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Conference Paper

Does Foreign Aid Improve Governance?

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Does Foreign Aid Improve Governance?

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Abstract

This paper analyses the impact of aid flows on governance. Using an instrumental variable approach and a large country sample, we find that aid has a negative rather than a positive influence on governance. This outcome is robust to various model specifications.

1. Introduction

Numerous studies have shown that governance matters for economic and social development (World Bank 2005). Despite the overwhelming evidence, there is surprisingly little research on how to promote it effectively. Broadly defined, governance refers to the selection and monitoring of governments and the effectiveness of the government in implementing policies. In this paper, we examine one important aspect, namely the impact of official development assistance (ODA) on governance. From a theoretical perspective, aid could release governments from binding revenue constraints and enable them to concentrate on enforcing law and order or fighting corruption effectively. In addition, aid could provide developing countries much needed technical assistance in building effective institutions to improve governance.

On the other hand, due to moral hazard problems and rent seeking, high levels of aid could delay or block necessary domestic reforms to improve governance. Furthermore, high transaction costs that accompany aid (on the side of the receiving country), donor fragmentation that multiple donor projects and agendas promote, problems of "poaching" qualified (government) staff members for aid projects, and the potential negative effects on raising taxes could all result in a deterioration of governance, even though entirely unintended. Hence, the net impact of aid on governance is unclear at the outset.

To our knowledge, only two studies have addressed the impact of aid on governance so far. Bräutigam and Knack (2004) find that aid might be harmful for governance. Yet their results are based on a purely cross-sectional analysis for the period 1982 to 1997 and restricted to 32 African countries. Rajan and Subramanian (2007) demonstrate that in countries that receive more aid, governance-dependent industries grow relatively more slowly. Governance-dependent industries can primarily be found in manufacturing, as this sector requires complex transactions between contracting parties that rely on the rule of law or effective regulations. What is missing is a thorough empirical analysis of the direct impact of ODA on governance over time and across countries. This brief paper intends to fill that gap.

2. Variables and Methodology

As an indicator for the quality of governance, we use three sub-components of the International Country Risk Guide (ICRG), namely, corruption, law and order, and bureaucracy quality. All three are clearly linked to governance, highly relevant for development issues, and scaled (or rescaled) from 0 to 6, where higher values indicate less corruption, better law and order enforcement, and higher bureaucracy quality. We compute a

composite governance indicator (labelled *Govcomp*) by adding up the three sub-components to assess the overall quality of governance.

Apart from *Aid*, defined as ODA as a share of (host) GDP, we employ a considerable number of economic and political explanatory variables.[1] We expect a positive impact of trade on governance, since open economies are more likely to learn from the experience in their trading partners' countries. Moreover, rent seeking and corruption might be harder in more open economies, as foreign firms increase the number of economic agents involved (Rajan and Zingales 2003). Both press freedom and political constraints on the executive branch are likely to improve the accountability of the government, which leads to positive impact on governance, whereas we expect the opposite for (internal and external) conflicts as well as inflation and the black-market premium as proxies for macroeconomic distortions.

Higher educational attainment levels should promote governance, as a better educated population is more likely to participate in (public) decision making and to demand better governance. The same applies to economic growth, which could provide the required financial resources for the enhancement of governance. Similar to trade, we also expect a positive influence of FDI on *Govcomp*, since foreign investors might lobby for improvements in governance. Finally, the sign for the population as a proxy for the country size is unclear a priori, as larger countries possess a critical financial mass to improve governance but – at the same time – face more information asymmetry problems and higher transaction costs, which could impede improvements in governance.

Our sample consists of 106 countries that have received (or repaid) ODA within the period considered and for which we obtained data for *Govcomp* and the independent variables.[2] Due to a lack of earlier data for *Govcomp*, our analysis covers the period 1984 to 2004. To reduce large variations in the data, we compute three-year averages of all variables, which leaves us with seven periods of three years.

