, these marginal products are random variables. The degrees to which the two marginal products (V_e and P_e) vary with the state of the world (ε) are denoted by σ_{V_e} and σ_{P_e} , the standard deviation of V_e and P_e with respect to ε .

In the Baker's model, the agent is assumed to be risk neutral, so that his utility function takes the form:

⁶⁰ The expectation operator is taken over ε , the vector of random variables.

⁶¹ The agent's salary is chosen to ensure that worker earns his reservation utility; it has no important role otherwise (Prendergast 1999; Courty and Marschke 2003).

$$U = s + bP(e, \varepsilon) - C(e),$$

where $C(e)$ is the disutility of effort, $C' > 0$, $C'' > 0$.

The model is solved in a standard way, with the principal maximizing his total value net of compensation payments subject to the participation and the incentive compatibility constraints given respectively by:

$$E[s + bP(e, \varepsilon) - C(e)] \geq \bar{U} \quad (3.1)$$

$$bP_e(e^*, \varepsilon) = C'(e^*) \quad (3.2)$$

In equation (3.1), \bar{U} is the agent's utility given by his outside option or his reservation utility and ε is unknown. In equation (3.2), ε is revealed to the agent and he chooses e^* given b so that his marginal benefit of effort equals his marginal cost of effort. The principal's maximization problem is then:

$$\max_{b,s} E[V(e^*, \varepsilon) - s - bP(e^*, \varepsilon)],$$

subject to equations (3.1) and (3.2).

The solution to this problem yields the following expression for the optimal piece rate:⁶²

$$b^* = \frac{E[V_e e_b^*]}{E[P_e e_b^*]} \quad (3.3)$$

Equation (3.3) simply states that the optimal piece rate is equal to the ratio of the expected value of the marginal product (V_e) times the responsiveness of the agent's effort to incentives (e_b^*), to the expected product ($P_e e_b^*$). Baker (1992) points out that if e_b^* , the marginal effect of incentives on the agent's effort, is not a function of ε , it would

⁶² Baker (1992) did not show how he derived this solution, but we provide the full development in appendix C.

drop out of the formula and $b^* = E[V_e]/E[P_e] = 1$; which is the standard case in agency theory with a risk-neutral agent. However, e_b^* depends on ε in this situation; and differentiating equation (3.2) with respect to b gives:

$$e_b^* = \frac{P_e}{C'' - bP_{ee}}. \quad (3.4)$$

Substituting (3.4) into (3.3) using the second-Taylor approximation for C and P ,⁶³ and assuming without loss of generality that $E[V_e] = E[P_e] = 1$, equation (3.3) can be rewritten as:

$$b^* = \frac{\text{Cov}(V_e, P_e) + 1}{\text{var}(P_e) + 1} = \frac{\rho\sigma_{V_e}\sigma_{P_e} + 1}{\sigma_{P_e}^2 + 1}, \quad (3.5)$$

where ρ is the correlation between P_e and V_e .

An important implication of Baker's model is that, even under risk-neutrality, achieving the first-best outcomes (i.e., an optimal incentive intensity or piece rate b^* equals to one) requires that P_e and V_e have the same variance and have perfect correlation. Otherwise, the performance measure leads to distorted incentives and the contract does not induce first-best outcomes.

Now taking the 1992 Baker model as a basis, our goal is to extend the analysis to the case of development assistance by examining how incentive structures within international donor agencies may lead to “a push” to disburse money and the extent to which these incentives may inhibit the ability of foreign aid to promote economic growth and reduce poverty. Specifically, the model explores how donor agencies' institutional

⁶³ The second-Taylor approximation assumes that the second derivatives of C and P with respect to e and ε are constant (Baker 1992).

incentive systems affect the characteristics of an optimal incentive contract and thus give rise to the “Money-Moving Syndrome.” Additionally, the model derives conditions required to reach an efficient outcome in terms of the impact of aid on poverty reduction and sustainable economic growth.

It follows from Baker (1992) that an aid organization’s mission to maximize poverty reduction and economic growth is part of its total value function. In effect, aid agencies are part of a chain of principal-agent relationships which starts with taxpayers and their legislative representatives as principals who are willing to transfer appropriated funds to developing countries. They delegate the implementation of development programmes to an aid agency. The aid agency, in turn, becomes the principal to other agents in the aid delivery chain (Martens et al. 2001). Hence, the objective or the mission of an aid organization (i.e., global poverty alleviation and sustainable economic growth) is mostly defined by those ultimate principals who provide aid resources (e.g., citizens, taxpayers).⁶⁴ However, aid agencies, as agents, also have “organizational imperatives” (survival, growth, achieve and/or maintain higher status or leadership position, have greater “market share,” promote interests of stakeholders, and so on).⁶⁵ In the *corporate world*, these imperatives are completely integrated into the total value function. In development assistance, it cannot be the case; being effective for an aid agency, or accomplish its mission as stated above, would mean to “shorten the organization’s lifespan, not lengthen it,” which runs counter to its imperative to survive or grow.

⁶⁴ Note that in some cases, for example, the World Bank, part of its resources comes from loans mobilized on international capital markets.

⁶⁵ Dichter (2003) argued that these organizational imperatives evolve naturally. See chapter 3 of this dissertation for more details.

Although these organizational imperatives are experienced at different levels across aid agencies,⁶⁶ they may be translated into similar actions across organizations. Donors, whose explicit goal is to alleviate poverty and promote growth, are committed by the very nature of their mission to deliberately put themselves out of work (Dichter 2003; Ellerman 2005). Thus, when they are faced with the prospect of survival and/or growth, aid organizations, though caring about development, may naturally take actions that run counter or preclude this mission and may institute an incentive system and performance evaluation criteria somewhat fostering these organizational imperatives. Hence, an aid organization will value two elements: its true mission (aid effectiveness) and its organizational imperatives.

We proceed to extend Baker's model (1992) as follows: let $V(e, \varepsilon)$ denote the aid agency's true mission, i.e., to promote aid effectiveness in terms of maximizing poverty reduction and economic growth. As before, $V(e, \varepsilon)$ is a function of the agent's effort e (unobservable) and a vector of random variables ε . Let $O(e, \varepsilon)$ denote the aforementioned organizational imperatives, as a function of the same variables. Note that $V(e, \varepsilon)$ is not contractible because the agent's (staff in the aid agency) contribution to development is difficult to observe and evaluate. $O(e, \varepsilon)$ is also not contractile for similar reasons.

The aid agency is thus required to choose an alternative performance measure easy enough to monitor or evaluate that it can be used in an incentive contract with the

⁶⁶ It may be argued that some development agencies, such as the World Bank, would not be concerned about, for example, survival in the short-run given the number of poor in the world. Nonetheless, in the long-run, as development takes place and is both successful and sustainable, those agencies may become less necessary.

staff. Let us assume the aid agency decides on a performance measure $P(e, \varepsilon)$ defined as the volume of aid allocated within a specific period of time; e then becomes the agent's effort exerted for project identification, design, and preparation.⁶⁷ The rationale for such a choice of performance measurement is as follows: considering a development institution is in the business of “transferring” money from taxpayers in the developed world to the poor in the developing world and in a context where aid workers' contribution to development is difficult to observe and evaluate, a tendency will arise to measure performance according to the size of budgets allocated to implement and finance development projects and programs for the reason that this performance measure appears convenient and is easily monitorable. A corollary of this rationale would be to determine under which conditions the volume of aid allocated would be more likely directed towards poverty alleviation or/and organization imperatives purposes.

Let us therefore consider the following assumptions:

$$E[P_e(e, \varepsilon)] = \gamma E[V_e(e, \varepsilon)] + (1 - \gamma) E[O_e(e, \varepsilon)], \quad (3.6)$$

$$\text{where } \gamma = \frac{\theta}{c + m} \text{ and } 0 \leq \gamma \leq 1$$

$$\text{with } 0 \leq \theta \leq 1, \quad 0 \leq c \leq 1, \quad 0 < m \leq 1.$$

Equation (3.6) states that the extent to which the expected marginal product of effort on the performance measure is related to the expected marginal product of effort on both organizational imperatives and the goal to reduce poverty depends on parameters θ , c , and m . The parameter θ is a measure of the degree of accountability in the development agency, specifically accountability for effectiveness with $\theta = 1$ denoting

⁶⁷ This is similar to Wane (2004).

perfect accountability.⁶⁸ Parameter c represents the level of corruption in recipient countries, with $c = 1$ characterizing highly corrupt countries. The degree of difficulty to measure or evaluate the performance of development projects or program aid is denoted by m , where $m = 1$ embodies development activities whose effectiveness is very difficult to evaluate.

Accountability is defined as “the means by which individuals and organizations report to a recognized authority, or authorities, and are held responsible for their actions”; and accountability for effectiveness is “the extent to which the combined impact of an aid agency’s portfolio of projects is in fact positively contributing to sustainable development” (Crawford 2004). The concept of accountability also implies the possibility of negative evaluation accompanied by sanction, or the possibility of positive evaluation and reward (Wenar 2006).

Today, there is a general consensus that corruption, defined as the “abuse of public office for private gain,” deters economic growth and poverty reduction and should be eradicated (Transparency International 2007).⁶⁹ In recipient countries, especially those countries where development resources constitute a large source of finance, corruption would prevent aid to reach the targeted beneficiaries and would lessen the magnitude of the impact of aid. Additionally, considering decision-making processes over aid allocations remain for the most part outside public scrutiny, the level of corruption in some aid-receiving countries may provide donor agencies with windows of opportunities

⁶⁸ The international aid institutions should be accountable either to taxpayers in rich countries from whom resources are obtained, or to the intended beneficiaries in developing countries, or to both (Wenar 2006).

⁶⁹ See Martinez-Vazquez et al. (2004).

and incentives to yield ground to organizational imperatives and external constraints when implementing development efforts.

Evaluation of development activities is an important aspect of the accountability of donor agencies. The evaluation of a particular development effort depends on the choice of development goals, the choice of indicators used to measure goal achievement, the choice between absolute goal achievement or the overall “value-added” of the development effort, the time period over which the evaluation is conducted, and on decisions about who should do the assessment. Once there is a consensus on the above evaluation criteria, evaluation becomes more complex the more extensive the development effort. For instance, the evaluation of a single project would be quite straightforward while the evaluation of a budget support to a recipient government would be much more complex (Pitman et al. 2005). We therefore assume that the more complex it is to evaluate development efforts of a donor agency in a recipient country, the greater the opportunities and incentives for that agency to emphasize organizational imperatives over poverty alleviation or economic growth.

Various interactions between accountability, corruption and development evaluation in equation (3.6) would influence the extent to which the expected marginal product of effort on the performance measure is related to the expected marginal product of effort on both poverty reduction and organizational imperatives to survive and grow.

First, if $\gamma \rightarrow 1$, then the expected marginal product of effort on the performance measure should be close or equal to the expected marginal product of effort on the organization’s objective to alleviate poverty or promote economic growth. This criterion would be met under the following conditions:

- If an aid agency with a strong accountability system provides highly corrupt recipient countries with development assistance strictly in the form of easily measurable development activities ($\theta \rightarrow 1, c \rightarrow 1, m \rightarrow 0$); such a form of development assistance would provide the agency accountable with a margin of maneuver to police and sanction aid recipients. Conversely, such an aid agency would only implement budget supports, development policy lending, or comprehensive development frameworks whose economic, political, institutional and social ramifications render evaluations complex, in highly clean recipient countries ($\theta \rightarrow 1, c \rightarrow 0, m \rightarrow 1$).⁷⁰
- If an aid agency with a strong accountability system chooses to limit aid strictly to developing countries with good governance and very low levels of corruption and in the form of development projects and programs whose performance evaluations are easily carried out ($\theta \rightarrow 1, c \rightarrow 0, m \rightarrow 0$).⁷¹
- Finally, if an aid agency with a limited accountability chooses to restrict its development aid to the least corrupt countries and focuses on financial and technical assistance where outputs, outcomes, and impacts are easy to identify and measure ($\theta \rightarrow 0, c \rightarrow 0, m \rightarrow 0$). In this context, low aid agency

⁷⁰ Note that equation (3.6) mathematically imposes that $\theta \leq c + m$, even though accountability, corruption, and development evaluation are independent from one another. However, the expected marginal product of effort on the performance measure remains close or equal to the expected marginal product of effort on the organization's objective to alleviate poverty or promote economic growth if ($\theta \rightarrow 1, c \rightarrow 1, m \rightarrow 0$) or ($\theta \rightarrow 1, c \rightarrow 0, m \rightarrow 1$) and $\theta > c + m$.

⁷¹ The expected marginal product of effort on the performance measure remains close or equal to the expected marginal product of effort on the organization's objective to alleviate poverty or promote economic growth if ($\theta \rightarrow 1, c \rightarrow 0, m \rightarrow 0$) and $\theta > c + m$. Note that when $\theta = 1$, the aid agency is totally held accountable for producing positive results in reducing poverty and promoting economic growth. For efficiency reasons, it is important to increase accountability to the extent that this results in greater poverty reduction; because a higher degree of accountability also involves costs (Wenar 2006).

accountability would be counteracted by low levels of corruption in recipient countries and project performance assessed against easily monitorable targets and efficiency criteria.

Second, if $\gamma \rightarrow 0$, then the expected marginal product of effort on the performance measure should be close or equal to the expected marginal product of effort on aid agency's organizational imperatives to survive and grow. This criterion would be met when the following condition is satisfied:

- If an aid agency with a limited accountability ($\theta \rightarrow 0$) does not discriminate against corrupt countries and provides development assistance in the form of budget supports, development policy lending, or comprehensive development frameworks whose economic, political, institutional and social ramifications render evaluations complex ($c \rightarrow 1, m \rightarrow 1$). The same is true when an aid agency with a limited accountability chooses to implement easily measurable development activities in highly corrupt countries ($c \rightarrow 1, m \rightarrow 0$) or conversely, to provide development policy lending in support of policy and institutional reforms to the least corrupt countries ($c \rightarrow 0, m \rightarrow 1$). In these three cases, aid officials are given windows of opportunities to satisfy the aid agency's organizational imperatives to survive or grow.

Finally, for any other level of accountability and corruption and any other level of difficulty to evaluate development activities, the expected marginal product of effort on the performance measure would be equal to a linear combination of the expected marginal product of effort on poverty reduction and the expected marginal product of effort on organizational imperatives to survive and grow. In other words, at any other

level of accountability and corruption and any other level of difficulty to evaluate development activities, an aid official would work for and allocate his/her effort simultaneously to both the aid agency's mission to reduce global poverty and its imperatives to survive.

A second important set of assumptions relates to the relationship between $V(e, \varepsilon)$, $O(e, \varepsilon)$ and $P(e, \varepsilon)$. The aid agency's total value function is defined by:

$$W(e, \varepsilon) = \alpha O(e, \varepsilon) + (1 - \alpha)V(e, \varepsilon) \quad (3.7)$$

In other words, the development agency cares about both aid effectiveness and its organizational imperatives. The parameter α is the preference weight on organizational imperatives, where $0 < \alpha < 1$. All other assumptions of the Baker's model remain.

The principal's maximization problem becomes:

$$\max_{b, s} E[W(e^*, \varepsilon) - s - bP(e^*, \varepsilon)],$$

subject to equations (3.1) and (3.2).

The solution to this problem yields the following optimal incentive intensity for a risk-neutral agent:⁷²

$$b_1^* = \frac{\alpha E[O_e e_b^*] + (1 - \alpha)E[V_e e_b^*]}{E[P_e e_b^*]}. \quad (3.8)$$

As before, if the marginal effect of incentives on the agent's effort is not a function of ε , i.e., e_b^* does not depend on ε , e_b^* would drop out from equation (3.8) and the optimal

piece rate becomes $b_1^* = \frac{\alpha E[O_e] + (1 - \alpha)E[V_e]}{E[P_e]}$, where $E[P_e] = \gamma E[V_e] + (1 - \gamma)E[O_e]$

⁷² See appendix C for a complete derivation of the optimal piece rate.

given the assumption in equation (3.6). In this case, b_1^* would be equal to one when $\alpha + \gamma = 1$; in other words, the closer γ is to one, the smaller the preference weight attached to organizational imperatives. This result implies the following proposition:

Proposition: In a bilateral or multilateral aid agency, the preference weight attached to organizational imperatives to survive and grow is small when:

- The accountability for effectiveness is very high and attached to readily measurable development activities implemented in the least corrupt countries
- The accountability for effectiveness is very high and attached to readily measurable development activities implemented in corrupt countries, and vice versa (negative relation between c and m).
- The accountability for effectiveness is limited but attached to readily measurable development activities implemented in the least corrupt countries.

Substituting (3.4) into (3.8), using the second-Taylor approximation for C and P , the optimal incentive intensity becomes:

$$b_1^* = \frac{\alpha E[O_e P_e] + (1 - \alpha) E[V_e P_e]}{E[P_e^2]}. \quad (3.9)$$

Equation (3.9) can easily be rewritten as follows:⁷³

$$b_1^* = \frac{\alpha (\text{cov}(O_e, P_e) + E[O_e] \cdot E[P_e]) + (1 - \alpha) (\text{cov}(V_e, P_e) + E[V_e] \cdot E[P_e])}{\text{var}(P_e) + (E[P_e])^2}, \quad (3.10)$$

or

$$b_1^* = \frac{\alpha (\rho_1 \cdot \sigma_{O_e} \cdot \sigma_{P_e} + E[O_e] \cdot E[P_e]) + (1 - \alpha) (\rho_2 \cdot \sigma_{V_e} \cdot \sigma_{P_e} + E[V_e] \cdot E[P_e])}{\sigma_{P_e}^2 + (E[P_e])^2}, \quad (3.11)$$

⁷³ See appendix C for a complete derivation of the optimal piece rate.

where ρ_1 is the coefficient of correlation between O_e and P_e , and ρ_2 is the coefficient of correlation between P_e and V_e , and $E[P_e] = \gamma E[V_e] + (1 - \gamma)E[O_e]$.

As mentioned in the beginning of this section, an incentive contract is efficient i.e., induces first-best outcomes, when the optimal incentive intensity or piece rate b^* equals to one. Per this definition, an incentive contract would be efficient whether it achieves first-best outcomes in terms of aid effectiveness or first-best outcomes in terms of promoting organizational imperatives to survive and grow. However, we are interested in an incentive contract where an aid organization's incentive structure would influence the chosen performance measure in such a way that would elicit an "effective" effort from aid officials, i.e., a level of effort that not only would affect their reward but also contribute as much as possible to the aid agency's true mission to reduce poverty and promote economic growth (Praag and Cools 2001). Consequently, "efficiency" hereafter would refer to efficiency in terms of poverty alleviation and sustainable growth.

Under the assumption that development aid agencies also face organizational imperatives that may justify the choice of a performance measure based on the amount of aid allocated within a specific period of time,⁷⁴ the characteristics of an optimal incentive contract based on such performance evaluation and the conditions for efficient outcomes depend on the imperatives of aid organizations and their degree of accountability, the level of corruption in recipient countries and how difficult it is to assess development activities.⁷⁵

⁷⁴ As aforementioned, other reasons to evaluate performance based on the amount of money spent are explored in section 1 of chapter 3. However, here we focus on organizational imperatives.

⁷⁵ The pertinent equations for the discussion are equations (3.6) and (3.11).

