

Aiding and Abetting

An Empirical Study of the Effects of Foreign Aid on the Rule of Law in sub-Saharan Africa

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“I hereby certify that I have neither given nor received unauthorized aid on this paper.”

Pledged: _____

The effects of foreign aid are often debated; citing little more than anecdotal evidence, the opposition frames the debate as enabling political incompetence, yet, while those in favor frequently point to individuals whose lives have been improved by aid given to foreign countries. This paper seeks to bring empirical analysis to the debate of the true effects of foreign aid—specifically examining the extent to which foreign aid effects rule of law in sub-Saharan Africa. Taking the fine comb of econometric analysis through the abundance of data allows for an empirical analysis to be done, as opposed to the anecdotal evidence that is all too often presented.

While some may be interested in the effects of foreign aid as a research question in and of itself, there are large scale implications to understanding this question. A paper published by the Congressional Research Service (CRS) in 2012 found that from 2000-2012, the mean amount of foreign aid that was given by Congress to low-income and middle-income countries was \$40 Billion. In 2012, Foreign Aid accounted for 1% of the total Federal Budget.¹ To place this amount of money in perspective, in the 2013 Budget, Education also received 1% of the budget and Transportation and Infrastructure together received 3%.² Foreign Aid comprises a significant amount of federal spending, and without a proper understanding of its effects, it is difficult to analyze both the federal budget and the decisions of our leaders.

Studying the effects of foreign aid is not novel. Starting in the 1960s a wealth of literature appeared asking various questions about foreign aid: who gives foreign aid, why do they give, to whom are they giving, and what is the effect of foreign aid? However, simultaneity issues in the

¹ Tarnoff, Curt, and Marian Leonardo Lawson. 2012.

² Center on Budget and Policy Priorities. 2013.

early literature weaken the conclusions about the direction and effect of foreign aid. More recently, many studies have been conducted using clever instruments and complex models to address these concerns. While there is a wealth of literature on the subject, strong conclusions have yet to be drawn.

Another major challenge with such a project, and the area where many studies have failed to excel, is identification. Measuring rule of law and the effect of aid requires a proper identification of the sample countries, of control variables, as well as defining rule of law. The Ibrahim Coalition of Good Governance has collected data on various measures of governance for African countries from 2000 to 2013. While this data is not available for years prior to 2000, the many years of data available for the 60 countries provides a robust sample of over 600 observations. This data set combined with data from the World Bank on Official Development Assistance (ODA) creates a rich and powerful tool for analysis that has previously been lacking.

Through an innovative approach, this paper analyzes the true effect of foreign aid on the rule of law, both by using past, proven instruments as well as by introducing a new, convincing instrument for foreign aid. By restricting the scope of this paper to the region of sub-Saharan Africa, I am able to create an instrument for foreign aid that is specific to the aid incentives of that region, while still having a robust dataset that reflects the true extent to which foreign countries receive aid. By focusing on the eleven years from 2000-2010, this study is able to understand the effects of foreign aid in a modern context. While there may be some concerns about the effects of the 2008 Global Financial Crisis, a report by the International Monetary Fund (IMF), Antoinette Sayeh explained that sub-Saharan Africa was not negatively effected by

the 2008 crisis.³ Furthermore, in the years following 2008, the US actually increased its appropriations for foreign aid. These facts help to validate the time period chosen, as well as the region of analysis.

Analyzing the 47 countries that comprise sub-Saharan Africa, and the years 2000-2010, I examined the true effects of foreign aid on rule of law, using a random effects, two-stage least squares, instrumental variable model. By using the percentage of the country that has HIV and AIDS, the natural logarithm of population, and both HIV and AIDS and the natural logarithm of population, I was able to find that foreign aid has a significant, negative impact of the rule of law in sub-Saharan Africa. These results are important for two reasons. First, and most obviously, finding a strong negative effect of foreign aid helps to answer questions about how much aid to give, to whom, and why? Secondly, this study provides a new alternative instrument for foreign aid in sub-Saharan Africa: percentage of country living with HIV and AIDS. There has been much work done attempting to justify new instruments for foreign aid, however, most of the work on this subject is incomplete. This study provides a clear and convincing instrument that can be used in further research.

