First Impressions: How Leader Changes Affect Bilateral Aid – Online Appendix –

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Abstract

This paper investigates a new mechanism to explain politically induced changes in bilateral aid. We argue that shifts in the foreign policy alignment between a donor and a recipient country following leadership changes induce reallocation of aid. Utilizing data from the G7 and 130 developing countries between 1975 and 2012 and employing high dimensional fixed effects and control function models, we show that incoming leaders in recipient countries, which politically converge towards their current donors, receive more aid commitments, compared to those that diverge. Additionally, accounting for donor leader change, we find that incumbent recipient leaders have an opportunity to get even more aid when political change in donor countries moves them closer to the donor's foreign policy position. Thus, leadership turnover in recipient and donor countries makes otherwise inconsequential deviations in foreign policy alignment highly consequential for aid provision.

Keywords: Dyadic leader change, UNGA voting realignment, development aid

JEL Classification: D72, F35, F53, O19

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A. Supporting Information

Table A-1
List of Recipient Countries, in Alphabetical Order

Afghanistan, Albania, Algeria, Angola, Argentina, Armenia, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo-Brazzaville, Costa Rica, Croatia, Cuba, Cyprus, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Ethiopia, Fiji, Gabon, Gambia, Georgia, Ghana, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, India, Indonesia, Iran, Iraq, Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Korea (North), Kuwait, Kyrgyzstan, Laos, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Rwanda, Saudi Arabia, Senegal, Serbia, Sierra Leone, Singapore, Solomon Islands, Somalia, South Africa, Sri Lanka, Sudan, Suriname, Swaziland, Syria, Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, Uruguay, Uzbekistan, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe.

TABLE A-2
Descriptive Statistics

	N	Min	Mean	Max	SD
ODA commitments	18,571	0.01	67.49	19,721.40	251.32
ODA commitments (Log)	18,571	-4.61	2.18	9.89	2.37
Administration dyads	18,571	1.00	–	7,507	–
Administration change	18,571	0.00	0.27	1.00	0.44
Recipient change	18,571	0.00	0.13	1.00	0.34
Donor change	18,571	0.00	0.20	1.00	0.40
$\triangle$ alignment	18,571	-0.94	-0.00	0.67	0.08
Voting Alignment	18,571	0.00	0.62	1.00	0.23
Past mean voting alignment	18,571	0.00	0.62	1.00	0.22
Administration dyad duration	18,571	1.00	5.93	16.00	3.65
Donor GDP (log)	17,401	20.09	21.45	23.30	0.81
Recipient GDP (log)	16,928	11.51	16.72	22.97	1.82
Donor population (log)	17,401	10.08	11.21	12.65	0.71
Recipient population (log)	17,095	4.95	9.06	14.10	1.70
Similarity Index (GDP)	16,928	0.00	0.06	0.50	0.11
Similarity Index (Population)	17,095	0.00	0.21	0.50	0.16
(Donor) Imports in million USD (Log)	18,571	-13.82	-2.88	13.00	8.99
(Recipients) Imports in million USD (Log)	18,571	-13.82	-5.58	12.13	9.42
Idealpoint recipients	18,571	-1.91	-0.46	1.70	0.53
Idealpoint donors	18,571	0.56	1.76	3.06	0.57
Domestic reform	12,213	0.00	0.38	0.92	0.25

TABLE A-3
Variables and Sources

Variable	Source
ODA commitments	OECD (2015)
ODA commitments (Log)	OECD (2015)
Administration dyads	Archigos (Goemans et al., 2009)
Administration change	Archigos (Goemans et al., 2009)
Recipient change	Archigos (Goemans et al., 2009)
Donor change	Archigos (Goemans et al., 2009)
Administration dyad duration	Archigos (Goemans et al., 2009)
Alignment change	Voeten et al. (2009)
Voting Alignment	Voeten et al. (2009)
Past mean voting alignment	Voeten et al. (2009)
Donor GDP (log)	PWT 7.1 (Heston et al., 2012)
Recipient GDP (log)	PWT 7.1 (Heston et al., 2012)
Donor population (log)	PWT 7.1 (Heston et al., 2012)
Recipient population (log)	PWT 7.1 (Heston et al., 2012)
(Donor) Imports in million USD (Log)	UN Comtrade (2017)
(Recipients) Imports in million USD (Log)	UN Comtrade (2017)
GDP per Capita (Log)	PWT 7.1 (Heston et al., 2012)
Democracy	Polity IV (Marshall et al., 2016)
Political System Transition	Polity IV (Marshall et al., 2016)
Military Alliance (United States)	Mattes et al. (2015)
Military Alliance (Russia)	Mattes et al. (2015)
Domestic Support Group Change (Donor)	Mattes et al. (2015)
Domestic Support Group Change (Recipient)	Mattes et al. (2015)
Same Political Colour Dummy	DPI (Beck et al., 2001)
Natural Death of a Leader (Recipient)	Jones and Olken (2005)
Executive Elections (Donor)	NELDA (Hyde et al., 2012)
Executive Elections (Recipient)	NELDA (Hyde et al., 2012)
Legislative Elections (Donor)	NELDA (Hyde et al., 2012)
Legislative Elections (Recipient)	NELDA (Hyde et al., 2012)
Presidential Term Limits (USA)	NELDA (Hyde et al., 2012)
Idealpoints	Bailey et al. (2017)
Domestic reforms (econ. liberalization)	Giuliano et al. (2013)

TABLE A-4
Baseline Results with Different Sets of Control Variables

	Dependent variable: *ln ODA commitments*					
	(1)	(2)	(3)	(4)	(5)	(6)
Recipient change	-0.099***	-0.095***				
	(0.032)	(0.032)				
Donor change	0.057**	0.049*				
	(0.027)	(0.027)				
△ alignment	-0.414***	0.436**	-0.455**	0.216	-0.267	0.105
	(0.143)	(0.208)	(0.221)	(0.356)	(0.306)	(0.355)
Recipient change * △ alignment	1.107***	1.126***	1.047**	1.043**	0.954**	1.096*
	(0.402)	(0.399)	(0.496)	(0.493)	(0.455)	(0.575)
Donor change * △ alignment	0.816**	0.718**	0.729	0.721	0.777*	0.832*
	(0.329)	(0.323)	(0.466)	(0.461)	(0.423)	(0.501)
Last year alignment		1.611***		1.304**	0.316	0.968*
		(0.317)		(0.538)	(0.391)	(0.524)
Past mean alignment					0.950**	0.703
					(0.371)	(0.446)
ln ODA commitments (lagged),					0.338***	
					(0.017)	
Similarity Index (GDP)						3.386
						(2.077)
Similarity Index (Population)						1.742
						(2.849)
Adjusted R-squared	0.711	0.713	0.786	0.786	0.813	0.790
Fixed Effects	DR,Y	DR,Y	DR,RY,DY	DR,RY,DY	DR,RY,DY	DR,RY,DY
# of observations	16923	16923	18571	18571	17858	16923
# of dyads	663	663	681	681	673	663

Notes: Columns 1 and 2 include the log of GDP and population for both recipient and donor countries. Fixed effects: donor-recipient (DR), year (Y), recipient-year (RY), donor-year (DY). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE A-5
Dis-aggregate Leader Changes (Splined Alignment Change)

	Dependent variable: *ln ODA commitments*
	(1)
Recipient change	-0.071
	(0.046)
Donor change	0.050
	(0.052)
Recipient change × converge	0.862
	(0.773)
Recipient change × diverge	-1.815***
	(0.647)
Donor change × converge	1.359***
	(0.520)
Donor change × diverge	-0.623
	(0.446)
Converge	-0.588
	(0.372)
Diverge	-0.612
	(0.375)
Last year alignment	0.696**
	(0.326)
Past mean alignment	1.152***
	(0.283)
Adjusted R-squared	0.046
Fixed Effects	DR,Y
# of observations	16928
# of dyads	668

Notes: Diverge are negative alignment changes × -1 while positive and no changes are set 0, converge are positive alignment changes in which negative and no changes are set 0. Fixed effects: DR are donor-recipient, Y are year fixed effects. Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE A-6
Timing of the Conditional Alignment Effect

	Dependent variable: *ln ODA commitments*				
Leader change-alignment interaction	*2 years prior*	*1 year prior*	*leader change*	*1 year after*	*2 years after*
△ alignment	0.7876*	0.5832	0.0342	0.3903	0.5907
	(0.4014)	(0.3987)	(0.3497)	(0.3446)	(0.3742)
Recipient change × △ alignment	0.2464	0.5709	1.1865**	0.8407*	-0.3027
	(0.4947)	(0.5081)	(0.5020)	(0.5061)	(0.5800)
Donor change × △ alignment	-0.6419	-0.1957	0.8773*	0.8859*	0.5312
	(0.5046)	(0.4626)	(0.4723)	(0.4949)	(0.4921)
Last year alignment	1.3252**	1.1019*	0.9370*	1.3890**	1.5363***
	(0.6232)	(0.5932)	(0.5288)	(0.5431)	(0.5779)
Past mean alignment	0.1643	0.1839	0.7297*	0.2997	0.0633
	(0.4321)	(0.4198)	(0.4342)	(0.4201)	(0.4092)
Adjusted R-squared	0.783	0.785	0.786	0.791	0.794
Fixed Effects	DR,RY,DY	DR,RY,DY	DR,RY,DY	DR,RY,DY	DR,RY,DY
# of observations	17103	17858	18571	17322	16568
# of dyads	681	681	681	681	681

