

# Does Foreign Aid Work? Evidence from a Natural Experiment in International Relations<sup>\*</sup>

Soumyajit Mazumder James Raymond Vreeland  
*Harvard University Georgetown University*

Date last updated: June 23, 2017

Date first created: February 18, 2017

Does foreign aid work? The existing literature on the effects of foreign aid tends to find mixed results over the efficacy of foreign aid as a tool of economic and political development. One crucial empirical problem is that donors do not randomly give foreign aid so selection bias plagues most studies. We use a quasi-experiment created by alphabetical rotation rules of the Presidency of the Council of the European Union to estimate the causal effect of the European Union's foreign aid program on economic and political development. Our results indicate that the European Union's aid program is effective in inducing economic growth and improving health outcomes. We also find weak evidence that foreign aid also fosters political liberalization. We find no evidence indicating that foreign aid increases trade openness, state capacity, political rights, or civil conflict. By disentangling the endogeneity of foreign aid, we show that foreign can be an effective yet limited tool for good.

---

<sup>\*</sup>We are grateful to Rachel Sigman and Jonathan Hanson for sharing their data on state capacity with us. The authors would like to thank Faisal Ahmed, Leonardo Baccini, and Axel Dreher for detailed feedback. The authors would also like to thank seminar participants of the Harvard University International Relations Workshop and participants of the 2016 meeting of the International Political Economy Society.

## INTRODUCTION

Does foreign aid work? Decades of research in political economy have been devoted to studying whether foreign aid is an effective tool of economic and political development. Much of this research relies on cross-country, observational evidence to test whether foreign aid from a variety of different donors can improve economic growth, human rights, and political liberalization among many other macro-level outcomes that both scholars and practitioners care about in the developing world. Ideally, researchers would randomize the receipt of aid and then measure whether any of the aforementioned variables differ across “treated” and “control” groups. Unfortunately, it is typically unfeasible both to run such a study at the macro-level.

Existing research has reached rather mixed views about the prospects of foreign aid as a tool of development. Many find that foreign aid does seem to produce economic growth and political liberalization (Burnside and Dollar 2000; Kosack and Tobin 2006; Finkel, Pérez-Liñán, and Seligson 2007; Wright 2009; Bearce and Tirone 2010). Other scholars have found the exact opposite—that foreign aid actually harms economic and political development (Knack 2001; Easterly, Levine, and Roodman 2004; Djankov, Montalvo, and Reynal-Querol 2008; Bueno de Mesquita and Smith 2010; Nielsen et al. 2011).

We argue that one reason for this discrepancy in findings is the problem of selection bias in aid giving. For example, donors might give more foreign aid to the countries that are the hardest to improve economically or politically. Or it might also be the case that donors target countries where they know that the marginal impact of each dollar might be the greatest. Given these potential types of confounding, perhaps it is of no surprise why the existing literature is rife with mixed findings.

To help resolve these empirical inconsistencies and the problems of unobserved confounding, we build on Carnegie and Marinov (2017) and leverage a natural experiment in the European Union’s (EU) foreign aid program to identify the causal effect of foreign aid on economic and political development. For identification, we use the fact that EU member governments hold the Presidency of the Council of the EU, which gives them enhanced power to shift the budget, through an exogenous rule of alphabetical rotation by country name. As a result, we can capture “as-if” random changes in the preferences of the EU to give more aid to some countries rather than others to isolate the exogenous component of the EU’s foreign aid program.

Using this quasi-experimental design, we find evidence suggests that foreign aid does indeed improve economic and, to a lesser extent, political development. Particularly, we find that aid from the EU increases the growth rate of developing, recipient countries and increases life expectancy. On political development, we find modest evidence that foreign aid fosters democratization. We do not find any evidence that aid increases trade openness, state capacity, or empowerment rights.