The remainder of this paper is organized as follows. Section 2 contains the analytical framework, a review of the theory of foreign aid. Section 3 details the empirical model used in this research. Section 4 discusses the data sources for this paper, defines the various variables, and provides a summary of the data. Section 5 provides the argument for the use of instruments, the instrument chosen, and model specification. Section 6 examines the empirical results, highlighting the findings of this paper. Finally, Section 7 concludes.

³ Sayeh, Antoinette. 2012.

Section 2: Analytical Framework

A. Alesina and D. Dollar point out in their work on the subject of foreign aid that the literature in the field can be split into two key sections: one explores the conditions in both the host and recipient country that encourage giving, and the other examines the effects of foreign aid on the countries who receive it.⁴ For the purpose of this study, a brief review of both will be necessary, however, a large portion of the literature on the analysis of the effects of aid will be saved for Section 5.

In addressing the giving of aid, David Lumsdaine, in his work *Moral Vision in International Politics*, explores why countries give foreign aid. As his title suggest, Lumsdaine advocates for a moral guidance in foreign aid, however, he finds that seldom is morality the driving force. While his study is focused on the giving country, Lumsdaine's findings show that colonial history, democratic status of the recipient, and income levels of the recipient play a key role in detaining who will receive aid.⁵ These factors highlight the need for a series of country specific controls. Alesina and Dollar add to the list of country specific factors that affect the likelihood of receiving aid: poverty of recipients, strategic interest, trade, and political institutions of the recipients. They note that the relative importance of these factors is not agreed upon.⁶ Schraeder, Hook, and Taylor report the importance of the interrelation of donor and recipient. They also support Lumsdaine's findings that moral or altruistic giving does not represent a significant portion of foreign aid.⁷ It is important to note, Alesina and Dollar find that

⁴ Alesina, Alberto, and David Dollar. 2000.

⁵ Lumsdaine, 1993.

⁶ Alesina, Dollar. 2000.

⁷ Schraeder, Hook, Taylor. 1998.

determinants of bilateral aid and multilateral aid differ. They argue that when combined, it is impossible to explain, however, when separated, clear deterrents are able to be found.

As to the second section of literature, questions regarding the effectiveness of aid, there are two main sub-sections: theory and empirical research. The latter will be saved for Section 5, but the former is integral to discuss before designing a model to study the true effects of aid. In his work titled, *The Futility of Foreign Aid*, Jude Blanchette reduces foreign aid to, “welfare for governments” arguing:

As with welfare for the poor, its destructive results are excused, its opponents are demonized and its failures are rewarded. It is a system through which political power becomes entrenched, political favors are distributed, enemies are punished. And despite its record of unmitigated failure, foreign aid, like welfare, has grown both in size and scope.⁸

While this analogy may appear harsh at first, Blanchette explains that foreign aid is simply governments subsidizing other government, and that any “aid” that might be given to the citizens of the recipient country must first be funneled through the bureaucracy and corruption of the receiving country.⁹ Peter Bauer argues similarly that foreign aid is simply a subsidy to corrupt government. He further states that it often makes the poor dependent on the corrupt governments that dole out small portions of what they receive.¹⁰

Bauer also holds that foreign aid, or official aid as he terms it, is a political construct used for political reasons rather than economic ones. He supports this saying, “The concept of the Third World and the policy of official aid are inseparable. The one would not exist without the

⁸ Blanchette, Jude. 2003.

⁹ *ibid*

¹⁰ Bauer, Péter Tamás. 1976. pp. 95-136

other.... Thus, the Third World is a political and not an economic concept.”¹¹ He concluded that foreign aid is a strong anti market force and does more harm than good.

