

In'airat, Mohammad

**Article**

## Aid allocation, selectivity, and the quality of governance

Journal of Economics, Finance and Administrative Science

**Provided in Cooperation with:**

Universidad ESAN, Lima

*Suggested Citation:* In'airat, Mohammad (2014) : Aid allocation, selectivity, and the quality of governance, Journal of Economics, Finance and Administrative Science, ISSN 2218-0648, Elsevier España, Barcelona, Vol. 19, Iss. 36, pp. 63-68,  
<https://doi.org/10.1016/j.jefas.2014.03.002>

This Version is available at:

<https://hdl.handle.net/10419/179749>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

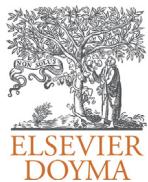
*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by-nc-nd/4.0/>



Article

## Aid allocation, selectivity, and the quality of governance

Mohammad In'airat

Ibn Rushd College for Management Sciences, Business Administration Department, P.O. Box 447, Abha, Saudi Arabia



### ARTICLE INFO

*Article history:*

Received 30 December 2013

Accepted 13 March 2014

*JEL classification:*

F35

O19

*Keywords:*

Foreign aid

Aid allocation

Governance

Aid selectivity

### ABSTRACT

The introduction of good governance in the economic growth and development agenda in the last two decades, along with the failure of aid conditionality to produce positive growth results, motivated ex-post selectivity instead of the ex-ante conditionality as a new approach to aid allocation. This paper aims to explore whether aid selectivity on the basis of the quality of governance is employed as a criterion in foreign aid allocation. The paper uses different instrumental variables as estimators to analyze the determinants of aid allocation over the period 2001–2010. The results produced strong evidence that countries with good governance are given preferential treatment by donors. Among the six governance indicators, it seems that voice and accountability and control of corruption are critical in the aid allocation decision.

© 2013 Universidad ESAN. Published by Elsevier España, S.L. All rights reserved.

## Asignación de ayuda, selectividad y calidad de gobierno

### RESUMEN

La introducción del buen gobierno en la agenda del crecimiento y el desarrollo económicos durante los dos últimos decenios, junto con el fracaso de la condicionalidad de la ayuda para producir resultados positivos sobre el crecimiento, han motivado la selectividad ex-post en lugar de la condicionalidad ex-ante como nuevo enfoque hacia la asignación de ayuda. Este documento trata de explorar si se utiliza o no la selectividad de la ayuda sobre la base de la calidad del gobierno, como criterio de cara a la asignación de la ayuda. El informe utiliza diferentes estimadores de las variables instrumentales para analizar los determinantes de la asignación de ayuda durante el período 2001-2010. Los resultados arrojaron sólidas pruebas acerca de que los donantes otorgan un tratamiento preferente a los países con buen gobierno. Entre los seis indicadores del buen gobierno, parece que la voz y la responsabilidad, así como el control de la corrupción, son críticos para decidir la asignación de la ayuda.

© 2013 Universidad ESAN. Publicado por Elsevier España, S.L. Todos los derechos reservados.

### 1. Introduction

Since the late 1980s, a large body of empirical literature presumed strong positive links between good governance and economic development. In fact, different studies have focused on different aspects of good governance (control of corruption, political stability, rule of law, institutional quality, property and contract rights, and civil liberties). On the basis of this evidence, the good governance agenda argument applied to foreign aid implies that

inducing and rewarding good governance countries would result in increasing the growth and social welfare of these countries and hence to better aid effectiveness.

The World Bank's report of 1998, "Assessing Aid", confirmed that foreign aid contributes to economic growth when economic policies are good. Sound management that produces macroeconomic stability, openness, rule of law, and absence of corruption leads to growth and poverty reduction. It also creates the right environment for aid to reduce poverty. According to the report, "research on aid effectiveness has emphasized that a good policy environment and effective public institutions are essential if development assistance is to foster growth, reduce poverty, and improve social conditions".

E-mail address: [mohd.inairat@psc.edu.sa](mailto:mohd.inairat@psc.edu.sa)

In the same line of World Bank's assertion, [Burnside and Dollar \(2000\)](#) argue that aid adds to investment whereas policy determines the productivity of investment and therefore includes an 'aid  $\times$  policy' interaction term but excludes investment. They quantify economic performance in aid-recipient countries as a function of aid and policy, using global data for the period 1973–97. They predict performance during four-year periods from characteristics in the preceding period. When other determinants of growth are controlled for, especially an indicator of economic policy, aid has no effect. Aid only has a positive impact on growth in developing countries with good fiscal, monetary, and trade policies but it is ineffective or has little effect in the presence of poor policies. This result is explained by the tendency of recipients, especially if they have poor policies, to divert aid to government consumption spending rather than using it to finance growth-promoting investment. They conclude that faster growth is associated with better policy, while the effect of aid depends upon the level of policy.