First, if concerns about poverty alleviation and economic growth are predominant in a development agency and if there is a high level of accountability attached to readily measurable development activities implemented in the least corrupt countries, such that $\alpha \rightarrow 0$ and $\gamma \rightarrow 1$, then a first-best linear incentive contract for a risk-neutral agent is obtained when the marginal product of the agent's effort level on both the performance measure (P_e) and the aid agency's true mission (V_e) have the same variance and have perfect correlation. The first-best linear incentive contract could also be obtained under the aforementioned conditions in the cases where the accountability for effectiveness is very high and attached to readily measurable development activities implemented in corrupt countries, and vice versa, or where the accountability for effectiveness is limited but attached to readily measurable development activities implemented in the least corrupt countries. In such an aid agency, the performance measure creates an incentive to direct each unit of effort/money towards its poverty alleviation mission; the staff is encouraged to choose projects and adopt policies more likely to promote development. Furthermore, if the recipient country is highly corrupt, perfect accountability would require that the agency implement development projects and program aid whose performance evaluation is easily carried out, and vice versa (negative relation between c and m). Lower levels of aid agency accountability would be offset by low levels of corruption in recipient countries and project performance assessed against easily monitorable targets. In this case, the quantity of aid disbursed factors in aid “quality.”⁷⁶

This is the *Quality-Aid Incentive Scheme* (figure 2).

⁷⁶ According to the Commitment to Development Index 2006 developed by the Centre for Global Development (CGD), “quality” aid, among other things, excludes tied aid, subtracts debt payments by developing countries on aid loans, and favors poor and uncorrupt countries.

Second, it could also happen that concerns about poverty alleviation and economic growth are predominant within an aid agency with limited accountability where, on the one hand, development assistance programs do not discriminate against corrupt countries and are provided in the form of development policy lending inherently difficult to evaluate. On the other hand, low aid agency accountability could also be attached to easily measurable development activities in highly corrupt countries or to development activities difficult to evaluate and implemented in least corrupt countries such that $\alpha \rightarrow 0$ and $\gamma \rightarrow 0$. In these circumstances, the expected marginal product of effort on effectiveness should be equal to the expected marginal product of effort on organizational imperatives in order to maintain the efficiency of the contract. Otherwise stated, despite strong concerns for development effectiveness, the above combination of limited accountability and levels of corruption and project performance measurability would leave room to organizational imperatives however weak they may be, and thus to the possibility to “move the money.” One solution to dampen this possibility of money-moving syndrome might be to restrict development assistance to countries with low levels of corruption and in the form of development projects and programs with higher levels of performance measurability (*Quality-Aid Incentive Scheme with Limited Accountability*).

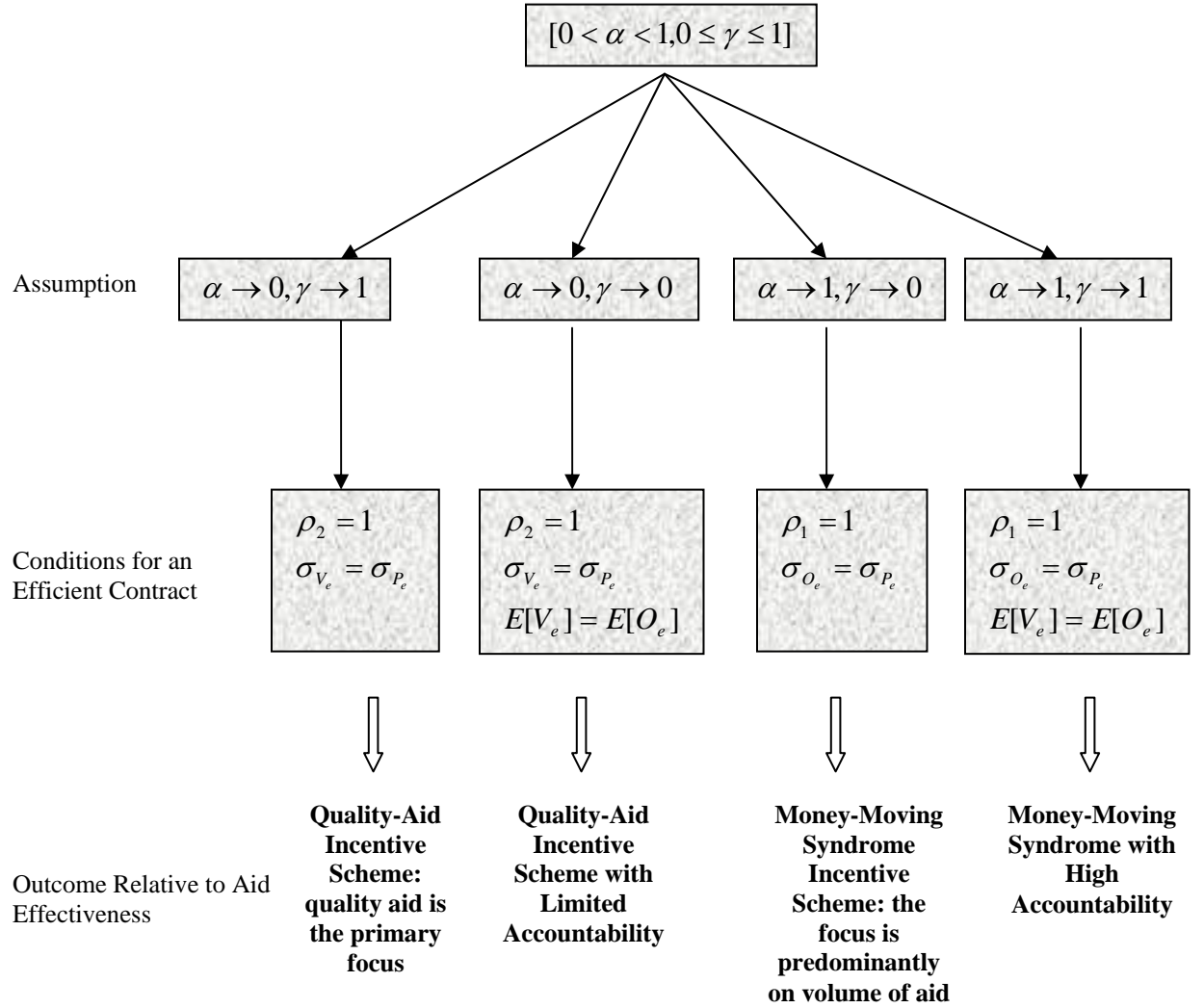
Third, if the internal imperatives of an aid organization largely outweigh the goal of effectiveness ($\alpha \rightarrow 1$) and the levels of accountability, corruption and project performance measurability are such that the expected marginal product of effort on the performance measure equals the expected marginal product of effort level on organizational imperatives, meaning $\gamma \rightarrow 0$, then the chosen performance measure would

elicit a level of effort that would contribute as much as possible to the aid agency's organizational drive to grow if and only if the marginal product of the agent's effort level on both the performance measure (P_e) and organizational imperatives (O_e) have the same variance and have perfect correlation. However, the incentive contract would not be efficient in terms of poverty reduction and sustainable economic growth. Each unit of effort/money would be directed towards the organization's imperative to survive, to grow, or maintain its global status. Therefore, the focus is predominantly on volume of aid disbursed rather than on the impact of aid disbursement on development. This situation is encountered when aid agencies with limited accountability and high preference for survival adopt development assistance programs that do not discriminate against corrupt countries and are provided in the form of budget support or program aid more difficult to evaluate; or when these agencies implement easily measurable development activities in highly corrupt countries and vice versa. This is the *Money-Moving Syndrome Incentive Scheme*, a state where the quantity of foreign aid committed or disbursed becomes, in itself, an important objective side by side or above the effectiveness of aid (figure 2).

Finally, let us modify the previous case in such a way that the internal imperatives to survive are still largely predominant in the aid organization ($\alpha \rightarrow 1$), but this time $\gamma \rightarrow 1$, i.e., the levels of accountability, corruption and project performance measurability are such that the expected marginal product of effort on the performance measure equals the expected marginal product of effort level on aid effectiveness. In this case, the performance measure would still align, as closely as possible, aid officials' levels of effort and aid agency's imperatives to survive and grow if an additional condition is taken

into account: the expected marginal product of effort on organizational imperatives equals the expected marginal product of effort on effectiveness. In other words, despite a high preference for survival, a combination of high level of accountability attached to readily measurable development activities implemented in the least corrupt countries would compel aid workers to somewhat choose projects and adopt policies that are more likely to promote development. Further pressures to emphasize organizational imperatives over aid effectiveness would be discouraged where the accountability for effectiveness is very high and attached to readily measurable development activities implemented in corrupt countries, and vice versa, or to some extent where the accountability for effectiveness is limited but attached to readily measurable development activities implemented in the least corrupt countries (*Money-Moving Syndrome Incentive Scheme with High Accountability*).

Figure 2: Analytical Illustration of the Effects of “Money Moving” Incentives on Aid Effectiveness



Conclusion

In general, international development agencies’ principal mission is to reduce global poverty and promote sustainable economic growth. Concurrent to this mission, external constraints, institutional structures and the incentives they generate may help or hinder development efforts. Among these institutional incentives and external constraints, are organizational imperatives to survive and grow, the “warm glow” effect, the lack of

checks and balances, and the difficulty to evaluate and quantify the overall impact of aid; factors that have been identified in this study as providing a motive for money moving behaviors within international development agencies. In the theoretical model, we assumed that, given the difficulty to quantify the overall impact of aid, an aid agency that values its mission and is concerned about organizational imperatives (or warm glow) may choose to evaluate staff performance according to the size of budgets allocated to implement and finance development projects and programs. The extent to which this performance measure affects aid effectiveness would depend on the level of institutional imperatives, the degree of accountability within the aid agency, the level of corruption in recipient countries and the degree of difficulty to evaluate development activities.

The theoretical model suggests, among other things, that as long as concerns about poverty alleviation and economic growth are predominant and a high level of accountability is attached to readily measurable development activities implemented in the least corrupt countries, the quantity of aid disbursed would factor in aid “quality.” This is explained by the fact that the staff is given the incentive to direct each unit of effort and money towards projects and policies more likely to promote development. On the other hand, where, for example, organizational imperatives outweigh the goal of aid effectiveness and limited accountability is attached to development assistance programs that do not discriminate against corrupt countries and are provided in the form of budget support or program aid more difficult to evaluate, each unit of effort and money would be mainly directed towards promoting organizational imperatives, because the staff face the incentive to focus on the amount of money disbursed rather than the impact of that

amount of aid on development. This occurrence is called the “Money-Moving Syndrome.”

CHAPTER IV

EMPIRICAL ANALYSIS

The objective of this chapter is to test several predictions of the theoretical model. We develop an empirical framework to examine the extent to which organizational imperatives for “survival,” perpetuation, recognition, and growth affect international aid agencies’ incentive structures and thus their mission to reduce global poverty and promote sustainable economic growth. In particular, the empirical framework analyzes the extent to which incentives to move the money stemming from these imperatives are present within donor agencies and coexist with genuine concerns about aid effectiveness to shape aid agencies’ decisions regarding project loan size to developing countries.

This chapter is organized in five sections. It begins with an overview of the empirical approach used to test the existence of the “Money-Moving Syndrome.” In the second section, we offer a description of variables and data sources used in the empirical analysis. The empirical methodology is described in the third section. In section four, we present our main set of hypotheses testing the existence of the “Money-Moving Syndrome” within the World Bank practices. In the last section, we develop the empirical model and specify the estimation equations used to test our set of hypotheses.

Overview

At this stage, it is important to recognize that the nature and the limitation of the data available do not allow us to derive the testable empirical hypotheses entirely from the theoretical model presented in the previous chapter; therefore attenuating the connection between theory and empirics in this dissertation. However, we could draw from the theoretical model several predictions readily testable empirically and complete them with testable hypotheses derived from the money moving literature reviewed in the second chapter.

As discussed in previous chapters, the purpose of this dissertation is to examine the prevalence of the “Money-Moving Syndrome” within international donor agencies and its role as a potential factor in the low performance of foreign aid in terms of poverty alleviation and growth enhancement in developing countries.

One approach in attempting to gauge the prevalence of the “Money-Moving Syndrome” within donor agencies would be to identify the determinants of project size or net commitment amounts to aid recipient countries.

However, an analysis of the impact of the “Money-Moving Syndrome” on the effectiveness of foreign aid is less straightforward. An ideal model specification would be one in which there is a relationship between a measure of aid effectiveness as a dependent variable and a measure of the “Money-Moving Syndrome” as an explanatory variable plus a set of other control variables. For example, at the aid institution level, we would analyze the extent to which the “Money-Moving Syndrome” is present in each project commitment and disbursement levels and then analyze how it affects the performance of that project.

However, while there are many variables readily available that could be used to measure the overall impact of aid,⁷⁷ this is not so for the “Money-Moving Syndrome.” To the extent of our knowledge, variables or proxies explicitly capturing independent institutional biases toward money moving at the expense of the development impact are not currently available. This issue was already raised by Fleck and Kilby (2005a). Moreover, there are not yet any variables specifically capturing money moving incentives faced by aid officials in aid agencies and other organizations involved in development assistance.⁷⁸

Consequently, it appears that estimating a direct relationship between aid effectiveness and “Money-Moving Syndrome” is not yet feasible. Nevertheless, as emphasized by the review of literature in chapter two, there is good reason to believe that a high degree of “Money-Moving Syndrome” will somewhat lead or contribute to aid ineffectiveness for the simple reason that, in this context, what matters the most is the volume of aid disbursed rather than its actual impact on poverty reduction or economic growth.

In our context, we posit that evidence in support of the “Money-Moving Syndrome” can perhaps be used to provide evidence as to why foreign aid has not been more effective in reducing global poverty and promoting economic growth among

⁷⁷ For instance, variables such as GDP per capita growth, life expectancy at birth, adult literacy rate, primary, secondary or tertiary enrolment ratio, and so on.

⁷⁸ As far as we know, the Swedish International Development Cooperation Agency (SIDA) is the only aid agency which attempted to determine if its employees felt pressures to disburse the budget within the appropriation period. Amongst the 46 randomly selected Sida Desk Officers interviewed, around 31 officers indicated that they had been under the pressure to “move the money,” especially at the end of the end of the budget year (Ostrom et al. 2001).

developing countries, despite the large amount of resources involved in achieving this goal over the years.

Variables Description and Data Sources

Foreign assistance is delivered through a collection of projects and programs offered by different multilateral aid agencies or bilateral donors to developing countries (Wane 2004). These development projects and programs are in general “donor-driven.” This means that international development agencies are highly involved in the identification, design, implementation, and evaluation of those projects and programs in poor countries. In this context, bilateral and multilateral aid agencies might be interpreted as being as responsible as developing countries for the effectiveness of foreign aid through the quality of aid they provide.⁷⁹ It is therefore sound to examine whether the “Money-Moving Syndrome” is present in aid agencies’ decisions over loan amounts for projects in aid-receiving countries. Of course, our underlying hypothesis is that whether incentives to move the money are present or not would influence aid quality and thus aid effectiveness.

However, obtaining comprehensive project databases from International Financial Institutions (IFIs) and bilateral organizations is not an easy task and is often impossible.⁸⁰

⁷⁹ Some authors have shown that donor agencies could improve the quality of the aid they provide. For example, Deininger, Squire, and Basu (1998) showed that the economic and sector work (ESW) provided by the World Bank improves the quality of World Bank lending portfolio. Kilby (2000) showed that early supervision and the amount of supervision improve the performance of World Bank-funded projects.

⁸⁰ Regarding some bilateral agencies, the USAID’s “Greenbook” for instance shows a complete record of the U.S. foreign aid (loans and grants) to the rest of the world for each fiscal year since 1949. However, this database does not contain any information on the performance of those projects. Also, the Office of Inspector General in charge of the efficiency and effectiveness in the operations of the USAID does not release data on the performance of USAID’s projects overseas.

In 2005, the Bank Information Center (BIC) and *freedominfo.org* developed the IFI Transparency Resource, an extensive information tool which compares the transparency standards of ten IFIs, including the World Bank and the regional development banks.⁸¹ The Transparency Resource was developed to encourage greater openness by the IFIs and promote higher global governance standards within the IFIs. The data in the Resource examines the ten IFIs' operations and projects and compare them across around 250 indicators of transparency (IFI Transparency Resource 2005).⁸²

One indicator is the “Final staff assessment of project” which provides critical information about institution, borrower, and implementing agencies' performance; and an evaluation of implementation of various aspects of the project. Another indicator is the “Evaluation unit assessment or audit of project” conducted by the Operations Evaluation Department of the institution and which assesses if the original objectives of the project have been satisfied and determines the project overall performance. The IFI Transparency Resource comparison of the ten IFIs across these two indicators revealed that, with the exception of the World Bank, the IFIs in general do not disclose information related to their evaluations and assessments related to a given project or operation (IFI Transparency Resource 2005).

⁸¹ The ten IFIs examined in the Transparency Resource are the Asian Development Bank (ADB), the African Development Bank (AfDB), the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Inter-American Development Bank (IDB), the International Finance Corporation (IFC), the Inter-American Investment Corporation (IIC), the International Monetary Fund (IMF), the Multilateral Investment Guarantee Agency (MIGA), and the World Bank (IFI Transparency Resource 2005).

⁸² The IFI Transparency Resource was launched in 2005 but it has been regularly updated.

We thus requested the World Bank projects database, and after a careful review of the request and dissertation outline by the Bank, we were finally able to obtain the data. However, contrary to the IFI Transparency Resource, some important variables we specifically requested (such as sub-ratings data, discussed in the section below) were omitted from the dataset. The reason given was that these data are “not currently disclosed.”

For all the obvious reasons, the empirical analysis in this chapter focuses exclusively on the World Bank-funded project database. Due to the unavailability of the data on projects and programs funded by other bilateral and multilateral donor agencies, the World Bank will be used as a proxy for the performance of all other donors in the development field.

The econometric analysis draws on 1,977 World Bank projects approved in 134 developing countries between 1984 and 2006 and completed between 1993 and 2007. The central variables in this analysis are project loan size or net commitment (dependent variable), various measures of project success and the World Bank’s and borrower’s performance in various stages of the project life cycle. We consider a variety of other project characteristics such as administrative regions, economic sector or network, and lending instrument types. These project-level variables are reported by the Independent Evaluation Group (IEG) of the World Bank. Additionally, the aid literature has long emphasized that GDP per capita, growth rate of GDP per capita, population size (indicators of need) and macroeconomic policy indicators such as inflation and trade openness (indicators of country merit) are important factors influencing aid allocation

and therefore project size in developing countries.⁸³ It is then important to control for these variables. All macroeconomic and policies variables included in the empirical analysis are drawn from the World Development Indicators (World Bank 2006) and the Penn World Tables (Heston et al. 2006). They cover a period from 1984 to 2004. Governance indicators such as corruption and bureaucracy quality over the same period are also retained in our analysis.

From an original population of 7,260 projects transmitted to us, only 2,078 were found to have complete measures of project success and bank and borrower performance. Of these, 101 other projects displayed a size of zero and have been excluded. This leaves us with 1,977 projects in our sample. The resulting dataset is a project-level independently pooled cross-section dataset. The summary statistics and the definition of all variables are presented in table D1 through table D3 of appendix D.

The choice of the dependent and explanatory variables presented in detail below stems from the propositions and implications of theoretical model we developed in chapter three. In the model, we assumed that because aid officials' contribution to development is difficult to observe and evaluate, a tendency will arise to measure performance according to the size of budgets allocated to implement and finance development activities for the reason that this particular performance measure appears convenient and is easily monitorable. However, the extent to which the chosen performance measure would elicit an "effective" effort from aid officials, i.e., a level of effort that would contribute as much as possible to an aid agency's true mission to reduce poverty and promote economic growth, would depend on factors such as: aid agency's

⁸³ See Burnside and Dollar (2000), Alesina and Dollar (2000), and Kilby (2000) for more details.

preferences for organizational imperatives to survive and grow, degree of aid agency's accountability for effectiveness, level of corruption in recipient countries and level of performance measurability. The main propositions of the model are as follows:

(a) As long as concerns about poverty alleviation and economic growth are predominant, and a high level of accountability is attached to readily measurable development activities implemented in the least corrupt countries, the staff is given the incentive to direct each unit of effort and money towards projects and policies more likely to promote development. Therefore, the quantity of aid disbursed would factor in aid "quality."