Laurence Vance adds to the theoretical discussion by reminding his readers that foreign aid is given by the tax payers of the governments that subsidies other countries. That is, the tax paying citizens are the ones who are the true source of aid.¹² He argues that citizens are often deceived by the name, “aid,” and agree to allow their tax dollars to go to developing countries assuming they are helping people. He notes however, often the “aid” countries receive is simply, “foreign government aid. And these foreign governments are habitually corrupt, heavily bureaucratic, and statist to the core.”¹³

While much theory exist in opposition to aid, there are also plenty of proponents of aid. Often, the proponents of aid are those who supply aid, the United Nations (UN), the World Bank, US Agency for International Development (USAID). They use rhetoric accompanying their programs that highlights the dual purpose of aid—reducing poverty and rewarding good governance in efficient policies and honest government. USAID describes itself as, “the lead U.S. Government agency that works to end extreme global poverty and enable resilient, democratic societies to realize their potential.”¹⁴ They go on to use the moral rhetoric that Vance describes saying:

USAID extends help from the American people to achieve results for the poorest and most vulnerable around the world. That assistance does not represent a Democratic value or a Republican value, but an American value; as beneficiaries

¹¹ Bauer, Péter Tamás. 1976. pp. 182-183

¹² Vance, Laurence M. 2000.

¹³ *ibid*

¹⁴ “What We Do | U.S. Agency for International Development.” 2014

of peace and prosperity, Americans have a responsibility to assist those less fortunate so we see the day when our assistance is no longer necessary.¹⁵

It is this “American value” of morality and obligation to those less fortunate that is the base of much of the US policy for foreign aid. However, a strong sense of morality alone does not lead to the advertised result in recipient countries.

In a review of empirical, rather than theoretical, work Alesina and Dollar highlight the mixed results of individual studies on the effectiveness of aid while finding an overwhelming consensus on the broader results: the effect of foreign aid depends on factors that are not effected by foreign aid.¹⁶ This conclusion argues that while foreign aid may produce good governance, it only does so under certain conditions. Furthermore, it argues that those conditions are wholly unassociated with the introduction or magnitude of foreign aid. This weak and unsatisfactory conclusion is the result of fragmented studies that focus on the wrong variables to make serious conclusions. Furthermore the mixed results are a consequence of the combination of poorly justified instruments that seriously effect the outcomes. By understanding these variables, and applying them to a group that is manageable, as well as including other factors, this study seeks to combine and propel the past work of others on the issue of foreign aid and aid instruments.

It is clear that there is a need for further research on the topic of the effects of foreign aid. While much has been done, substantive work that measures the true effect of aid has yet to be seen in the field. It is my hope that I will be able to take the work of others, namely Alesina, Dollar, Boone, and Goldsmith, and further the field by using the contributions that each of these

¹⁵ “What We Do | U.S. Agency for International Development.” 2014

¹⁶ Alesina, Dollar. 2000.

authors have so painstakingly presented to the field of foreign aid studies and adding my own contribution.

Section 3: The Model

The model used in this study is as follows:

$$y = \alpha + \beta_1 x_1 + \mathbf{X}\beta_{n+1} + u$$

In this equation, y denotes the rule of law ranking obtained by the Ibrahim Index of African Governance (IIAG) for a given country in a given year; x_1 denotes the amount of foreign aid a given country receives in a given year; and, finally, \mathbf{X} is a matrix of country control variables including dummy variables for being a former French, British, or Portuguese colony, and, the country specific Gross Domestic Product (GDP) per capita for a given year. The rule of law score is ranked in on an ordinal scale from zero to one hundred. Yearly foreign aid is measured in 2009 US dollars. For this model, yearly aid is logarithmically transformed to correct for the skewed nature of the data and normalize the distribution. Finally, GDP per capita is measured in 2009 US dollars, it is also logarithmically transformed to normalize the distribution.

Section 4: Sources, Definitions, and Summary Data

The data for this study was gathered from multiple sources. The two main sources of data for this research were the Mo Ibrahim Foundation¹⁷ and the World Bank¹⁸. However, the Mo Ibrahim Foundation dataset is a collection of many sources. Further information for those can be obtained through the Mo Ibrahim Foundation website. Data was gathered for 47 countries, all

¹⁷ “Mo Ibrahim Foundation.” <http://www.moibrahimfoundation.org/>.