Notes: Fixed effects: donor-recipient (DR), year (Y), recipient-year (RY), donor-year (DY). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE A-7
Additional Variables in Table 3

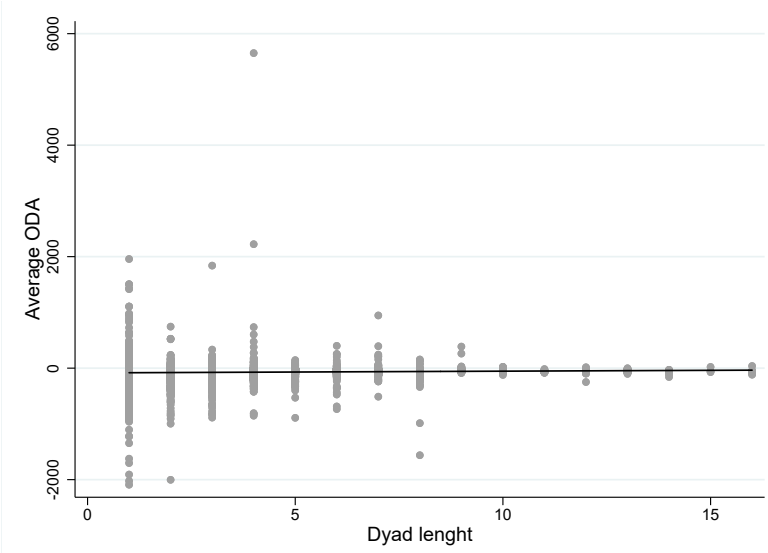
Specification	Variables	Source
Mattes et al. (2015)	Democracy (if PolityIV >= 6)	Teorell et al. (2013)
	Political system transition	Teorell et al. (2013)
	USA defense pact	Gibler (2009)
	RUS defense pact	Gibler (2009)
Dreher and Jensen (2013)	Donor GDP per capita	Heston et al. (2012)
	Recipient GDP per capita	Heston et al. (2012)
	Political color	Beck et al. (2001)
Carter and Stone (2015)	Democracy dummy	Teorell et al. (2013)
	Donor GDP per capita	Heston et al. (2012)
	Recipient GDP per capita	Heston et al. (2012)
	Same political color	Beck et al. (2001)

B. Additional Timing Issues

B-1. Working Relationships

Is there a payoff for working relationships, i.e., administration dyads that persist for longer periods of time? We investigate this relationship in two ways. First, we check a simple correlation between administration dyad length and average ODA commitments to see whether ODA commitments are on average higher in longer lasting administration dyads. Second, we investigate whether ODA commitments increase during administration dyads over time. For both exercises, we first de-mean our ODA measure by the recipient-donor country dyad[1] and donor-year.[2] The correlation between the average demeaned ODA commitments and dyad length turns out to be positive. Dyads that last one year longer receive $3m more aid commitments, on average. The correlation is statistically different from zero at the 5% significance level. The average administration dyad lasts around 5 years and receives around $67m in total. Thus, for a dyad that last one year longer aid increases by about 4.5% compared to the average administration dyad. The short term conditional alignment effect amounts to roughly 4-9% for donor leader change and 10-20% for recipient leader change. Thus, the effect of working relationships equals the short-term donor change effect for a dyad lasting 1 to 2 years (or 20% to 40%) longer than the average dyad, while it is equal to the short-term recipient leader change effect after lasting 2 to 5 years longer than the average dyad (or 40% to 100%).

FIGURE B-1
Admin-dyad-length and aid



Note: The figure reports the average aid commitments per dyad-length. ODA commitments are demeaned by donor-recipient dyad and donor-year.

[1] This takes care of bilateral time invariant strategic relationships such as colonial past.
[2] To capture yearly variations in donor aid budgets.

To understand how ODA commitments develop over time within dyads, we plot the average ODA commitments within administration dyads over time in Figure B-1. The figure shows essentially a flat line, highlighting that additional years within dyads are not a good predictor of ODA commitments. However, we observe that the variation in ODA commitments decreases over time. Hence, there seems to be evidence that longer lasting or 'working' relationships lead to higher stability in bilateral ODA commitments. This is in line with our argument. Deviations in behavior should matter less in longer lasting relationships as uncertainty about behavior in the international arena decreases, which also decreases the likelihood that ODA gets adjusted in response.

B-2. Stability of Initial Alignment Changes

How stable is political alignment over time, conditional on initial alignment changes? Does initial convergence or divergence in political alignment fade out over time, or is it indicative of the general relations. We explored this issue in Figure B-2, where we divide the sample into two groups. In the first group, we included only dyads that saw political convergence after leader change. In the second group, we included only dyads that experienced divergence after leader change. We then plot the alignment level within dyads over years passed within the administrative-dyad.[3] For both groups we observe a slight regression to the mean; i.e. a negative trend in alignment levels for dyads that initially converged and a positive trend for dyads that initially diverged. This regression to the mean, however, does not offset the initial change in alignment within the average dyad length (five years after leader change). Hence, country pairs might eventually come to some understanding of their general relations, but it has not necessarily to be an amicable one.

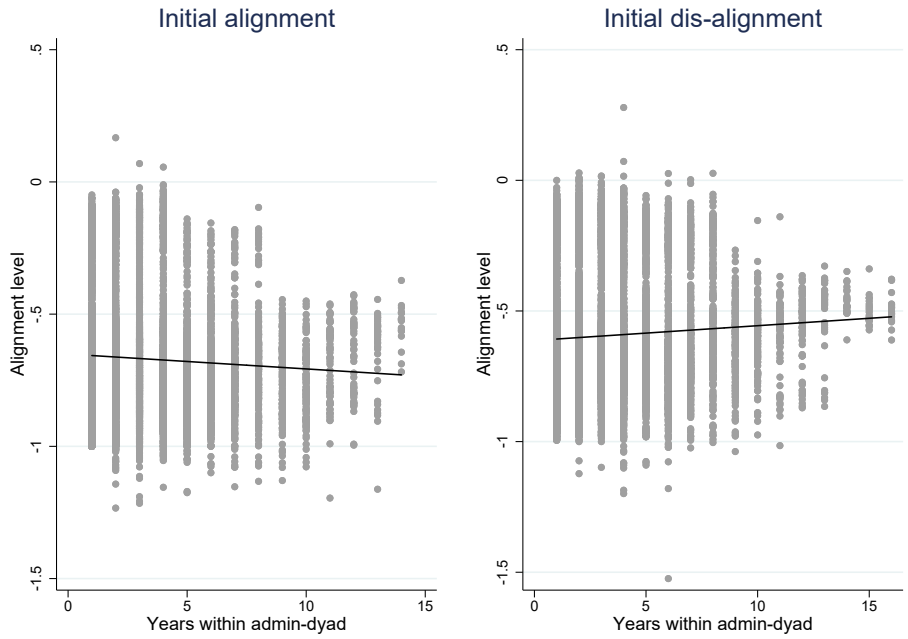
B-3. Waiting

We expect and do indeed find short-term conditional alignment effects, which poses the question whether donor country administrations simply postpone ODA commitments during recipient leader changes, for instance due to technical issues.[4] If this were true, we would expect to find significantly more ODA commitments later on during the recipient administration. In fact, the effects could offset each other, which would imply that our proposed mechanism reduces to a temporal distortion in ODA commitments that has nothing to do with political alignment. In order to test for the possibility of 'waiting' or 'backlog' effects, we exclusively focus on recipient leader administration changes. Note that we cannot extent the time frame in our standard model, since regular donor leader

[3]The alignment level is demeaned by dyad and the initial value of the alignment level.

[4]Note that we find this less plausible in the case of donor leader change, since development agencies usually keep most of their staff.

FIGURE B-2
Alignment levels within dyads over time



Notes: The figure plots the alignment levels demeaned by the initial level of the dyad and the average level of the dyads, over the years within a dyad. The left panel plots this relationship for dyads that experience a positive alignment change during the first year. The right panel plots the relationship for dyads that experience a negative alignment change during the first year.