Since all independent variables are endogenous (except, perhaps, the population), we apply the system-GMM (Generalised Method of Moments) estimator. This dynamic panel estimator, suggested by Blundell and Bond (1998), uses lagged levels and first differences as instruments for the endogenous variables and is based on two equations. The first equation, based on levels, reads as follows:

(1) $Govcomp_{it} = \alpha_i + \beta_1 Govcomp_{it-1} + \beta_2 Govcomp_{it-2} + \beta_3 Aid_{it} + \gamma' X_{it} + \lambda_t + \varepsilon_{it}$

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[1] See the Appendix for exact definitions of all variables and data sources.
[2] Importantly, our empirical results hardly change if we exclude negative aid flows.

where $Govcomp_{it}$ denotes the governance indicator for country i in period t, α_i is the country fixed effect, $Govcomp_{it-1}$ and $Govcomp_{it-2}$ represent the lagged dependent variable in previous periods, Aid_{it} is the variable of interest, X_{it} denotes the set of control variables, λ_t is a set of time dummies, and ε_{it} stands for the error term. The second equation is based on first differences, which eliminates the country-specific effects:

$$(2) \qquad \Delta Govcomp_{it} = \beta_1 \Delta Govcomp_{it-1} + \beta_2 \Delta Govcomp_{it-2} + \beta_3 \Delta Aid_{it} + \gamma' \Delta X_{it} + \Delta \lambda_t + \Delta \varepsilon_{it}$$

where $\Delta Govcomp_{it} = Govcomp_{it} - Govcomp_{it-1}$. In fact, we are estimating both equations simultaneously using several lags and differences as instruments.

3. Empirical Results and Policy Implications

We now turn to the empirical results. To begin with, we use only openness to trade, press freedom, conflicts, and population as control variables and *Aid* as the variable of principal interest. The signs of the coefficients are largely as expected (see Model 1, that is, column 1 in Table 1). Being more open to trade leads to an improvement in governance, whereas the opposite applies to conflicts. Both an enhanced press freedom and a larger population are positively associated with governance. An increase in aid, however, leads to a worsening of governance.[3] We then check the robustness of the results for Model 1 by reducing the number of lags used as instruments dramatically (Model 1 and column 2). The results regarding the variable of main interest (*Aid*) (and almost all of the other explanatory variables), however, do not change much.[4]

Next, we add the remaining control variables one by one to the benchmark equation (Models 2 to 7), since the inclusion of a large number of control variables increases the number of instruments enormously in the system-GMM estimation and/or the number of countries included in the analysis would decline. Yet we also report the results if all additional control variables are added simultaneously (Model 8),[5] though the results are less reliable in comparison to previous models, as we had to lower the number of lags dramatically. The signs of the further control variables are largely as expected, though not all coefficients are statistically significant at conventional threshold levels. Importantly, *Aid* has in all model specification a negative sign and is significant at least at the 10 per cent level, but often at the

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[3] The regression diagnostics, reported at the bottom of Table 1, indicate that we have no second-order serial correlation in the residuals. We obtain this result by including the second lag of the dependent variable. The *J*-statistics of the Sargan test of over-identifying restrictions suggest that the applied instruments are valid.
[4] We obtain a similar outcome for the following (extended) model specifications.
[5] We exclude, however, the black-market premium, as this variable is closely correlated with the inflation rate, but restricted to both fewer countries and periods.

5 or even 1 per cent level. This means that *Aid* belongs to the small group of explanatory variables that is quite robust.

Apart from Model 7, which is not directly comparable to the other specifications, the estimated coefficients for *Aid* vary between 0.02 and 0.04. Taken at face value, this means that an increase in aid by the within standard deviation (4.43 percentage points of GNI) leads to a deterioration in *Govcomp* of some 0.09 to 0.18 points. Therefore, the impact of aid on governance is not very large, but it is always negative and quite robust to different model specifications.

It could be argued that *Aid* does not correctly measure the amount of development assistance a country actually receives. ODA comprises various forms of development assistance, including debt relief, which hardly counts as new aid. While we have to keep the limitations of using aggregate data in mind, we still think our aid measure is appropriate for the aid-governance nexus. Moreover, we run various robustness checks using different aid measures, such as effective development assistance (EDA). Yet the outcome is very similar.[6]

Even in view of our results, we do not suggest that governance could be improved by lowering aid flows. Still, the intended increase in aid over the next couple of years – in particular to African countries – should be viewed with great caution. Donors should reconsider current aid structures and aid effectiveness when increasing aid flows. Correspondingly, recipient countries need to rethink carefully the potential drawbacks of aid on governance at both a country and a project level, and try to minimise any likely harmful effects.

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[6] Results for various robustness checks that are not shown in the paper can be obtained from the first author upon request.