¹⁸ “Data | The World Bank.” 2014. <http://data.worldbank.org/>.

located in Sub-Saharan Africa, for the years 2000 through 2010, as this was the latest release of data from the Mo Ibrahim Foundation at the start of this study.

It is import to clearly define the variables used in this study. In that line, Rule of Law will be defined as it is by the Mo Ibrahim foundation, which was established to promote leadership and governance in Africa. I will use their definition of good governance to derive the measure the rule of law. They define good governance to be:

[Good] governance is defined by the Mo Ibrahim Foundation as the provision of the political, social and economic public goods and services that a citizen has the right to expect from his or her state, and that a state has the responsibility to deliver to its citizens. This definition is focused on outputs and outcomes of policy. The IIAG governance framework comprises four dimensions (categories): Safety & Rule of Law; Participation & Human Rights; Sustainable Economic Opportunity; and Human Development. These categories are made up of 14 sub-categories, consisting of 94 indicators. The 2013 IIAG is calculated using data from 32 independent sources.¹⁹

This definition is very broad, relying on the idea that basic needs must be met by the government and that those needs will be better met by a “good” government. It highlights Rule of Law, Participation & Human Rights, Sustainable Economic Opportunity, and Human Development, all factors that would be affected by the quality of the governance. From this governance score, a sub-score of rule of law is also provided. This score is measured from zero to one hundred, with zero being no rule of law and one hundred being perfect rule of law.

Two important variables were taken from data made available by the World Bank: Official Development Assistance (ODA) and Percent with HIV. The World Bank defines ODA as:

¹⁹ “Mo Ibrahim Foundation.” <http://www.moibrahimfoundation.org/>.

Net official development assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent).²⁰

They define Percent with HIV as, “Prevalence of HIV refers to the percentage of people ages 15-49 who are infected with HIV.”²¹ Using the aforementioned definition, I apply these variables to my model.

Table 1: Summary Statistics

Variable	Number of Observations	Mean	Std. Dev.	Minimum	Maximum
Rule of Law	517	50.20	21.34	0.00	95.92
Foreign Aid	517	499,196,406.12	842,416,307.59	5,272,553.50	12,727,846,912.00
ln(Aid)	517	19.27	1.31	15.48	23.27
ln(Population)	517	15.58	1.58	11.30	18.89
ln(GDP/CAP)	517	5.10	1.27	0.00	6.22
French Colony	517	0.43	0.49	0	1
British Colony	517	0.28	0.45	0	1
Portuguese Colony	517	0.13	0.33	0	1
Percent_HIV	495	5.68	6.91	0.10	28.00

With terms clearly defined, I turn now to a summary of the data used in this paper. Table 1 shows that the mean rule of law for this sample is 50.2 with a standard deviation of 21.23. To place this rating system in perspective, one standard deviation is the difference between to rule of

²⁰ “Data | The World Bank.” 2014. <http://data.worldbank.org/>.

²¹ *ibid*

law score in South Africa and that in Uganda, with ratings of 90 and 69 respectively. The mean amount of aid a country receives is roughly \$500 Million, measured in 2009 US Dollars.

Roughly 43% of the countries were former French Colonies, 28% were former British Colonies, and 13% were former Portuguese Colonies, with some overlap between colonial powers. Finally, the mean percentage of people living with HIV for this data is roughly 6%.

Section 5: Instruments and Specification Test

The study of foreign aid is plagued with endogeneity. In his classic work from the mid-1990s, Boone addresses this endogeneity issue of foreign aid and measures of governance by introducing a new series of variables. First, Boone uses the natural logarithm of population, finding that smaller countries receive more aid than larger countries and that larger countries grow faster than smaller countries. The second set of instruments Boone uses attempts to capture the political agendas of donors. He uses Friends of US, Friends of OPEC, and Friends of France, to control for large politically motivated donation packages. He measures these by the United Nations voting records of the various countries. The implicit assumption behind this instrument is that the US, France, and OPEC give aid for political motives. Their findings support this assumption and provide some base level evidence that UN vote records are a reasonable measure of country alignments. Finally, Boone uses aid, lagged two periods to control for business cycle factors as well as emergency factors that might effect aid.²² These instruments gave rise to a new generation of studies that helped examine the actual effect of foreign aid in both specific countries and in the broader foreign aid market.