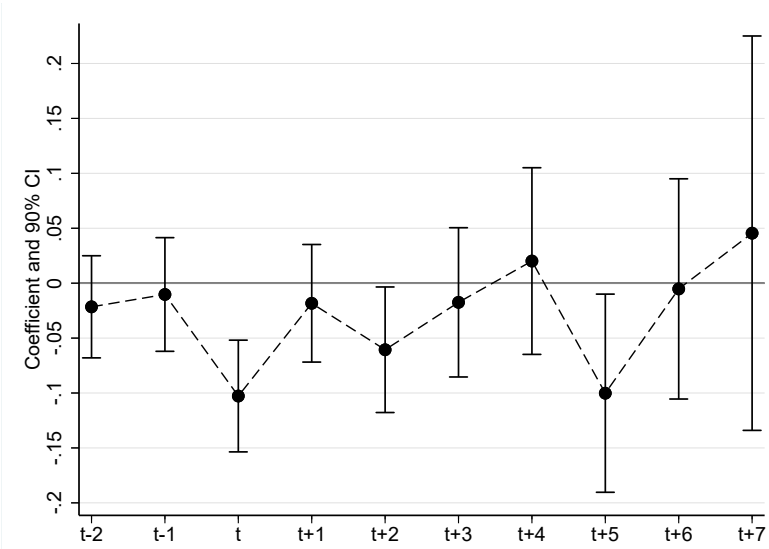
changes prohibit long bilateral administration dyads in most cases. We simply regress ODA commitments on our standard model excluding donor-leader change as well as the donor and recipient leader change interactions, but we include donor-year fixed effects alongside the bilateral fixed effects to absorb the level effect of donor leader changes. The coefficient of interest in this setting is the recipient leader change dummy.

Figure B-3 plots the resulting point coefficients. We still observe the negative level effect in the year of the recipient leader change. Note, however, that this is now an unconditional effect and not the effect if alignment stays constant. Given that the majority of alignment changes is slight disalignment during recipient leader changes, it is not surprising that we find a negative point estimate. We also observe a negative effect 5 years after the change, which is likely to be some statistical noise, since it could coincide with the next recipient leader change. Importantly, we do not observe any positive effects over time. Thus, the estimates depicted in Figure B-3 seem not to support 'waiting' or 'backlog' as an alternative explanation for our core result.

B-4. Spurious Correlation

Even though the analysis of the timing structure of the conditional alignment effect supports our argument, it might still be the case that our results are driven by spurious

FIGURE B-3
Recipient leader change timing

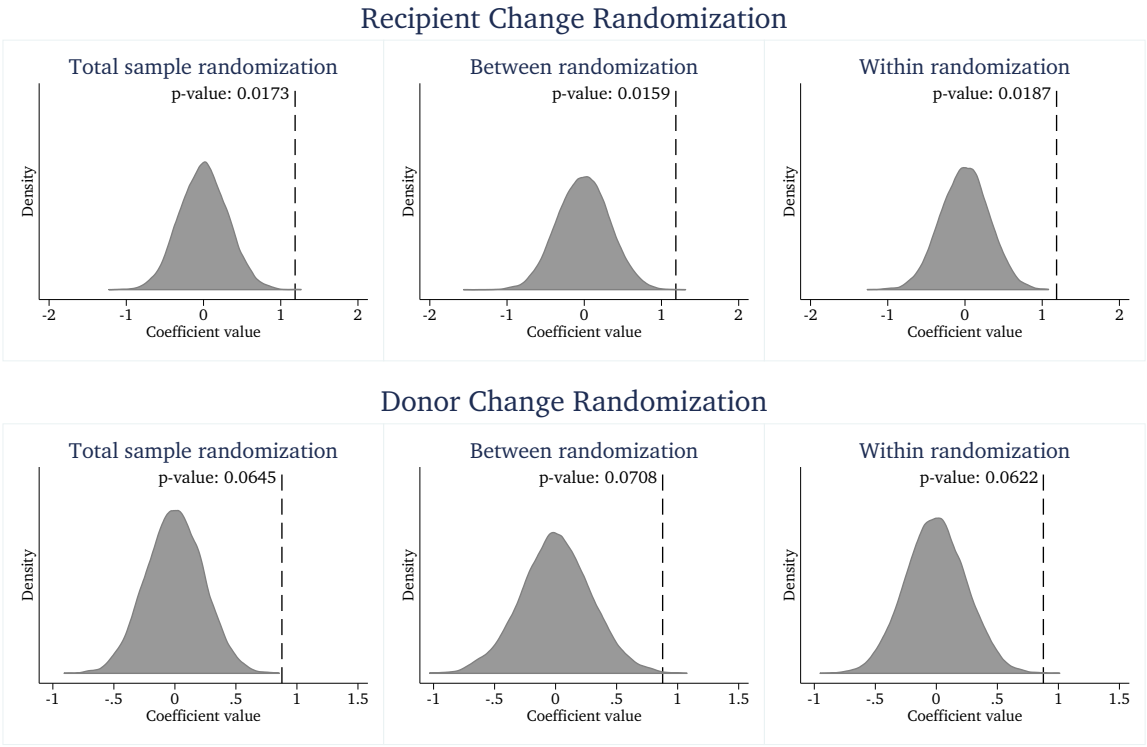


Notes: Based on regressions, including donor-recipient and donor-year fixed effects. Standard errors are clustered at the donor-recipient dyad.

correlation that covaries with the leader change interactions within the dyads over time. In order to test for this, we follow Hsiang and Jina (2014) and conduct a randomization test over all dimensions of our panel. More specifically we conduct three randomizations of our respective interaction terms on the basis of model 4 in Table 2: First, we randomize leader changes over the entire sample. Hence, a leader change in Kenya in 2000 can potentially be assigned to Indonesia in 1990. Second, we randomize between dyads, thus keeping the time structure of the leader changes constant, which means that the entire leader change pattern of Kenya is, for example, assigned to Indonesia. This tests for spurious correlation arising from country or regional time trends, for example because the US closely monitors countries' voting behavior in the Middle East at the time of the wars in Iraq. Third, we randomize leader changes within each dyad, but not across dyads. Thus, leader changes in Kenya are shuffled around within Kenya. This randomization allows us to test if any unobserved dyadic-specific circumstances that vary over time drive the results, for instance conflicts over trade between countries that covary with the leader changes within dyads or covert operations between donors and recipients, such as CIA interventions (Berger et al., 2013). We expect that all randomization procedures produce a distribution of point estimates centered around zero and that we should not reject the null more often than in our corresponding regression using the real data.

Figure B-4 presents the kernel density function of the resulting point coefficients of the recipient leader and donor leader change interactions for each of the three randomization exercises, resulting from 10,000 randomization iterations. The recipient change results are reported in the upper panel, while the donor change interaction results are plotted

FIGURE B-4
Randomization of Leader Change



Notes: Distribution of point estimates for the interaction between recipient change and alignment change, based on Table 2, column 4. Each distribution corresponds to the different dependent-independent variable pairs, for the three different randomization procedures. Each distribution is constructed by repeating the randomization and estimation procedure 10000 times. The point coefficient of the actual estimation is depicted as a vertical line.

in the lower panel. The dotted line represents the obtained point coefficient from the actual data based on column 4 in Table 2. The reported Monte Carlo p-values report fraction of t-statistics from the randomized data that exceed the absolute t-values for our coefficients of interest using the real data. In all cases, the estimated interaction terms using the real data exceed the obtained coefficient distributions obtained from the hypothetical scenarios. The p-values range between 0.0159 to 0.0187 for the recipient change interactions and 0.0622 and 0.0708 for the donor interactions. Thus they reaffirm the timing structure of our proposed mechanism. It is also further evidence that our results are not driven by any spurious correlation, either within or between panels. Hence, we are confident that it is indeed the leader change interacted with foreign policy alignment that drives changes in ODA commitments between donors and recipients.

C. Dependent Variable

C-1. Selection on the Dependent Variable

Due to the log-transformation, our results relate only to recipient countries that have already received aid from a donor. To rule out selection effects, we thus include donor-recipient pairs without previous aid flows, allowing us to test whether leader change can lead to the establishment of new development cooperation between a developing and a G7 country or to the complete abandonment of it, respectively.

Ideally we would run a proper two-stage model, but unfortunately we lack an instrument for the selection equation. Hence, we estimate an onset specification, in which the dependent variable is a dummy that is 1 if a country receives a positive amount of ODA commitments and zero otherwise (see Table C-1, column 1). The sample consists only of donor-recipient dyads where there have been no ODA commitments in the last period. Concerning our variables of interest, only donor leader change has a statistically significant effect on the establishment of development cooperation with recipient countries if voting alignment stays constant. Most importantly, the interaction terms are not statistically significant. Political convergence after leadership turnover does lead to ODA commitments if they have been zero in the past period.[5] We further test whether aid is cut completely between a donor and a recipient induced by alignment change after leader turnover (see Table C-1, column 2). In this specification, none of the core variables is statistically significant. Hence, we conclude that the voting alignment mechanism after leadership change has no effect on the extensive margin of ODA commitments between donors and recipients.

