

Worldwide Governance Indicators as a Predictor of Development Assistance in Africa

Introduction

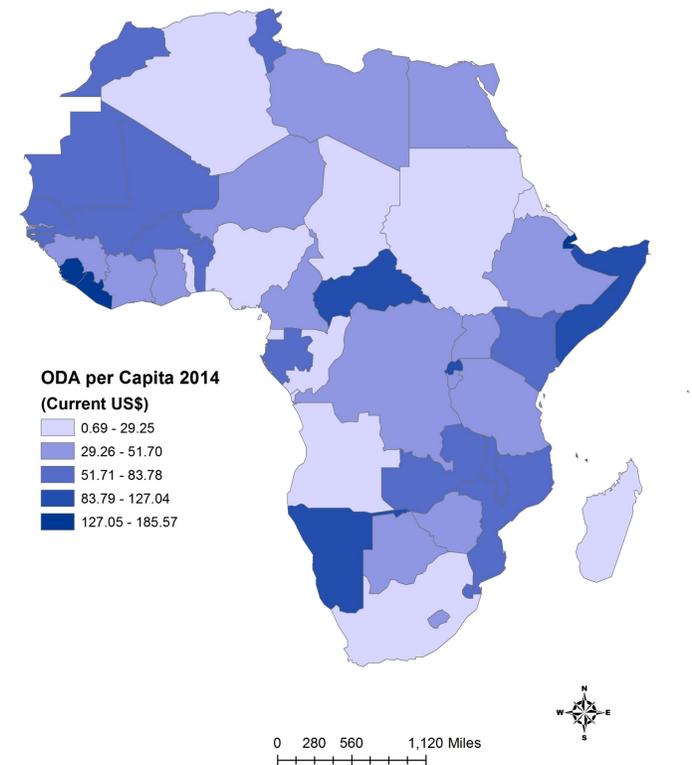
Aid money to help development in countries around the world has long been an important aspect of foreign policy in the United States and other developed countries. The most common measure of development assistance is Official Development Assistance (ODA). ODA includes all assistance provided by official government agencies. Trends in ODA have varied over time, but currently Africa receives the most money of any region. In 2014, Africa received \$53,789 million. 17% of this came from the United States, the largest donor worldwide. ODA is given for many reasons, and while it is intended to help the poorest countries develop, they are not always the ones receiving the most aid. There are many factors contributing to which countries receive aid. This report seeks to discover if there is some relationship between the amount of aid a country receives and the quality of governance in that country, measured by Worldwide Governance Indicators.