The significance of governance in the economic growth and development agenda highlighted at the 2002 UN Financing for Development Conference, as the President of the United States, G.W. Bush suggested that greater aid must be tied to political, legal and economic reforms. For this purpose, he announced the establishment of a new Millennium Challenge Account to provide an additional five billion dollars in grants to developing countries. In the words of Mr. Bush, "*these new funds will be devoted to projects in nations that govern justly, invest in their people and encourage economic freedom*".

On the basis of the shift in the development and foreign aid agenda, from aid conditionality to aid selectivity, this paper sets out to examine the relationship between good governance in developing countries and the amount of aid allocated to such countries. In other words, the paper will explore whether aid allocation decision is based on governance quality of the recipient among other factors or not. The most recent aid flow data will be used to analyze if donors have indeed introduced the good governance as a criterion for selectivity and foreign aid amounts allocated to recipients.

The remainder of this paper is structured as follows: Section 2 provides an overview of foreign aid and governance literature. The empirical model and data used in this investigation are outlined in Section 3, followed by a presentation of the results and interpretation in Section 4, while Section 5 concludes.

## 2. Aid effectiveness and governance

Foreign aid has long been argued to help development, in the sense that it helps complete and foster missing or incomplete markets in developing countries. Aid has been the principal source of development finance for the majority of developing countries over the past few decades. This has generated a large literature on the effectiveness of aid, which remains essentially inconclusive. Regardless of the models and approaches used, there is sufficient evidence that foreign aid does have a positive effect in developing countries, but only under certain conditions. The point of disagreement among the different authors in the foreign aid literature is the condition required to make foreign aid effective.

Foreign aid can be defined as "the benevolent donation of funds by rich nations to poor nations so that the poor nations can sufficiently meet the needs of its people" ([Hoy, 1998](#)). The Development Assistance Committee (DAC) defines foreign aid as Official Development Assistance (ODA); this definition is considered as the technical definition of foreign aid. Foreign aid or ODA is a "transfer of resources on concessional terms (...) undertaken by official agencies; [which] has the promotion of economic development and welfare as its main objectives; and has a 'grant element' of 25 percent or more" ([Cassen, 1994](#)).

The principal economic rationale for aid is to increase growth rates in recipient countries. This has been the driving economic objective of aid for decades, formally established in the 'two-gap' model of [Cheney and Strout \(1966\)](#). In this approach, investment is the cornerstone of growth and, at least initially, this requires imported capital goods. Furthermore, aid is given to countries with low income, and aid/GDP is much higher for countries with small populations. But economic growth of developing countries is not the only driver for the transfer of foreign aid. There is a large body of literature that has addressed the question of donor interests, [Maizels and Nissanke \(1984\)](#), [McKinlay and Little \(1979\)](#), [Frey and Schneider \(1986\)](#) and [Trumbull and Howard \(1994\)](#). In general, this literature has found that donors' strategic interests play an important role in the allocation of aid. Frey and Schneider found evidence that commitment of World Bank assistance is associated with good policies conditionality such as lowering inflation rate.

The earnest attempts during 1980s and 1990s to make recipient countries comply with donor-imposed conditions attached to loans and grants are deemed to have largely failed (see for instance [Collier, 1997, 2000](#)). Therefore, the dissatisfying results of conditionality in inducing political, institutional, and economic reforms of recipient countries ([Lockwood, 2005](#); [Svensson, 2002](#); [Van de Walle, 2005](#)) prompted the introduction of ex-post selectivity (allocation of aid to countries with proven records of ownership and commitment toward comprehensive reform and good governance) as a guiding principle for the allocation of aid ([Burnside & Dollar, 2000](#); [World Bank, 1998](#)).

The conception of good governance emerged in 1989 in the World Bank's report on Sub-Saharan Africa, which described the crisis in the region as a "crisis of governance" ([World Bank, 1989](#)). The concept of governance as defined by the World Bank captures "the manner in which power is exercised in the management of a country's economic and social resources for development" ([World Bank, 1992](#)). A good governance system imposes certain requirements on the process of decision-making and public policy formulation. It extends beyond the capacity of public sector to the rules that create a legitimate efficient and effective framework for the conduct of public policy. It implies managing public affairs in an accountable, transparent, participatory and equitable manner. It also entails effective participation in public policy making, the prevalence of the rule of law and an independent judiciary institutional checks and balances through horizontal and vertical separation of powers and effective oversight agencies ([Kaufmann, Kraay, & Zoido-Lobaton, 1999a, 1999b](#)).