Although we find no selection effects, we replicate columns 3 and 4 from Table 2 including zero ODA commitments (see Table C-1, columns 3 and 4).[6] The main results support our argument. Nevertheless, the substantive as well as statistical significance decreases compared to the results in Table 2. This is however not surprising. If the interaction of leader change and the political alignment does not have an effect on the extensive margin, including zeros biases the results for the intensive margins downward. Thus, foreign policy realignment is more important for recipients that already have established development cooperation.

[5] We also test if our mechanism induced any development cooperation in cases where a donor has never given aid to a recipient in the past. We do not find any effect on the interactions, but a small effect on the unconditional recipient change indicator. The unconditional alignment change is also statistically insignificant in those cases.

[6] In order to log-transform this variable, we add $1 to each observation.

TABLE C-1
ODA Selection and Zero ODA Commitments

	Dependent variable:			
	ODA onset	*ODA cont.*	*ln ODA commitments*	
	(1)	(2)	(3)	(4)
Recipient change	0.010	0.003	-0.049**	
	(0.015)	(0.003)	(0.020)	
Donor change	0.023**	0.001	0.029*	
	(0.011)	(0.004)	(0.017)	
Alignment change	0.061	0.031	0.313**	0.193
	(0.083)	(0.028)	(0.145)	(0.206)
Recipient change × realignment	-0.278	0.052	0.500*	0.788**
	(0.191)	(0.055)	(0.275)	(0.312)
Donor change × realignment	0.064	-0.002	0.356	0.184
	(0.114)	(0.044)	(0.220)	(0.249)
Last year alignment	-0.137	0.058*	0.727***	0.676**
	(0.107)	(0.034)	(0.211)	(0.339)
Past mean alignment	0.110	-0.000	0.681***	0.427*
	(0.111)	(0.033)	(0.187)	(0.249)
Donor GDP (ln)	0.116*	-0.009	1.358***	
	(0.065)	(0.025)	(0.426)	
Donor population (ln)	0.189	0.181***	1.338*	
	(0.224)	(0.060)	(0.697)	
Recipient GDP (ln)	-0.026	-0.011	-0.094	
	(0.021)	(0.009)	(0.085)	
Recipient population (ln)	-0.029	-0.011	0.179	
	(0.045)	(0.020)	(0.200)	
Adjusted R-squared	0.037	0.013	0.053	0.843
Fixed Effects	DR,Y	DR,Y	DR,Y	DR,RY,DY
# of observations	4745	16938	21683	24176
# of dyads	426	673	745	768

Notes: Leader change variables in column 4 omitted due to fixed effects. Fixed effects: donor-recipient (DR), year (Y), recipient-year (RY), donor-year (DY). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

C-2. Size of ODA Changes

In a next step, we test whether the results regarding the intensive margin are driven by small changes in ODA commitments. To this end, we recode the dependent variable and include a threshold for ODA changes. Table C-2 reports our core specification but replaces the log of ODA commitments with a categorical variable that is -1 if ODA commitments decrease by more then $x\%$, $+1$ if they increase by more than $x\%$, and 0 otherwise. Table C-2 shows that the statistical significance of our main variable is not driven by small changes in ODA commitments.[7] The interaction terms between alignment change and

[7]What is more, we can run this specification on the full sample. As expected, the coefficients decrease in magnitude but keep their statistical significance. Results not reported, but available upon request.

either recipient or donor country leader change remain positive in all specifications.

TABLE C-2
Magnitude of ODA Changes

	Dependent variable: *ln ODA commitments*				
	△ 5%	△ 10%	△ 15%	△ 20%	△ 30%
	(1)	(2)	(3)	(4)	(5)
Recipient change	-0.051**	-0.047**	-0.059***	-0.052***	-0.054***
	(0.022)	(0.021)	(0.020)	(0.020)	(0.018)
Donor change	-0.032	-0.030	-0.013	-0.020	-0.019
	(0.024)	(0.023)	(0.022)	(0.021)	(0.019)
△ alignment	-0.231	-0.224	-0.181	-0.214	-0.139
	(0.166)	(0.164)	(0.155)	(0.152)	(0.137)
Recipient change × △ alignment	0.578**	0.533*	0.535*	0.496*	0.633**
	(0.287)	(0.274)	(0.272)	(0.264)	(0.247)
Donor change × △ alignment	0.583**	0.557**	0.530**	0.559***	0.436**
	(0.234)	(0.228)	(0.218)	(0.213)	(0.195)
Last year alignment	0.121	0.068	0.109	0.074	0.101
	(0.166)	(0.162)	(0.157)	(0.149)	(0.136)
Past mean alignment	-0.052	0.022	0.009	-0.007	-0.085
	(0.163)	(0.159)	(0.154)	(0.148)	(0.138)
Adjusted R-squared	0.010	0.010	0.009	0.009	0.009
Fixed Effects	DR,Y	DR,Y	DR,Y	DR,Y	DR,Y
# of observations	16928	16928	16928	16928	16928
# of dyads	668	668	668	668	668

Notes: All columns include the log of GDP and population for both recipient and donor countries. Fixed effects: donor-recipient (DR), year (Y), recipient-year (RY), donor-year (DY). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

C-3. Disbursements

Next, we check if our results only pick up cheap talk, which could be the case by simiply announcing aid commitments, or if donors actually change their ODA disbursements, which refers to actual money spent. We replicate Table 2 using net ODA disbursements instead of ODA commitments. Table C-3 shows that the obtained effects largely hold for aid disbursements as well, although the point coefficients become smaller and have reduced statistical significance. Note that the donor leader change interaction loses its statistical significance in the high dimensional fixed effects model in column 4.

TABLE C-3
Net ODA Disbursements

	Dependent variable: *Log net ODA disbursements*			
	(1)	(2)	(3)	(4)
Recipient change	-0.070**		-0.066**	
	(0.029)		(0.029)	
Donor change	0.065***		0.073***	
	(0.022)		(0.023)	
△ alignment		0.389**	0.077	0.468
		(0.188)	(0.207)	(0.326)
Recipient change × △ alignment			0.798**	0.785*
			(0.389)	(0.445)
Donor change × △ alignment			0.701**	0.153
			(0.308)	(0.469)
Last year alignment	0.675***	1.000***	0.835***	1.246**
	(0.200)	(0.303)	(0.305)	(0.528)
Past mean alignment	0.671**	0.488*	0.663**	0.692
	(0.262)	(0.273)	(0.291)	(0.430)
Adjusted R-squared	0.052	0.051	0.052	0.811
Fixed Effects	DR,Y	DR,Y	DR,Y	DR,RY,DY
# of observations	15853	15853	15853	17218
# of dyads	661	661	661	670

Notes: Leader change variables in column 4 are omitted due to fixed effects. Columns 1 to 3 include GDP and population controls for donors and recipients. Fixed effects: donor-recipient (DR), year (Y), recipient-year (RY), donor-year (DY). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

D. Independent Variable

D-1. Positioning of Recipients

One concern regarding foreign policy alignment and the resulting alignment change measurement is that they are not independent between donor-recipient dyads. If voting in line with one donor country means not voting in line with another country, the effects on aid disbursement might cancel each other out. A perfect example for such a case are the shifting alliances in the International Whaling Commission, in which recipients either oppose the United Kingdom and France, or Japan (Dippel, 2015). Unlike the International Whaling Commission, the UNGA covers a myriad of different votes, which makes it much harder to test if there is such a trade-off between voting in line with different donors during the year. The best we can do is to inspect if recipients seem to be in general to the 'left', 'right', or 'middle' of different donors using the idealpoint measure developed by Bailey et al. (2017). The idealpoint measure aggregates the voting behavior of all countries into a one dimensional policy space, where positive values reflect the overall support for 'Western' values (e.g., free trade, human rights, and democracy).[8] It also corrects for some differences in the voting agendas between years.[9] Figure D-1 plots the idealpoint positions for all donors and recipients in our sample over time.

