Opening the Black Box on Intl Aid Data Section

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So this is the document for preparing and presenting results. Moving things over from various other files. The goal of this is to be a working document that can eventually become an appendix to the paper. We'll pull our main models from here and keep the others as robustness checks.

Importing the libraries that we'll need for all of the following projects.

Gonna break this into three big sections for now. (1) Analysis by Recipient (target?) country, (2) Analysis by donor-recipient dyad, and (3) Subnational analysis. If there are not some descriptive statistics in every section, there should be!

Analysis by Recipient-Year

Analysis by Dyad-Year

Here are some descriptive statistics on the recipient-year data. "'{, message = FALSE, results='asis'} crs_by_types $RecipientName < -ifelse(crs_by_typesRecipientCode==247,$ "Cote d Ivoire",crs_by_typesRecipientName)

crs_by_types <- crs_by_types %>% filter(round(total_disbursement) != 0) %>% filter(Year>2003)

tmp <- crs_by_types %>% select(Year,RecipientName,DonorName,total_disbursement,gov_d_percent,gov_r_percent,gov_3 %>% unique() %>% group_by(Year) %>% mutate(sum_total = sum(total_disbursement, na.rm = TRUE), mean_gov_d = mean(gov_d_percent, na.rm = TRUE), mean_gov_r = mean(gov_r_percent, na.rm = TRUE), mean_gov_3 = mean(gov_3_percent, na.rm = TRUE), mean_gov_o = mean(gov_o_percent, na.rm = TRUE), mean_corp = mean(corp_percent, na.rm = TRUE), mean_ngo = mean(ngo_percent, na.rm = TRUE), mean_igo = mean(igo_percent, na.rm = TRUE), mean_other = mean(other_percent, na.rm = TRUE)) %>% select(Year, sum_total, mean_disbursement, mean_gov_d, mean_gov_r, mean_gov_3, mean_gov_o, mean_corp, mean_igo, mean_ngo, mean_other) %>% unique()

stargazer(as.data.frame(tmp), digits = 2, type = 'latex', summary = FALSE, title = "Dyadic Summary Statistics By Year")

tmp <- crs_by_types %>% select(Year,RecipientName,DonorName,total_disbursement,gov_d_percent,gov_r_percent,gov_3 %>% unique() %>% group_by(RecipientName,DonorName) %>% mutate(sum_total = sum(total_disbursement, na.rm = TRUE), mean_disbursement = mean(total_disbursement, na.rm = TRUE), mean_gov_d = mean(gov_d_percent, na.rm = TRUE), mean_gov_r = mean(gov_r_percent, na.rm = TRUE), mean_gov_3 = mean(gov_3_percent, na.rm = TRUE), mean_gov_o = mean(gov_o_percent, na.rm = TRUE), mean_corp = mean(corp_percent, na.rm = TRUE), mean_ngo = mean(ngo_percent, na.rm = TRUE), mean_igo = mean(igo_percent, na.rm = TRUE), mean_other = mean(other_percent, na.rm = TRUE)) %>% select(RecipientName,DonorName, sum_total, mean_disbursement, mean_gov_d, mean_gov_r, mean_gov_3, mean_gov_o, mean_corp, mean_igo, mean_ngo, mean_other) %>% unique() stargazer(as.data.frame(tmp),digits = 2, font.size = 'small', type = 'latex', summary = FALSE, title = 'Summary Statistics by Dyad')

% Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu % Date and time: Tue, Aug 14, 2018 - 11:45:56 AM % Requires LaTeX packages: rotating