The motive behind the introduction of good governance agenda resides in the continuing lack of aid effectiveness. Therefore, a large number of studies have been devoted to examine the links between different governance aspects and the effectiveness of foreign aid. The common result of these studies is that aid may work positively in an environment of good governance ([Ahrens & Meurers, 2002](#); [Burnside & Dollar, 2000](#); [Harms & Lutz, 2003](#); [Isham, Kaufman, & Pritchett, 1997](#); [Kaufmann et al., 1999b](#); [Kjaer, 1996](#); [Knack, 2001](#); [Santiso, 2001](#); [Sopha, 2002](#); [Weder, 2000](#)).

The seminal paper by [Burnside and Dollar \(2000\)](#), which identified a strong relationship between sound policies and economic growth, as well as a large body of subsequent research provided the empirical grounds for the realignment of aid allocation mechanisms toward selectivity and conditionality on good governance ([Arndt & Oman, 2006](#); [Berthelemy & Tichit, 2004](#); [Burnside & Dollar, 2004](#)). Many other studies also supported the emergence of good governance as the new guiding principle for the allocation of foreign aid ([Chhotray & Hulme, 2009](#); [Doornbos, 2001](#); [Hermes & Lensink, 2001](#)).

Many studies used particular indicators of governance to test their effects on development and the impact of foreign aid. But it seems that among these indicators, corruption was the major

concern (Ades & Di Tella, 1997; Alesina & Weder, 2002; Collier & Dollar, 2001; Lahiri & Moller, 2000; Thornton, 2002). The main finding of these studies is that corruption significantly impairs aid effectiveness. Isham et al. (1997) tested two more indicators of governance and found that effective citizen voice and public accountability often contributes to greater efficacy in government action and a more efficient allocation of resources. More fundamentally, open governance systems are more likely to generate a responsible and responsive government and thus adopt pro-poor public policies.

As aid allocation is the main aim of this paper, a number of studies have been conducted to explore the links between the amounts of aid allocated to recipients and their quality of governance (Alesina & Dollar, 2000; Alesina & Weder, 2002; Bandyopadhyay & Wall, 2006; Furuoka, 2005; Neumayer, 2003; Svensson, 2000). However, these studies could not reach a robust conclusion regarding the behavior of donors in foreign aid allocation and the results that these studies yielded were often contradictory. For example, Alesina and Weder (2002) found that only Australian and Scandinavian donors use corruption control as a basis for selectivity. Svensson (2000) and Neumayer (2003) found that there is a weak role of controlling corruption in the selection of recipient countries. Alesina and Dollar (2000) found that most donor countries, apart from France, Italy, Belgium and Austria, do favor recipients with better political and civil rights. Neumayer (2003) concluded that most donors favor more populous countries. Bandyopadhyay and Wall (2006) produced evidence that aid flows tended to respond negatively to per capita income.

The World Bank Institute suggests that currently there are more than 140 sets of governance indicators available, comprising of thousands of individual quantitative measures (World Bank Institute, 2006). The best-known indicators, which are used by the majority of research work, are those provided by the World Bank, the Freedom House, the International Country Risk Guide, and Transparency International (Arndt, 2010; Kaufmann et al., 1999a, 1999b; Kaufmann, Kraay, & Mastruzzi, 2004, 2005, 2006a, 2006b, 2008, 2013). Researchers at the World Bank Institute distinguished six main dimensions of good governance, these are:

- I Voice and accountability, which includes civil liberties and political stability.
- II Government effectiveness, which includes the quality of policy making and public services delivery.
- III The lack of regulatory burden.
- IV The rule of law, which includes protection of property rights.
- V Independence of the judiciary system.
- VI Control of corruption (Kaufmann et al., 1999a, 1999b).

### 3. The empirical model and data

As discussed in the previous section, both on the research and policy making levels there was a strong recommendation to apply selectivity on the basis of the quality of governance in allocating aid to developing countries. My aim in this paper is to trace the effect of this recommendation and to find out whether aid allocation to developing countries in the period 2001–2010 is influenced by the quality of governance. The way to achieve this aim is to estimate an empirical model, in which the amount of aid as a dependent variable is influenced by certain explanatory variables including governance.

Following the literature reviewed in section two of this paper, ODA allocation is hypothesized to be determined by four factors: (1) aid recipients' need, measured by the level of income (GDP per capita), (2) aid recipients' populations, (3) aid recipients' quality of governance, and (4) donors' interest. Firstly, income level in aid

recipient countries is expected to be an important determinant for aid allocation because countries with low per capita income have a greater need for foreign aid. This study follows the literature in hypothesizing that countries with lower per capita GDP receives bigger amount of foreign aid.