Figure D-1 shows that the absolute majority of recipient countries are constantly to the 'left' of the G7 donors. While this is no definite proof that recipients do not face costly votes in which they have to decide with which donor they want to align themselves, it supports the idea that this is not the case in the aggregate and for the vast majority of recipient country governments. Thus, aligning to one donor after leadership turnover does on average and in all likelihood not entail dis-alignment from another in terms of overall foreign policy positions.[10]

D-2. Alignment Change Measurement

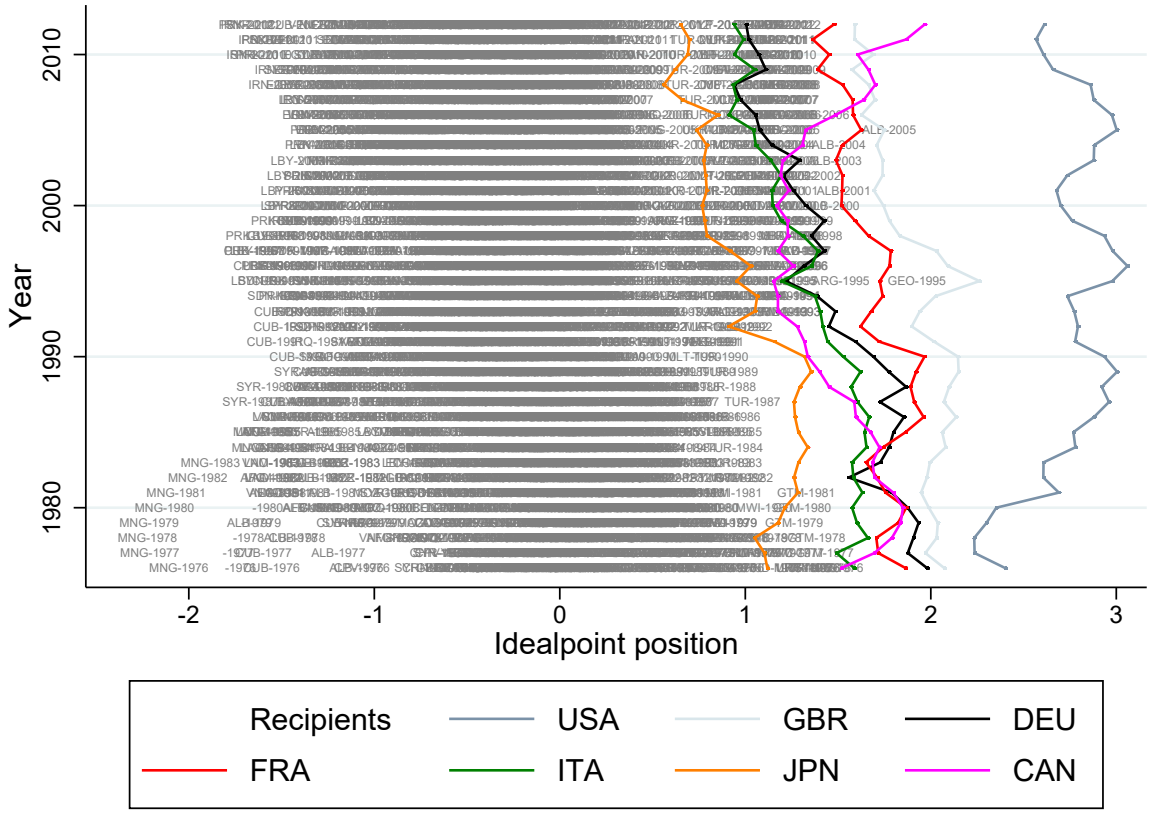
In a next step, we test if our results are driven by the measurement of foreign policy realignment. First, we employ regular votes instead of all votes. This measure is based on recurring votes and therefore not dependent on the yearly fluctuations of the UNGA voting agenda (Bailey et al., 2017; Häge and Hug, 2016). Second, we focus only on key votes – votes deemed important by the US State Department – to test if recipients and

[8]This measure is monadic by construction, which is the primary reason we do not use it in our preferred specifications. Furthermore, we do not want to filter the information donors might receive from voting behavior by reducing a multidimensional policy space to a single dimension.

[9]This should not be an issue in our setting, since the fixed effects should take care of any differences in the voting agenda over time.

[10]We will return to this issue in Appendix E where we test for differences between single G7-donors. Furthermore, as we show in Appendix E, our results are not dependent on specific recipients, implying that the few recipient leaders that in fact face a trade-off do not render our results meaningless.

FIGURE D-1
Aggregated recipient and donor policy positions



Notes: The figure plots the idealpoint positions (Bailey et al., 2017) of the recipieints and the G7 donors over time.

donors act differently to issues considered as strategically important by the United States (Kersting and Kilby, 2016).[11] Third, we test if our results are driven by extreme shifts in foreign policy and run a trimmed least squares regression dropping the bottom and top 5% of the voting change observations. Lastly, we include vote abstentions into the UNGA voting alignment counting abstentions .5 (Barro and Lee, 2005).

The results largely support the robustness of the previous findings (see Table D-1). The interaction between recipient leader change and the change in voting alignment is positive and statistically significant in all but one model. Only in case of key votes is the coefficient not statistically significant. At first sight this might seem puzzling. Yet, key votes are based on votes deemed important by the United States and might therefore always carry consequences, as suggested by the alignment change coefficient. The donor interaction effect in turn might be driven by the fact that other G7 leaders follow the US to different degrees.[12] Furthermore, key votes often cluster around certain events, like

[11] Key votes are only available after 1984.

[12] Note that this is not a sample size effect. We replicated our base specification (Table 2, column 3) on the reduced key-vote sample – 1984 onwards – and obtain stable results.

TABLE D-1
Alternative Alignment Change Specifications

	Dependent variable: *ln ODA commitments*				
	Regular votes	*Key votes*	*TLS 10%*	*Vote abstentions*	
	(1)	(2)	(3)	(4)	(5)
Recipient change	-0.091***	-0.070**	-0.094***	-0.101***	
	(0.032)	(0.034)	(0.033)	(0.032)	
Donor change	0.048*	0.068**	0.058**	0.046*	
	(0.027)	(0.027)	(0.027)	(0.027)	
△ alignment	0.320	0.667***	-0.142	-0.058	0.058
	(0.200)	(0.159)	(0.305)	(0.294)	(0.460)
Recipient change × △ alignment	1.208***	-0.103	1.217**	1.646***	1.283*
	(0.399)	(0.143)	(0.616)	(0.539)	(0.681)
Donor change × △ alignment	0.943***	0.289*	2.970***	0.972**	0.471
	(0.334)	(0.159)	(0.522)	(0.457)	(0.629)
Last year alignment	1.341***	1.179***	0.928**	0.595	0.984
	(0.309)	(0.159)	(0.394)	(0.443)	(0.784)
Past mean alignment	0.970**	-0.116	0.987***	0.882**	0.699
	(0.390)	(0.178)	(0.328)	(0.387)	(0.614)
Log GDP recipient	-0.131	0.051	-0.071	-0.137	
	(0.132)	(0.135)	(0.142)	(0.133)	
Log GDP donor	2.225***	1.769***	2.479***	2.309***	
	(0.647)	(0.677)	(0.613)	(0.652)	
Log population recipient	0.799**	0.589	0.842**	0.804**	
	(0.341)	(0.364)	(0.351)	(0.343)	
Log population donor	-0.074	3.186**	0.299	-0.109	
	(1.018)	(1.277)	(1.020)	(1.028)	
Adjusted R-squared	0.044	0.054	0.048	0.041	0.786
Fixed Effects	DR,Y	DR,Y	DR,Y	DR,Y	DR,RY,DY
# of observations	16900	13495	15315	16928	18571
# of dyads	662	661	668	668	681

Notes: Regular votes (reoccurring votes) in column 1. Key votes in column 2. Top and bottom 5% of realignment excluded in columns 3. Alignment change includes vote abstentions in columns 4 and 5. Leader change variables in column 5 omitted due to fixed effects. Fixed effects: donor-recipient (DR), year (Y), recipient-year (RY), donor-year (DY). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

the Iraq War. Recipient country leaders might come to power and, simply by chance, not be able to signal alignment via key votes.[13] The interaction between donor leader change and the foreign policy alignment change is positive and statistically significant as long as we do not count abstentions. All in all, we find that our results are not driven by large changes in voting alignment alone and robust to different measures of UNGA

[13]Since key votes are solely determined by the US, we rerun column 2 using only the US as a donor and utilize a simple time trend instead of the year fixed effects. Note that year fixed effects would absorb the US leader changes in this setting. In this case both interactions lose their statistical significance while yearly alignment changes enter significant (results not reported). This is not surprising, since Carter and Stone (2015) have shown that the USA uses aid to influence voting behavior on key votes, thus introducing problems of endogeneity.

voting alignment.

D-3. Leader Change Measurement

We also put the other part of our interactions under further scrutiny. So far we assigned a leader to a country year if he or she holds the majority of days in office during that year. While we believe this choice to be the most appropriate it is by no means the only justifiable approach. Mattes et al. (2015), for example, make the argument that the leader in power during the last three months of a year is most likely to influence UNGA alignment, since most of the votes are cast during that period (roughly 90% of the votes).[14] Thus we recode the leader in office variable in several ways. First we exclusively consider leaders in power for the majorities of days during December. Second we focus on leaders in power during November and December. Third we only take leaders into account during the last three month of any year. Lastly, we ignore all but the first or last leader during the last quarter. The correlation between the resulting recipient leader changes and our definition are between 0.60 and 0.76[15] and 0.64 and 0.86 for the donor leader changes, respectively.[16] Note that the different leaders we consider here only change the set of leaders in the sample, not the way we code changes. The change variable is still unitary if the last years leader is not the current year's leader. Let us highlight this approach using two examples. First, in case of the U.S. the alternative coding of December leaders vs. the majority of days definition does change anything. U.S. presidents always enter office in January and thus leader changes coded either using the majority of days in office or the in power during December definition are identical. Germany is different in this regard. German chancellors usually enter office during November. Thus the December leader coding will move the leader change to an earlier date. While we have a leader change in 1999 with the transition of leadership from Kohl to Schroeder following the majority of days in office definition, we code a change in office in 1998 using the December definition.