Table 1: Dyadic Year: VDEM Polyarchy

			$Dependent\ variable:$		
	Base	Controls	Gov Together	Base RE	Controls RE
Donor Gov	0.016 (0.019)	0.003 (0.019)		0.020 (0.019)	0.001 (0.019)
Recip Gov	-0.037^* (0.020)	-0.037* (0.020)		-0.032 (0.020)	-0.037^* (0.020)
Third Gov	0.032 (0.034)	0.033 (0.034)		0.025 (0.034)	0.030 (0.034)
Other Gov	-0.009 (0.018)	0.009 (0.018)		-0.004 (0.018)	0.024 (0.018)
All Gov			-0.009 (0.017)		
NGO	0.027 (0.021)	-0.009 (0.022)	-0.016 (0.021)	0.025 (0.021)	-0.010 (0.022)
IGO	-0.058^{***} (0.020)	-0.055^{***} (0.020)	-0.060^{***} (0.020)	-0.064^{***} (0.020)	-0.058^{***} (0.020)
Corporation	0.057 (0.164)	0.049 (0.165)	0.030 (0.164)	0.050 (0.165)	0.065 (0.166)
Total	0.128^{***} (0.021)	0.110^{***} (0.021)	0.120^{***} (0.023)	0.123^{***} (0.021)	0.107^{***} (0.021)
$\log(\mathrm{GDP})$		0.310^{***} (0.029)	0.310^{***} (0.029)		0.218^{***} (0.022)
Urban		-0.011^{**} (0.005)	-0.012^{**} (0.005)		0.017*** (0.002)
$\log({ m Population})$		-0.280** (0.137)	-0.305^{**} (0.136)		-0.155^{***} (0.024)
Constant				4.585*** (0.042)	4.705*** (0.401)
Observations R ² Adjusted R ² F Statistic	$ \begin{array}{c} 14,095 \\ 0.010 \\ -0.185 \\ 15.554^{***} \text{ (df = 8; 11765)} \end{array} $	$13,871 \\ 0.023 \\ -0.173 \\ 24.452^{***} \text{ (df = 11; 11560)}$	$13,871$ 0.022 -0.173 32.978^{***} (df = 8; 11563)	$ \begin{array}{c} 14,095 \\ 0.069 \\ 0.069 \\ 130.448^{***} \text{ (df = 8; 14086)} \end{array} $	$13,871 \\ 0.101 \\ 0.100 \\ 139.734^{***} \text{ (df} = 11; 13859)}$

 * p<0.1; * p<0.05; *** p<0.01

Note:

- % Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu
- % Date and time: Tue, Aug 14, 2018 11:46:18 AM % Requires LaTeX packages: rotating
- % Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu
- % Date and time: Tue, Aug 14, 2018 11:46:42 AM % Requires LaTeX packages: rotating
- % Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu
- % Date and time: Tue, Aug 14, 2018 11:47:05 AM % Requires LaTeX packages: rotating
- % Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu
- % Date and time: Tue, Aug 14, 2018 11:47:29 AM % Requires LaTeX packages: rotating
- % Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu
- % Date and time: Tue, Aug 14, 2018 11:47:53 AM % Requires LaTeX packages: rotating

Subnational Stuff

Table 2: Dyadic Year: VDEM LibDem

			Dependent variable:		
	Base	Controls	Gov Together	Base RE	Controls RE
Donor Gov	0.022 (0.016)	0.015 (0.016)		0.024 (0.016)	0.011 (0.016)
Recip Gov	-0.012 (0.017)	-0.012 (0.017)		-0.008 (0.017)	-0.012 (0.017)
Third Gov	0.021 (0.028)	0.018 (0.028)		0.017 (0.028)	0.018 (0.029)
Other Gov	0.001 (0.015)	0.009 (0.015)		0.004 (0.015)	0.024 (0.015)
All Gov			0.010 (0.014)		
NGO	0.014 (0.017)	-0.008 (0.018)	-0.007 (0.018)	0.012 (0.017)	-0.014 (0.018)
ODI	-0.013 (0.016)	-0.012 (0.017)	-0.012 (0.017)	-0.018 (0.016)	-0.014 (0.017)
Corporation	0.090 (0.136)	0.080 (0.137)	0.078 (0.137)	0.084 (0.137)	0.096 (0.138)
Total	0.088*** (0.017)	0.080*** (0.018)	0.079*** (0.019)	0.085***	0.073*** (0.018)
$\log(\mathrm{GDP})$		0.200^{***} (0.024)	0.200*** (0.024)		0.160*** (0.019)
Urban		-0.016^{***} (0.004)	-0.016^{***} (0.004)		0.014*** (0.002)
log(Population)		-0.091 (0.114)	-0.094 (0.113)		-0.177^{***} (0.022)
Constant				3.192^{***} (0.041)	4.199*** (0.374)
Observations R ² Adjusted R ² F Statistic	$14,095 \\ 0.009 \\ -0.187 \\ 13.800^{***} \text{ (df = 8; 11765)}$	$13.871 \\ 0.016 \\ -0.180 \\ 17.443^{***} \text{ (df = 11; 11560)}$	$13,871 \\ 0.016 \\ -0.180 \\ 23.860^{***} \text{ (df = 8; 11563)}$	$14,095 \\ 0.041 \\ 0.040 \\ 74.845^{***} (df = 8; 14086)$	13,871 0.067 0.066 89.039*** (df = 11; 13859)
Note:					*p<0.1; **p<0.05; ***p<0.01