²² Boone, 1995.

Later, Goldsmith uses the natural logarithm of GDP per capita, as well as French, British, Portuguese, and Belgian former colonies as instruments. The natural logarithm of GDP per capita attempts to control for larger economies that could grow faster due to the aid. The colonial instrument attempts to control for a foreign aid nepotism that is clearly identified in the data. These instruments are key is isolating the true effect of aid in any given country.²³ Many other studies have been conducted (including the notable Bräutigam and Knack 2004) using these instruments; however, poor justification of these instruments, as well as possible model misspecification, has led to a scarcity of results.

Daniel Kaufmann avoids the issue of finding instruments all together by using what he calls, “a more textbook approach.”²⁴ He argues that convincing instruments are scarce, and concludes that the use of non-sample information is a better alternative to instrumentation. By using an estimation of the variance of measurement error in both incomes and governance, as well as the correlation between the error terms, Kaufmann explains that instruments are no longer necessary. Kaufmann does however admit that some control for “history” is important for many reasons, i.e. colonial past.

Most studies, including all the studies discussed above, use a simple dummy variable for colonial past. While some only include French colonies, others specify the colony and include British, Portuguese, and Belgian colonies. One study attempts to measure the colonial impact, separate from the nepotism issue, by controlling for infant mortality in the 18th and 19th century.²⁵ Acemoglu, Johnson and Robinson argue that colonial powers had, “weak incentives to

²³ Goldsmith, 2001.

²⁴ Kaufmann, 2002. pp. 3

²⁵ Acemoglu, Johnson, Robinson. 2001

establish the institutions of good governance in colonies where a permanent European presence was unlikely to take root.”²⁶ This argument is contradicted by a wealth of literature that finds former colonies to thrive in modern development.

This list of instruments provides a solid base of theoretical understanding to build on. Furthermore, these study highlight a list of well argued controls that allow for a greater understanding of the true impact of foreign aid. By using the proven instruments, as well as creating new instruments, the real effect of aid can be determined. Furthermore, with the introduction of my new instrument, I will develop the literature in the field of foreign aid studies to a great extent. With this base, and the knowledge that previous studies have failed to control for issues that have been clearly identified, the results of the previous studies are seen in a less significant light. However, while the individual results of these studies may not provide the best evidence, the collection of them is profitable.

With these studies in mind, I now turn to a new instrumental variable for foreign aid: percent of the country living with HIV. It is well known that the African continent suffers from a debilitating infection of HIV. With a recent shift in HIV infections from northern Africa to sub-Saharan Africa, countries in southern Africa are battling HIV infections of up 28% of the population. This problem is made known to Congressmen, Members of Parliament, and other political actors around the globe, often being the central humanitarian issue of focus for the continent of Africa. It is easy to understand that with an issue so salient, foreign aid would be directed to these countries in an attempt to help with this serious problem. While the correlation

²⁶ Acemoglu, Johnson, Robinson. 2001

between foreign aid and the percentage of the county with HIV is clear, and even testable, the exogeneity of the instrument is less obvious.

Many factors effect the rule of law in a given country: corruption, transparency, free and fair elections, reliability of police services, the judicial process, poverty, and many more. These factors are robust and not easily defined. However, the percentage of the country living with HIV is not correlated with any of these factors with the potential exception of poverty. By controlling for GDP per capita separately, the potential correlation with the disturbance through poverty is controlled for. Furthermore, in addition to the lack of theoretical arguments for a connection between HIV and rule of law, South Africa, who scored on the upper end of the rule of law index also ranks near the top of the percent living with HIV spectrum. There is no clear reason to believe that percent living with HIV is endogenous, and therefore, can be reasonable used as an instrument. It is important to note, however, that this instrument is regionally specific, as a large portion of the world does not deal with HIV to the same extent that the continent of Africa does.