(b) On the other hand, if organizational imperatives outweigh the goal of aid effectiveness and limited accountability is attached to development activities that do not discriminate against corrupt countries and are provided in the form of budget support or program aid more difficult to evaluate, the staff is given the incentive to direct each unit of effort and money towards promoting organizational imperatives. Therefore, the focus would be on the amount of money disbursed (aid "quantity") rather than the impact of that amount of aid on development.⁸⁴

These two propositions and other propositions derived from the model justify the choice of project loan size as the dependent variable. Indeed, this variable offers the possibility to separate the component "quality" from the component "quantity" in the volumes of aid resources allocated to developing countries. From the set of explanatory variables included in the model that would influence the quantitative and qualitative aspects of official aid (such as aid agency's preferences for organizational imperatives to

⁸⁴ *Quality* of foreign aid refers to its output whereas *quantity* of aid refers to its input. A complete definition of aid quality is provided in appendix A.

survive and grow, degree of aid agency's accountability for effectiveness, level of corruption in recipient countries and level of performance measurability), only data on corruption and performance measurability are readily available and therefore used in the testable empirical hypotheses. As aforementioned, other explanatory variables that have been known to significantly influence the quantitative and qualitative aspects of aid (such as GDP per capita, growth rate of GDP per capita, population size, inflation, trade openness, and bureaucracy quality) have been drawn from the literature (discussion of the relevance of these variables is in section four).

Dependent Variable

Our dependent variable is a measure of project's size and reflects the degree of World Bank involvement.⁸⁵ It is called the Net Commitment Amount (in millions of current dollars) and is calculated as total commitments net of cancellations for all projects in the World Bank portfolio (Annual Report on Portfolio Performance 2006).

An important part of a development project is the mode and amount of financing required for the project. The proposal for financing the project may involve a loan component from the World Bank. The World Bank may then approve the loan amount for the project based upon mutually agreed upon terms and conditions.⁸⁶ The amount of loan approved is called the committed loan amount. Once the loan is approved, the borrower should meet certain conditions (in terms of the project), before the loan becomes effective. Upon the loan becoming effective, the World Bank may disburse the

⁸⁵ Hereafter, project size, loan amount, and net commitment will be used interchangeably in the chapter.

⁸⁶ Loan Approval by the Board of Directors occurs at stage 5 of the World Bank Project Cycle (see appendix E).

loan. For closed (completed) projects, net commitments equals to all disbursements made.⁸⁷

Independent Variables

Our main independent variables of interest are three project performance rating criteria developed by the World Bank's Independent Evaluation Group (IEG): (1) overall project outcome, (2) project's sustainability, and (3) project's contribution to institutional development in the borrowing country. These indicators are available from *ex-post* evaluations conducted by the IEG and provide an assessment of the overall performance of a *completed* project.

The overall project outcome is the extent to which the project's major relevant objectives were achieved, or are expected to be achieved, efficiently. Project outcome is rated on a six-point scale: highly satisfactory, satisfactory, moderately satisfactory, moderately unsatisfactory, unsatisfactory, and highly unsatisfactory.

Sustainability reflects the resiliency to risks of a project as measured by the likelihood that its estimated net benefits will be maintained or exceeded over the project's intended useful life. Sustainability is rated using the following five-point scale: highly likely, likely, uncertain, unlikely, and highly unlikely.

Finally, the institutional development impact measure assesses the extent to which a project improves the ability of a country to use its human, financial, and natural resources efficiently, equitably, and in a sustainable manner. This last measure is rated using a four-point scale: high, substantial, modest, and negligible (Independent

⁸⁷ This information was provided by the Loan Services Group at the World Bank.

Evaluation Group 2006). These performance ratings are transformed into dichotomous variables for the econometric analysis.

Other independent variables of interest include the IEG's evaluations of bank and borrower performance. The goal of these evaluations is to determine how good a job each partner has done during the different stages of the project cycle, i.e., project identification, preparation, appraisal and implementation. However, only the overall bank and borrower performance are available in our dataset. In the case of the bank, the quality at entry and quality of supervision ratings are combined into a rating of overall *bank performance*. This rating is based on a six-point scale from highly satisfactory to highly unsatisfactory, where “highly satisfactory” means that the bank performance was rated highly satisfactory on both dimensions.⁸⁸ In the case of the borrower, ratings for government performance and implementing agency (ies)’s performance are combined into a rating of *borrower performance*. This rating is also based on a six-point scale, where “highly satisfactory” means that the borrower performance was rated highly satisfactory on both dimensions.⁸⁹

Another potentially useful variable is the Implementation Completion Report or ICR quality. This is a project performance evaluation conducted by the operational staff

⁸⁸ It should be noted that when the rating for one dimension is in the satisfactory range while the rating for the other dimension is in the unsatisfactory range, the rating for overall *bank performance* normally depends on the *outcome* rating. Thus, overall *bank performance* is rated *Moderately Satisfactory* if *Outcome* is rated in the satisfactory range or *Moderately Unsatisfactory* if *outcome* is rated in the unsatisfactory range, except when Bank performance did not significantly affect the particular outcome (Independent Evaluation Group 2006).

⁸⁹ A similar guidance rule as in the previous footnote applies for the borrower performance rating.

of the Bank itself but not by the IEG; in that regard, it is a self-evaluation.⁹⁰ ICR quality is rated as exemplary, satisfactory, or unsatisfactory.

All the above-mentioned performance ratings are also transformed into dichotomous variables for the econometric analysis.

In the following paragraphs, we discuss other variables of interest that can be potentially used as control independent variables (discussion of the relevance of these variables is in section four).

First, other project characteristics that could be used in this study consist of:

- i) Administrative regions (Africa; Asia; Europe, Middle East and North Africa; and Latin America and Caribbean) which correspond to the major operational divisions of the World Bank
- ii) Economic sectors (Agriculture, Health, Education, Transport, and so on), which reflect the type of project.⁹¹
- iii) Projects are also categorized by type of lending instruments. There are two types of lending instruments: investment lending and adjustment lending.⁹² Investment lending provides long-term financing for a variety of activities in various sectors aimed at building the physical and social infrastructure necessary for

⁹⁰ The IEG nevertheless reviews every ICR and validate the self-rating (see http://www.worldbank.org/oed/oed_tools.html).

⁹¹ In total, 17 sectors are represented in the IEG dataset.

⁹² In 2004, adjustment lending was replaced by development policy lending (see <http://go.worldbank.org/56JYOB4OV0>), accessed 10 February 2008.

development. Adjustment lending provides quick-disbursing financing to support policy and institutional reforms in developing countries.⁹³

- iv) In the IEG dataset, each project has also an approval fiscal year, an approval date, an exit fiscal year, a deactivation date (or closing date) and an evaluation date.

We also control for macroeconomic conditions in the borrower country which may influence Bank managers' decisions over project size or loan amount. The variables taken into account are some measures of poverty or need in the recipient country, such as GDP per capita, growth rate of GDP per capita, and some policy indicators such as inflation and trade openness. These data are compiled from the World Bank's *World Development Indicators* (World Bank, 2006) and the Penn World Tables (Heston et al. 2006). Other variables likely to affect decisions over project size or loan amount are corruption and bureaucracy quality, governance indicators compiled from the International Country Risk Guide (ICRG).

A brief overview of the World Bank's lending portfolio size, composition, and performance is presented in Table D4 through Table D7 of appendix D. Table D8 reports the frequency distribution of projects per aid recipient country.

Tables D4 and Table D5 report the size of the loan by region, sector, and overall project outcome respectively. Clearly, from 1984 to 2006, East and South Asia received on average the largest amount of net commitments (around \$1.1 billion) for a total of 510 operations. With near 78 percent successful outcomes weighted by number of projects,

⁹³ For more information on Investment and Development Policy Lending, refer to <http://go.worldbank.org/Y5DDIIBTY0> and <http://go.worldbank.org/NIOSPCWSA0>, accessed 10 February 2008.

this region is well above the Bank's average of 74 percent. This is the case for most regions except Sub-Saharan Africa. Over the same period, Sub-Saharan Africa's total net commitment averaged \$36 million with the largest number of operations (544) financed by the World Bank during that period. However, the breakdown of successful development outcomes by region revealed that Sub-Sahara Africa's low successful outcomes rating at 61 percent, weighted by number of operations, is well below the Bank-wide average of 74 percent.

A detailed analysis of development outcomes by Sector Boards (Table D5) shows that during the same period, the Finance sector outperformed other sectors in successful development outcomes in terms of number of operations; furthermore the Finance portfolio was the largest, with an average net commitment of \$1.44 billion. Two sectors (Environment & Social Development and Private Sector Development) had successful development outcomes below the World Bank's average of 74 percent; each sector receiving around \$50 million in net commitments.

Table D6 shows development outcomes by loan size and approval month. Compared to other operations, projects approved at the end of the fiscal year (March, April and May) had successful outcomes weighted by number of projects below the Bank's average; moreover, their average portfolio from 1984 to 2006 is close to the average portfolio of operations approved during the remainder of the fiscal year.

Operations considered difficult to evaluate are the largest in the Bank's portfolio, with an average loan size of about \$1.75 billion concentrated on 264 operations and with development outcomes at 80 percent successful by number of projects. On the other

hand, operations considered easy to evaluate received on average \$80 million with successful development outcomes slightly above the Bank's average (Table D7).

Empirical Methodology

To examine the extent to which “Money-Moving Syndrome” and concerns for poverty alleviation coexist within the World Bank, we use the independently pooled Ordinary Least Squares (OLS) estimation. Indeed, projects subject to a Project Performance Assessment Report (PPAs) conducted by the World Bank's Independent Evaluation Group (IEG) are randomly selected each year from a population of completed projects. One in four completed projects (around 70 projects a year) is subject to a Project Performance Assessment Report. Unfortunately, data on projects not approved, and projects approved and completed but not subject to Project Performance Assessment are not reported.

In addition, we use specific estimation procedures in an attempt to address potential econometric issues. Due to of the possible nonlinear effects of population and GDP per capita, these two variables are entered in the regression in logarithm and quadratic terms respectively. To control for potential heteroskedasticity in the error term, we use the White heteroskedasticity-robust standard errors. To account for any historical factors that could potentially affect the current decisions regarding project loan size, or to control for unobserved factors (projects and country unobservables) that affect current project loan size and are likely to be correlated with one or more of the independent variables (endogeneity bias), we use a lagged dependent variable. Using this technique as

a way to control for unobservables is not perfect but it allows us to obtain better estimates of our main variables of interest.

Testable Hypotheses

Our empirical work attempts to explain the “net commitments” dependent variable as fully as possible by controlling for all independent variables that may positively affect the size of the net commitments; but at the same time to include other explanatory variables that may reduce if not eliminate the size of net commitments.

Evidence supporting the existence of a “Money-Moving Syndrome” will be provided if: a) we find those variables that are expected to take a negative sign to actually take a positive and significant coefficient (for example, the higher the level of corruption in the country as measured independently by Transparency International, the higher the level of net commitments); and b) we find those variables that are expected to have a positive sign actually being insignificant or taking a negative and significant coefficient.

Specifically, after controlling for country- and project-specific factors, we are interested in determining the extent to which the World Bank’s managers take into consideration past project performance, bank and borrower performance when making decisions regarding the loan amount of a new development project. In effect, we would expect that, before choosing the loan amount of an additional development assistance project in a country, a country manager concerned about project performance would take into account the relevance and efficiency of past projects in the country, their sustainability, their impact on institutions, and the quality of the work done by both the

Bank and the borrower in various stages of past projects (*hypothesis 1*).⁹⁴ Reckoning with this information as well as with country specific characteristics may have a positive impact on the effectiveness of a new development assistance project approved in a recipient country. In effect, it provides an estimate of the likelihood of success of the Bank's future development projects and programs in a country and may reduce the "excessive optimism" about conditions in recipient countries that often plagues development organizations preoccupied with volume of lending rather than effectiveness of loans. Another advantage of such an analysis is that it provides an idea of whether the World Bank encourages a learning environment, i.e., whether past knowledge affects future planning within the Bank.

However, a regression of net commitments on past overall project performance ratings or even past overall Bank and borrower performance may not be a correct specification because these ratings may not yet be available to the country manager at the time he/she is making a decision regarding the loan amount of a new project. A solution to this problem would be to use sub-ratings of past projects performance i.e., performance ratings at the design, preparation, and implementation stages of past projects. Unfortunately, the IEG sub-rating data are not disclosed to the public.

To circumvent this problem, we use the performance ratings of past projects which, at the time of the approval of a new project, are at least *halfway to the end* or at least *three- quarter to the end* (figure 3). The idea is that if past projects are, for instance, at least halfway to the end at the time of approval of a new project, the country manager may already possess some relevant information about the overall future performance of

⁹⁴ We could also argue that, in his/her decision-making process, the country manager should heavily weigh the performance of the most recently completed projects and the bank and borrower performance for those projects, rather than the projects that were completed a long time ago.

these projects. In effect, when a project is *halfway completed*, performance ratings at design, preparation, implementation and supervision stages of the project are already known (see appendix E). Furthermore, previous studies on the World Bank lending portfolio have shown that a project with a satisfactory quality at entry has a higher probability of performing well than a project with design problems from the start; the stock of prior economic and sector work (ESW) improves the quality of World Bank lending; and the timing and intensity of supervision have a positive impact on a project's probability of success (Deininger et al. 1998; Kilby 2000; Wane 2004).

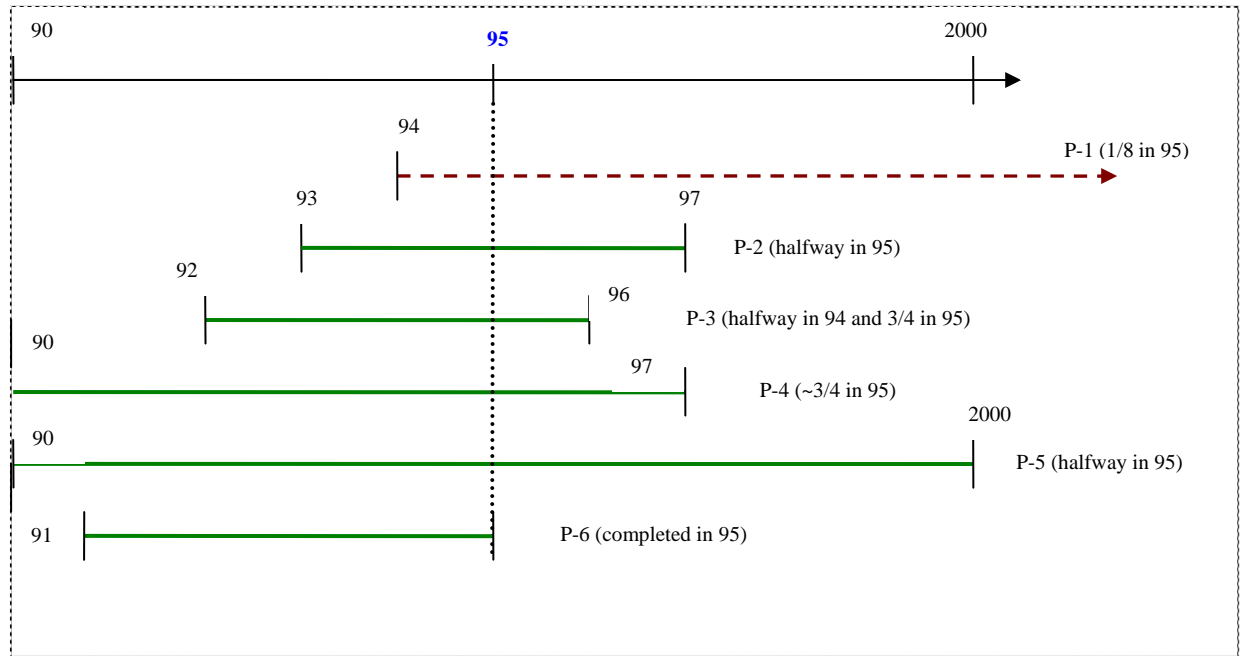
As for past projects which at the time of the approval of a new project are *completed*, the country manager would already possess relevant information about the overall performance of these projects and thus, their performance ratings could easily be used when making a decision regarding the amount of resources to be allocated to the new project in the aid-receiving country.

For illustration purposes, let us consider the example in figure 3. In order to maximize the effectiveness of a new project in China, the China country manager at the World Bank should consider the following before determining the loan amount of the new project: (a) country-specific characteristics and (b) the relevance and performance of past projects P-2, P-3, P-4, P-5, and P-6.

Figure 3: Project Timeline

Country: China

Approval fiscal year of a new project: FY 1995⁹⁵



An additional approach to test the existence of an “approval culture” or a “Money-Moving Syndrome” within an aid agency would be to examine how the promise of funds or the net commitments to a recipient country respond to macroeconomic conditions, institutional framework and policy environment in that country. Similar to the aid allocation literature, we are interested in verifying whether the pattern of lending is dictated by recipients’ need and merit (factors making aid loans effective in alleviating poverty) or by aid agencies’ organizational imperatives to survive and grow (*hypothesis*

⁹⁵ The World Bank’s fiscal year runs from July 1 to June 30. For example, fiscal year 2003 covers the period from July 1, 2002 to June 30, 2003.

2). In particular, we would expect that, in an aid agency where poverty reduction initiatives outweigh money moving incentives, variables such as GDP per capita and its growth rate (measures of the level of poverty and indicators of need) would have a negative effect on the size of new projects *ceteris paribus*; meaning that the promise of funds of an education or health project would be larger the poorer the country. We would also expect that aid agencies would reward good economic policies; for instance the lower the inflation rate and the higher the degree of openness the larger the project loan, holding everything constant (indicators of merit). The quality of governance measured by the level of corruption and the bureaucracy quality in recipient countries should also enter in the decision-making process (other indicators of merit). A proven track record of lending to corrupt countries or countries with poor bureaucracies would seem to produce evidence that there is a “Money-Moving Syndrome” at work.

Evidence supporting the existence of a “Money-Moving Syndrome” may also be provided by the impact of many other variables essential in capturing a donor agency’s preference for volume of lending over projects’ value or program accomplishments. One such variable is the total net commitment of past projects in a country at the time of approval of a new project. This variable would determine whether more budget resources tend to be allocated in recipient countries where past loan volumes are already substantial (*hypothesis 3*). If the emphasis is on the effectiveness of the development assistance provided rather than on the volume of lending, overall past loans alone should not affect decisions regarding project loan size; but rather their impact should be weighted in relation to intermediate or final performance of past projects. More precisely, we would expect the volume of past loans in a recipient country to have a positive effect on a new

project loan size if the proportion of successful past projects in that country is quite high (*extension of hypothesis 3*).

Another interesting variable would be one that captures the degree of difficulty to evaluate and quantify project performance. More explicitly, this variable would reveal whether donor agencies systematically spend more money on large-scale development interventions which overall impact on poverty would be difficult to evaluate and quantify (*hypothesis 4*). As mentioned in chapter three, performance evaluation of development activities is an important aspect of the accountability of donor agencies. However, performance evaluation becomes more complex the more extensive the development effort. Basically, while the performance evaluation of a single project would be quite straightforward, the implementation of budget supports, development policy lending, or comprehensive development frameworks with their economic, political, institutional and social ramifications would render performance evaluations much more complex. We therefore assume that the more complex it is to evaluate development efforts of a donor agency in a recipient country, the greater the opportunities for organizational imperatives for survival, recognition, and growth to enter into play, and the greater the institutional incentives to “move the money.” We choose to divide economic sectors into three categories based on the degree of difficulty of project performance evaluation: difficult, moderately difficult and easy to evaluate.⁹⁶ A project evaluation dummy is created to

⁹⁶ These three categories are constructed on the basis of the type of project (or sectors), the lending instruments and the lending instrument types. The first category (“difficult to evaluate”) includes all projects in economic sectors financed by development policy lending. The second category includes all projects, except projects in the Infrastructure Network sector, financed by investment loans. The last category (“easy to evaluate”) includes all projects in the Infrastructure Network sector financed by investment loans. We assume that it is possible to determine in which category a new development project will fall even before its design or implementation as long as the type of project, the lending instrument and the lending instrument type are known.

capture each category. As aforementioned, this dummy variable also indirectly controls for the magnitude of projects.