Table 1: Aid and Governance

Independent variables	lags	(2 to 5) Model 1	(2 to 2) Model 1	(2 to 4) Model 2	(2 to 4) Model 3	(2 to 4) Model 4	(2 to 4) Model 5	(2 to 4) Model 6	(2 to 3) Model 7	(2 to 2) Model 8
Dependent variable: Govcomp										
Govcomp (t-1)		0.914***	0.937***	0.904***	0.953***	0.931***	0.902***	0.95***	0.846***	0.925***
		(19.7)	(18.7)	(18.7)	(17.8)	(20.1)	(18.9)	(21.5)	(11.1)	(17.2)
Govcomp (t-2)		-0.283***	-0.294***	-0.280***	-0.299***	-0.274***	-0.278***	-0.27***	-0.276***	-0.299***
		(-6.92)	(-6.48)	(-6.91)	(-6.69)	(-6.88)	(-7.12)	(-6.86)	(-5.77)	(-6.90)
Trade		0.0101***	0.0119***	0.00968***	0.0123***	0.0064**	0.0085***	0.0078***	0.012**	0.0094***
		(3.13)	(2.90)	(3.28)	(3.51)	(2.43)	(2.90)	(3.76)	(2.00)	(2.97)
Press Freedom		0.273*	-0.135	0.290*	0.258	0.256*	0.082	0.249*	0.0059	-0.0841
		(1.63)	(-0.52)	(1.71)	(1.36)	(1.73)	(0.43)	(1.73)	(0.018)	(-0.39)
Conflicts		-0.338**	-0.561***	-0.397***	-0.340**	-0.247*	-0.304**	-0.300**	-0.354**	-0.357**
		(-2.39)	(-3.10)	(-2.80)	(-2.33)	(-1.83)	(-2.40)	(-2.56)	(-2.15)	(-2.48)
ln Population		0.131*	0.169*	0.143*	0.163**	0.0731	0.0988	0.109*	0.102	0.121
		(1.69)	(1.73)	(1.79)	(1.92)	(1.08)	(1.21)	(1.66)	(0.84)	(1.43)
Aid		-0.0247***	-0.0266**	-0.0254***	-0.0199**	-0.0297***	-0.0230**	-0.019**	-0.048**	-0.0202*
		(-2.66)	(-2.13)	(-2.83)	(-1.92)	(-3.19)	(-2.33)	(-2.48)	(-2.26)	(-1.69)
Economic Growth				0.00989						0.0164
				(0.49)						(1.03)
Literacy Rate					-0.00022					0.00076
					(-0.033)					(0.095)
FDI						3.317				0.985
						(1.03)				(0.22)
Political Constraints							1.120**			0.966**
							(2.43)			(2.06)
Inflation								-0.0002***		0.00006
								(-3.06)		(0.046)
Black-Market Premium									-0.0001	
									(-0.32)	
Observations		475	475	470	398	475	470	475	284	393
Countries		106	106	105	89	106	105	106	87	88
Sargan (p-value)[1]		0.18	0.12	0.39	0.25	0.27	0.32	0.28	0.34	0.70
AB 2 (p-value)[2]		0.99	0.93	0.98	0.34	0.98	0.88	0.61	0.39	0.65
Instruments		96	51	102	84	102	102	102	77	96

Notes: Significance at the 10, 5, and 1 percent level is denoted by *, **, and ***, respectively. Estimation based on one-step system-GMM estimator with robust standard errors; corresponding *z*-values are reported in parentheses. Constant terms and time dummies are always included but not reported. [1] Sargan-test of overidentification. [2] Arellano-Bond-test that second-order autocorrelation in residuals is 0; first-order autocorrelation is always rejected (not reported).

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Appendix: Definition of Variables and Data Sources

Variable	Definition	Source
Aid	Official development assistance in % of (host) GDP	OECD (2007) and World Bank (2007a)
Black-Market Premium	Black-market premium for foreign currency (US Dollar) in %	World Bank (2007b)
Conflicts	Incidence and intensity of internal and external conflicts: 0 (no conflict), 1 (number of casualties in the range from 1 to 25), 2 (26 to 1000 casualties), and 3 (above 1000)	CSCW (2007)
Economic Growth	Real growth of GDP per capita in %	World Bank (2007a)
FDI	Foreign direct investment as a share of GDP	World Bank (2007a)
Govcomp	ICRG composite governance indicator, including law & order, bureaucracy quality, and corruption, monthly data, 0-18	PRS Group (2007)
Literacy Rate	Literacy rate in %, population ages 15 and above	World Bank (2007a)
Political Constraints	Political constraints V, Henisz database, 0-1	Henisz (2007)
Population	Total Population	World Bank (2007a)
Press Freedom	Freedom of the press (0-2)	Freedom House (2007)
Trade	Total imports and exports of goods divided by GDP in %	Heston, Summers and Aten (2006)