Using this instrument, I run a two-stage least squares regression. The debate turns to the use of random verses fixed effects models. When deciding between these two models there are two important considerations: the assumptions of the models and the variables I intend to use. Addressing the later consideration first, fixed effects models do not allow for time irrelevant variables. This presents a problem as many of my control variables, former colonies, do not vary with time. With these variables being necessary, and proven in the literature, it is import to test the appropriateness of the random effects model. As to the assumptions of the models, there are stricter assumptions under the random effects model than the fixed model—mainly that the disturbance term is not correlated with the explanatory variables. This assumption, and the

appropriateness of the random effects model, can be tested using the Hausman Test. After running both fixed and random effects, a Hausman Test revealed that random effects was appropriate for my data and the random effects model was not in violation of the strict assumptions. With this knowledge, I proceeded to use a random effects model.

Section 6: Empirical Results

Table 2: Non-Instrumented Results

Variable	I	II	III
ln(Aid)	-0.46 (0.65)	-0.46 (0.63)	0.38 (0.42)
French Colony	-5.51*** (1.89)	-5.51*** (1.93)	-4.31 (6.62)
British Colony	12.94*** (2.12)	12.94*** (2.12)	12.26 (7.51)
Portuguese Colony	-0.34 (0.34)	-0.34 (0.34)	1.23 1.23
South Africa	25.31*** (5.93)	25.31*** (1.90)	28.43 (20.90)
ln(GDP/CAP)	4.89*** (0.66)	4.89*** (0.95)	- -
Constant	32.48** (13.22)	32.48** (13.69)	40.55*** (9.84)
F-Stat	27.29***	193.48***	-
Chi2			9.35*
R2 - Overall	0.23	0.24	0.16
N	517	517	517

Notes: *p < 0.1; **p < 0.05; ***p < 0.01; Regression I contains OLS results; Regression II contains OLS Results with White Robust Errors; Regression III contains Panel Data Regression.

Using the variables and the model shown in Section 3, I calculate an Ordinary Least Squares (OLS) regression of the effects of foreign aid on the rule of law. While OLS does not allow for the use of all information collected or instrumentation, it is an important step in the process of obtaining the true results. These results are reported in Table 2, column I and II, with the only difference between the two being robust standard errors reported in column II and not in column I. Column III reports the results of a random effect, panel data regression without instrumentation. While the results of aids effect are not valuable, these regressions do give guidance as to the expected effects of some other variables. Table 2 shows the impact of being a former French Colony is negative, while the impact of being a former British Colony is positive. Columns I and II also show the importance of controlling for South Africa alone, as it is a more developed nation than any of its regional counterparts.

Table 2 proves to provide some interesting results, however, without instrumentation, the effect of foreign aid on the rule of law cannot be determined. Table 3 shows the results of regressions that instrument for foreign aid. Column I uses Percent_HIV as the only instrument for foreign aid. With this new instrument, *Ceteris Paribus*, aid is shown to have a negative impact of roughly 1/6 a standard deviation in the rule of law.²⁷ This finding is statistically significant at the $p < .05$ level. To better understand the magnitude of this result it should be noted that the average sub-Saharan African country receives roughly \$500 million in foreign aid per year. If a country were to receive roughly \$3 billion in yearly aid, which is 6 times the average but well under the maximum amount received of \$12 billion, it would reduce their rule of law by the difference between the rule of law in the South Africa and Uganda, Kenya and

²⁷ Table 1

Table 3: Random Effects with Instrumentation

	I	II	III
Variable			
ln(Aid)	-3.40** (1.39)	-3.40** (1.57)	-3.33*** (1.15)
French Colony	-5.93 (6.56)	-6.15 (6.28)	-5.91 (6.62)
Portuguese Colony	-2.40 (6.70)	-2.31 (6.34)	-2.32 (6.62)
British Colony	11.48** (5.63)	11.57** (5.22)	11.50** (5.55)
South Africa	32.01*** (5.22)	31.94*** 4.64	31.93*** (4.89)
ln(GDP/CAP)	0.57* (0.32)	0.59* (0.32)	0.57* (0.32)
Constant	111.97*** (26.93)	111.69*** (31.02)	110.46*** (22.85)
1st Stage Instrument(s) F-test	29.15***	32.94***	36.59***
2nd Stage F-test	185.13***	205***	188.90***
Chi2	15.33**	17.95***	19.03***
Kleibergen-Paap	25.32***	30.09***	50.64***
Cragg-Donald Wald	28.96	47.87	33.87
Hansen J	-	-	0.01
R2 - Overall	0.15	0.15	0.15
N	495	517	495