Additionally, we might be interested in testing the existence of end-of-fiscal-year pressures to spend within the World Bank (*hypothesis 5*); although it operates mostly on the basis of loans mobilized on international capital markets (not government appropriations) and, *a priori*, should be not subject to this type of pressure. To capture the end-of-fiscal-year effect, we use project's approval date to create a dummy variable. The value of the dummy variable is one if a project's loan size is approved in April, May, or June and zero if it is approved in the remainder of the fiscal year (from July to March).⁹⁷

Finally, we also argue that the quantitative and qualitative aspects of project loan size do not only depend on the above-mentioned variables but also on the interaction between these variables:

First, let us consider what we call *performance interactions*. We have previously mentioned the interaction term between past project performance and past loans (see extension of hypothesis 3). In a money moving environment, we also argue that past project performance would matter less in decisions regarding loan sizes when a new project to be approved is considered difficult to evaluate than when it is easy to evaluate (this is an extension of hypothesis 4);⁹⁸ the rationale being that the wider the economic, political, institutional and social ramifications of a new development project or program,

⁹⁷ The World Bank's fiscal year runs from July 1 to June 30. For example, fiscal year 2003 covers the period from July 1, 2002 to June 30, 2003.

⁹⁸ As aforementioned, we assume that it is possible to determine in which category a new development project will fall even before its design or implementation as long as the type of project, the lending instrument and the lending instrument type are known.

the higher the probability of organizational imperatives and money moving incentives to enter into play, and thus the lower the chance to take into account the likelihood of project success in decisions regarding new project loan size. This is the interaction term between project evaluation dummies and past project performance criteria.

Second, we introduce an *interaction term between past project performance criteria and corruption* to examine to what extent the partial effect of past project performance on net commitments depends on the level of corruption in the recipient country. Basically, the level of corruption prevailing in a recipient country may also exacerbate preferences for volume of lending over its effective use by minimizing the impact of past project performance on decisions regarding new project loan sizes (this is an extension of hypothesis 2).⁹⁹

Lastly, we are interested in estimating the effect of *time interactions terms* computed as a product of year dummies and past performance criteria on the one hand and project evaluation dummies on the other hand. Year dummies correspond to four time periods from 1984 to 2006. First, the 1980s, when development assistance took the form of structural adjustment programs aimed at reducing inflation, correcting government deficits, removing price distortions, and reducing trade barriers. Then, the first and the second half of the 1990s, when development assistance started to recognize the need for sound institutions like good governance, property rights, and democratic accountability. We divide the 1990s in two periods to somewhat capture the impact of the Wapenhans Report released in 1992 and commissioned by Lewis Preston during his

⁹⁹ As a reminder, the corruption index takes on values between zero (most corrupt recipient countries) and six (least corrupt recipient countries).

presidency at the World Bank (1991-1995). The Wapenhans Report found that pressure to lend money surpassed any other considerations and therefore instigated the implementation of measures destined to shift the focus away from lending volumes towards effective implementation of lending projects. Finally, the 2000s which saw the rise of a new aid architecture characterized by a greater emphasis on selectivity in allocating aid; a growing recognition of the importance of governance, institutions, and local ownership of reforms; enhancement of aid coordination and donor alignment with country strategies; greater considerations for absorptive capacity constraints; measuring and monitoring of results.

In summary, we are interested in empirically testing the following: the extent to which the “Money-Moving Syndrome” coexists with an aid agency’s true mission to reduce poverty and promote economic growth; the latter being achieved when aid loans are allocated on the basis of country need and country performance as measured by good governance, good policy environment, and good intermediate and final outcome indicators.

Table 3 below summarizes the main set of testable hypotheses developed to estimate the level of “Money-Moving Syndrome” within aid agencies and in particular the World Bank. As mentioned at the beginning of this chapter, results in the second column of the table are expected to provide evidence in support of the “Money-Moving Syndrome.”

Table 3. Some Testable Hypotheses Assessing the “Money-Moving Syndrome”¹⁰⁰

Independent Variable	Evidence of Quality-Aid if Expected Impact on Dependent Variable ^(a)	Evidence in Support of “Money-Moving Syndrome” if Expected Impact on Dependent Variable ^(b)
Overall Project Outcome	Positive	Negative/Insignificant
Project Sustainability	Positive	Negative/Insignificant
Project Institutional Development Impact	Positive	Negative/Insignificant
Bank Performance	Positive	Negative/Insignificant
Borrower Performance	Positive	Negative/Insignificant
Implementation Completion Report or ICR quality	Positive	Negative/Insignificant
Total Net Commitment of Past Projects	Insignificant	Positive
End of Fiscal Year Dummy	Insignificant	Positive
GDP per capita	Negative	Positive/Insignificant
GDP per capita Growth	Negative	Positive/Insignificant
Inflation	Negative	Positive/Insignificant
Openness	Positive	Negative/Insignificant
Corruption ¹⁰¹	Positive	Negative/Insignificant
Bureaucracy Quality	Positive	Negative/Insignificant

Note: (a), (b): statistically significant and holding everything else constant.

¹⁰⁰ The table does not include important interactions terms that may be useful in capturing the “Money-Moving Syndrome.” See section four for details.

¹⁰¹ The ICRG corruption index takes on values between zero, for the most corrupt countries, and six, for the least corrupt countries.

Model Specifications

To test our set of hypotheses, we estimate variants of the following general baseline equation:

$$\log(\text{netcommit}) = \alpha + \beta_g \mathbf{g}' + \beta_p \mathbf{p}' + \beta_G \mathbf{G}' + \beta_P P + \beta_b \mathbf{b}' + \beta_D \mathbf{D} + \beta_Z \mathbf{Z} + \varepsilon \quad (4.1)$$

where \mathbf{g} is a 2x1 vector of governance and institutional variables that affect project loan size, here corruption and bureaucracy quality; \mathbf{p} is a 2x1 vector of macroeconomic policy variables, i.e., trade openness and inflation rate as a measure of monetary policy; \mathbf{G} is a Gx1 vector of variables reflecting recipient need such as logarithm of GDP per capita, logarithm of GDP per capita squared, growth rate of GDP per capita, and logarithm of population. In the aid literature, it has often been found that small countries usually receive more aid than larger countries.¹⁰² In addition, the \mathbf{D} vector reflects region, sector, and year dummies in the regression. The regional and sector dummy variables capture variations across regions and sectors which may affect project loan size.

\mathbf{P} is a Px1 vector of intermediate and final project performance indicators, notably overall project outcome, project's sustainability, project's contribution to institutional development in the borrowing country, and implementation completion report quality. Considering they constitute different measures of project outcome, we estimate variants

¹⁰² However, there is not a consensus in the aid literature regarding the role of population as an indicator of recipient need versus its role as an indicator of donor interest. If it is reasonable to assume that, at the same level of development, larger poor countries would require more aid than smaller ones; it is also the case that donors would wish to give more aid to larger and potentially powerful poor countries in order to increase their political influence (Maizels and Nissanke 1984; Burnside and Dollar 2000).

of equation (4.1) with one performance criterion at a time. We also include the vector **b**, which is a 2x1 vector of bank and borrower performance.

All these performance ratings are transformed into dichotomous variables for the purpose of the econometric analysis. For example, the dummy variable “outcome50” is equal to one if, at the time of approval of a new project in a recipient country, at least 50% of past projects halfway completed or completed in that country were successful.¹⁰³ When making a decision regarding the loan size of a new project, this measure not only gives a country manager an adequate idea about the success rate of ongoing and completed projects, but also the likelihood of success of new projects in the country. Hence, with a proportion of at least 50% of successful past projects in the country, a country manager might feel confident about allocating more funds to a new project for the reason that these funds are less likely to be wasted compare to a situation where the success rate of past projects is very small. The dummies are interpreted similarly for each of the other project performance rating criteria.¹⁰⁴

¹⁰³ The dummy variable “outcome50” is equal to zero if, at the time of approval of a new project in a recipient country, either there are no halfway completed or completed past projects, or strictly less than 50% of halfway completed or completed past projects were successful.

¹⁰⁴ The other dummies reflecting project performance rating criteria are: sustain50, impact50, and icrq50. **Sustain50** equal to one if, at the time of approval of a new project in a recipient country, at least 50% of past projects halfway completed or completed were likely sustainable. **Impact50** equal to one if, at the time of approval of a new project in a recipient country, at least 50% of past projects halfway completed or completed had a substantial or modest institutional development impact. **Icrq50** equal to one if, at the time of approval of a new project in a recipient country, at least 50% of past projects halfway completed or completed were judged successful by the World Bank’s operational staff. The dummies reflecting Bank and Borrower performance rating criteria are bankperf50 and borrperf50. **Bankperf50** equal to one if, at the time of approval of a new project in a recipient country, at least 50% of past projects halfway completed or completed had a successful bank performance. **Borrperf50** equal to one if, at the time of approval of a new project in a recipient country, at least 50% of past projects halfway completed or completed had a successful borrower performance.

Finally, our baseline equation also includes a subset of $Z \times 1$ vector of variables \mathbf{Z} , essential in capturing the tradeoff between volume of lending and project's quality within the World Bank. The vector of variables \mathbf{Z} includes the lagged dependent variable,¹⁰⁵ the total net commitments of past projects in a country at the time of approval of a new project, the end-of-fiscal-year dummy and a project evaluation dummy. The interaction terms between the above-mentioned variables are also included in this vector.

¹⁰⁵ The dependent variable is from period $t + 1$ and the lagged dependent variable is therefore from period t .

CHAPTER V

EMPIRICAL RESULTS

This chapter reports the empirical results derived from our main testable hypotheses regarding the presence of the “Money-Moving Syndrome” using data from the World Bank. We proceed to estimate the following:

- First, for each of the three project performance rating criteria developed by the World Bank’s Independent Evaluation Group (IEG), i.e., (a) overall project outcome, (b) project’s sustainability, and (c) project’s contribution to institutional development in the borrowing country, we estimate the general baseline equation capturing our five main testable hypotheses and the corollary interaction terms;
- Second, we estimate the general baseline equation using the project performance rating developed by the operational staff of the World Bank itself, i.e., the Implementation Completion Report or ICR quality.

The rationale for these alternative specifications is simply to evaluate the robustness of our results to various measures of project performance.

Four tables, Table 4 to Table 7 below, report the estimation results. For each of the four project performance criteria above-mentioned, we estimate the parameters in the baseline equation using simple Ordinary Least Squares (OLS). As for inference, we use the heteroskedasticity-robust standard errors for our estimates of the loan allocation model.

The first section clarifies some issues regarding the data. The second section reports the determinants of project loan size using each project performance rating criterion one at the time in the baseline equation. To that effect, Table 4 presents the estimation results of our loan allocation model described in equation (4.1) using overall project outcome as the first project performance rating criterion. Table 7 presents similar results using the Implementation Completion Report or ICR quality as the fourth and last project performance rating criterion. The five main hypotheses and the corollary interactions are discussed in turn. The third section considers the results of the previous section and discusses the extent to which the “Money-Moving Syndrome” coexists with the World Bank’s true mission to reduce global poverty and promote economic growth in the developing world.

Additional Data Issues

Before presenting and interpreting the estimation results of our testable hypotheses, some clarifications might be useful. The corruption index takes on values between zero (most corrupt) and six (least corrupt). Therefore, a positive sign in the estimation results tables indicates that, holding other factors fixed, the least corrupt the recipient country, the higher the project loan size on average. The same is true for bureaucratic quality; a positive sign indicates that countries with a high quality bureaucracy receive on average larger project loan size, holding everything else fixed.

Determinants of Project Loan Size

In this section, we examine the existence of the “Money-Moving Syndrome” using the World Bank project database and using alternatively each project performance rating criterion in the loan allocation model. Table 4 to Table 7 present the empirical results.

Table 4. Determinants of Project Loan Size (Overall Project Outcome)

Dependent Variable: Log of Net Commitments ^a

Variable	Specifications		
	(1) No Interactions	(2) Performance Interactions	(3) Year Interactions
Lnetcommit_1	0.059** (0.030)	0.161*** (0.046)	0.050* (0.030)
corrupt	0.046 (0.036)	-0.050 (0.050)	0.045 (0.036)
bureau	0.010 (0.036)	0.023 (0.036)	0.006 (0.036)
openk	0.002* (0.001)	0.001 (0.001)	0.002* (0.001)
infl	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Lgdp	-1.048*** (0.381)	-1.046*** (0.382)	-0.985*** (0.373)
Lgdp2	0.083*** (0.026)	0.083*** (0.026)	0.079*** (0.026)
ggdp_cap	-0.004 (0.006)	-0.004 (0.006)	-0.005 (0.006)
Lpop	0.385*** (0.040)	0.382*** (0.040)	0.379*** (0.040)
Lcumloan	-0.048 (0.039)	-0.048 (0.039)	-0.042 (0.038)
outcome50	-0.309** (0.123)	-0.300 (0.317)	-0.203 (0.134)
bankperf50	0.363*** (0.127)	0.342*** (0.126)	0.319** (0.125)
borrperf50	0.005 (0.118)	0.016 (0.118)	0.015 (0.118)
reg2	0.102 (0.120)	0.092 (0.118)	0.096 (0.120)
reg3	0.181 (0.122)	0.153 (0.123)	0.190 (0.123)

reg4	0.320** (0.132)	0.279** (0.132)	0.312** (0.133)
yr80s	0.004 (0.093)	-0.055 (0.091)	0.123 (0.132)
yr95_99	-0.248*** (0.068)	-0.239*** (0.068)	-0.100 (0.128)
yr2000s	-0.551*** (0.136)	-0.562*** (0.138)	-0.375 (0.371)
proj_eval1	1.253*** (0.102)	0.944*** (0.169)	0.815*** (0.170)
proj_eval2	-0.524*** (0.057)	-0.521*** (0.077)	-0.455*** (0.081)
Apr_June	-0.089* (0.053)	-0.085 (0.053)	-0.083 (0.052)
Lagcom_out50		-0.145*** (0.051)	
peval1_out50		0.427** (0.198)	
peval2_out50		0.030 (0.111)	
out50_corr		0.160** (0.063)	
yr80_out50			0.000 (0.000)
yr9599_out50			-0.131 (0.127)
yr2000_out50			-0.626** (0.280)
yr80_peval1			-0.752*** (0.210)
yr9599_peval1			0.257 (0.210)
yr2000_peval1			1.010*** (0.338)
yr80_peval2			-0.149 (0.150)
yr9599_peval2			-0.120 (0.122)
yr2000_peval2			0.132 (0.363)
Constant	0.247 (1.372)	0.229 (1.397)	0.078 (1.351)
Observations	1383	1383	1383
R-squared	0.43	0.44	0.44

^a Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 5. Determinants of Project Loan Size (Project Sustainability)

Dependent Variable: Log of Net Commitments ^a

Variable	Specifications		
	(1) No Interactions	(2) Performance Interactions	(3) Year Interactions
Lnetcommit_1	0.060** (0.030)	0.097** (0.038)	0.050* (0.030)
corrupt	0.052 (0.036)	0.003 (0.043)	0.057 (0.037)
bureau	-0.000 (0.037)	-0.003 (0.037)	-0.009 (0.037)
openk	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)
infl	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Lgdp	-1.070*** (0.383)	-0.986** (0.384)	-1.058*** (0.380)
Lgdp2	0.085*** (0.026)	0.080*** (0.026)	0.084*** (0.026)
ggdp_cap	-0.003 (0.006)	-0.001 (0.006)	-0.003 (0.006)
Lpop	0.391*** (0.040)	0.391*** (0.040)	0.384*** (0.040)
Lcumloan	-0.053 (0.039)	-0.048 (0.038)	-0.041 (0.038)
sustain50	-0.116 (0.078)	-0.370 (0.302)	-0.151 (0.111)
bankperf50	0.205* (0.112)	0.184 (0.112)	0.191* (0.114)
borrperf50	-0.036 (0.114)	-0.034 (0.113)	-0.022 (0.115)
reg2	0.064 (0.119)	0.015 (0.118)	0.072 (0.119)
reg3	0.164 (0.122)	0.109 (0.123)	0.179 (0.123)
reg4	0.282** (0.131)	0.216* (0.131)	0.290** (0.132)
yr80s	0.011 (0.093)	-0.015 (0.092)	0.098 (0.131)
yr95_99	-0.258*** (0.068)	-0.239*** (0.068)	-0.228** (0.114)
yr2000s	-0.552*** (0.136)	-0.557*** (0.138)	-0.792** (0.364)
proj_eval1	1.251*** (0.102)	0.962*** (0.118)	0.791*** (0.172)
proj_eval2	-0.524*** (0.057)	-0.578*** (0.070)	-0.455*** (0.081)
Apr_June	-0.088* (0.053)	-0.075 (0.053)	-0.088* (0.052)
Lagcom_sust50		-0.073 (0.049)	
peval1_sust50		0.537*** (0.159)	
peval2_sust50		0.173	

		(0.120)	
sust50_corr		0.122*	
		(0.065)	
yr80_sust50			0.000
			(0.000)
yr9599_sust50			0.086
			(0.126)
yr2000_sust50			-0.131
			(0.237)
yr80_peval1			-0.757***
			(0.213)
yr9599_peval1			0.271
			(0.212)
yr2000_peval1			1.024***
			(0.350)
yr80_peval2			-0.152
			(0.150)
yr9599_peval2			-0.123
			(0.122)
yr2000_peval2			0.129
			(0.375)
Constant	0.205	-0.044	0.240
	(1.383)	(1.396)	(1.379)
Observations	1383	1383	1383
R-squared	0.43	0.44	0.44

^a Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 6. Determinants of Project Loan Size (Project Institutional Development Impact)

Dependent Variable: Log of Net Commitments ^a

Variable	Specifications		
	(1) No Interactions	(2) Performance Interactions	(3) Year Interactions
Lnetcommit_1	0.059** (0.030)	0.190*** (0.050)	0.049 (0.030)
corrupt	0.050 (0.036)	-0.039 (0.051)	0.056 (0.036)
bureau	0.012 (0.036)	0.018 (0.036)	0.004 (0.036)
openk	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)
infl	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Lgdp	-1.070*** (0.386)	-1.150*** (0.387)	-0.994** (0.385)
Lgdp2	0.084*** (0.027)	0.090*** (0.027)	0.079*** (0.027)
ggdp_cap	-0.005 (0.006)	-0.004 (0.006)	-0.005 (0.006)
Lpop	0.380*** (0.040)	0.376*** (0.040)	0.366*** (0.040)
Lcumloan	-0.042 (0.039)	-0.040 (0.039)	-0.025 (0.039)
impact50	-0.090 (0.115)	0.113 (0.337)	-0.099 (0.121)
bankperf50	0.232* (0.136)	0.250* (0.137)	0.218 (0.137)
borrperf50	-0.086 (0.106)	-0.101 (0.108)	-0.082 (0.107)
reg2	0.079 (0.120)	0.076 (0.118)	0.077 (0.120)
reg3	0.161 (0.123)	0.155 (0.123)	0.158 (0.125)
reg4	0.295** (0.132)	0.275** (0.131)	0.280** (0.133)
yr80s	0.002 (0.094)	-0.064 (0.092)	0.097 (0.133)
yr95_99	-0.247*** (0.069)	-0.239*** (0.069)	-0.233 (0.157)
yr2000s	-0.555*** (0.138)	-0.584*** (0.144)	0.328 (0.363)
proj_eval1	1.241*** (0.102)	0.754*** (0.194)	0.772*** (0.174)
proj_eval2	-0.527*** (0.057)	-0.487*** (0.084)	-0.463*** (0.081)
Apr_June	-0.084 (0.053)	-0.081 (0.053)	-0.085 (0.052)
Lagcom_imp50		-0.172*** (0.053)	
peval1_imp50		0.585*** (0.225)	
peval2_imp50		-0.044	