This note builds on a relatively new line of research that uses quasi-experimental research designs to estimate the causal effect of foreign aid on growth and governance. For example, Ahmed (2012) uses the oil price shock of 1979 to show how foreign aid and remittances increase leader tenure. Nunn and Qian (2014) leverage shocks to wheat prices to show how food aid from the United States can actually increase the incidence of civil conflict. While these studies demonstrate that aid from unilateral donors such as the United States can have adverse political economy effects, our results contribute to the growing evidence that aid from less politicized donors such as multilateral ones can actually increase growth and political development (Carnegie and Marinov 2017; Galiani et al. 2017). Moreover, our results extend beyond Carnegie and Marinov (2017) by providing causal estimates that are valid beyond a potentially non-representative sample of former colonies. In short, we show that foreign aid, at least from multilateral donors like the EU, does indeed “work.”

## RESEARCH DESIGN

### *The Rotating Presidency as a Natural Experiment*

The Rotating Presidency of the Council of the EU plays a central role in our strategy to identify the effect of foreign aid on economic and political development.<sup>1</sup> This position, held by national governments rather than any one individual, rotates among all of the EU member states every six months. Since 1965, the Presidency has rotated by alphabetical order according to the way in which each country spells its name in its own language.

As a result, the Rotating Presidency is one of the few positions of international leadership that is filled as-if the process were random. Generally, states have combined their EU-wide policy vision with future Presidencies to facilitate policy coherence. The power of the Rotating Presidency also affords national governments with special privileges—most notably, the power to shape the agenda. If a state that holds the Presidency does not like a legislative proposal by the Commission, it can threaten to not put the proposal on the agenda for Council meetings (Hix and Hoyland 2011).

Scholars document that states holding the Rotating Presidency have enhanced bargaining power in intra-Council negotiations as well as negotiations with the Commission (Tallberg 2003, 2004; Schalk et al. 2007; Warntjen 2008; Tallberg 2010; Aksoy 2010). In addition, the President has the power to control the number of meetings, the duration of meetings, as well as the priorities presented before the Council and Commission (Sherrington 2000, p. 44). Because the state who holds the Rotating Presidency is privy to information from all relevant actors, they are better able to shift policies closer to their ideal points (Tallberg 2003).

---

<sup>1</sup>We hereby refer to the position as the Rotating Presidency.

Given these arguments, we suspect that countries that hold the Rotating Presidency have an enhanced ability to shape the EU's budget process—a core function of the Council of the EU. Since foreign aid is a budgeted item, member states that hold the Rotating Presidency should also have a better ability to shape the EU's aid budget relative to states that do not hold the Rotating Presidency. Since, as we argue, the member state holding the Rotating Presidency has an enhanced ability to shift the budget composition toward its ideal point, we expect that aid priorities should also reflect the preferences of whichever state that holds the rotating Presidency.

We start from the premise that member governments who hold the Rotating Presidency during the budgeting period, which occurs during the second half of each year, will have greater ability to shift the aid budget toward their own preferences. Essentially, the alphabetical rotation of the Presidency gives us quasi-random assignment of the EU's aid preferences. To measure a member government's aid preferences, we use the amount of *bilateral* aid that a potential recipient country receives from the member government—bilateral aid acts as a measure of revealed preference. Importantly, we can directly test this premise through the first-stage regressions of the amount of bilateral aid that a potential recipient receives from the Rotating President on the amount of aid that they receive from the EU. Thus this natural experiment, as we argue in the following section, satisfies the necessary assumptions needed to credibly identify causal effects.

Carnegie and Marinov (2017) use a variation of this quasi-experimental design to investigate the effect of aid on governance. Instead of using the amount of bilateral aid that a country receives from the Rotating President, the authors use whether the country was a former colony of the Rotating President. While this natural experiment design can still identify causal effects, these effects are only valid *conditional on ever being colonized*. We generalize this approach to all recipient countries instead of just former colonies, which allows us to recover estimates of the Local Average Treatment Effect (LATE) of EU aid for a broader population of developing countries.