Notes: *p < 0.1; **p < 0.05; ***p < 0.01; Regression I instruments ln(aid) using Percent_HIV; Regression II instruments ln(aid) using ln(Population); Regression III instruments ln(aid) using both Percent_HIV and ln(population); Kleibergen-Paap test for under-identification; Chagg-Donald Wald test for weak identification; Hansen J test for over-identification and appropriateness of random effects model; All regressions were run using robust standard errors.

Liberia, Angola and Somalia. This drastic finding highlights the significantly negative impact of aid on the rule of law. This finding supports the idea that aid entrenches corrupt governments and perpetuates the failure of many African states.

In column II, a similar result is reported, however, in this case the natural logarithm of the population is used as the instrument for foreign aid. This instrument was proven by Boone²⁸ and performs similarly to the percentage of the country living with HIV. Finally, in column III, both Percent_HIV and ln(population) were used as instruments. When combining instruments there is a potential to over-identify the endogenous variable. The Hansen J statistic is a measure of this pitfall and shows that using both instruments is not a problem. By using both instruments, the statistical significance of the effect of aid is slightly increased, while the magnitude of the effect is slightly decreased. The similarity of the results between the three instruments displays the robustness of the result.

It is also important to note that in all three regressions, *Ceteris Paribus*, former British Colony had a positive impact (11 pts) on the rule of law scale about half a standard deviation. Being South Africa drastically increases the rule of law score (29-37 pts), as it is an outlier in the sub-Saharan region. Finally, the ln(GDP/CAP) has a positive impact. The magnitude of the effect of GDP per capita is small, but it is significant at the $p < .1$ level.

Section 7: Conclusion

This paper empirically examined the relationship between foreign aid and the rule of law in sub-Saharan Africa. Using a random effects model, and instrumenting for foreign aid with the percentage of the population living with HIV, this paper found that foreign aid has a significant,

²⁸ Boone, 1995.

negative impact on the rule of law, roughly 1/6 a standard deviation *Ceteris Paribus*.

Furthermore, these findings were robust to proven instruments such as the natural log of population. Notably, in addition to the effect of aid, this paper provided a new instrument for foreign aid in sub-Saharan Africa, a finding of equal importance to the empirical result.

While these findings suggest that aid is not as helpful as it is often argued, this study does not consider either the geo-political or the humanitarian impacts of giving foreign aid to sub-Saharan countries. The stated USAID mission, however, consists of two parts. First, to end extreme global poverty, and second, to enable resilient democracies. While these findings do not speak to the former goal, they help illuminate the failure of the latter. With a decrease in the rule of law, USAID is not enabling resilient democracies, diametrically it is enabling corruption and abuse of power. It is important to note, that these findings are restricted to sub-Saharan Africa and the effect of aid on rule of law, not the general effectiveness of foreign aid. However, it would not be unreasonable to suggest that with a decrease in the rule of law, effective humanitarian aid would prove more difficult to accomplish.