Secondly, the size of population is also an important factor to consider. More populous developing countries are expected to be in greater need of foreign aid. Large population has been considered an obstacle for the economic growth in developing countries. According to Simon (1997), there has been consensus that large population in a developing country could lead to a reduction in machinery and infrastructure per person, and hence to a reduction in output per person.

But since the model measures the impact on per capita aid and not the total aid, it is expected that per capita aid will drop down with larger populations. Finally, according to Burnside and Dollar (2000) and many others, as shown above, foreign aid should be redirected to countries following "good policies". Therefore, and depending on Bush's announcement in 2002 to direct foreign aid to countries with good governance, it is expected that countries with a good governance record will relatively receive more of per capita aid. Donors' interest is also expected to play a role in aid allocation, therefore I have control for donors' interest by a number of regional dummies including Egypt, Sub-Saharan-Africa(SSA), Franc Zone, and Central America. These dummies were used in previous research including that of Burnside and Dollar (2000).

The estimation strategy is to run a regression to estimate the following equation:

$$\text{Aid amount} = \text{Recipient need} + \text{Governance} + \text{Donors interest}$$

where aid amount is the natural log of the annual per capita ODA, recipient need is captured by the natural log of the annual per capita GDP and the natural log of total population. For the quality of governance, World Governance Indicators (WGI) developed by Kaufmann et al. (2013) are used. All explanatory variables are lagged one period on the assumption that aid allocation depends on the previous year's data.

To address potential endogeneity of governance, the estimation strategy will be to run different types of instrumental variables (IV) regressions including two-stage least squares (2SLS), limited information maximum likelihood (LIML), generalized method of moments GMM, and Baltagi's (1981) error component two-stage least squares (EC2SLS) regressions. The results in terms of the size and statistical significance of regressors' coefficients will be compared to establish the level of confidence in these results. For the selection of instruments, I follow Burnside and Dollar (2000) who argued that there are good instruments that can be used in the aid allocation equation. These are the money supply (M2/GDP) and the government consumption relative to GDP. Both the instruments are lagged one period in all the IV regressions.

Finally, I run a panel random effect regression to estimate the coefficients of individual indicators of governance so as to know the weight and significance of each individual variable in the aid allocation decision. I did so due to the limited number of instrumental variables that can be used in the estimation of IV regressions. In all regressions time dummies were used. Except for the governance indicators, the main source of data is the World Bank's internet database – *World Development Index Data-Query* (World Bank, 2013). The panel consists of 122 aid recipient countries for the period 2001–2010 (see Appendix 1).

### 4. Empirical results and analysis

To have a general understanding of the data, a summary statistics that describe the mean and the standard deviation of the data

**Table 1**

Summary statistics of the data.

| Variable                                | Mean      | Std. Dev. | Min       | Max      |
|---|-----------|-----------|-----------|----------|
| Natural log of aid per capita           | 3.542285  | 1.372526  | -2.944946 | 6.81418  |
| Natural log of initial GDP per capita   | 7.168493  | 1.073178  | 4.776134  | 9.474208 |
| Natural log population                  | 15.75824  | 1.947094  | 11.15138  | 21.01422 |
| Governance (range between -2.5 and 2.5) | -.5019145 | .5569222  | -2.123715 | 1.04239  |

Author calculation.

is reported in [Table 1](#). The next step in the analysis, a pooled OLS regression was estimated. [Table 2](#) regression (1) presents the results of this regression. All the explanatory variables except the dummies representing donors' interest are correctly signed and statistically significant. Among the dummies, only Franc Zone enters with a significant minus sign coefficient at .05 level. This result suggests that foreign aid allocation takes into consideration both the need and governance quality of the recipient. It seems that donors' interest did not play a significant role in deciding the aid allocation agenda, during the period of study. It also seems that populated countries receive less aid in terms of per capita. Both the coefficients of initial GDP per capita and population variables entered with the expected minus sign and both are significant at .01 level. This result is consistent with the previous research findings. Though the coefficient of governance variable is relatively small but it also confirms the hypothesis that donors are inclined to allocate foreign aid on the basis of the governance quality of the recipient.

I also conducted the IV regressions to cope with the potential bias generated by endogeneity of the governance variable. The IV regressions results as displayed in [Table 2](#) regressions (2) to (5) clearly show that the use of these different estimators does not alter the expected signs; nor does it change the statistical significance of the explanatory variables, except for the Franc Zone dummy where its coefficient is now no more statistically significant in all the IV estimators. But, the magnitude of these parameters presents different size of variations for different estimators. The maximum variation is in the case of governance where the coefficients range between .194 in regression (1) and 1.202 in regression (4). Nevertheless, and in spite of these variations in magnitude the signs and the level of significance did not change except for governance coefficient where the level of significance dropped from .01 to .05 when estimating the equation using Baltagi's EC2SLS RE.