The results of the specifications using this alternative assignment of leader change are presented in Table D-2.[17] Columns 1 to 3 show that the obtained effects decrease in both magnitude and statistical significance compared to column 3 of Table 2, which is the corresponding specification using the majority of days in office definition (during the entire year, rather than the specific month) to identify leader changes. In fact the interaction results vanish completely if we focus solely on the leader in power during December. If

[14] They highlight that the majority of votes between 1946 and 2008 occur during December (around 75%), followed by November (roughly 15%) and October (approximately 4%).

[15] Specifically, 0.6032 for the December definition, 0.6389 for the November and December definition, 0.7191 for the last quarter definition, 0.7588 for the first leader during the last quarter and 0.7221 for the last leader during the last quarter.

[16] More specifically, the correlation coefficients are 0.6401, 0.6975, 0.7976, 0.8559, and 0.7976.

[17] Note that we recoded the past mean alignment variable in each case, since the duration of administration pairs changes as soon as we redefine the leaders which are in power in a specific year.

TABLE D-2
Leader Change Definitions

	Dependent variable: *ln ODA commitments*				
		Majority in Office		*Last Leader*	*Newest Leader*
	December	*Nov. and Dec.*	*Last Quarter*	*Last Quarter*	*Last Quarter*
	(1)	(2)	(3)	(4)	(5)
Recipient change	-0.061*	-0.060*	-0.096***	-0.097***	-0.091***
	(0.035)	(0.033)	(0.032)	(0.032)	(0.032)
Donor change	0.004	0.022	0.037	0.072**	0.037
	(0.026)	(0.025)	(0.027)	(0.028)	(0.027)
$\triangle$ alignment	0.573***	0.544***	0.499**	0.461**	0.487**
	(0.210)	(0.208)	(0.208)	(0.209)	(0.209)
Recipient change $\times$ $\triangle$ alignment	0.453	0.894**	0.864**	0.974**	0.975**
	(0.364)	(0.391)	(0.391)	(0.405)	(0.385)
Donor change $\times$ $\triangle$ alignment	0.411	0.285	0.486	0.578*	0.478
	(0.326)	(0.320)	(0.323)	(0.326)	(0.323)
Last year alignment	1.627***	1.627***	1.630***	1.624***	1.629***
	(0.317)	(0.318)	(0.318)	(0.318)	(0.318)
Past mean alignment	-0.470	0.196	0.248	-0.150	0.039
	(0.409)	(0.356)	(0.386)	(0.399)	(0.368)
Adjusted R-squared	0.043	0.043	0.044	0.044	0.044
Fixed Effects	DR,Y	DR,Y	DR,Y	DR,Y	DR,Y
# of observations	16928	16928	16928	16928	16928
# of dyads	668	668	668	668	668

Notes: All specifications include GDP and population controls. Fixed effects: donor-recipient (DR), year (Y). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

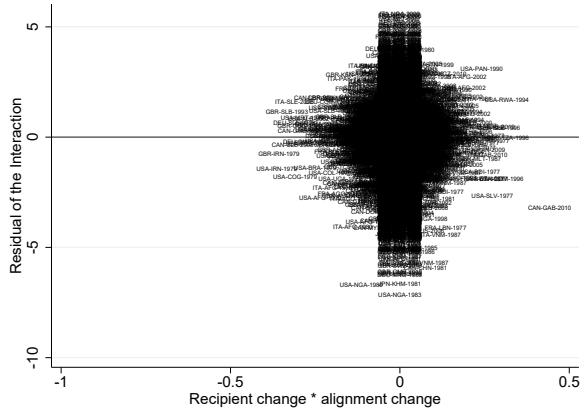
we consider only the first or last leader during the last quarter results are similar to column 3. The donor change interaction in turn gains only statistical significance when we use the first leader of the last quarter definition. There are two likely explanations for these results. First, it is plausible that new administrations coming in during the last two months of a year are not able to communicate their foreign policy preferences succinctly during the year in question. The second explanation is that UNGA voting alignment works more in the way of revealed preferences. Hence, alignment changes that coincide with leader changes at the end of the year are less consequential, since they proxy insufficiently for the relations during that year. The fact that the effect reconstitutes as we move closer to the majority of days in office definition for relevant leaders increases our confidence in the proxy character of the alignment measure.

E. Influential Donors and Recipients

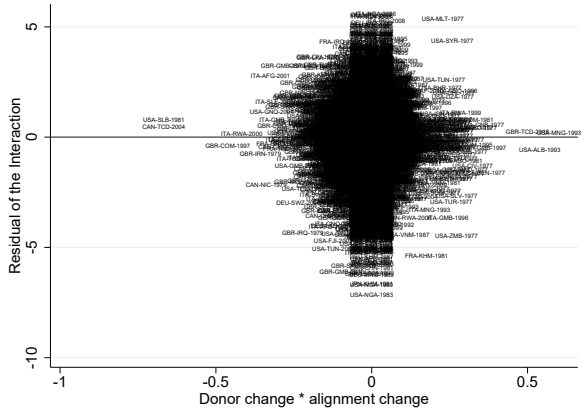
There is ample evidence that donors differ in the way they commit and disburse aid (Alesina and Dollar, 2000; Dietrich, 2016). The United States are famous for using aid to achieve geo-strategic goals, while France focuses prominently on former colonies. Thus, there remains the possibility that our core results are driven by specific donor-recipient pairs. We investigate if our specification does a particularly bad job in explaining our proposed mechanism, by plotting the partial residuals of our interaction terms over the recipient × alignment change and donor × alignment change interactions in Figure E-1.[18]

FIGURE E-1
Partial residuals of interaction effects

(A) Recipient change interaction



(B) Donor change interactions



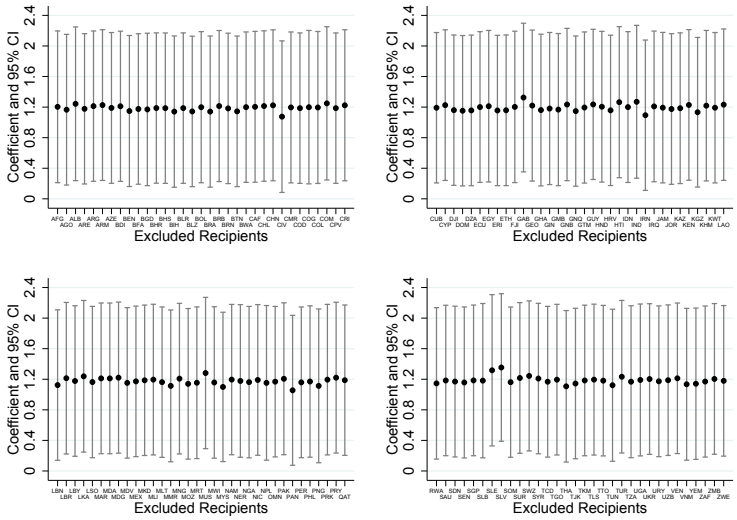
Notes: Panel A reports the partial residuals of the recipient leader * alignment change interactions. Panel B reports the partial residuals of the donor leader * alignment change interactions.

Figure E-1 shows that while there are some observations that seem to be not very well explained in our model, there is no systematic donor-recipient pair that drives the results. Yet, while we cannot observe a specific donor-recipient pair, it might still be the case that individual recipients drive our results. Afghanistan, for example, features quite prominently in the top 10 most influential recipient interactions following a dfbeta test, although with different donors and in different years. To test if our results are driven by individual recipient countries, we perform leave-one-out tests. Here, we rerun the specification from column 4 in Table 2 excluding every recipient country once at a time.

The point estimates of the recipient change-alignment interaction are plotted in Figure E-2. All effects are positive and statistically significant. From this we can conclude that no single recipient has enough leverage to drive our main finding. Additionally, Figure E-3 plots the corresponding donor change-alignment interaction. Apart from two exceptions, the results remain the same.