Methods

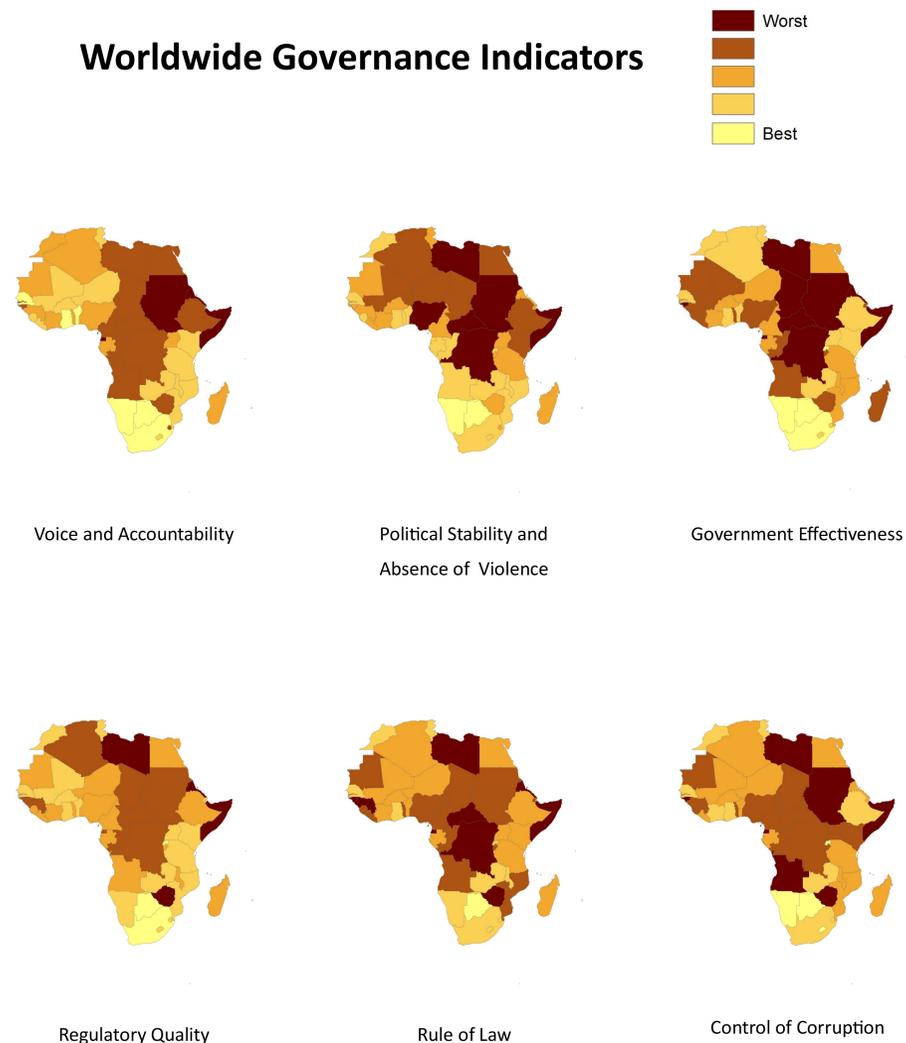
I obtained ODA data from the World Bank. There are many variations of this data and I used ODA per capita. This normalized the data across countries with very different populations. All data is from 2014 as this was the most recent year with complete data for all countries in Africa. I represent this data with gradient colors on a map to show ranges of ODA across the continent.

The Worldwide Governance Indicators (WGI), created by the World Bank and Brookings Institute, among other organizations, rank countries on six categories of governance: Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. The rankings range from -2.5 (worst) to 2.5 (best). While these scores are not used by the World Bank to allocate funding, they are useful indicators of the political climate in every country. The WGI data, obtained from the World Bank, is represented using gradient colors to show the variation across the continent and correlation with ODA.

I ran a Least Squares regression using the six WGI indicators and the ODA data as the dependent variable. The results of the regression are shown in the table.



Worldwide Governance Indicators



Results

Variable	Coefficient (a)	StdError	t-Statistic	Probability (b)
Intercept	65.512169	7.901025	8.291604	0.000000*
Voice and Accountability	10.116822	11.188823	0.904190	0.370817
Political Stability and Absence of Violence	4.147801	7.997323	0.518649	0.606605
Government Effectiveness	-25.808903	22.355657	-1.154469	0.254540
Regulatory Quality	39.451836	19.978281	1.974736	0.054595
Rule of Law	-74.311900	35.407545	-2.098759	0.041612*
Control of Corruption	58.072559	16.240593	3.575766	0.000864*

* An asterisk next to a number indicates a statistically significant p-value ($p < 0.01$).

Adjusted R-Squared: 0.221476

Discussion

The results show that Rule of Law and Control of Corruption have a significant influence on ODA in a given country. Rule of Law is negatively correlated and a 1 unit increase is correlated with a 74.31 decrease in ODA per capita. Control of Corruption is positively correlated and a 1 unit increase correlating with a 58.07 increase in ODA per capita. It makes sense that countries with better control of corruption receive more aid as donors would not want to waste development money that would end up in the pockets of corrupt officials. It makes less sense why countries with worse rule of law receive more aid.

The R-Squared of this regression was 0.221476, meaning the WGI could only explain 22% of the change in ODA per capita. Clearly there are many other factors that determine how much development assistance countries need. Future research should potentially include some of these other factors to better explain variation in ODA. A more complete model could help policy makers and analysts explain trends in development assistance and determine where future aid is most needed.

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GIS 101

May 2016

Data Source: Worldbank, Tufts M drive

Projection : Lambert_Conformal_Conic

References

OECD Development Aid at a Glance, Statistics by Region: Africa (2016)

Tufts
UNIVERSITY