To investigate the impact of the six individual variables of governance (voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption) on aid allocation decision, a panel random effect regression is estimated instead of an IV regression. If the six variables are entered in an IV regression, at least six instruments will be required. This is a difficult task that hardly one can achieve.

[Table 3](#) regression (1) presents consistent results with those shown in [Table 2](#) in terms of both significance of coefficients and variation in magnitude. In regression (2) the overall governance is replaced by the individual governance indicators to find out the weight of each indicator in donors' aid allocation decision. As the regression shows, only two indicators entered with significant coefficients, voice and accountability and control of corruption. This result indicates that donors are more concerned with these two indicators when allocating aid to recipient countries, which is partially consistent with [Alesina and Weder \(2002\)](#) who found that Australian and Scandinavian donors use corruption control as a basis for selectivity, and [Alesina and Dollar \(2000\)](#) who found that most donor countries favor recipients with better political and civil rights.

To avoid potential multicollinearity among the individual governance variables that could bias the results of column(2), regressions (3) to (8) are estimated for each variable separately. As expected, there are variations in signs and magnitude. Except for political stability, which remains insignificant with a close to zero coefficients, all other indicators show significance when entered alone in the regression. This result strongly supports the possibility of multicollinearity and overlap between governance indicators. For example, regression (3) shows that the coefficient of voice and accountability increased from .154 significant at .05 level in regression (2) to .233 significant at .01 level in regression (3). Regressions

**Table 2**

OLS and instrumental variable panel aid allocation regressions.

| Regression             | 1<br>Pooled OLS | 2<br>2SLS       | 3<br>LIML       | 4<br>GMM        | 5<br>EC2SLS<br>RE 933 |
|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|
| Observations           | 1048            | 933             | 933             | 933             | 933                   |
| Constant               | 15.767** (.365) | 16.718** (.583) | 16.826** (.610) | 17.435** (.685) | 17.446** (.973)       |
| Initial GDP per capita | -.478** (.034)  | -.630** (.086)  | -.650** (.093)  | -.761** (.102)  | -.690** (.114)        |
| Population             | -.556** (.015)  | -.524** (.024)  | -.520** (.025)  | -.493** (.031)  | -.545** (.038)        |
| Overall governance     | .194** (.061)   | .749** (.266)   | .812** (.288)   | 1.202** (.351)  | .662* (.297)          |
| Egypt                  | .259 (.280)     | .204 (.287)     | .190 (.290)     | .104 (.192)     | .230 (.636)           |
| Franc Zone             | -.198* (.090)   | -.040 (.093)    | -.024 (.117)    | .072 (.121)     | -.058 (.219)          |
| SSA                    | .038 (.068)     | -.023 (.093)    | -.037 (.096)    | -.118 (.106)    | -.100 (.174)          |
| Central America        | .045 (.120)     | .021 (.125)     | .014 (.126)     | -.047 (.174)    | .028 (.270)           |
| R square               | .637            | .621            | .615            | .563            | —                     |
| Adjusted R square      | .632            | .614            | .608            | .556            | —                     |
| R square between       |                 |                 |                 |                 | .696                  |
| R square overall       |                 |                 |                 |                 | .626                  |

Author calculation.

Countries: 122 aid recipients.

Dependent variable: aid per capita.

Instrumented: Governance.

Instruments: Initial GDP per capita, population (lagged one period), Egypt, SSA, Franc Zone, Central America, yr2002, yr2003, yr2004, yr2005, yr2006, yr2007, yr2008, yr2009, M2/GDP (lagged one period), Government Consumption/GDP (lagged one period).

\* Significance at the 5 percent level.

\*\* Significance at the 1 percent level.

Standard errors reported in parenthesis.

**Table 3**

Panel random effect aid allocation regression.