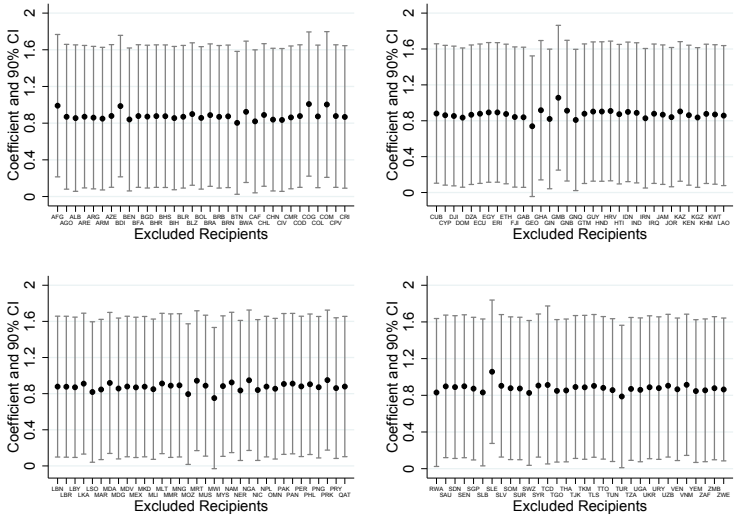
[18] Based on the model in column 3 in Table 2.

FIGURE E-2
Leave-one-out Test for Recipient Change Interaction



Note: Reported are point coefficients of the interaction between recipient change and alignment change and the corresponding 95% confidence intervals, based on column 4 in Table 2.

FIGURE E-3
Leave-one-out Test for Donor Change Interaction



Note: Reported are point coefficients of the interaction between donor change and alignment change and the corresponding 90% confidence intervals, based on column 4 in Table 2.

Finally, there is a chance that individual donors might drive our results, e.g., the U.S. as the biggest donor in our sample. This is closely related to the question whether changes in aid commitments of individual donors are due to the changes in the average alignment with the G7 in general or whether the results are truly driven by the dyad-specific changes in political proximity. We test the two issues jointly by including the average change in voting alignment with the G7 as an additional control and fully interacting our baseline

model for the different donors (see Table E-1).[19]

Regarding the interaction between recipient change and foreign policy alignment, we find that Canada, Germany, Great Britain, and the United States are the main drivers behind the reward and punishment mechanism following recipient leader change.[20] In case of alignment changes after donor leader change, we find statistically significant results for Canada, Germany, Great Britain, and Japan, while the rest of the G7 donors seem to exhibit no such behavior. France does not react to realignment after leader change, which is consistent with France's focus on former colonies (Alesina and Dollar, 2000). Despite not reacting to conditional signaling, Italy nevertheless goes along with the rest of the G7; the effect of average G7 realignment is positive and statistically significant. Although we do not find the same effects for every donor, we also do not find evidence against our theoretical argument. None of the interaction terms are negative and statistically significant. Rather, the results emphasize that different donors seem to vary with regards to the importance they place on realignment after leadership turnover. Most importantly, the results are not driven by a single donor.

[19]We keep the time dummies separate, since they would overload the specification and absorb the donor change variable. Hence they only control for global shocks concerning all donors and recipients.

[20]This is surprising since both the UK and the US have been shown to have a tendency to bypass aid in the first place (Dietrich, 2016), which should make them less responsive to our proposed mechanism.

TABLE E-1
Differences between Donor Countries

	Dependent variable: *ln ODA commitments*						
	CAN	*FRA*	*GER*	*GBR*	*ITA*	*JAP*	*USA*
Recipient change	-0.098	0.023	0.020	0.179**	0.281**	0.060	0.076
	(0.072)	(0.076)	(0.020)	(0.077)	(0.125)	(0.122)	(0.063)
Donor change	-0.066	0.052	-0.094	-0.150**	-0.058	-0.129*	-0.010
	(0.070)	(0.074)	(0.106)	(0.076)	(0.063)	(0.077)	(0.057)
Alignment change	-2.008***	0.837	0.907	1.253***	-1.229	0.514	0.273
	(0.725)	(0.525)	(0.684)	(0.480)	(1.193)	(1.512)	(0.437)
Recipient change × realignment	2.258*	1.412	2.020***	2.546***	-3.395	1.291	1.238*
	(1.192)	(0.988)	(0.642)	(0.742)	(2.390)	(1.951)	(0.713)
Donor change × realignment	2.812***	0.310	3.487**	1.564*	1.385	3.742*	0.737
	(0.985)	(0.798)	(1.775)	(0.865)	(1.251)	(2.045)	(0.624)
Average G7 realignment	1.119	-0.489	-0.954	-1.148**	2.625***	-0.595	-0.332
	(0.724)	(0.599)	(0.698)	(0.531)	(0.851)	(0.974)	(0.307)
Last year alignment	0.639	1.338**	1.644**	1.548**	0.842	-0.234	0.901*
	(0.735)	(0.569)	(0.731)	(0.738)	(1.315)	(1.374)	(0.510)
Past mean alignment	2.302***	3.224***	2.333**	3.147***	-4.239***	8.659***	0.563
	(0.689)	(0.669)	(0.974)	(0.870)	(1.486)	(2.802)	(0.430)
Adjusted R-squared				0.085			
Fixed Effects				DR,Y			
# of observations				16900			
# of dyads				662			

Notes: GDP and population of donor and recipient countries are not reported. Fixed effects: donor-recipient (DR), year (Y). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

F. Instrumental Variables Strategy

Studies point to the fact that donors engage in vote buying (Dreher and Sturm, 2012; Carter and Stone, 2015), intervene in or influence elections in recipient countries (Faye and Niehaus, 2012), or use other means to oust unfavorable political leaders and regimes in order to achieve political and commercial objectives.[21] Hence, political convergence (or divergence) between a recipient and donor may depend on commitments (or threats) made by donors prior to leader turnover in a recipient country. The same problem applies to leader turnover in donor countries. A new US president may alter aid commitments made to recipients directly after inauguration, thus driving recipients to change their alignment strategies.

To tackle this issue we utilize an instrumental variables framework. Ideally, we would instrument donor and recipient leader change as well as foreign policy alignment. Unfortunately, we lack instruments for foreign policy alignment and can only instrument leader changes. Bun and Harrison (2014), however, indicate that the interaction term between an exogenous and an endogenous variable is itself exogenous as long as there is no contemporaneous reversed causality, anticipation effects, and the degree of endogeneity of the endogenous variables does not depend on the values of the exogenous one.

We follow Annen and Strickland (2017) and instrument donor leader changes with regular (executive and legislative) elections in donor countries. In addition, we include presidential term limits.[22] We instrument recipient leader changes using natural deaths of executive leaders (Jones and Olken, 2005) as well as legislative and executive elections.[23] The election data is taken from the National Elections Across Democracy and Autocracy (NELDA) database (Hyde et al., 2012).[24] Note that we only include 'regular' elections, which are elections that occur at their scheduled date and not elections that have been postponed or held after regular elections have been tempered with.[25]

Our identifying assumption is that none of these variables affects ODA commitments besides their effect via actual leader change and the foreign policy alignment that occurs

[21] Berger et al. (2013) provide a comprehensive list of United States' CIA interventions into the domestic politics of developing countries during the Cold War.

[22] Term limits are only available for the US. France introduced presidential term limits in 2008, but they have no predictive power for leader change in our sample that runs only until 2012.

[23] We depart from previous studies that exclusively focus on natural leader deaths. Despite the fact that such instances constitute exogenous variation, it is likely that a deceased leader's successor comes from the same party platform, was personally close to the former leader, and thus has little incentive to alter foreign policy dramatically. Hence, especially in cases of leadership turnover that occur after leader death, our mechanism is least likely to manifest. On top of that, no donor leader has died a natural death in office within our sample. Hence, we cannot use natural deaths as an instrument for donor leader change.

[24] For detailed information on the data see Hyde et al. (2012) and the original application in Annen and Strickland (2017).

[25] Since we always code the leader with the most days in office during a year as the current leader, we lead elections occurring after July 1 by one year. By definition a new leader would not be coded for the current year and the change would occur in the following year.