### *Data and Estimation*

With this natural experiment in hand, we proceed to identify the causal effect of foreign aid on a number of economic and political outcomes that scholars might be interested in. Our first set analyses explore the impact of the EU's aid program on economic development as proxied by growth (percent increase in GDP per capita), health (log infant mortality and life expectancy), and trade openness (exports and imports as a percent of GDP) from World Bank (2016). While this certainly is not an exhaustive list of outcomes, we believe that they capture essential features of economic development.

Next, we move to estimate the effect of EU aid on political development. We measure institutional liberalization through Polity2 scores where higher scores reflect more

democratic institutions. To measure the effects of foreign aid on state and bureaucratic capacity, we rely on an index created by Hanson and Sigman (2013) that uses a Bayesian Item Response approach to measure state capacity where higher scores indicate greater state capacity.<sup>2</sup> We also measure whether aid affects political and gender rights through indices created by Coppedge et al. Finally, we use data from Gleditsch et al. (2002) to measure the effect of aid on the incidence of civil conflict.

Our key independent variable is the logarithm of the total amount of Official Development Assistance (ODA) that a country receives from the EU. Given the problem of selection bias in aid-giving, we use the amount of bilateral ODA that a given country receives from the EU member state that holds the Rotating Presidency in the second-half of the year (the time of budgeting). For example in the years 1991-1993, Netherlands, the United Kingdom, and Belgium held the Rotating Presidency in the second-half of the year. We use the amount of bilateral aid that they respectively disbursed to recipient countries as an exogenous operationalization of the EU's aid preferences.

Using this natural experiment and data, we estimate the following set of equations via two-stage least square (2SLS):

$$\text{Log}(EUODA)_{i,t-1} = \lambda \text{Log}(\text{RotatingPresidencyBilateralAid})_{i,t-2} + \delta X_{i,t-1} + \gamma S + \tau T + \eta_{i,t-1} \quad (1)$$

$$Y_{it} = \beta \text{Log}(\widehat{EUODA})_{i,t-1} + \delta X_{i,t-2} + \gamma S + \tau T + \epsilon_{i,t} \quad (2)$$

For the 2SLS setup to consistently estimate  $\beta$ —the causal effect of EU aid—we need to make several assumptions. First, the instrument must be exogenous. As argued above, the power of the office enables the Council President to influence aid expenditures to reflect the preferences of his/her nation, and the alphabetically rotating nature of this office ensures that the changes in foreign aid priorities induced by the preferences of the country that controls the Council Presidency are exogenous to other factors that might influence aid effectiveness. To the extent that the preferences of the country controlling the Council Presidency shape aid allocation, we have as close to an experimental set up as one could imagine in an observational setting. Of course, the preferences of the Council Presidency are not the only determinant of EU aid allocations, so we also control for three major factors well known in the aid literature: regime type, population, and lagged foreign aid (we use the amount of EU ODA a country received at time  $t - 2$ —see, for example, Alesina and Dollar (2000)).<sup>3</sup> The term  $\delta X$  captures these covariates. Additionally, we include country fixed effects— $\gamma S$ —so that all comparisons are

<sup>2</sup>For more details on the measure, we refer readers to Hanson and Sigman (2013).

<sup>3</sup>Our qualitative conclusions, presented below, hold when we exclude regime type from the first stage of the 2SLS analysis. See Tables 6 and 7 in the Online Appendix.

made *within* each country. Moreover, we also include year fixed effects— $\tau T$ —to absorb global trends.

Second, we need to make an exclusion restriction assumption that the instrument only affects the relevant dependent variable through its effect on the independent variable. Since the Rotating President’s main power is to help set the budget, we argue that it is likely that the instrument satisfies the exclusion restriction. Third, we need to assume that the instrument is relevant in that it strongly predicts the endogenous variable of interests. This assumption is directly testable and we find consistent support for this in the analyses below as well as Table 3 in the Online Appendix. The coefficient on our instrument is positive and statistically significant with the control variables in the expected directions. For inference, we two-way cluster our standard errors by country and year.