| Regression Observations   | 1<br>1048       | 2<br>1048       | 3<br>1055       | 4<br>1049       | 5<br>1051       | 6<br>1051       | 7<br>1054       | 8<br>1053       |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Constant                  | 17.134** (.880) | 17.087** (.892) | 16.563** (.854) | 16.615** (.862) | 17.157** (.891) | 17.257** (.872) | 16.916** (.870) | 16.980** (.866) |
| Initial GDP per capita    | -.615** (.074)  | -.596** (.073)  | -.557** (.069)  | -.519** (.070)  | -.574** (.072)  | -.584** (.070)  | -.583** (.072)  | -.591** (.070)  |
| Population                | -.565** (.036)  | -.570** (.037)  | -.565** (.035)  | -.588** (.036)  | -.591** (.035)  | -.591** (.034)  | -.569** (.035)  | -.567 (.035)    |
| Egypt                     | .259 (.728)     | .336 (.719)     | .420 (.718)     | .337 (.726)     | .306 (.723)     | .306 (.713)     | .159 (.727)     | .273 (.724)     |
| Franc Zone                | -.168 (.232)    | -.157 (.230)    | -.206 (.229)    | -.245 (.231)    | -.176 (.232)    | -.219 (.229)    | -.170 (.232)    | -.141 (.231)    |
| SSA                       | .053 (.171)     | .061 (.169)     | .002 (.169)     | .001 (.171)     | -.027 (.170)    | -.028 (.168)    | -.037 (.171)    | .077 (.171)     |
| Central America           | .029 (.307)     | -.028 (.305)    | .017 (.304)     | .078 (.306)     | .078 (.304)     | -.003 (.301)    | .108 (.306)     | .075 (.305)     |
| Overall Governance        | .333** (.096)   | —               | —               | —               | —               | —               | —               | —               |
| Voice and accountability  | —               | .154* (.075)    | .233** (.067)   | —               | —               | —               | —               | —               |
| Political stability       | —               | -.087 (.054)    | —               | .009 (.049)     | —               | —               | —               | —               |
| Government effectiveness  | —               | -.122 (.118)    | —               | —               | .183* (.080)    | —               | —               | —               |
| Regulatory quality        | —               | .142 (.093)     | —               | —               | —               | .223** (.070)   | —               | —               |
| Rule of law               | —               | .054 (.114)     | —               | —               | —               | —               | .246** (.079)   | —               |
| Control of corruption     | —               | .236** (.094)   | —               | —               | —               | —               | —               | .301** (.073)   |
| R square: Between Overall | 712.633         | 722.642         | 718.637         | 713.631         | 717.637         | 725.644         | 709.630         | 709.628         |

Author calculation.

Countries: 122 aid recipients.

Dependent variable: aid per capita.

\* Significance at the 5 percent level.

\*\* Significance at the 1 percent level.

Standard errors reported in parenthesis.

(5) and (6) show that when regulatory quality and rule of law entered individually in the regression equation the coefficients are larger and significant at .01 level.

## 5. Conclusion

This paper sought to explore the determinants of foreign aid allocation by using different panel data estimators over the period 2001–2010. All the estimators' results confirm that three of the explanatory variables of the aid allocation equation are significant. These are: the initial per capita GDP, the size of population, and the quality of governance. But there is no empirical evidence found to support the hypothesis that foreign aid allocation is made on the basis of donors' interest proxied by the regional dummies. The results clearly indicate that poorer countries receive larger amounts

of foreign aid per capita. As far as the size of population is concerned, aid per capita tends to decrease with larger populations.

Turning to the main aim of this paper, there is strong evidence that countries with good governance are given preferential treatment by donors. Exploring the impact of the individual governance indicators show that if all indicators are entered in the aid allocation equation, only two indicators appear with significant coefficients; voice and accountability and control of corruption. All other indicators, except political stability are only significant when entered individually in the equation. This tendency may be attributed to the potential multicollinearity and overlap among the six governance indicators.