		(0.112)	
imp50_corr		0.136**	
		(0.064)	
yr80_imp50			0.000
			(0.000)
yr9599_imp50			0.056
			(0.154)
yr2000_imp50			-1.259***
			(0.208)
yr80_peval1			-0.739***
			(0.214)
yr9599_peval1			0.287
			(0.213)
yr2000_peval1			1.031***
			(0.348)
yr80_peval2			-0.147
			(0.150)
yr9599_peval2			-0.115
			(0.122)
yr2000_peval2			0.147
			(0.371)
Constant	0.405	0.519	0.297
	(1.390)	(1.416)	(1.391)
Observations	1383	1383	1383
R-squared	0.43	0.44	0.44

^a Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 7. Determinants of Project Loan Size (Implementation Completion Report Quality)

Dependent Variable: Log of Net Commitments^a

Variable	Specifications		
	(1) No Interactions	(2) Performance Interactions	(3) Year Interactions
Lnetcommit_1	0.061** (0.030)	0.180*** (0.052)	0.051* (0.030)
corrupt	0.049 (0.036)	-0.047 (0.055)	0.056 (0.036)
bureau	0.011 (0.036)	0.018 (0.036)	0.002 (0.036)
openk	0.002* (0.001)	0.001 (0.001)	0.002 (0.001)
infl	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Lgdp	-1.046*** (0.385)	-1.122*** (0.389)	-0.976** (0.384)
Lgdp2	0.082*** (0.027)	0.088*** (0.027)	0.077*** (0.026)
ggdp_cap	-0.005 (0.006)	-0.004 (0.006)	-0.004 (0.006)
Lpop	0.385*** (0.040)	0.381*** (0.040)	0.371*** (0.040)
Lcumloan	-0.053 (0.040)	-0.054 (0.040)	-0.036 (0.039)
icrq50	0.093 (0.114)	0.222 (0.347)	0.087 (0.117)
bankperf50	0.119 (0.131)	0.149 (0.132)	0.083 (0.132)
borrperf50	-0.096 (0.107)	-0.119 (0.109)	-0.096 (0.108)
reg2	0.091 (0.119)	0.093 (0.119)	0.100 (0.119)
reg3	0.182 (0.122)	0.172 (0.123)	0.193 (0.124)
reg4	0.301** (0.132)	0.285** (0.131)	0.298** (0.132)
yr80s	0.027 (0.095)	-0.034 (0.094)	0.111 (0.134)
yr95_99	-0.267*** (0.068)	-0.253*** (0.069)	-0.427** (0.187)
yr2000s	-0.575*** (0.137)	-0.583*** (0.141)	0.324 (0.363)
proj_eval1	1.248*** (0.102)	0.789*** (0.235)	0.767*** (0.173)
proj_eval2	-0.525*** (0.057)	-0.478*** (0.088)	-0.460*** (0.081)
Apr_June	-0.087 (0.053)	-0.082 (0.053)	-0.089* (0.052)
Lagcom_icrq50		-0.152*** (0.055)	
peval1_icrq50		0.519** (0.259)	

peval2_icrq50		-0.058	
		(0.113)	
icrq50_corr		0.139**	
		(0.067)	
yr80_icrq50			0.000
			(0.000)
yr9599_icrq50			0.252
			(0.184)
yr2000_icrq50			-1.282***
			(0.208)
yr80_peval1			-0.720***
			(0.213)
yr9599_peval1			0.296
			(0.213)
yr2000_peval1			1.063***
			(0.349)
yr80_peval2			-0.145
			(0.150)
yr9599_peval2			-0.120
			(0.122)
yr2000_peval2			0.169
			(0.371)
Constant	0.249	0.421	0.180
	(1.391)	(1.443)	(1.391)
Observations	1383	1383	1383
R-squared	0.43	0.44	0.44

^a Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Hypothesis 1

Hypothesis 1 states that in a money moving environment, the relevance and efficiency of past projects, their sustainability, and their impact on institutions in a recipient country would not matter in decisions regarding the net commitments of new development projects in that country. The results in the first specification (column one) of Table 4 through F4 finds evidence to support this hypothesis within the World Bank.¹⁰⁶ The dummy variable “outcome50” is negative and statistically significant at the

¹⁰⁶ The regression specifications with sector dummies rather than project evaluation dummies yield approximately the same results, at least when the performance criterion is the overall project outcome (see Table F1 in appendix F).

5 percent level, meaning that a country with a proportion of at least 50 percent of successful past projects receives on average 31 percent less in new project loan (or net commitments) than when it has a success rate of strictly less than 50 percent, holding other factors fixed. In other words, more resources are directed to countries where the success rate of past projects is small and are therefore more likely to be wasted. It would appear that despite a low performance of foreign aid in some developing countries, the World Bank continues to provide these countries with increasing levels of funding. This situation may reflect an “excessive optimism” about conditions in recipient countries that often plagues development organizations, an “excessive optimism” about the probable returns of new development assistance projects approved. Another possibility is the fact that recipient countries with low performance of foreign would attract more attention from the World Bank.

The additional project performance dummy variables “sustain50,” “impact50,” and “icrq50” enter insignificantly, suggesting that the proportion of past projects that were sustainable, or past projects with a substantial institutional development impact, or even past projects that were judged successful by the Bank’s operational staff does not affect decisions regarding new project loan sizes.

Related to the first hypothesis is the impact of Borrower and Bank performance ratings of past projects that are halfway completed or completed at the time of approval of a new project. The borrower performance rating (“borrperf50”) evaluates the level of the borrower’s ownership and responsibility necessary to ensure the quality of project’s preparation and implementation, which are important to achieve both development

objectives and sustainability. From Table 4 through Table 7 in all three specifications,¹⁰⁷ we find that the proportion of past projects for which the borrower performance was successful does not affect current project loan sizes.

These results may suggest that the World Bank might have not created positive organizational incentives to learn about factors leading to successful project performance. Had it been the case, a primary emphasis would have been placed on factors identified as necessary (if not sufficient) conditions for project effectiveness; factors such as the success rate of past projects or the level of recipient ownership of a development assistance project or program.

Strikingly, however, from the dummy variable “bankperf50” in the first column of Table 4, it seems the World Bank allocates 36 percent more funds to new projects when at least 50 percent of past projects had a successful bank performance compared to when strictly less than 50 percent of past projects had a successful bank performance. For all other project performance criteria, except the Implementation Completion Report quality, “bankperf50” enters positively and significantly at the 10 percent level. Therefore, it seems the bank performance during past project identification, preparation, and implementation outweigh past overall project performance or even borrower performance in decisions regarding new project loan amounts.

Additionally, when the interaction term between outcome and corruption (“out50_corr”) is introduced in the regression specification (column 2 of Tables F1 to F4), the estimated coefficient is positive and significant at the 5 percent level, implying that as the corruption index increases (i.e., for less corrupt countries), new projects will

¹⁰⁷ Each result table includes three specifications: one specification with no interaction terms, another one with performance interaction terms and the last specification with year interaction terms.

receive on average 12 to 16 percent more loan amounts when the proportion of successful past projects is at least 50% compared to a success rate of strictly less than 50 percent *ceteris paribus*. The implication of this result is very important: with less corrupt recipient countries, the World Bank would be more likely to take into consideration the success rate of past projects in deciding new project loan sizes, thus suggesting the importance of good governance as a safeguard or counterbalance against “Money-Moving Syndrome” within a donor agency.¹⁰⁸

Finally, when we introduce the interaction term between past project performance criteria and time, we found that new projects receive on average 63 percent less when the proportion of successful past projects is at least 50 percent during the 2000s compared to the early 1990s (column 3 of Table 4); the average percentage becomes 126 percent and 128 percent for the dummy variables “yr2000_imp50” and “yr2000_icrq50” respectively (column 3 of Table 6 and Table 7). These results suggest that perhaps many years after the Wapenhans Report, i.e., during the 2000s, the organizational imperatives to survive and grow may have once again entered into play within the World Bank’s loan approval process and driven institutional incentives to pursue “move the money” policies.

Hypothesis 2

Recall that hypothesis 2 states that in a money moving environment, the pattern of lending would be dictated by the aid agency’s organizational imperatives to survive and grow rather than by recipients’ need and merit (factors making aid loans effective in alleviating poverty).

¹⁰⁸ “Successful projects” here encompass projects with good results in all four project performance rating criteria.

Concerning *recipient need*, the results suggest that the World Bank allocates aid funds according to recipient's need only to some extent. Indeed, as evidenced by the coefficient for "Lgdp" (in all three specifications of Table 4 to Table 7), at low values of the logarithm of GDP per capita, a 1% increase in GDP per capita reduces loan sizes by around 1%, holding other factors fixed. But at some point, the elasticity of loan with respect to GDP per capita increases as the logarithm of GDP per capita increases. The turning point occurs when the GDP per capita is equal to around \$552 (constant 2000 US\$).¹⁰⁹ It turns out that for 1,162 of the 1,977 projects the GDP per capita averages more than \$552, which represents about 59 percent of the sample. Therefore, the quadratic to the right of \$552 (or 6.31 for "Lgdp") could not be ignored, meaning that there is an increasing marginal effect of the logarithm of GDP per capita on the logarithm of net commitments. In other words, the World Bank would give aid loans to the neediest countries, but at a certain level of GDP per capita, the Bank would lend more to richer countries.

Furthermore, as expected, the World Bank allocates more aid to larger countries. However, as mentioned in the previous chapter, there is not a consensus in the aid literature regarding the role of population as an indicator of recipient's need versus its role as an indicator of donor interest. If it is indeed reasonable to assume that, at the same level of development, larger poor countries would require more aid than smaller ones, it is also the case that donors would wish to give more aid to larger and potentially

¹⁰⁹ The turnaround value of "Lgdp" is calculated using the following equation: $Lgdp^* = |\text{coefficient on "Lgdp"}| \div \text{twice the coefficient on "lgdp2"}]$. $Lgdp^*$ is therefore equal to 6.31 ($|-1.048/(2*0.083)|$) and gdp^* is equal to \$552.

powerful poor countries in order to increase their influence (Maizels and Nissanke 1984; Burnside and Dollar 2000).¹¹⁰

Finally, the growth rate of GDP per capita, which is used in the baseline equation to determine whether slow-growing countries are more likely, *ceteris paribus*, to attract more aid loans per capita than fast-growing ones, is negative but very small and insignificant. Thus, the growth rate of GDP per capita does not seem to affect project loan sizes.

In regard to *recipient's merit*, the results in column 1 of Table 4 to Table 7 show that the quality of governance, institutional framework and policy environment necessary for poverty reduction and sustained economic growth are not the driving force behind decisions regarding loan sizes of development projects and programs. Specifically, the level of corruption, the quality of bureaucracy, and the inflation rate in recipient countries are not statistically significant. However, total trade as a percentage of GDP (“openk”) is positive and statistically significant at the 10 percent level, indicating that more open countries receive more net commitments per project. Nevertheless, the estimated coefficient for “openk” is very small and therefore not economically significant.

Hypothesis 3

Hypothesis 3 states that in a money moving environment, more budget resources would tend to be allocated in recipient countries where past loan volumes are already substantial. The estimated coefficient for “Lcumloan,” i.e., the logarithm of the

¹¹⁰ This result remains even after controlling for agreement type, i.e., the type of financing or credit according to the financing or credit instrument used: here either the International Bank for Reconstruction and Development (IBRD), or the International Development Association (IDA).

cumulative loan amount of all past projects in a country at the time of approval of a new project, enters negatively but it is not significant. However, the loan size of the most recently approved past project does have a positive and significant effect, *ceteris paribus*, on the net commitments of a new development project as evidenced by the estimated coefficient for “Lnetcommit_1”(column 1 of Table 4 to Table 7).¹¹¹ This indicates that only the most recently approved projects in a country influence decisions regarding the net commitments of new development assistance projects. However, this effect is not substantial.

When the interaction term between the project performance rating criteria and the lag of net commitments is introduced in the baseline equation, the effect of the lag of the dependent variable is reinforced. For instance, the estimated coefficient of the interaction term “Lagcom_out50” enters negatively but significantly at the 1 percent level, implying that as the loan size of the most recently approved project increases, new projects will receive on average 14 percent less net commitments when the proportion of successful past projects is at least 50% compared to a success rate of strictly less than 50 percent, *ceteris paribus* (column 2 of Table 4). The same is true for the estimated coefficients of “Lagcom_imp50” and “Lagcom_icrq50”; they enter negatively but significantly at the 1 percent level (column 2 of Table 6 and Table 7). In other words, aid loans are allocated where the most recent loan volumes are substantial and where the achievement rate of past projects is small i.e., where the likelihood of successful outcomes is lower.

¹¹¹ As aforementioned, the dependent variable is from period $t + 1$ and the lagged dependent variable, denoted Lnetcommit_1, is therefore from period t .

Hypothesis 4

Hypothesis 4 states that in a money moving environment, donor agencies would tend to spend more money on large-scale development interventions which overall impact on poverty would be difficult to evaluate and quantify; the rationale being that the more complex it is to evaluate development efforts of a donor agency in a recipient country, the greater the opportunities for organizational imperatives for survival and growth to enter into play, and the greater the institutional incentives to “move the money.” Here, we assume, for instance, that budget supports, structural reforms, or comprehensive development frameworks (with their numerous economic, political, institutional and social ramifications) that are financed by development policy lending would be more complex to evaluate and quantify than straightforward infrastructure projects financed by investment lending.¹¹²

The results in the four tables (Table 4 to Table 7) confirm this hypothesis. The dummy variable for projects that are difficult to evaluate (“Proj_eval1”) enters positively and significantly in all three specifications and its effect is substantial. Holding other factors constant, development projects which overall impact on poverty is difficult to evaluate and quantify receive on average around 125 percent more net commitments than projects considered easy to evaluate. On the other hand, projects categorized as moderately difficult to evaluate, i.e., all types of projects (except infrastructure projects) financed by investment loans, receive on average around 52 percent less net commitments than projects in the infrastructure sector also financed by investment loans. This result may capture the fact that, confronted to a choice between many investment

¹¹² As mentioned above, we assume that it is possible to determine in which category a new development project will fall even before its design or implementation as long as the type of project, the lending instrument and the lending instrument type are known.

loans, World Bank's employees would tend to favor large and quick-disbursing infrastructure projects such as dams, roads, ports, irrigation canals, factories, and so on.

As above mentioned, we argued that for projects with wide economic, political, institutional and social ramifications, it may be extremely complicated to tease out the influence of the development project itself from the influence of environmental factors and shocks. Under these murky conditions, a donor agency is provided with opportunities and incentives to “move the money.” Consequently, we would expect that with projects that may be considered difficult to evaluate, the performance of past projects would not be taken into account in decisions regarding net commitments per new project. The results in the second column of Table 4 to Table 7 do not corroborate our intuition, however. The positive and significant coefficient on the interaction terms between project performance rating criteria and project evaluation dummies, like “peval1_out50,” suggests that Bank's employees tend to allocate larger loans to projects that may be considered difficult to evaluate when the likelihood of success is higher.

Finally, the interaction terms between project evaluation dummies and time dummies reveal that, *ceteris paribus*, projects considered difficult to evaluate receive on average about 72 percent less net commitments during the 1980s than projects considered easy to evaluate during the early 1990s. The reverse is true for the years 2000s compared to the early 1990s (column 3 of Table 4 to Table 7). These outcomes potentially reflect the shift in the development discourse in the 1990s when the development assistance field began to recognize the need for sound institutional and policy environments as factors conducive to poverty reduction and sustained and equitable growth.

Hypothesis 5

Hypothesis 5 states that in a money moving environment, an international donor agency might be subject to end-of-fiscal-year pressures to spend. The end-of-fiscal-year effect is captured by “Apr_June,” a dummy variable equal to one if a development project’s loan size is approved in April, May, or June and zero if it is approved in the remainder of the fiscal year (from July to March); since the World Bank’s fiscal year runs from July 1 to June 30. The negative and significant coefficient on “Apr_June” (column 1, Table 4 and Table 5) implies that there is no end-of-fiscal-year pressures to spend within the World Bank; in fact projects approved in April, May, or June receive on average 9 percent less net commitments than projects approved throughout the remainder of the fiscal year, for the same level of other factors. This result seems to indicate that the World Bank operates mostly on the basis of loans mobilized on international capital markets (not government appropriations) and, is therefore not pressured to commit resources at the end of the fiscal year.¹¹³

Other Control Variables

Among all the region dummies, only Latin America and the Caribbean region exhibits a positive and significant coefficient; meaning that Latin America and the Caribbean receive on average more net commitments per new project than Africa, holding other factors fixed. This effect is robust to all specifications in Table 4 to Table 7.

¹¹³ Alternatively, we use the dummy variable “June” to capture the end-of-fiscal-year effect. The dummy variable equals to one if a development project’s loan size is approved in June and zero if it is approved in any other month during the fiscal year. Table F2 in appendix F presents the results. The estimated coefficient of “June” is negative and insignificant in all three specifications, which seems to indicate that, holding everything constant, there is no difference between a World Bank project approved in June and a World Bank project approved in the remainder of the fiscal year in terms of loan size. In other words, the end of the fiscal year has no effect on decisions regarding project loan size.

When taking into account year dummies, we notice that net commitments per new project during the second half of the 1990s were on average about 25 percent less than net commitments per new project during the early 1990s. The same is true for net commitments per new project during the 2000s which were on average about 55 percent lower than during the early 1990s (column 1 in Table 4 to Table 7). These results may indicate that the Wapenhans Report and the subsequent implementation of measures destined to shift the focus away from lending volumes towards effective implementation of lending projects have been somewhat successful in dampening the “approval culture” for loans and the pressure to lend that had affected the World Bank’s project approval process prior to the report.

As mentioned in the literature review in chapter two, one widespread explanation of the aid ineffectiveness emphasizes that donor country strategic interests have frequently dominated recipient countries’ needs and merits as *aid allocation criteria* within aid agencies, both bilateral and multilateral. Donor strategic interests generally include *diplomatic interests* (e.g., establishing military bases, securing UN votes, supporting a preferred regime); *commercial interests* (e.g., “tied” aid, providing exports subsidies to donor countries firms, focusing on projects with high foreign exchange components); and *cultural interests* usually provided to promote a donor’s religion, language, or values (Lancaster 1999). Although donor countries’ strategic interests behind aid giving are beyond the scope of this dissertation, it might nevertheless be important to control for this factor in the loan allocation regression.

To analyze the role played by the largest shareholders, especially the U.S., in pressuring the World Bank to deviate from its objectives to eliminate poverty and

promote sustain development, we use U.S. trade statistics as a measure of U.S. commercial interests; specifically U.S. exports to a specific country in year t as a share of U.S. exports, in the same year, to all included countries and U.S. imports from a country as a share of U.S. imports from all included countries (Fleck and Kilby 2005a).¹¹⁴ In this framework, an allocation of World Bank funds reflecting U.S. commercial interests would confirm the emphasis of organizational imperatives to survive and grow over aid effectiveness, and therefore a focus on the volume of aid disbursements rather than on the impact of aid on development.

From the results presented in Table F3 in appendix F, the estimated coefficients of U.S. export share and U.S. import share enter with the right sign (respectively positive and negative) as suggested by the U.S. trade policy which favors exports over imports (Fleck and Kilby 2005a), but they are statistically insignificant. These results seem to indicate that project loan size does not reflect U.S. commercial interests.

Discussion

In general, the empirical results presented in the previous section support the hypothesis that there is a “Money-Moving Syndrome” at work within the World Bank’s current loan allocation criteria.