## Results

Table 1: Two-Stage Least Squares Estimates of EU Aid on Economic Indicators

	GDP Growth Rate	Log (Life Expectancy)	Log (Infant Mortality)	Trade (Pct. GDP)
	(1)	(2)	(3)	(4)
Log (EU ODA), t-1	7.70* (3.91)	0.06* (0.03)	-0.03 (0.07)	-5.93 (8.04)
First-Stage F-Stat	9.45	15.08	14.89	8.18
Country Fixed Effects	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓
Time Varying Covariates	✓	✓	✓	✓
Observations	2,289	2,422	2,383	2,296

Notes:

\*\*p < .01; \*p < .05; †p < .1

Standard errors two-way clustered by country and year.

Does foreign aid help or harm economic and political development? Table 1 checks whether EU aid causes a shift in economic development. Columns 1 and 2 provide some modest evidence that EU aid increases economic growth and life expectancy in recipient countries. We do not find any statistically significant evidence that aid moves either infant mortality or trade openness. In terms of substantive effects, our results show that a one standard deviation increase in the amount of EU ODA that a country receives causes about a one standard deviation increase in the GDP growth rate. The effects on life expectancy, however, are much more modest. A one standard deviation increase in foreign aid leads to about one-third standard deviation increase in life expectancy. Given that outcomes such as life expectancy are likely quite slow moving, this more modest effect size is not surprising.

Table 2: Two-Stage Least Squares Estimates of EU Aid on Political Indicators

	Polity2	State Capacity	VDEM Political Liberties	VDEM Gender Index	Civil Conflict Incidence
	(1)	(2)	(3)	(4)	(5)
Log (EU ODA), t-1	2.06 <sup>†</sup> (1.09)	0.18 (0.11)	0.07 (0.04)	0.07* (0.03)	-0.11 (0.11)
First-Stage F-Stat	15.3	14.05	14.8	8.9	13.95
Country Fixed Effects	✓	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓	✓
Time Varying Covariates	✓	✓	✓	✓	✓
Observations	2,426	2,427	2,408	2,179	2,411

Notes: \*\*p < .01; \*p < .05; †p < .1  
Standard errors two-way clustered by country and year.

Table 2 moves on to estimate the effect of EU aid on political development. Columns 1 and 4 provide some evidence that EU aid seems to increase political liberalization as measured by Polity2 scores and gender rights. We do not find any statistically significant evidence that aid increases state capacity, political liberties, or the likelihood of civil conflict. In terms of substantive significance, a one standard deviation increase in EU aid leads to about a one-fourth standard deviation increase in Polity2 scores and a one-third standard deviation increase in the VDem Gender Index. While we cannot disentangle whether aid's effect on growth drives the findings on Polity 2 and gender or the other way around, the findings on gender are consistent with household bargaining models of the gendered division of labor. As growth increases, women might be more likely to go into the labor force, which in turn, can increase the political power of women in society.

While foreign aid does seem to positively impact “first-order” outcomes such as economic growth and political liberalization, we note that many of these other outcomes that scholars might care about such as trade openness, political rights, state capacity, and civil conflict do not seem to respond to foreign aid shocks—at least from the EU. This suggests that foreign aid in the short-run is no panacea for the hurdles that developing countries face. The upshot of this exercise is that foreign aid from the EU does seem to work, but that the scope of its impact seems to be quite modest.

## CONCLUSION

Is foreign aid successful in spurring economic and political development? In this research note, we leverage a quasi-experimental identification strategy using the Rotating Presidency of the Council of the EU to estimate the causal effect of foreign aid on a variety of political economy outcomes. While our results do show some support for the idea that foreign aid can positively and systematically shape development; though, we also

note that the scope of what foreign aid can impact seems quite limited. Given that aid from the EU is one of the less politically motivated aid programs, it is quite likely that our results are *upper bounds* on the wider efficacy of foreign aid.<sup>4</sup> Since the evidence suggests that foreign aid from politically motivated donors seems to be less effective than aid that is not and since most other bilateral and multilateral donors are noted for being susceptible to geopolitical manipulation, it is unlikely that these results extrapolate to other programs (Bueno de Mesquita and Smith 2009; Vreeland and Dreher 2014; Ahmed 2016). Multilateral aid from the EU, however, appears to have no negative effects and some positive effects on economic and political development.