## Appendix 1. List of developing countries included in this study

| East Asia And Pacific | Europe and Central Asia | Latin America and Caribbean    | MENA                 | South Asia       | Sub-Saharan Africa       |                       |
|-----------------------|-------------------------|--------------------------------|----------------------|------------------|--------------------------|-----------------------|
| Cambodia              | Albania                 | Argentina                      | Algeria              | Afghanistan      | Angola                   | Mauritania            |
| China                 | Armenia                 | Belize                         | Djibouti             | Bangladesh       | Benin                    | Mauritius             |
| Fiji                  | Azerbaijan              | Bolivia                        | Egypt, Arab Rep.     | Bhutan           | Botswana                 | Mozambique            |
| Indonesia             | Belarus                 | Brazil                         | Iran, Islamic Rep.   | India            | Burkina Faso             | Namibia               |
| Lao PDR               | Bosnia and Herzegovina  | Colombia                       | Iraq                 | Maldives         | Burundi                  | Niger                 |
| Malaysia              | Georgia                 | Costa Rica                     | Jordan               | Nepal            | Cameroon                 | Nigeria               |
| Mongolia              | Kazakhstan              | Cuba                           | Lebanon              | Pakistan         | Cape Verde               | Rwanda                |
| Papua New Guinea      | Kyrgyz Republic         | Dominica                       | Libya                | Sri Lanka        | Central African Republic | Sao Tome and Principe |
| Philippines           | Macedonia, FYR          | Dominican Republic             | Morocco              | Chad             | Senegal                  |                       |
| Samoa                 | Moldova                 | Ecuador                        | Syrian Arab Republic | Comoros          | Seychelles               |                       |
| Solomon Islands       | Montenegro              | El Salvador                    | Tunisia              | Congo, Dem. Rep. | Sierra Leone             |                       |
| Thailand              | Serbia                  | Grenada                        | Yemen, Rep.          | Congo, Rep.      | South Africa             |                       |
| Timor-Leste           | Tajikistan              | Guatemala                      |                      | Cote d'Ivoire    | Sudan                    |                       |
| Tonga                 | Turkey                  | Guyana                         |                      | Eritrea          | Swaziland                |                       |
| Vanuatu               | Ukraine                 | Haiti                          |                      | Ethiopia         | Tanzania                 |                       |
| Vietnam               |                         | Honduras                       |                      | Gabon            | Togo                     |                       |
|                       |                         | Jamaica                        |                      | Gambia, The      | Uganda                   |                       |
|                       |                         | Mexico                         |                      | Ghana            | Zambia                   |                       |
|                       |                         | Nicaragua                      |                      | Guinea           | Zimbabwe                 |                       |
|                       |                         | Panama                         |                      | Guinea-Bissau    |                          |                       |
|                       |                         | Paraguay                       |                      | Kenya            |                          |                       |
|                       |                         | Peru                           |                      | Lesotho          |                          |                       |
|                       |                         | St. Lucia                      |                      | Liberia          |                          |                       |
|                       |                         | St. Vincent and the Grenadines |                      | Madagascar       |                          |                       |
|                       |                         | Suriname                       |                      | Malawi           |                          |                       |
|                       |                         | Venezuela, RB                  |                      | Mali             |                          |                       |