Table 3: Dyadic Year: VDEM PartipDem

			Dependent variable:		
	Base	Controls	Gov Together	Base RE	Controls RE
Donor Gov	0.012 (0.011)	0.004 (0.011)		0.013 (0.011)	0.001 (0.011)
Recip Gov	-0.027^{**} (0.011)	-0.028** (0.011)		-0.025^{**} (0.011)	-0.029^{**} (0.012)
Third Gov	0.023 (0.019)	0.019 (0.020)		0.021 (0.019)	0.020 (0.020)
Other Gov	-0.009 (0.010)	0.003 (0.010)		-0.007 (0.010)	0.012 (0.010)
All Gov			-0.007 (0.010)		
NGO	0.026^{**} (0.012)	0.0003 (0.012)	-0.003 (0.012)	0.026^{**} (0.012)	-0.00003 (0.012)
IGO	-0.033^{***} (0.011)	-0.031^{***} (0.012)	-0.034^{***} (0.012)	-0.036^{***} (0.011)	-0.032^{***} (0.012)
Corporation	0.026 (0.094)	0.020 (0.094)	0.007	0.025 (0.095)	0.036 (0.095)
Total	0.074^{***} (0.012)	0.062^{***} (0.012)	0.068*** (0.013)	0.072^{***} (0.012)	0.059*** (0.012)
$\log(\mathrm{GDP})$		0.190^{***} (0.017)	0.190^{***} (0.017)		0.136*** (0.013)
Urban		-0.011^{***} (0.003)	-0.011^{***} (0.003)		0.013*** (0.001)
log(Population)		-0.037 (0.078)	-0.052 (0.078)		-0.078^{***} (0.017)
Constant				2.732*** (0.032)	2.369*** (0.285)
Observations R ² Adjusted R ² F Statistic	$14,095 \\ 0.012 \\ -0.184 \\ 17.942^{***} \text{ (df = 8; 11765)}$	$13,871 \\ 0.027 \\ -0.168 \\ 28.776^{***} (df = 11; 11560)$	13,871 0.026 -0.168 38.668*** (df = 8; 11563)	$14,095 \\ 0.047 \\ 0.046 \\ 86.262^{***} \text{ (df = 8; 14086)}$	$13,871 \\ 0.079 \\ 0.078 \\ 106.728^{***} \text{ (df = 11; 13859)}$
Note:					$^{*}p<0.1;$ $^{**}p<0.05;$ $^{***}p<0.01$

Table 4: Dyadic Year: Polity

			Dependent variable:		
	Base	Controls	Gov Together	Base RE	Controls RE
Donor Gov	-0.006 (0.049)	-0.054 (0.049)		-0.004 (0.049)	-0.053 (0.049)
Recip Gov	0.013 (0.052)	-0.022 (0.051)		0.021 (0.052)	-0.003 (0.052)
Third Gov	0.120 (0.087)	0.052 (0.087)		0.108 (0.087)	0.066 (0.088)
Other Gov	-0.117^{**} (0.047)	-0.056 (0.047)		-0.112^{**} (0.047)	-0.064 (0.047)
All Gov			-0.068 (0.045)		
NGO	0.186^{***} (0.056)	0.074 (0.056)	0.068	0.182^{***} (0.056)	0.095* (0.056)
IGO	0.035 (0.055)	0.023 (0.055)	0.017 (0.056)	0.021 (0.055)	0.019 (0.055)
Corporation	-0.073 (0.416)	-0.066 (0.411)	-0.074 (0.410)	-0.108 (0.417)	-0.075 (0.413)
Total	0.294*** (0.056)	0.272^{***} (0.056)	0.287*** (0.060)	0.293*** (0.056)	0.286*** (0.056)
$\log(\mathrm{GDP})$		0.507*** (0.076)	0.512*** (0.076)		0.522*** (0.060)
Urban		-0.037^{***} (0.013)	-0.037^{***} (0.013)		0.023*** (0.006)
$\log(\text{Population})$		1.610^{***} (0.347)	1.633*** (0.344)		-0.339^{***} (0.071)
Constant				2.722^{***} (0.118)	3.299*** (1.180)
Observations R ² Adjusted R ² F Statistic	$13,184 \\ 0.015 \\ -0.186 \\ 20.299^{***} \text{ (df = 8; 10950)}$	$12.978 \\ 0.027 \\ -0.173 \\ 27.252^{***} \text{ (df = 11; 10762)}$	12,978 0.027 -0.173 37.459*** (df = 8; 10765)	$13,184 \\ 0.012 \\ 0.012 \\ 20.216^{***} \text{ (df = 8; 13175)}$	12.978 0.027 0.027 32.798** (df = 11; 12966)
Note:				*	*p<0.1; **p<0.05; ***p<0.01