---

<sup>4</sup>On the merits of bilateral versus multilateral aid, see Milner and Tingley (2012) and Schneider and Tobin (2013)



## References

- Ahmed, Faisal Z. 2016. "Does Foreign Aid Harm Political Rights? Evidence from U.S. Aid." *Quarterly Journal of Political Science* 11 (2): 118–217.
- . 2012. "The Perils of Unearned Foreign Income: Aid, Remittances, and Government Survival." *American Political Science Review* 106 (1): 146–165.
- Aksoy, Deniz. 2010. "Who Gets What, When, and How Revisited: Voting and Proposal Powers in the Allocation of the EU Budget." *European Union Politics* 11 (2): 171–194.
- Alesina, Alberto, and David Dollar. 2000. "Who Gives Foreign Aid to Whom and Why?" *Journal of Economic Growth* 5 (1): 33–63.
- Bearce, David H., and Daniel C. Tirone. 2010. "Foreign Aid Effectiveness and the Strategic Goals of Donor Governments." *The Journal of Politics* 72 (3): 837–851.
- Bueno de Mesquita, Bruce, and Alastair Smith. 2009. "A Political Economy of Aid." *International Organization* 63 (2): 309–340.
- . 2010. "The Pernicious Consequences of UN Security Council Membership." *Journal of Conflict Resolution* 54 (5): 667–686.
- Burnside, Craig, and David Dollar. 2000. "Aid, Policies, and Growth." *American Economic Review* 90 (4): 847–868.
- Carnegie, Allison, and Nikolay Marinov. 2017. "Foreign Aid, Human Rights, and Democracy Promotion: Evidence from a Natural Experiment." *American Journal of Political Science*.
- Coppedge, Michael, et al. *V-Dem Country-Year Dataset v6*. Varieties of Democracy (V-Dem) Project.
- Djankov, Simeon, Jose G. Montalvo, and Marta Reynal-Querol. 2008. "The Curse of Aid." *Journal of Economic Growth* 13 (3): 169–194.
- Easterly, William, Ross Levine, and David Roodman. 2004. "New Data, New Doubts: A Comment on Burnside and Dollar's Aid, Policies, and Growth." *American Economic Review* 94 (3): 774–780.

- Finkel, Steven E., Aníbal Pérez-Liñán, and Mitchell A. Seligson. 2007. "The Effects of US Foreign Assistance on Democracy Building, 1990-2003." *World Politics* 59 (3): 404–439.
- Galiani, Sebastian, et al. 2017. "The Effect of Aid on Growth: Evidence from a Quasi-Experiment." *Journal of Economic Growth* 22 (1): 1–33.
- Gleditsch, Nils Petter, et al. 2002. "Armed Conflict 1946-2001: A New Dataset." *Journal of Peace Research* 39 (5): 615–637.
- Hanson, Jonathan K., and Rachel Sigman. 2013. "Leviathan's Latent Dimensions: Measuring State Capacity for Comparative Political Research." Working Paper.
- Hix, Simon, and Bjørn Hoyland. 2011. *The Political System of European Union*. Palgrave MacMillan.
- Knack, Stephen. 2001. "Aid Dependence and the Quality of Governance." *Southern Economic Journal* 68 (2): 310–329.
- Kosack, Stephen, and Jennifer Tobin. 2006. "Funding Self-Sustaining Development: The Role of Aid, FDI and Government in Economic Success." *International Organization* 60 (1): 205–243.
- Milner, Helen V., and Dustin H. Tingley. 2012. "The Choice for Multilateralism: Foreign Aid and American Foreign Policy." *Review of International Organizations* 8 (3): 313–341.
- Nielsen, Richard A., et al. 2011. "Foreign Aid Shocks as a Cause of Violent Armed Conflict." *American Journal of Political Science* 55 (2): 219–232.
- Nunn, Nathan, and Nancy Qian. 2014. "US Food Aid and Civil Conflict." *American Economic Review* 104 (6): 1630–1666.
- Schalk, Jelmer, et al. 2007. "The Power of the Presidency in EU Council Decision-making." *European Union Politics* 8 (2): 229–250.
- Schneider, Christina J., and Jennifer L. Tobin. 2013. "Interest Coalitions and Multilateral Aid Allocation in the European Union." *International Studies Quarterly* 57 (1): 103–114.
- Sherrington, Phillipa. 2000. *The Council of Ministers: Political Authority in the European Union*. Pinter Pub Ltd.
- Tallberg, Jonas. 2003. "The Agenda-Shaping Powers of the EU Council Presidency." *Journal of European Public Policy* 10 (1): 1–19.
- . 2010. "The Power of the Chair: Formal Leadership in International Cooperation." *International Studies Quarterly* 54 (1): 241–265.