References

- Acemoglu, Daron, Simon Johnson, and James A Robinson. 2000. "The Colonial Origins of Comparative Development: An Empirical Investigation" (June 1).
- Alesina, Alberto, and David Dollar. 2000. "Who Gives Foreign Aid to Whom and Why?" *Journal of Economic Growth* 5 (1): 33–63.
- Alesina, Alberto, and Beatrice Weder. 1999. "Do Corrupt Governments Receive Less Foreign Aid?" 7108. *American Economic Review*. Vol. 92. Cambridge, MA.
- Bauer, Péter Tamás. 1976. *Dissent on Development*. Harvard University Press.
- Blanchette, Jude. 2003. "The Free Market: Futility of Foreign Aid, The." *The Free Market* 23 (7).
- Boone, P. 1995. "Politics and Effectiveness of Foreign Aid." *Center for Economic Performance*.
- Bräutigam, Deborah A, and Stephen Knack. 2004. "Foreign Aid, Institutions, and Governance in Sub-Saharan Africa." *Economic Development and Cultural Change* 52 (2): 255–285.
- "Data | The World Bank." 2014. Accessed April 26. <http://data.worldbank.org/>.
- Dudley, Leonard, and Claude Montmarquette. 1976. "Model of the Bilateral Supply of Foreign Aid." *American Economic Review* 66 (1): 132–142.
- Easterly, William, Source The, Economic Perspectives, and No Summer. 2003. "Can Foreign Aid Buy Growth?" *The Journal of Economic Perspectives* 17 (3): 23–48.
- Epstein, Gil S., and Ira N. Gang. 2008. "Good Governance and Good Aid Allocation". No. 3585. Bonn, Germany.
- Feyzioglu, Tarhan, Vinaya Swaroop, and Min Zhu. 1998. "A Panel Data Analysis of the Fungibility of Foreign Aid." *World Bank Economic Review* 12 (1): 29–58.
- Goldsmith, Arthur A. 2001. "Foreign Aid and Statehood in Africa." *International Organization* 55 (1): 123–148.
- "Home | Mo Ibrahim Foundation." 2013. Accessed October 6. <http://www.moibrahimfoundation.org/>.
- Kaufmann, Daniel. 2002. "Growth Without Governance". Washington, DC.
- Lumsdaine, David Halloran. 1993. *Moral Vision in International Politics: The Foreign Aid Regime, 1949-1989*. Princeton University Press.

- Mohammadi, Teimour. 2012. "Relative Performance of Components Variance Estimators in Random Effects Models." *Iranian Journal of Economic Research* 17 (50): 83–98.
- Morgenthau, Hans. 1962. "A Political Theory of Foreign Aid." *The American Political Science Review* 56 (2): 301–309.
- "Net Official Development Assistance and Official Aid Received (current US\$) | Data | Table." 2014. <http://data.worldbank.org/indicator/DT.ODA.ALLD.CD>.
- "Policy Basics: Where Do Our Federal Tax Dollars Go? — Center on Budget and Policy Priorities." 2013.
- Prasad, Biman C. 2003. "The Theory of Property Rights, Economic Development, Good Governance and the Environment." *International Journal of Social Economics* 30 (6): 741–762. doi:10.1108/03068290310474120.
- "Prevalence of HIV, Total (% of Population Ages 15-49) | Data | Table." 2014. <http://data.worldbank.org/indicator/SH.DYN.AIDS.ZS>.
- Sayeh, Antoinette. 2012. "Africa and the Great Recession: Changing Times | iMFdirect." *iMFdirect*. <http://blog-imfdirect.imf.org/2012/05/14/africa-and-the-great-recession-changing-times/>.
- Schaffer, M.E., Stillman, S. 2010. xtoverid: Stata module to calculate tests of overidentifying restrictions after xtreg, xtivreg, xtivreg2 and xtaylor <http://ideas.repec.org/c/boc/bocode/s456779.html>
- Schraeder, Peter J., Steven W. Hook, and Bruce Taylor. 1998. "Clarifying the Foreign Aid Puzzle: A Comparison of American, Japanese, French, and Swedish Aid Flows." *World Politics* 50 (02) (January 1): 294–323.
- Svensson, Jakob. 1995. "When Is Foreign Aid Policy Credible? Aid Dependence and Conditionality". Stockholm, Sweden.
- Tarnoff, Curt, and Marian Leonardo Lawson. 2012. "Foreign Aid: An Introduction to U.S. Programs and Policy". Washington, DC.
- Vance, Laurence M. 2000. "Foreign Aid Debacle." *The Free Market* 18 (12).
- "What We Do | U.S. Agency for International Development." 2014. <http://www.usaid.gov/what-we-do>.
- Zanger, S. C. 2000. "Good Governance and European Aid: The Impact of Political Conditionality." *European Union Politics* 1 (3) (October 1): 293–317. doi:10.1177/146511650001003002.