Table 5: Dyadic Year: FH Rule of Law

			Dependent variable:		
	Base	Controls	Gov Together	Base RE	Controls RE
Donor Gov	-0.052^{**} (0.024)	-0.010 (0.024)		-0.049^{**} (0.024)	-0.033 (0.024)
Recip Gov	-0.050** (0.025)	-0.025 (0.025)		-0.043^{*} (0.025)	-0.038 (0.025)
Third Gov	-0.060 (0.043)	-0.044 (0.042)		-0.064 (0.043)	-0.055 (0.043)
Other Gov	0.081^{***} (0.022)	-0.011 (0.022)		0.086*** (0.023)	0.045^{**} (0.023)
All Gov			-0.042^* (0.022)		
NGO	-0.176^{***} (0.027)	-0.097^{***} (0.027)	-0.107^{***} (0.027)	-0.179^{***} (0.027)	-0.120^{***} (0.028)
IGO	-0.121^{***} (0.026)	-0.120^{***} (0.025)	-0.133^{***} (0.026)	-0.131^{***} (0.026)	-0.132^{***} (0.026)
Corporation	0.145 (0.207)	0.090 (0.202)	0.061 (0.202)	0.136 (0.208)	0.139 (0.207)
Total	0.064^{**} (0.027)	0.116^{***} (0.027)	0.140^{***} (0.029)	0.059** (0.027)	0.092^{***} (0.027)
$\log(\mathrm{GDP})$		-0.029 (0.038)	-0.028 (0.038)		-0.268^{***} (0.031)
Urban		_0.036*** (0.006)	-0.036*** (0.006)		0.018*** (0.003)
log(Population)		-2.390^{***} (0.175)	-2.411^{***} (0.173)		-0.772^{***} (0.039)
Constant				5.991*** (0.070)	19.788*** (0.640)
Observations R ² Adjusted R ² F Statistic	13,740 0.015 -0.185 22.343*** (df = 8; 11420)	$ \begin{array}{c} 13,519 \\ 0.069 \\ -0.122 \\ 75.410^{***} \text{ (df} = 11; 11217) \end{array} $	$ \begin{array}{c} 13,519 \\ 0.069 \\ -0.122 \\ 103.736*** (df = 8; 11220) \end{array} $	$13,740 \\ 0.055 \\ 0.055 \\ 100.087^{***} (df = 8; 13731)$	$13,519 \\ 0.092 \\ 0.091 \\ 123.349^{***} \text{ (df} = 11; 13507)$

 * p<0.1; * p<0.05; *** p<0.01

Note:

Table 6: Dyadic Year: FH Status

			$Dependent\ variable:$		
	Base	Controls	Gov Together	Base RE	Controls RE
Donor Gov	0.022^{***} (0.008)	0.016^{**} (0.008)		0.021^{***} (0.008)	0.021*** (0.008)
Recip Gov	-0.00 <i>6</i> (0.008)	-0.013 (0.008)		-0.008 (0.008)	-0.008 (0.008)
Third Gov	0.038*** (0.014)	0.034^{**} (0.014)		0.040^{***} (0.014)	0.040^{***} (0.014)
Other Gov	-0.020^{***} (0.007)	-0.006 (0.007)		-0.022^{***} (0.007)	-0.022^{***} (0.007)
All Gov			0.007		
NGO	0.018**	0.008	0.013 (0.009)	0.018**	0.015^* (0.009)
IGO	0.025^{***} (0.008)	0.024^{***} (0.008)	0.028*** (0.008)	0.029*** (0.008)	0.029*** (0.008)
Corporation	0.031 (0.067)	0.039	0.045	0.033 (0.067)	0.028 (0.068)
Total	-0.012 (0.009)	-0.019^{**} (0.009)	-0.026^{***} (0.009)	-0.010 (0.009)	-0.013 (0.009)
$\log(\mathrm{GDP})$		-0.069^{***} (0.012)	-0.067^{***} (0.012)		0.015^* (0.009)
Urban		0.003 (0.002)	0.003 (0.002)		-0.006^{***} (0.001)
log(Population)		0.767*** (0.056)	0.784*** (0.055)		0.082*** (0.008)
Constant				2.100^{***} (0.014)	0.907*** (0.144)
Observations R ² Adjusted R ² F Statistic	14,048 0.007 -0.191 9.702*** (df = 8; 11719)	$13,824 \\ 0.030 \\ -0.165 \\ 32.093^{***} \text{ (df = 11; 11514)}$	$13.824 \\ 0.029 \\ -0.166 \\ 42.298^{***} \text{ (df = 8; 11517)}$	$14,048 \\ 0.131 \\ 0.130 \\ 263.809^{***} (df = 8; 14039)$	$13,824 \\ 0.154 \\ 0.154 \\ 0.154 \\ 227.291^{***} \text{ (df} = 11; 13812)$
Note:					*p<0.1; **p<0.05; ***p<0.01