- . 2004. “The Power of the Presidency: Brokerage, Efficiency and Distribution in EU Negotiations.” *JCMS: Journal of Common Market Studies* 42 (5): 999–1022.
- Vreeland, James Raymond, and Axel Dreher. 2014. *The Political Economy of the United Nations Security Council: Money and Influence*. Cambridge University Press.
- Warntjen, Andreas. 2008. “The Council Presidency: Power Broker or Burden? An Empirical Analysis.” *European Union Politics* 9 (3): 315–338.
- World Bank. 2016. *World Development Indicators*. Online.
- Wright, Joseph. 2009. “How Foreign Aid Can Foster Democratization in Authoritarian Regimes.” *American Journal of Political Science* 53 (3): 552–571.

## ONLINE APPENDIX

Table 3: First-Stage Relationship between Rotating Presidency Instrument and EU ODA

	Log (EU ODA), t - 1	
	(1)	(2)
Log (Presidency Aid), t-2	0.10** (0.02)	0.04** (0.01)
Log(EU Aid), t-2		0.52** (0.04)
Log(GDP per Capita), t-2		−0.03 (0.08)
Log(Population), t-2		−0.03 (0.10)
Polity2, t-2		0.01** (0.01)
Constant	14.94** (0.32)	8.20** (1.57)
Country Fixed Effects	✓	✓
Year Fixed Effects	✓	✓
N	2,699	2,427
R <sup>2</sup>	0.68	0.77

† p < .1; \* p < .05; \*\* p < .01

Table 4: Two-Stage Least Squares Estimates of EU Aid on Economic Indicators (Display All Effects)

	GDP Growth Rate	Log (Life Expectancy)	Log (Infant Mortality)	Trade (Pct. GDP)
	(1)	(2)	(3)	(4)
Log (EU ODA), t-1	7.70* (3.91)	0.06* (0.03)	-0.03 (0.07)	-5.93 (8.04)
Log (EU ODA), t-2	-3.73 <sup>†</sup> (2.10)	-0.03 <sup>†</sup> (0.01)	-0.01 (0.04)	4.28 (4.11)
Log (Population), t-2	2.27 (1.71)	0.001 (0.01)	0.04 <sup>†</sup> (0.02)	-5.99* (2.44)
Polity2, t-2	-0.12 (0.08)	0.001 (0.001)	-0.001 (0.003)	0.36 <sup>†</sup> (0.19)
Log (GDP per Capita), t-2	-4.93** (1.15)	0.000 (0.01)	-0.16** (0.03)	3.47 (3.56)
Constant	-7.38 (29.03)	3.48** (0.28)	4.45** (0.68)	108.03 (88.35)
First-Stage F-Stat	9.45	15.08	14.89	8.18
Country Fixed Effects	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓
Time Varying Covariates	✓	✓	✓	✓
Observations	2,289	2,422	2,383	2,296

Notes: \*\*p < .01; \*p < .05; <sup>†</sup>p < .1  
Standard errors two-way clustered by country and year.