TABLE F-1
Instrumental Variables: First Stages

	Dependent variables: *Leader Changes*			
	(1)	(2)	(3)	(4)
	Recipient change	*Donor Change*	*Recipient change *alignment*	*Donor change *alignment*
Alignment change	-0.105**	0.281***	0.125***	0.192***
	(0.052)	(0.050)	(0.011)	(0.015)
Last year alignment	-0.284***	0.145**	0.067***	0.128***
	(0.068)	(0.058)	(0.009)	(0.013)
Past mean alignment	0.261***	0.257***	-0.088***	-0.148***
	(0.068)	(0.058)	(0.009)	(0.011)
Instruments				
Natural death of recipient leader	0.933***	0.020	0.001	-0.002
	(0.009)	(0.030)	(0.001)	(0.004)
Executive election (Recipient)	0.204***	0.036**	0.002	0.001
	(0.027)	(0.015)	(0.002)	(0.002)
Legislative election (Recipient)	0.018	0.022**	-0.001*	-0.001
	(0.015)	(0.011)	(0.001)	(0.001)
Leader term limit (Donor)	-0.019	1.194***	0.004*	-0.009***
	(0.026)	(0.009)	(0.002)	(0.001)
Executive election (Donor)	-0.006	0.048**	0.001	0.008***
	(0.012)	(0.020)	(0.001)	(0.001)
Legislative election (Donor)	0.009	0.172***	-0.000	-0.007***
	(0.007)	(0.007)	(0.000)	(0.001)
*Instruments*alignment change*				
Natural death of recipient leader	0.180**	-0.518*	0.869***	0.030
	(0.080)	(0.279)	(0.014)	(0.063)
Executive election (Recipient)	0.504**	0.131	0.084**	0.114
	(0.238)	(0.231)	(0.042)	(0.081)
Legislative election (Recipient)	-0.319***	-0.120	0.005	-0.021
	(0.121)	(0.144)	(0.021)	(0.031)
Leader term limit (Donor)	-0.087	0.633***	0.019	0.764***
	(0.239)	(0.105)	(0.040)	(0.019)
Executive election (Donor)	-0.055	2.194***	-0.007	0.000
	(0.142)	(0.170)	(0.025)	(0.050)
Legislative election (Donor)	0.034	-1.613***	0.023	0.213***
	(0.074)	(0.100)	(0.015)	(0.027)
Adjusted R-squared	0.093	0.320	0.228	0.427
Fixed Effects	DR,Y	DR,Y	DR,Y	DR,Y
# of observations	15581	15581	15581	15581
# of dyads	668	668	668	668

Notes: Each column represents one of the first stages of model 1 Table F-2. The Kleibergen-Paap F-stats over the 4 first stages are reported in Table F-2. All specifications include GDP and population controls. Fixed effects: donor-recipient (DR), year (Y). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

in tandem. While this assumption is rather straight-forward in case of term limits, natural deaths, and election dates in donor countries, it could be more problematic for recipient countries. For one, Faye and Niehaus (2012) show that donors increase aid commitments to friendly regimes during election years, while they reduce aid to hostile regimes. Yet, their mechanism is conditional on alignment, for which we control. Hence, the conditional independence assumption should hold as long as we control for lagged alignment. We are also confident that the potential endogeneity in alignment should not depend on the values of our instrumented leader changes. Leader changes due to natural death should for example not affect the degree of potential endogeneity between alignment changes and ODA commitments within a given donor-recipient dyad.

Table F-1 presents the four first stages of our 2SLS specification. Note that our instruments perform better in predicting donor leader change than recipient leader change, as shown by the adjusted R-squared in Table F-1. This is not surprising, since elections in many recipient countries are not as competitive as in donor countries. Hence, they have less power in predicting leader change. Moreover, we cannot include donor and recipient year fixed effects since our instruments vary only by donor and recipient year.

Table F-2 presents the second stage results of our instrumental variables approach. We report both 2SLS and control function results. Using regular 2SLS in column 1, we find that the donor-change interaction is positive and statistically significant. It increases in size compared to the original effect (see column 3 in Table 2). The interaction between recipient country leader change and foreign policy alignment is not statistically significant. Note, however, that the recipient leader change interaction is estimated very imprecisely, and the interacted instruments do not really add exogenous variation (see the first stage results).[26]

Since our instrument interactions do not add exogenous variation on the first stage, we focus on a control function approach, which increases efficiency, given mild assumptions (Wooldridge, 2010, 2015). Control functions do not need the residuals of our interaction instruments in order to produce consistent estimators. An obvious problem would, however, occur if our instrumented leader changes predict alignment change. In such a case it seems unlikely that the level residual can capture the endogeneity of leader changes in the levels as well as in the interactions. Column 1 of Table F-3 shows that neither of our instrumented leader changes predicts alignment changes. We are thus confident that the conditional independence assumption holds for the interaction as well.[27] Column 2 reports the control function estimates, where the standard errors are obtained from

[26]Nonetheless, the Hansen J-test of over-identification is rejected with a test statistic of 12.964 (p-value 0.1131).

[27]The non-findings also have implications for potential endogeneity in the alignment change variable. If we assume that our instrumented leader changes are indeed exogenous with respect to ODA commitments and, as Table F-3 shows, do not predict alignment changes, then the endogeneity of alignment should not depend on the value of the instrumented leader changes, which is a necessary condition to identify the interaction following Bun and Harrison (2014).

TABLE F-2
Instrumental Variables: Second Stages

	Dependent variable: *ln ODA commitments*		
	(1)	(2)	(3)
	2SLS	*Control Function*	*Control Function*
Recipient change	-0.224*	-0.232*	-0.225*
	(0.116)	(0.120)	(0.119)
Donor change	0.032	0.013	0.027
	(0.054)	(0.053)	(0.054)
Alignment change	-0.064	-0.101	-0.282
	(0.398)	(0.244)	(0.241)
Recipient change × realignment	-0.291	1.423***	1.402***
	(1.787)	(0.423)	(0.418)
Donor change × realignment	1.840**	1.065***	0.927***
	(0.900)	(0.344)	(0.333)
Last year alignment	0.613	0.601*	0.234
	(0.376)	(0.344)	(0.345)
Past mean alignment	1.226***	1.263***	0.889**
	(0.354)	(0.311)	(0.312)
Control function Residuals			
Recipient change (residual)		0.155	0.142
		(0.125)	(0.124)
Donor change (residual)		0.042	0.040
		(0.062)	(0.064)
Within R-squared	0.047	0.050	0.039
Fixed Effects	DR,Y	DR,Y	DR,Y
F-stat IV (Kleibergen-Paap)	237.8	237.8	209.1
# of observations	15576	15581	15581
# of dyads	663	668	668

Notes: Columns 1 and 2 include GDP and population controls. Fixed effects: donor-recipient (DR), year (Y). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

999 bootstraps.[28] In this case both the donor and recipient interactions are positive, statistically significant, and comparable in size to the previous results. In addition, we follow Angrist and Pischke (2008) and exclude our control variables from the control function, since neither GDP, nor population should add to the conditional independence between our instruments and leader change (Table F-2, column 3). Again, the results support our argument. All in all, it is not surprising that the obtained LATE does not differ much from the original results since donors do not seem to care too much about the circumstances surrounding recipient leader changes.

Lastly, because the identification of our interaction variables rests on the absence of anticipation effects of the alignment change (Bun and Harrison, 2014), we reestimate our core models with alignment change as the dependent variable and use lagged ODA

[28]If we include the residuals of the interaction terms, which is not necessary in a control function, we obtain the same coefficients as in column 1.

TABLE F-3
Granger Causality

	Dependent variables: *Alignment Change*			
	2SLS	*OLS*	*OLS*	*OLS*
	(1)	(2)	(3)	(4)
Lagged ODA			0.0003	0.0005*
			(0.0004)	(0.0003)
Recipient change	-0.0026		-0.0033*	
	(0.0059)		(0.0020)	
Donor change	-0.0013		-0.0037**	
	(0.0031)		(0.0016)	
Recipient change × lagged ODA			0.0004	0.0000
			(0.0006)	(0.0003)
Donor change × lagged ODA			0.0011**	-0.0004
			(0.0005)	(0.0003)
Last year alignment	-0.8423***	-0.8320***	-0.8378***	-0.8713***
	(0.0223)	(0.0213)	(0.0218)	(0.0358)
Past mean alignment	0.5272***	0.5185***	0.5224***	0.2101***
	(0.0205)	(0.0197)	(0.0200)	(0.0238)
Donor GDP (log)	-0.0132	-0.0143	-0.0090	
	(0.0099)	(0.0093)	(0.0095)	
Recipient GDP (log)	0.0005	-0.0002	-0.0004	
	(0.0030)	(0.0023)	(0.0024)	
Donor population (log)	-0.2580***	-0.2496***	-0.2617***	
	(0.0207)	(0.0195)	(0.0201)	
Recipient population (log)	0.0030	-0.0008	0.0012	
	(0.0063)	(0.0061)	(0.0062)	
Adjusted R-squared	0.5476	0.5621	0.5655	0.8909
Fixed Effects	DR,Y	DR,Y	DR,Y	DR,DY,RY
# of observations	15576	16337	16337	17858
# of dyads	663	668	662	673

Notes: Fixed effects: donor-recipient (DR), year (Y), recipient-year (RY), donor-year (DY). Robust standard errors in parentheses, clustered on donor-recipient dyad. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

commitments as well as interactions of leader change with lagged ODA commitments as independent variables (see columns 2 and 3 in Table F-3). We obtain a small level-coefficient of lagged ODA commitments on the alignment change, no effect for the recipient interaction with lagged ODA, and a small effect of the interaction between donor change and lagged ODA, which is consistent with the findings of Annen and Strickland (2017). None of these interaction effects is statistically significant if we include donor-year and recipient-year fixed effects. We are thus confident to conclude that problems of selection and endogeneity do not bias our main results in a systematic way.

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