The World Bank’s loan allocation criteria suggest that recipient’s need is a stronger selection criterion than recipient’s merit as measured by the quality of governance, institutional framework and policy environment. However, even recipient’s need appears not to be a consistent criterion within the Bank. In particular, Bank’s

¹¹⁴ The U.S. trade statistics data come from the 2008 IMF Direction of Trade Statistics (DOTS).

employees would give aid loans to the neediest countries, but at a certain level of GDP per capita, Bank's employees would lend more to richer countries; thus reducing aid resources available for the poor in the poorest countries. According to the Meltzer Commission Report (2000), when development assistance is limited to the poorest countries, "additionality of resource transfer is enhanced." The report adds that aid resources available for the poor would increase drastically if the volume of lending to middle- or high-income countries was reduced and reallocated to the poorest countries. In other words, the positive incentives to "move the money" would be reduced and aid effectively targeted to the poor if aid volumes to richer countries that do not need it are limited.

Furthermore, despite a new development discourse that emerged in the early 1990s and which recognized the need for sound institutions like good governance, property rights, and democratic accountability; and despite findings by Burnside and Dollar (2000) suggesting that aid has been ineffective in promoting growth and stimulating policy reforms except in good policy and institutional environments, it would appear that the level of corruption alone, the quality of bureaucracy, and the inflation rate in recipient countries are not the driving forces behind decisions regarding project loan sizes within the World Bank; thus creating positive incentives to "move the money." However, the evidence shows that with less corrupt recipient countries, World Bank's aid officials would be more likely to take into consideration the success rate of past projects in deciding new project loan sizes. This result suggests the importance of good governance as a safeguard or counterbalance against the "Money-Moving Syndrome" within a donor agency.

Additionally, it appears that despite a low performance of foreign aid in some developing countries, World Bank's aid officials would continue to provide these countries with increasing levels of funding. This situation may reflect an "excessive optimism" about conditions in recipient countries or about the probable returns of new development assistance projects approved. This result may also reflect the fact that recipient countries with low performance of foreign would attract more attention from the World Bank. In any case, the end results are a reinforcement of positive incentives to "move the money" and a potential inefficiency of aid caused by a misallocation of scarce resources.

Another important issue is the emphasis on recipient countries' ownership of development activities and reforms. The 2005 Paris Declaration on Aid Effectiveness¹¹⁵ recognized that if development assistance was to be linked to an autonomous design and implementation of national development strategies, it would promote the reduction of poverty and inequality, increase growth and accelerate the achievement of the Millennium Development Goals. However, the evidence shows that World Bank's officials do not seem to factor in the level of recipient ownership of national development strategies in decisions regarding new project loan sizes, which may provide further opportunities for organizational imperatives to grow and thus drive incentives to pursue "move the money" strategies.

However, it would appear that World Bank' officials take into account the bank performance during past project identification, preparation, and implementation. Unfortunately, if quality at entry and appropriate supervision provided by a donor agency

¹¹⁵ http://www.oecd.org/document/18/0,2340,en_2649_3236398_35401554_1_1_1_1,00.html, accessed 10 February 2008.

are necessary for the achievement of development objectives, it is not sufficient; therefore, it may not be efficient to allocate money among development assistance projects solely on that basis. On the other hand, a positive and statistically significant estimated coefficient for the bank performance dummy variable across almost all project performance criteria would provide evidence that World Bank's lending practices encourage an internal learning environment in the sense that past knowledge about the quality of the work done by Bank's officials in various stages of past projects affects current decisions regarding loan sizes.

Furthermore, it seems that loan sizes of new development projects in a recipient country are higher where loan volumes of the most recently approved development assistance projects are substantial. Although this result may reflect the fact that a group of loans may respond to a common policy decision, the effect appears to be reinforced when the achievement rate of past projects is small i.e., where the likelihood of successful outcomes is lower. Here again, the evidence of a "Money-Moving Syndrome" at work within the World Bank's loan allocation criteria is reinforced.

The World Bank's aid officials also tend to allocate more aid loans to development projects which overall impact on poverty may be considered difficult to evaluate and quantify compared to projects considered easy to evaluate. We argue that this result may strengthen positive incentives to "move the money" on the basis that the more complex it is to evaluate development efforts of a donor agency in a recipient country, the more complicated it is to tease out the influence of the development project itself from the influence of environmental factors and shocks. Therefore, under these

murky conditions, a donor agency is provided with opportunities and incentives to pursue “move the money” strategies.

On the other hand, projects categorized as moderately difficult to evaluate, i.e., all types of projects (except infrastructure projects) financed by investment loans, receive on average less net commitments than projects in the infrastructure sector also financed by investment loans. This result may suggest a preference for large and quick-disbursing infrastructure projects such as dams, roads, ports, irrigation canals, or factories over any other development projects financed by investment loans; and therefore, it may indicate a “lending culture” at work within the World Bank’s development practices.

The regional dummy variables seem to indicate that Latin America and the Caribbean receive on average more net commitments per new project than Africa. This result confirms the finding that recipient countries’ needs appear not to be a consistent allocation criterion within the World Bank. Aid would be “moved” in the sense that it is not predominantly focused on the poorest of developing countries that actually need it.

Finally, as expected, the World Bank appears not to be subject to end-of-fiscal-year pressures to spend, simply because it operates mostly on the basis of loans mobilized on international capital markets rather than government appropriations like bilateral aid agencies.

Overall, the empirical results suggest that, within the World Bank, the quantity of foreign aid committed or disbursed in itself appears as important a mission as the effectiveness of aid, suggesting that there seems to be a degree of “Money-Moving Syndrome” in effect within the World Bank’s development activities. In general, World Bank’s lending practices do not appear to adequately fit the needs and merit of the

poorest countries; furthermore, World Bank's lending resources tend to be directed to countries where the success rate of past projects is small and are therefore more likely to be wasted, while the proportion of sustainable past projects in a recipient country, or the proportion of past projects with a substantial institutional development impact, or even the proportion of past projects judged successful by the Bank's operational staff do not seem to affect decisions regarding new project loan sizes in that country. These factors, among others discussed above, seem to lead to the conclusion that an "approval culture" undermines the World Bank's lending portfolio.

However, there is evidence that World Bank's lending practices encourage an internal learning environment in the sense that past knowledge about the quality of the work done by Bank's officials in various stages of past projects affects current decisions regarding loan sizes. Additionally, the World Bank appears not to be subject to end-of-fiscal-year pressures to spend mainly because it operates mostly on the basis of loans mobilized on international capital markets. These pressures are in fact more likely to be present within bilateral aid agencies financed through government appropriations.

As emphasized by the review of literature in chapter two, there is good reason to believe that a high degree of "Money-Moving Syndrome" will somewhat lead or contribute to aid ineffectiveness for the simple reason that, in this context, what matters the most is the volume of aid disbursed rather than its actual impact on poverty reduction or economic growth. In this dissertation, we posited that evidence in support of the "Money-Moving Syndrome" could perhaps be used to provide some evidence as to why foreign aid has not been more effective at reducing global poverty in developing

countries despite the large amount of resources involved in achieving this goal over the years.

CHAPTER VI

CONCLUSIONS AND POLICY IMPLICATIONS

In this dissertation we explored the extent of the role played by international donor agencies' incentive structures, especially incentives to "move the money" (or the "Money Moving Syndrome"), as a potential cause of the low performance of foreign aid in reducing poverty and promoting sustainable economic growth in developing countries.

Theoretically, we developed a simple principal-agent model which examined how donor agencies' institutional incentive systems affect the characteristics of an optimal and efficient incentive contract and thus give rise to the Money Moving Syndrome. Our model adapts the basic framework developed in Baker (1992) to fit the organizational settings of international development agencies by introducing the notion of "organizational imperatives" (such as survival, growth, achieve and/or maintain higher status or leadership position, promote interests of stakeholders, and so on) as an additional factor in an aid agency's total value function (other than its true mission to maximize poverty reduction and economic growth).

Our main conclusion from the model indicates that as long as concerns about aid effectiveness are predominant and a high level of accountability is attached to readily measurable development activities implemented in the least corrupt countries, the performance measure would elicit an "effective" effort from aid officials, i.e. a level of effort that would contribute as much as possible to an aid agency's true mission to reduce poverty and promote economic growth. Therefore, the quantity of aid disbursed would factor in aid "quality" ("Quality-Aid Incentive Scheme").

On the other hand, if organizational imperatives outweigh the goal of aid effectiveness and limited accountability is attached to development activities that do not discriminate against corrupt countries and are provided in the form of budget support or program aid more difficult to evaluate, the staff would be given the incentive to direct each unit of effort and money towards promoting organizational imperatives. Therefore, the focus would be on the amount of money disbursed (aid “quantity”) rather than the impact of that amount of aid on development (“Money-Moving Syndrome Incentive Scheme”). The empirical chapter and the results partially corroborate the model’s predictions.

Empirically, we investigated the extent to which incentives to “move the money”, stemming from organizational imperatives, are present within donor agencies and coexist with genuine concerns about aid effectiveness to shape aid agencies’ decisions regarding project loan size to developing countries. In our context, we posited that evidence in support of the “Money-Moving Syndrome” can perhaps be used to provide evidence as to why foreign aid has not been more effective in reducing global poverty and promoting economic growth among developing countries. Due to the unavailability of the data on projects and programs funded by other bilateral and multilateral donor agencies, the empirical analysis focused exclusively on the World Bank-funded project database. In this context, the World Bank is therefore used as a proxy for the performance of all other donors in the development field.

We implemented the empirical estimation using the independently pooled Ordinary Least Squares (OLS) methodology. On the one hand, the empirical results provide evidence that World Bank’s lending practices encourage an internal learning

environment in the sense that past knowledge about the quality of the work done by Bank's officials in various stages of past projects affects current decisions regarding loan sizes. In addition, the World Bank appears not to be subject to end-of-fiscal-year pressures to spend mainly because it operates mostly on the basis of loans mobilized on international capital markets. These pressures are in fact more likely to be present within bilateral aid agencies financed through government appropriations.

On the other hand, our empirical results revealed that, in general, World Bank's lending practices do not appear to adequately fit the needs and merit of the poorest countries. More important, World Bank's lending resources tend to be directed to countries where the success rate of past projects is small and are therefore more likely to be wasted; while the proportion of sustainable past projects in a recipient country, or the proportion of past projects with a substantial institutional development impact, or even the proportion of past projects judged successful by the Bank's operational staff do not seem to affect decisions regarding new project loan sizes in that country. These factors seem to lead to the conclusion that there is a degree of "Money-Moving Syndrome" in effect within the World Bank's development activities; in other words, the quantity of foreign aid committed or disbursed in itself appears as important a mission as the effectiveness of aid.

These results could be translated into the following policy recommendations for reducing donor agencies' institutional incentives to "move the money" and improving the overall performance of foreign aid.

First, in order to get the institutional incentives right, first at the source i.e. at the stage where the funds originate with donors organizations, and then at the destination, it appears imperative to establish within aid organizations a system of checks and balances

that would allow individuals involved in aid to overcome diversionary incentives hindering their genuine intentions to help the poor. Instituting accountability for effectiveness seems to be a step in that direction. Several applications of accountability for effectiveness within bilateral and multilateral aid agencies exist in spite of the fact that they may be difficult to implement. In particular, one solution to enforce the accountability for effectiveness within bilateral and multilateral development agencies would be to allocate a portion of their budget to the creation of a supreme independent entity, even though this would mean fewer resources available for development activities (*hierarchical accountability*). Aid organizations would be accountable to the entity that would represent only the interests of taxpayers in rich nations providing aid resources and intended beneficiaries in aid-receiving countries. The entity would restore the “broken information feedback loop” that exists between the two parties by providing aid recipients with means to communicate their own needs, to communicate whether those needs have been met, to question the adequacy of what donor agencies provide them, or to have a voice in all decisions that affect development strategies, projects, and policies. The entity would therefore conduct independent evaluations of donor agencies’ performance or institute standard principles and guidelines that must be abided by in order to conduct project evaluations; for these independent evaluations constitute an important criterion by which the success of development activities is judged. Overall, the existence of a supreme independent organization would recreate a political process in foreign aid similar to the one in modern democracies where taxpayers (voters) are the same as beneficiaries and could therefore exercise political pressure on public bureaucracies to improve performance and satisfy their needs.¹¹⁶

¹¹⁶ It must be clear that the concept of accountability could only be raised in relation with intermediate aid

However, such an approach would be probably unfeasible in the current development paradigm. Another more practical approach to institute accountability for effectiveness within bilateral and multilateral development agencies would be to allocate a portion of aid resources directly to recipient countries (civil society or ultimate beneficiaries of aid) so that they could provide an independent feedback to donor agencies, thus creating a direct communication channel between recipients and aid agencies (Martinez-Vazquez et al. 2005). Providing recipients with financial means to easily communicate their own needs and whether those needs have been met, or to question the adequacy of what donor agencies provide them, appears to be one important and feasible avenue to reduce money moving incentives within aid agencies.

Second, aid selectivity in donor agencies should be strengthened around criteria such as high levels of poverty, good governance (such as low levels of corruption, transparency, ownership, and high bureaucracy quality), and sound policies. Allocating aid based on such criteria would not only reduce positive incentives to “move the money” within aid agencies by targeting aid resources where they are needed the most and would likely be more effective, but also would help improve incentives in recipient countries. Undeniably, enforcing aid selectivity on such a basis would provide developing countries concerned about poverty reduction with strong incentives to establish a good governance environment with sound institutions and policies.

agencies that link the taxpayers in rich countries and the intended beneficiaries in poor countries. The reason being that aid agencies are expected to use aid resources entrusted to them effectively to promote economic growth and reduce global poverty. Undeniably, in a relationship solely between these ultimate protagonists of foreign aid (taxpayers and beneficiaries) there is no place for accountability. Taxpayers in rich countries willingly transfer part of their income to developing countries to alleviate poverty and simply cannot be held accountable when aid fails to achieve its purpose. Additionally, we should note that increasing accountability for effectiveness can increase efficiency but can also impose great costs. Consequently, accountability should only be increased when its benefits outweigh its costs.

Finally, providing official development assistance in the form of development interventions where the overall impact on poverty or economic growth is easy to evaluate and quantify may be another approach to discourage donor agencies' institutional incentives to "move the money". With such projects, it would be possible to tease out the influence of development projects from the influence of environmental factors and shocks, disentangle causes and effects, hold the implementing aid agency accountable, learn from mistakes, and improve the focus on high "quality" aid. However, considering this approach may lead to an overflow of "hard" infrastructure projects in developing countries, it would be more beneficial to invest resources in built-in evaluation systems where an evaluation procedure (e.g. quantifiable performance measurements and clear evaluation criteria) is built directly into the implementation of a development project or program rather than being conducted at the end of the development activity.

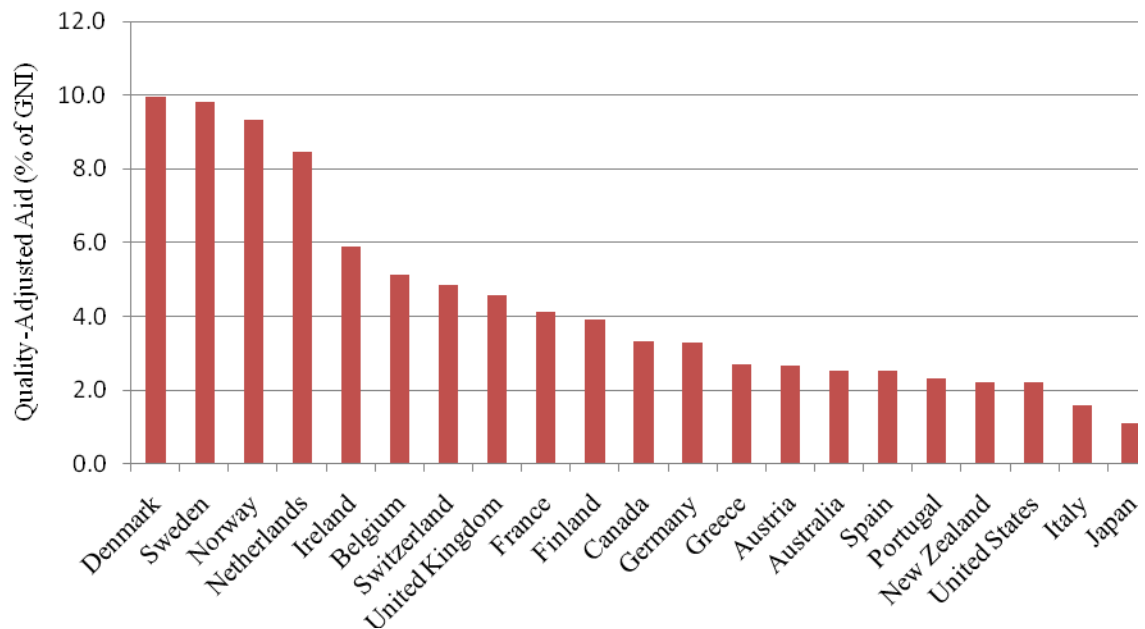
APPENDIX A

BEYOND QUANTITATIVE AID: THE QUALITY OF AID

According to the Commitment to Development Index 2006 developed by the Centre for Global Development (CGD), “quality” aid, among other things, excludes tied aid, subtracts debt payments by developing countries on aid loans, penalizes donors for overburdening poor countries with a large variety of small aid projects, and favors poor and uncorrupt countries.

Figure A below compares donor countries in terms of the quality of aid they provide to developing countries. In 2006, while Denmark, the Netherlands, Norway, and Sweden scored highest in terms of the amount of quality aid as a share of GNI provided, the United States and Japan (the largest donors in absolute terms) ranked at or near the bottom.

Figure A: Quality Aid in 2006 (% of GNI)



Source: Commitment to Development Index 2006, Center for Global Development.

APPENDIX B

LITERATURE REVIEW ON PREVIOUS AID ALLOCATION MODELS

Collier and Dollar (2002) developed a poverty-efficient allocation of aid model based on some findings from the aid effectiveness literature.¹¹⁷ They deduced the following from their model: aid allocated to developing countries should be an increasing function of good policy and poverty level in those countries; and the poverty-efficient equilibrium is determined where the marginal impact of an additional dollar of aid, in terms of the number of people lifted out of the poverty line per million dollars, is equalized across aid-receiving countries.¹¹⁸ Their model depends on the important assumption that donors have no influence in the distribution of income within countries; in other words, they can reduce poverty only through an increase in aggregate income.

In the Equal Opportunity Model of aid allocation developed by Cogneau and Naudet (2004), these authors introduced an effort indicator influenced by structural disadvantages to growth (such as climate, the health of the population, historical disruptions...) over which each country has little or no control; in that sense, they tried to control for aid effectiveness differential across countries; aid effectiveness beyond the control of aid agencies. Their optimal aid allocation gives more to the poorest countries by equalizing differences in poverty risk by a specific point in time between countries facing different disadvantages but making the same degree of effort. Their model

¹¹⁷ Some studies on aid effectiveness have shown the following results: 1) the impact of aid on growth depends on the quality of economic policies and institutional environments in developing countries (Burnside and Dollar 2000); and 2) aid does not systematically induce political or economic reforms (Alesina and Dollar 2000); for more studies, see (Collier and Dollar 2002).

¹¹⁸ Collier and Dollar (2002) used the headcount Index as a measure of poverty.

complements the work done by Collier and Dollar (2002) by introducing a notion of fairness.

A different aid allocation model is the model implicit in the Millennium Development Goals (MDGs) which seeks to allocate aid so as to minimize differences between actual levels of MDG indicators in each country and their target levels. As such, the MDGs poverty efficient outcome implicitly assumes that the marginal effectiveness of aid is equal across all countries (McGillivray 2006).

APPENDIX C

THEORETICAL MODEL-MAXIMIZATION PROBLEMS

In this appendix, we provide the full development of some equations figuring in the theoretical model.

- Equation (3.5) in the theoretical model is derived as follows:

The principal's objective is to maximize expected profits, i.e. the total value net of compensation payments:

$$\max_{b,s} E[V(e^*, \varepsilon) - s - bP(e^*, \varepsilon)],$$

s.t.

$$E[s + bP(e, \varepsilon) - C(e)] \geq \bar{U} \quad (C.1)$$

$$bP_e(e^*, \varepsilon) = C'(e^*) \quad (C.2)$$

The principal sets the fixed payment, s , to bind the agent's participation constraint.