Table 5: Two-Stage Least Squares Estimates of EU Aid on Political Indicators (Display All Effects)

	Polity 2	State Capacity	VDEM Political Liberties	VDEM Gender Index	Civil Conflict Incidence
	(1)	(2)	(3)	(4)	(5)
Log (EU ODA), t-1	2.06 <sup>†</sup> (1.09)	0.18 (0.11)	0.07 (0.04)	0.07* (0.03)	-0.11 (0.11)
Log (EU ODA), t-2	-0.85 (0.62)	-0.07 (0.06)	-0.04 (0.02)	-0.03 <sup>†</sup> (0.02)	0.05 (0.06)
Log (Population), t-2	-0.13 (0.46)	-0.05 <sup>†</sup> (0.03)	-0.003 (0.01)	-0.003 (0.004)	0.03 (0.02)
Polity2, t-2		-0.004 (0.01)	0.02** (0.002)	0.003* (0.001)	-0.001 (0.004)
Log (GDP per Capita), t-2	-0.44 (0.41)	0.23** (0.05)	-0.02 (0.02)	-0.01 (0.01)	-0.01 (0.03)
Constant	-26.18** (8.95)	-3.78** (1.12)	-0.35 (0.39)	-0.13 (0.32)	0.58 (1.11)
First-Stage F-Stat	15.3	14.05	14.8	8.9	13.95
Country Fixed Effects	✓	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓	✓
Time Varying Covariates	✓	✓	✓	✓	✓
Observations	2,426	2,427	2,408	2,179	2,411

Notes: \*\*p < .01; \*p < .05; <sup>†</sup>p < .1  
Standard errors two-way clustered by country and year.

Table 6: Two-Stage Least Squares Estimates of EU Aid on Economic Indicators (Only Lagged DV)

	GDP Growth Rate	Log (Life Expectancy)	Log (Infant Mortality)	Trade (Pct. of GDP)
	(1)	(2)	(3)	(4)
Log (EU ODA), t-1	8.10* (3.64)	0.05* (0.02)	0.03 (0.08)	-9.82 (8.03)
Log(EU ODA), t-2	-3.96 <sup>†</sup> (2.02)	-0.02 <sup>†</sup> (0.01)	-0.04 (0.05)	6.38 (4.14)
Constant	-7.96 (8.00)	3.53** (0.18)	3.26** (0.57)	65.40 (65.55)
Country Fixed Effects	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓
Observations	2,363	2,563	2,509	2,387

Notes: \*\*p < .01; \*p < .05; <sup>†</sup>p < .1  
Standard errors two-way clustered by country and year.

Table 7: Two-Stage Least Squares Estimates of EU Aid on Political Indicators (Only Lagged DV)

	Polity2	State Capacity	VDEM Political Liberties	VDEM Gender Index	Civil Conflict Incidence
	(1)	(2)	(3)	(4)	(5)
Log (EU ODA), t-1	2.08 <sup>†</sup> (1.07)	-0.05 (0.11)	0.14* (0.06)	0.07** (0.03)	-0.04 (0.09)
Log (EU ODA), t-2	-0.86 (0.61)	0.03 (0.06)	-0.06 <sup>†</sup> (0.03)	-0.03* (0.01)	0.01 (0.05)
Constant	-31.66** (8.26)	-0.54 (0.88)	-1.41** (0.39)	-0.29 (0.18)	0.29 (0.77)
Country Fixed Effects	✓	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓	✓
Observations	2,521	2,583	2,549	2,273	2,551

Notes: \*\*p < .01; \*p < .05; <sup>†</sup>p < .1  
Standard errors two-way clustered by country and year.