## References

- Ades, A., & Di Tella, R. (1997). National champions and corruption: Some unpleasant interventionist arithmetic. *The Economic Journal*, 107, 1023–1042.
- Ahrens, J., & Meurers, M. (2002). How governance affects the quality of policy reform and economic performance: New evidence for economies in transition. *Journal for Institutional Innovation, Development and Transition*, 6, 35–56.
- Alesina, A., & Dollar, D. (2000). Who gives foreign aid to whom and why? *Journal of Economic Growth*, 5, 33–63.
- Alesina, A., & Weder, B. (2002). Do corrupt governments receive less foreign aid? *American Economic Review*, 92, 1126–1137.
- Arndt, C. (2010). The politics of governance ratings. *International Public Management Journal*, 11, 275–297.
- Arndt, C., & Oman, C. (2006). *Uses and abuses of governance indicators*. OECD, Development Center Study.
- Baltagi, B. H. (1981). Simultaneous equations with error components. *Journal of Econometrics*, 17, 189–200.
- Berthelemy, J., & Tichit, A. (2004). Bilateral donors aid allocation decisions—A three dimensional panel analysis. *International Review of Economics and Finance*, 13, 253–274.
- Bandyopadhyay, S., & Wall, H. (2006). The determinants of aid in the post-Cold War era Federal Reserve Bank of St. Louis. *Working Paper Series 2006-021B*.
- Burnside, C., & Dollar, D. (2000). Aid, policy and growth. *American Economic Review*, 90(4), 847–868.
- Burnside, C., & Dollar, D. (2004). Aid, policies, and growth: Revisiting the evidence. *World Bank Policy Research Working Paper 3251*.
- Cassen, R. (1994). *Does aid work? Report to an Intergovernmental Task Force* (2nd ed.). Oxford: Clarendon Press.
- Cheney, H., & Strout, A. (1966). Foreign assistance and economic development. *American Economic Review*, 66, 679–733.
- Chhotray, V., & Hulme, D. (2009). Contrasting visions for aid and governance in the 21st century: The white house millennium challenge account and DFID's drivers of change. *World Development*, 37, 36–49.
- Collier, P. (1997). The Failure of Conditionality. In C. Gwin, & J. Nelson (Eds.), *Perspectives on aid and development*. Washington, DC: Overseas Development Council.
- Collier, P. (2000). In C. L. Gilbert, & D. Vines (Eds.), *Conditionality, dependence and coordination: Three current debates in aid policy* (pp. 299–324). Cambridge, UK: The World Bank – Structure and policies, Cambridge University Press.
- Collier, P., & Dollar, D. (2001). *Development effectiveness: What have we learnt?* Washington, DC: World Bank.
- Doornbos, M. (2001). Good governance: The rise and decline of a policy metaphor? *Journal of Development Studies*, 37, 93–108.
- Frey, S., & Schneider, F. (1986). Competing models of international lending activity. *Journal of Development Economics*, 20, 225–245.
- Furuoka, F. (2005). Human rights conditionality and aid allocation: Case study of Japanese foreign aid policy. *Perspectives on Global Development and Technology*, 4, 125–146.
- Harms, P., & Lutz, M. (2003). Aid, governance, and private foreign investment: Some puzzling findings and a possible explanation. *Study Center Gerzensee Working Paper No. 03.04*.
- Hermes, N., & Lensink, R. (2001). Changing the conditions for development aid: A new paradigm. *Journal of Development Studies*, 37, 1–16.
- Hoy, P. (1998). *Players and issues in international aid*. Connecticut: Kumarian Press, Inc.
- Isham, J., Kaufman, D., & Pritchett, L. (1997). Civil liberties, democracy and the performance of government projects. *The World Bank Economic Review*, 11, 219–242.
- Kaufmann, D., Kraay, A., & Zoido-Lobaton, P. (1999a). Aggregating governance indicators. *World Bank Policy Research Working Paper No. 2195*.
- Kaufmann, D., Kraay, A., & Zoido-Lobaton, P. (1999b). *Governance matters*. Washington: The World Bank, Policy Research Working Paper 2196.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2004). Governance matters III: Governance indicators for 1996, 1998, 2002 and 2004. *Economic Review*, 24, 253–287.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2005). Governance matters IV: Aggregate and individual governance indicators 1996–2004. *World Bank Policy Research Working Paper No. 3630*.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2006a). Governance matters V: Governance indicators for 1996–2005. *World Bank Policy Research Working Paper No. 4012*.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2006b). Governance matters V: Aggregate and individual governance indicators for 1996–2006. *World Bank Policy Research Working Paper No. 4280*.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2008). Governance matters VII: Aggregate and individual governance indicators 1996–2007. *World Bank Policy Research Working Paper No. 4654*.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2013). *World governance indicators project*. World Bank.
- Kjaer, M. (1996). Making it tangible. In *Paper presented at the "Good Governance" Working Group at the EADI Conference Vienna*, September 11–14.
- Knack, S. (2001). *Aid dependence and the quality of governance: A cross-country empirical analysis*. Washington, DC: The World Bank.
- Lahiri, S., & Raimondos-Moller, P. (2000). Lobbying by ethnic groups and aid allocation. *Economic Journal*, 110, 62–79.
- Lockwood, M. (2005). *The state they're in: An agenda for international action on poverty in Africa*. London: ITDG Publishing Bourton-on-Dunsmore.
- Maizels, A., & Nissanke, K. (1984). Motivations for aid to developing countries. *World Development*, 12, 879–900.
- McKinlay, D., & Little, R. (1979). The US Aid relationship: A test of the recipient need and donor interest models. *Political Studies*, 27, 236–250.
- Neumayer, E. (2003). The Determinants of aid allocation by regional multilateral development banks and United Nations agencies. *International Studies Quarterly*, 47, 101–122.
- Santiso, C. (2001). Good Governance and aid effectiveness: The World Bank and conditionality. *The Georgetown Public Policy Review*, 7, 1–22.
- Simon, J. L. (1997). Introduction. In J. L. Simon (Ed.), *Economics of population: key modern writings*. Vol. 1 (pp. 13–22). Lyme, NH: Edward Elgar Publishing, Limited.
- Sophal, E. (2002). *Has more aid worsened governance since 1995?* Department of Political Science & Department of Agricultural and Resource Economics University of California at Berkeley, May 6.
- Svensson, J. (2000). Foreign aid and rent-seeking. *Journal of International Economics*, 51, 437–461.
- Svensson, J. (2002). Why conditional aid does not work and what can be done about it? *Journal of Development Economics*, 70, 381–402.
- Thornton, M. (2002). *Corruption and foreign aid*. On-line Publications on Ludwig von Mises Institute.
- Trumbull, W. N., & Howard, W. (1994). Estimating aid-allocation criteria with panel data. *Economic Journal*, 104, 876–882.
- Van de Walle, N. (2005). *Overcoming stagnation in aid-dependent countries*. Washington, DC: Center for Global Development.
- Weder, B. (2000). Foreign aid, institutions and development: Lessons from four decades of international development cooperation. *Aussenwirtschaft, (Swiss Review of International Economic Relations)*, 55, 291–303.
- World Bank (1989). *Sub-Saharan Africa: From crisis to sustainable growth*. Washington, DC: World Bank.
- World Bank (1998). *Assessing aid: What works, what doesn't, and why*. Washington, DC: World Bank.
- World Bank (1992). *Governance and development*. Washington, DC: World Bank.
- (2006). *World Bank Institute Global monitoring report 2006: Strengthening mutual accountability: Aid, trade, and governance*.
- World Bank (2013). *Worldwide governance indicators*. Washington, DC: World Bank.