Substituting s from the participation constraint and equation (C.2) into the principal's expected profit gives:

$$\max_b E[V(e^*, \varepsilon) - \bar{U} + bP(e, \varepsilon) - C(e) - bP(e^*, \varepsilon)],$$

where e^* is function of b and ε .

Deriving this last equation with respect to b yields the following:

$$\frac{\partial E[\pi]}{\partial b} = E[V_e e_b^*] + E[P(e, \varepsilon)] - E[P(e, \varepsilon)] - bE[P_e e_b^*] = 0$$

$$\text{or, } \frac{\partial E[\pi]}{\partial b} = E[V_e e_b^*] - bE[P_e e_b^*] = 0 \quad (C.3)$$

From equation (C.3),

$$b^* = \frac{E[V_e e_b^*]}{E[P_e e_b^*]} \quad (C.4)$$

Differentiating equation (C.2) with respect to b gives:

$$e_b^* = \frac{P_e}{C'' - bP_{ee}}. \quad (C.5)$$

Replacing equation (C.5) into equation (C.4):

$$b^* = \frac{E[V_e \frac{P_e}{C'' - bP_{ee}}]}{E[P_e \frac{P_e}{C'' - bP_{ee}}]} = \frac{E\left[\frac{V_e P_e}{C'' - bP_{ee}}\right]}{E\left[\frac{P_e^2}{C'' - bP_{ee}}\right]} = \frac{E[V_e P_e]}{E[P_e^2]} \quad (C.6)$$

According to the definitions of variance, covariance and coefficient of correlation,

$$\begin{aligned} Cov(V_e, P_e) &= E[V_e P_e] - E[V_e] E[P_e] \\ Var(P_e) &= E[P_e^2] - (E[P_e])^2 \\ \rho_{V_e, P_e} &= \frac{Cov(V_e, P_e)}{\sigma_{V_e} \sigma_{P_e}} \end{aligned} \quad (C.7)$$

Assuming without loss of generality that $E[V_e] = E[P_e] = 1$, combining equations (C.6)

and (C.7) yields the following optimal piece rate:

$$b^* = \frac{Cov(V_e, P_e) + 1}{var(P_e) + 1} = \frac{\rho \sigma_{V_e} \sigma_{P_e} + 1}{\sigma_{P_e}^2 + 1}$$

- Equation (3.11) in the theoretical model is derived as follows:

The principal's objective is to maximize expected profits, i.e. the total value net of compensation payments:

$$\max_{b, s} E[W(e^*, \varepsilon) - s - bP(e^*, \varepsilon)],$$

subject to the participation and the incentive compatibility constraints given respectively by equations (C.1) and (C.2).

As above, the principal sets the fixed payment (s) to bind the agent's participation constraint. After substituting s from the participation constraint and equation (C.2) into the principal's expected profit, it becomes:

$$\max_b E[\alpha O(e^*, \varepsilon) + (1 - \alpha)V(e^*, \varepsilon) - \bar{U} + bP(e, \varepsilon) - C(e) - bP(e^*, \varepsilon)], \text{ where } e^* \text{ is}$$

function of b and ε .

Deriving this last equation with respect to b yields the following:

$$\frac{\partial E[\pi]}{\partial b} = \alpha E[O_e e_b^*] + (1 - \alpha)E[V_e e_b^*] + E[P(e, \varepsilon)] - E[P(e, \varepsilon)] - bE[P_e e_b^*] = 0$$

$$\text{or, } \frac{\partial E[\pi]}{\partial b} = \alpha E[O_e e_b^*] + (1 - \alpha)E[V_e e_b^*] - bE[P_e e_b^*] = 0 \quad (\text{C.8})$$

From equation (C.8),

$$b_1^* = \frac{\alpha E[O_e e_b^*] + (1 - \alpha)E[V_e e_b^*]}{E[P_e e_b^*]} \quad (\text{C.9})$$

Replacing equation (C.5) into equation (C.9):

$$b_1^* = \frac{\alpha E[O_e \frac{P_e}{C'' - bP_{ee}}] + (1 - \alpha)E[V_e \frac{P_e}{C'' - bP_{ee}}]}{E[P_e \frac{P_e}{C'' - bP_{ee}}]} = \frac{\alpha E\left[\frac{O_e P_e}{C'' - bP_{ee}}\right] + (1 - \alpha)E\left[\frac{V_e P_e}{C'' - bP_{ee}}\right]}{E\left[\frac{P_e^2}{C'' - bP_{ee}}\right]}$$

$$\text{Or } b_1^* = \frac{\alpha E[O_e P_e] + (1 - \alpha)E[V_e P_e]}{E[P_e^2]} \quad (\text{C.10})$$

According to the definitions of variance, covariance and coefficient of correlation presented in line (C.7), equation (C.10) changes as follows:

$$b_1^* = \frac{\alpha(\text{cov}(O_e, P_e) + E[O_e] \cdot E[P_e]) + (1 - \alpha)(\text{cov}(V_e, P_e) + E[V_e] \cdot E[P_e])}{\text{var}(P_e) + (E[P_e])^2},$$

or

$$b_1^* = \frac{\alpha(\rho_1 \cdot \sigma_{O_e} \cdot \sigma_{P_e} + E[O_e] \cdot E[P_e]) + (1 - \alpha)(\rho_2 \cdot \sigma_{V_e} \cdot \sigma_{P_e} + E[V_e] \cdot E[P_e])}{\sigma_{P_e}^2 + (E[P_e])^2},$$

(C.11)

where $E[P_e(e, \varepsilon)] = \gamma E[V_e(e, \varepsilon)] + (1 - \gamma)E[O_e(e, \varepsilon)]$, $\gamma = \frac{\theta}{c + m}$, and ρ_1 is the coefficient

of correlation between O_e and P_e , and ρ_2 is the coefficient of correlation between P_e

and V_e .

APPENDIX D

DATA APPENDIX

Table D1. Variable Names

variable name	variable label
country	Country
year	Approval Fiscal Year ¹¹⁹
netcommit	Net Commitments (Millions of US Dollars)
Lnetcommit	Logarithm Net Commitments
Lnetcommit_1	Logarithm Net Commitments Lagged
approvdate	Approval Date
deactdate	Deactivation Date
exit_fy	Exit Fiscal Year
evaldate	Evaluation Date
p_id	Project ID
totproj	Total # of Projects Approved per FY/Country
tproj	Total # of Projects Approved in each Country
region	Region
sector	Sector
network	Network
instr	Lending Instrument
evaltype	Evaluation Type
instrtype	Lending Instrument Type
agreetype	Agreement Type
corrupt	Corruption
bureau	Bureaucracy Quality
openk	Openness
gdp	GDP per capita (constant 2000 US\$)
Lgdp	Logarithm GDP per capita
ggdp_cap	GDP per capita growth (annual %)
infl	Inflation, consumer prices (annual %)
Lpop	Total Population (logarithm)
count	Number of HC ^(a)
Lcumloan	Cumulative Loan Amount of All Past Projects At the Approval Time (log)
outcome50 ^(b)	Dummy Variable equal 1 if at least 50 % of HC were successful
sustain50	Dummy Variable equal 1 if at least 50 % of HC were likely sustainable
impact50	Dummy Variable equal 1 if at least 50 % of HC had a Substantial or Modest Impact
bankperf50	Dummy Variable equal 1 if at least 50 % of HC had a successful Bank Performance
borrperf50	Dummy Variable equal 1 if at least 50 % of HC had a successful Borrower Performance
icrq50	Dummy Variable equal 1 if at least 50 % of HC were judged successful by the

¹¹⁹ The World Bank's fiscal year runs from July 1 to June 30. For example, fiscal year 2003 covers the period from July 1, 2002 to June 30, 2003.

	BOS ^(c)
half_date	Time By which Projects are Halfway Completed Measure Constructed to Reflect Degree of Difficulty to Evaluate Project
projeval	Performance
proj_eval1	Equal to 1 if Sector Projects Difficult to Evaluate
proj_eval2	Equal to 1 if Sector Projects Moderately Difficult to Evaluate
proj_eval3	Equal to 1 if Sector Projects Easy to Evaluate (base)
Apr_June	Equal to 1 if Approval Month is April, May or June
reg1	region==Africa (base)
reg2	region==E&S Asia
reg3	region==Europe, Middle East and North Africa
reg4	region==Latin America and the Caribbean
sect1	sector==Eco. Mngt
sect2	sector==Env&Soc
sect3	sector==Finance
sect4	sector==Human
sect5	sector==Infrastructure (base)
sect6	sector==Private
yr80s	Dummy equal to one if 1980s
yr90_94	Dummy equal to one if 1990 to 1994
yr95_99	Dummy equal to one if 1995 to 1999
yr2000s	Dummy equal to one if 2000s

Note: (a) "HC" means "Past Projects Halfway completed or Completed by the Approval Time of a New Project". (b) More precisely, outcome50 equal 1 if at least 50 % of HC were successful. Equal to 0 otherwise, meaning that either there are no HC (i.e. count=0) or strictly less than 50% of HC were successful. (c) BOS = World Bank Operational Staff.

Table D2. Descriptive Statistics: All Sample

Variable	Obs	Mean	Std. Dev.	Min	Max
country	1977	63.94588	37.54392	1	134
year	1977	1994.957	4.244748	1984	2006
netcommit	1977	74.02852	126.3778	0.1332412	2525.25
approvdate	1977	12817.04	1539.58	8931	16692
deactdate	1977	36980.73	1107.845	34150	39156
exit_fy	1977	2001.079	3.093327	1993	2007
evaldate	1977	37315.47	1074.931	35468	39262
region	1977	2.411735	1.110506	1	4
sector	1977	3.514922	1.553012	1	6
network	1977	3.24785	1.467349	1	6
instr	1977	11.11482	2.916425	1	15
instrtype	1977	1.866464	0.3402388	1	2
agreetype	1977	1.488113	0.5030125	1	3
evaltype	1977	1.114315	0.3182735	1	2
outcome50	1977	0.5665149	0.4956814	0	1
sustain50	1977	0.4066768	0.4913379	0	1
impact50	1977	0.6302479	0.4828596	0	1
bankperf50	1977	0.5943349	0.4911445	0	1
borrperf50	1977	0.5432473	0.4982522	0	1
icrq50	1977	0.6545271	0.4756425	0	1
p_id	1977	16.19423	18.6411	1	109
totproj	1977	3.143652	2.662835	1	16
count	1977	7.925645	12.51287	0	90
cum_loan_amt	1977	1316.079	2590.611	0	16104.58
projeval	1977	2.167931	0.6379714	1	3
Apr_June	1977	0.430956	0.4953353	0	1
corrupt	1581	2.909604	0.9128316	0	5
bureau	1581	1.88707	0.8857682	0	4
openk	1906	62.04777	38.35935	7.974345	384.6969
gdp_cap	1941	1526.918	1854.101	74.74135	15815.79
ggdp_cap	1934	2.592812	6.837837	-46.99654	89.41008
infl	1818	50.38546	257.8053	-12.86966	4734.915
pop	1951	1.42E+08	3.18E+08	41800	1.26E+09

Table D3. Variable Definitions and Data Source

Variable	Definitions and Data Source
Net Commitment Amount	The Net Commitment Amount is calculated as total commitments net of cancellations for all projects in the Work Bank portfolio. <i>Source: The Independent Evaluation Group, World Bank</i>
Overall Project Outcome	A measure of the extent to which the project's major relevant objectives were achieved, or are expected to be achieved, efficiently. Six-point rating scale: highly satisfactory, satisfactory, moderately satisfactory, moderately unsatisfactory, unsatisfactory, and highly unsatisfactory. <i>Source: The Independent Evaluation Group, World Bank</i>
Project Sustainability	A measure reflecting the resiliency to risks of a project as measured by the likelihood that its estimated net benefits will be maintained or exceeded over the project's intended useful life. Five-point rating scale: highly likely, likely, uncertain, unlikely, and highly unlikely. <i>Source: The Independent Evaluation Group, World Bank</i>
Project Institutional Development Impact	A measure of the extent to which a project improves the ability of a country to use its human, financial, and natural resources efficiently, equitably, and in a sustainable manner. Four-point rating scale: high, substantial, modest, and negligible. <i>Source: The Independent Evaluation Group, World Bank</i>
Bank Performance	A measure of the extent to which services provided by the Bank ensured quality at entry and supported implementation through appropriate supervision. Six-point rating scale from highly satisfactory to highly unsatisfactory, where "highly satisfactory" means that the Bank performance was rated highly satisfactory on both dimensions. <i>Source: The Independent Evaluation Group, World Bank</i>
Borrower Performance	A measure of the extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, towards the achievement of development objectives and sustainability. Six-point rating scale from highly satisfactory to highly unsatisfactory. <i>Source: The Independent Evaluation Group, World Bank</i>
Implementation Completion Report or ICR quality	Project performance rating attributed by the operational staff of the Bank itself but not by the IEG; in that regard, it is a self-evaluation. It assesses (a) the degree to which the project achieved its development objective and outputs as set out in the project documents; (b) other significant outcomes and impacts; (c) prospects for the project's sustainability; and (d) Bank and borrower performance, including compliance with relevant Bank safeguard and business policies. Three-point rating scale: exemplary, satisfactory, or unsatisfactory. <i>Source: The Independent Evaluation Group, World Bank</i>
Region	The administrative regions correspond to the major operational divisions of the World Bank: Africa; Asia; Europe, Middle East and North Africa; and Latin America and Caribbean <i>Source: The Independent Evaluation Group, World Bank</i>
Sectors	Sectors are economic, political or sociological subdivisions within society. They reflect the type of project. There are 17 sectors represented in the World Bank Project Portfolio. E.g. Agriculture, Health, Education, Transport, Water Supply and Sanitation, and Energy and Mining. <i>Source: The Independent Evaluation Group, World Bank</i>

Variable	Definitions and Data Source
Network	The World Bank's portfolio is also distributed by networks. There are six networks ranging from Environmentally and Socially Sustainable Development Network (ESSD) to Private Sector Development Network (PSDN). <i>Source: The Independent Evaluation Group, World Bank</i>
Type of Lending Instruments	<i>Investment Lending</i> provides long-term financing for a variety of activities in various sectors aimed at building the physical and social infrastructure necessary for development. <i>Adjustment Lending</i> provides quick-disbursing financing to support policy and institutional reforms in developing countries. <i>Source: The Independent Evaluation Group, World Bank</i>
Agreement Type	The type of financing or credit according to the financing or credit instrument used: the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), and the Special Fund (SPF). <i>Source: The Independent Evaluation Group, World Bank</i>
Board Approval Date	The date that the Board of Directors voted to approve the loan or credit. <i>Source: The Independent Evaluation Group, World Bank Website: Projects & Operations, Help/FAQs</i>
Deactivation Date or Closing Date	The date all financial activities related to the project stopped. In many cases, financial activities (e.g. closing the books) will continue after actual field activities have ceased. <i>Source: The Independent Evaluation Group, World Bank Website: Projects & Operations, Help/FAQs</i>
GDP per capita	GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant U.S. dollars. <i>Source: World Development Indicators (2006), World Bank</i>
GDP per capita Growth	Annual percentage growth rate of GDP per capita based on constant local currency. GDP per capita is gross domestic product divided by midyear population. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. <i>Source: World Development Indicators (2006), World Bank</i>
Inflation	Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a fixed basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used. <i>Source: World Development Indicators (2006), World Bank</i>
Openness	Exports plus Imports divided by the RGDPL or Real GDP per capita (Laspeyres). It is the total trade as a percentage of GDP. The RGDPL is obtained by adding up consumption, investment, government and exports, and subtracting imports in any given year. It is a fixed base index where the reference year is 1996, hence the designation "L" for Laspeyres. <i>Source: Penn World Tables 6.2 (Heston et al. 2006)</i>
Corruption Index	It captures the likelihood that capture the likelihood that high government officials will demand special payments and bribes, and the extent to which illegal payments are expected throughout lower levels of government. The corruption index takes on values between zero (most corrupt) and six (least corrupt). <i>Source: The International Country Risk Guide (ICRG), Political Risk Group</i>

Bureaucracy Quality	<p>It is a measure of the quality of a country's bureaucracy on a 4 point scale. It is a shock absorber that tends to minimize policy variations when governments change. A high quality bureaucracy (<i>high score</i>) has the strength and expertise to govern without drastic changes in policies or interruptions in government services. Countries with poor bureaucracies receive <i>low points</i> because a change in government tends to be traumatic in terms of policy formulation and day-to-day administrative functions.</p> <p><i>Source: The International Country Risk Guide (ICRG), Political Risk Group</i></p>
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Table D4. Loan Size and Performance by Region

IEG Outcome				
Region	successful	unsuccessful	Total	Outcome by Number (%suc)
Africa	40.526971	30.142516	36.499177	61.21
	49.727427	36.725063	45.37823	
	333	211	544	
E&S Asia	116.42653	83.088866	108.97458	77.65
	164.60493	78.532262	150.29587	
	396	114	510	
Europe, Middle East and North Africa	56.051398	56.490136	56.138606	80.12
	76.049865	86.279512	78.096591	
	391	97	488	
Latin America and the Caribbean	101.15312	95.559546	100.06012	80.46
	139.39979	295.78958	180.45831	
	350	85	435	
Total	79.537467	58.055831	74.028519	74.36
	122.3375	136.29554	126.37781	
	1470	507	1977	

Means, Standard Deviations and Frequencies of Net Commitments (Millions of Dlr)

Table D5. Loan Size and Performance by Sector

IEG Outcome				
Sector	successful	unsuccessful	Total	Outcome by Number (%suc)
Eco. Mngt	99.792263	98.016032	99.351494	75.19
	186.08838	313.71103	223.94369	
	203	67	270	
Env&Soc	56.432809	41.036762	51.919547	70.69
	67.280901	55.846596	64.458306	
	299	124	423	
Finance	157.53541	96.724817	143.89565	77.57
	257.70171	205.06518	247.28083	
	83	24	107	
Human	66.197872	40.769037	60.433284	77.33
	91.262458	53.771783	84.858937	
	365	107	472	
Infrastructure	84.044846	70.133236	80.670248	75.74
	90.201838	80.396672	88.061733	
	459	147	606	
Private	65.157223	20.668555	48.080765	61.62
	100.26779	22.069688	82.535187	
	61	38	99	

Total	79.537467	58.055831	74.028519	
	122.3375	136.29554	126.37781	
	1470	507	1977	74.36

Means, Standard Deviations and Frequencies of Net Commitments (Millions of Dlr)

Table D6. Loan Size and Performance by Approval Month

IEG Outcome				
Approval Month	successful	unsuccessful	Total	Outcome by Number (%suc)
0	79.671605	59.245672	74.769381	
	134.51098	164.83653	142.56868	
	855	270	1125	76
1	79.350981	56.700315	73.050268	
	103.15939	94.102745	101.17831	
	615	237	852	72.1831
Total	79.537467	58.055831	74.028519	
	122.3375	136.29554	126.37781	
	1470	507	1977	74.35508

Means, Standard Deviations and Frequencies of Net Commitments (Millions of Dlr)

Note: Equal to 1 if Approval Month is April, May or June

Table D7. Loan Size and Performance by Evaluation

IEG Outcome				
projeval	successful	unsuccessful	Total	Outcome by Number (%suc)
1	179.82335	154.60088	174.75974	
	238.66986	367.88969	268.97261	
	211	53	264	79.92
2	51.576388	35.804017	47.227337	
	67.77332	49.483375	63.630732	
	809	308	1117	72.43
3	82.782338	69.950838	79.639051	
	88.953374	80.642899	87.100141	
	450	146	596	75.50
Total	79.537467	58.055831	74.028519	
	122.3375	136.29554	126.37781	
	1470	507	1977	74.36

Means, Standard Deviations and Frequencies of Net Commitments (Millions of Dlr)

Note: projeval is the Measure constructed to reflect the degree of difficulty to evaluate project performance 1=Sector Projects Difficult to Evaluate; 2= Sector Projects Moderately Difficult to Evaluate; 3= Sector Projects Easy to Evaluate

Table D8. Countries Included in the Dataset (by Regions)

Region: Sub-Saharan Africa			
Country	Freq.	Percent	Cum.
Angola	7	1.29	1.29
Benin	14	2.57	3.86
Botswana	1	0.18	4.04
Burkina Faso	19	3.49	7.54
Burundi	15	2.76	10.29
Cameroon	12	2.21	12.5
Cape Verde	9	1.65	14.15
Central African Republic	11	2.02	16.18
Chad	16	2.94	19.12
Comoros	8	1.47	20.59
Congo, Democratic Republic of	3	0.55	21.14
Cote d'Ivoire	16	2.94	24.08
Equatorial Guinea	2	0.37	24.45
Eritrea	5	0.92	25.37
Ethiopia	18	3.31	28.68
Gabon	4	0.74	29.41
Gambia, The	9	1.65	31.07
Ghana	32	5.88	36.95
Guinea	17	3.13	40.07
Guinea-Bissau	8	1.47	41.54
Kenya	21	3.86	45.4
Lesotho	8	1.47	46.87
Madagascar	23	4.23	51.1
Malawi	17	3.13	54.23
Mali	22	4.04	58.27
Mauritania	19	3.49	61.76
Mauritius	9	1.65	63.42
Mozambique	14	2.57	65.99
Niger	10	1.84	67.83
Nigeria	24	4.41	72.24
Rwanda	13	2.39	74.63
Sao Tome and Principe	7	1.29	75.92
Senegal	24	4.41	80.33
Sierra Leone	12	2.21	82.54
Sudan	1	0.18	82.72
Swaziland	1	0.18	82.9
Tanzania	30	5.51	88.42
Togo	15	2.76	91.18
Uganda	22	4.04	95.22
Zambia	19	3.49	98.71
Zimbabwe	7	1.29	100
<i>Total</i>	<i>544</i>	<i>100</i>	

Region: East and South Asia			
Country	Freq.	Percent	Cum.
Afghanistan	1	0.2	0.2
Bangladesh	24	4.71	4.9
Bhutan	2	0.39	5.29
Cambodia	6	1.18	6.47
China	109	21.37	27.84
Fiji	3	0.59	28.43
India	91	17.84	46.27
Indonesia	64	12.55	58.82
Korea, Republic of	18	3.53	62.35
Lao People's Democratic Republic	13	2.55	64.9
Malaysia	9	1.76	66.67
Maldives	1	0.2	66.86
Mongolia	5	0.98	67.84
Nepal	19	3.73	71.57
Pakistan	48	9.41	80.98
Papua New Guinea	7	1.37	82.35
Philippines	30	5.88	88.24
Samoa	3	0.59	88.82
Solomon Islands	2	0.39	89.22
Sri Lanka	22	4.31	93.53
Thailand	19	3.73	97.25
Tonga	1	0.2	97.45
Vanuatu	2	0.39	97.84
Vietnam	11	2.16	100
<i>Total</i>	<i>510</i>	<i>100</i>	

Region: Europe, Middle East and North Africa			
Country	Freq.	Percent	Cum.
Albania	31	6.35	6.35
Algeria	24	4.92	11.27
Armenia	13	2.66	13.93
Azerbaijan	7	1.43	15.37
Belarus	3	0.61	15.98
Bosnia and Herzegovina	24	4.92	20.9
Bulgaria	13	2.66	23.57
Croatia	8	1.64	25.2
Cyprus	5	1.02	26.23
Czech Republic	2	0.41	26.64
Djibouti	6	1.23	27.87
Egypt, Arab Republic of	15	3.07	30.94
Estonia	4	0.82	31.76
Georgia	11	2.25	34.02
Hungary	16	3.28	37.3
Iran, Islamic Republic of	3	0.61	37.91
Jordan	12	2.46	40.37
Kazakhstan	10	2.05	42.42
Kyrgyz Republic	15	3.07	45.49

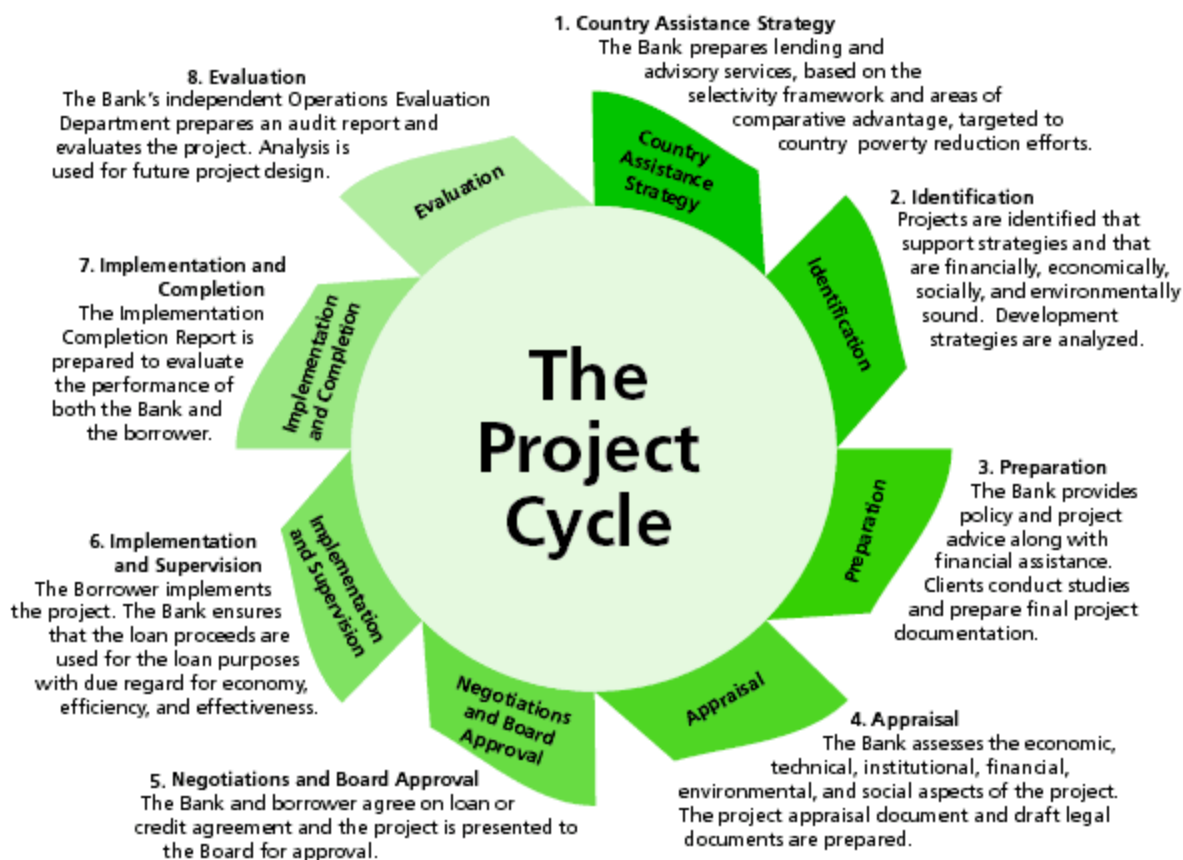
Latvia	11	2.25	47.75
Lebanon	7	1.43	49.18
Lithuania	9	1.84	51.02
Macedonia, former Yugoslav Republic of	15	3.07	54.1
Moldova	9	1.84	55.94
Morocco	41	8.4	64.34
Poland	27	5.53	69.88
Portugal	1	0.2	70.08
Romania	16	3.28	73.36
Russian Federation	19	3.89	77.25
Serbia	6	1.23	78.48
Slovak Republic	2	0.41	78.89
Slovenia	4	0.82	79.71
Tajikistan	12	2.46	82.17
Tunisia	20	4.1	86.27
Turkey	24	4.92	91.19
Turkmenistan	3	0.61	91.8
Ukraine	11	2.25	94.06
Uzbekistan	6	1.23	95.29
Yemen, Republic of	23	4.71	100
<i>Total</i>	<i>488</i>	<i>100</i>	

Region: Latin America and the Caribbean			
Country	Freq.	Percent	Cum.
Argentina	41	9.43	9.43
Bahamas, The	1	0.23	9.66
Barbados	2	0.46	10.11
Belize	6	1.38	11.49
Bolivia	27	6.21	17.7
Brazil	71	16.32	34.02
Chile	17	3.91	37.93
Colombia	33	7.59	45.52
Costa Rica	5	1.15	46.67
Dominica	5	1.15	47.82
Dominican Republic	11	2.53	50.34
Ecuador	22	5.06	55.4
El Salvador	9	2.07	57.47
Grenada	3	0.69	58.16
Guatemala	9	2.07	60.23
Guyana	9	2.07	62.3
Haiti	10	2.3	64.6
Honduras	8	1.84	66.44
Jamaica	15	3.45	69.89
Mexico	43	9.89	79.77
Nicaragua	15	3.45	83.22
Panama	7	1.61	84.83
Paraguay	8	1.84	86.67
Peru	18	4.14	90.8
St. Kitts and Nevis	3	0.69	91.49
St. Lucia	3	0.69	92.18

St. Vincent and the Grenadines	3	0.69	92.87
Trinidad and Tobago	3	0.69	93.56
Uruguay	12	2.76	96.32
Venezuela, Republica Bolivariana de	16	3.68	100
<i>Total</i>	<i>435</i>	<i>100</i>	

APPENDIX E

THE WORLD BANK PROJECT CYCLE



Source: the World Bank (<http://go.worldbank.org/GI967K75D0>), accessed 10 September 2007.

APPENDIX F

LOAN ALLOCATION CRITERIA: OTHER EMPIRICAL RESULTS

Table F1. Determinants of Project Loan Size with Overall Project Outcome and Sector Dummy

Dependent Variable: Log of Net Commitments ^a

Variable	Specifications		
	(1) No Interactions	(2) Performance Interactions	(3) Year Interactions
Lnetcommit_1	0.076** (0.032)	0.162*** (0.049)	0.067** (0.032)
corrupt	-0.020 (0.039)	-0.083 (0.053)	-0.022 (0.038)
bureau	0.017 (0.041)	0.028 (0.041)	0.013 (0.041)
openk	0.002** (0.001)	0.002** (0.001)	0.002** (0.001)
infl	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Lgdp	-1.308*** (0.431)	-1.309*** (0.433)	-1.309*** (0.420)
Lgdp2	0.101*** (0.030)	0.101*** (0.030)	0.102*** (0.029)
ggdp_cap	-0.001 (0.007)	0.000 (0.007)	-0.002 (0.007)
Lpop	0.385*** (0.046)	0.382*** (0.045)	0.384*** (0.043)
Lcumloan	-0.042 (0.044)	-0.039 (0.044)	-0.033 (0.042)
outcome50	-0.297** (0.144)	-0.291 (0.349)	-0.238 (0.154)
bankperf50	0.314** (0.141)	0.286** (0.143)	0.261* (0.141)
borrperf50	0.081 (0.132)	0.098 (0.132)	0.100 (0.130)
reg2	-0.023 (0.132)	-0.030 (0.131)	-0.024 (0.132)
reg3	0.157 (0.141)	0.149 (0.142)	0.195 (0.143)
reg4	0.306** (0.150)	0.287* (0.149)	0.322** (0.151)
yr80s	0.038 (0.097)	-0.060 (0.095)	0.111 (0.132)
yr95_99	-0.207*** (0.071)	-0.203*** (0.072)	-0.187 (0.133)
yr2000s	0.083 (0.146)	0.050 (0.148)	-0.366 (0.468)
sect1	-0.201 (0.128)	-0.637*** (0.228)	-0.821*** (0.201)
sect2	-0.601***	-0.513***	-0.472***

	(0.074)	(0.098)	(0.105)
sect3	0.184	-0.207	0.017
	(0.163)	(0.241)	(0.241)
sect4	-0.229***	-0.318***	-0.259***
	(0.069)	(0.087)	(0.088)
sect6	-0.544***	-0.548***	-0.506**
	(0.169)	(0.191)	(0.219)
Apr_June	-0.037	-0.031	-0.031
	(0.059)	(0.059)	(0.057)
Lagcom_out50		-0.121**	
		(0.055)	
sect1_out50		0.632**	
		(0.271)	
sect2_out50		-0.116	
		(0.142)	
sect3_out50		0.561*	
		(0.313)	
sect4_out50		0.169	
		(0.130)	
sect6_out50		0.045	
		(0.317)	
out50_corr		0.111	
		(0.070)	
yr80_out50			0.000
			(0.000)
yr9599_out50			-0.028
			(0.134)
yr2000_out50			-0.405
			(0.425)
yr80_sect1			-0.674
			(0.715)
yr9599_sect1			0.382
			(0.274)
yr2000_sect1			1.886***
			(0.366)
yr80_sect2			-0.060
			(0.175)
yr9599_sect2			-0.258
			(0.158)
yr2000_sect2			0.071
			(0.412)
yr80_sect3			-0.046
			(0.318)
yr9599_sect3			0.022
			(0.373)
yr2000_sect3			1.245***
			(0.449)
yr80_sect4			-0.370**
			(0.169)
yr9599_sect4			0.042
			(0.141)
yr2000_sect4			0.677*
			(0.362)
yr80_sect6			-0.413
			(0.509)
yr9599_sect6			0.128

yr2000_sect6			(0.292)
			-0.466
			(1.049)
Constant	1.166	1.144	1.137
	(1.555)	(1.588)	(1.545)
Observations	1383	1383	1383
R-squared	0.31	0.32	0.34

^a Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table F2. Determinants of Project Loan Size with Overall Project Outcome and June Dummy

Dependent Variable: Log of Net Commitments^a

Variable	Specifications		
	(1) No Interactions	(2) Performance Interactions	(3) Year Interactions
Lnetcommit_1	0.059** (0.030)	0.160*** (0.046)	0.051* (0.030)
corrupt	0.046 (0.036)	-0.053 (0.050)	0.045 (0.036)
bureau	0.009 (0.036)	0.023 (0.036)	0.005 (0.036)
openk	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)
infl	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Lgdp	-1.059*** (0.382)	-1.057*** (0.382)	-0.995*** (0.374)
Lgdp2	0.083*** (0.026)	0.084*** (0.026)	0.079*** (0.026)
ggdp_cap	-0.004 (0.006)	-0.004 (0.006)	-0.004 (0.006)
Lpop	0.388*** (0.040)	0.385*** (0.040)	0.382*** (0.040)
Lcumloan	-0.051 (0.039)	-0.051 (0.039)	-0.045 (0.038)
outcome50	-0.302** (0.124)	-0.315 (0.318)	-0.193 (0.135)
bankperf50	0.358*** (0.128)	0.337*** (0.127)	0.312** (0.126)
borrperf50	0.001 (0.118)	0.012 (0.119)	0.012 (0.118)
reg2	0.100 (0.120)	0.091 (0.119)	0.094 (0.120)
reg3	0.178 (0.122)	0.150 (0.123)	0.187 (0.123)
reg4	0.330** (0.132)	0.288** (0.131)	0.322** (0.133)
yr80s	-0.012 (0.092)	-0.070 (0.090)	0.109 (0.132)
yr95_99	-0.246*** (0.068)	-0.236*** (0.068)	-0.095 (0.128)
yr2000s	-0.545*** (0.136)	-0.555*** (0.138)	-0.370 (0.371)
proj_eval1	1.250*** (0.101)	0.942*** (0.168)	0.807*** (0.168)
proj_eval2	-0.521*** (0.057)	-0.518*** (0.077)	-0.451*** (0.081)
June	-0.040 (0.064)	-0.035 (0.064)	-0.032 (0.063)
Lagcom_out50		-0.144*** (0.052)	
peval1_out50		0.427**	

		(0.197)	
peval2_out50		0.031	
		(0.111)	
out50_corr		0.165***	
		(0.063)	
yr80_out50			0.000
			(0.000)
yr9599_out50			-0.135
			(0.127)
yr2000_out50			-0.638**
			(0.278)
yr80_peval1			-0.755***
			(0.209)
yr9599_peval1			0.265
			(0.207)
yr2000_peval1			1.025***
			(0.338)
yr80_peval2			-0.152
			(0.150)
yr9599_peval2			-0.122
			(0.122)
yr2000_peval2			0.148
			(0.364)
Constant	0.217	0.213	0.046
	(1.375)	(1.401)	(1.354)
Observations	1383	1383	1383
R-squared	0.43	0.44	0.44

^a Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table F3. Determinants of Project Loan Size with Overall Project Outcome and Share of U.S. Trade

Dependent Variable: Log of Net Commitments ^a			
Variable	Specifications		
	(1) No Interactions	(2) Performance Interactions	(3) Year Interactions
Lnetcommit_1	0.055* (0.029)	0.163*** (0.047)	0.047 (0.030)
corrupt	0.055 (0.036)	-0.051 (0.050)	0.054 (0.036)
bureau	0.004 (0.037)	0.023 (0.037)	0.001 (0.036)
openk	0.002* (0.001)	0.001 (0.001)	0.002* (0.001)
infl	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Lgdp	-1.066*** (0.392)	-1.099*** (0.392)	-0.998*** (0.385)
Lgdp2	0.084*** (0.027)	0.087*** (0.027)	0.080*** (0.027)
ggdp_cap	-0.003 (0.006)	-0.004 (0.006)	-0.004 (0.006)
Lpop	0.393*** (0.044)	0.380*** (0.044)	0.388*** (0.044)
shareexp	2.845 (8.554)	1.221 (8.490)	3.089 (8.414)
shareimp	-2.871 (6.795)	-0.085 (6.879)	-3.246 (6.761)
Lcumloan	-0.051 (0.039)	-0.052 (0.038)	-0.046 (0.038)
outcome50	-0.304** (0.123)	-0.300 (0.319)	-0.201 (0.135)
bankperf50	0.361*** (0.127)	0.339*** (0.126)	0.317** (0.125)
borrperf50	0.010 (0.118)	0.017 (0.118)	0.020 (0.118)
reg2	0.096 (0.120)	0.095 (0.118)	0.089 (0.120)
reg3	0.169 (0.122)	0.153 (0.123)	0.177 (0.124)
reg4	0.299** (0.132)	0.262** (0.131)	0.292** (0.132)
yr80s	0.005 (0.093)	-0.053 (0.091)	0.122 (0.133)
yr95_99	-0.242*** (0.067)	-0.232*** (0.067)	-0.096 (0.128)
yr2000s	-0.511*** (0.134)	-0.517*** (0.135)	-0.410 (0.370)
proj_eval1	1.232*** (0.101)	0.938*** (0.168)	0.820*** (0.171)
proj_eval2	-0.520*** (0.058)	-0.519*** (0.077)	-0.455*** (0.081)
Apr_June	-0.095* (0.053)	-0.090* (0.053)	-0.088* (0.052)

Lagcom_out50		-0.155***	
		(0.051)	
peval1_out50		0.415**	
		(0.197)	
peval2_out50		0.039	
		(0.112)	
out50_corr		0.172***	
		(0.063)	
yr80_out50			0.000
			(0.000)
yr9599_out50			-0.128
			(0.127)
yr2000_out50			-0.586**
			(0.277)
yr80_peval1			-0.764***
			(0.211)
yr9599_peval1			0.247
			(0.211)
yr2000_peval1			1.006***
			(0.339)
yr80_peval2			-0.148
			(0.151)
yr9599_peval2			-0.120
			(0.122)
yr2000_peval2			0.203
			(0.361)
Constant	0.193	0.454	-0.013
	(1.436)	(1.453)	(1.417)
Observations	1380	1380	1380
R-squared	0.43	0.44	0.44

^a Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

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