Online Appendix for "A Friend Like Me: The Effect of IO Membership on State Preferences"

Appendix A: List of IOs in which the EU as a whole held membership in 2004

ACP-EU Joint Assembly
Carbon Sequestration Leadership Forum
Congo Basin Forest Partnership
Council of the Baltic Sea States
Global Health Security Initiative
Inter-American Tropical Tuna Commission
International Cocoa Organization
International Coffee Organization
International Copper Study Group
International Grains Council
International Lead and Zinc Study Group
International Nickel Study Group
International Olive Council
International Rubber Study Group
International Tropical Timber Organization
North Atlantic Salmon Conservation Organization
North East Atlantic Fisheries Commission
Northwest Atlantic Fisheries Organization
OSPAR Commission

In seven of these IOs (OSPAR Commission, Carbon Sequestration Leadership Forum, Council of the Baltic Sea States, Congo Basin Forest Partnership, Global Health Security Initiative, International Copper Study Group, International Nickel Study Group, and International Tropical Timber Organization), EU member states are represented by both national and EU representatives. In nine of them (North East Atlantic Fisheries Commission, North Atlantic Salmon Conservation Organization, Northwest Atlantic Fisheries Organization, International Coffee Organization, International Cocoa Organization, Inter-American Tropical Tuna Commission, International Grains Council, International Olive Council, and International Rubber Study Group), they are represented by EU representatives only. In the ACP-EU Joint Assembly, they are represented by national representatives only. We were unable to determine how EU member states are represented in the International Lead and Zinc Study Group.

Appendix B: List of countries in the treatment and control groups

The treatment and control group both consist of dyads. One of the countries in each dyad is a new EU member state. The other countries in the dyads are listed below according to group status. Some states that joined the EU in 2004 held membership in one or more of the 19 IOs in question prior to their joining the EU. Specifically, Estonia, Latvia, Lithuania, and Poland held membership in the Council of Baltic Sea States, and Poland held membership in both the International Copper Study Group and the International Lead and Zinc Study Group. The dyads containing these countries and the countries that were members of these three IOs are therefore coded as belonging to the control group, unless they also gained an additional shared automatic IO membership as a result of another IO in which the EU as a whole held membership.

Countries in the treatment group, Eastern accession data:
Algeria
Angola
Antigua and Barbuda
Argentina
Australia
Bahamas
Barbados
Belize
Benin
Bolivia
Botswana
Brazil
Burkina Faso
Burundi
Cambodia
Cameroon
Canada
Cape Verde
Central African Republic
Chad
Chile
China
Colombia
Comoros
Republic of the Congo
Costa Rica
Côte d'Ivoire
Cuba
Djibouti
Dominica
Dominican Republic
Ecuador

Egypt
El Salvador
Equatorial Guinea
Eritrea
Fiji
Gabon
The Gambia
Ghana
Grenada
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras
Iceland
India
Indonesia
Iran
Israel
Jamaica
Japan
Jordan
Kazakhstan
Kenya
Kiribati
Republic of Korea
Lesotho
Liberia
Libya
Madagascar
Malawi
Malaysia
Mali
Mauritania
Mauritius
Mexico
Morocco
Mozambique
Myanmar
Namibia
Nauru
Nepal
New Zealand
Nicaragua

Niger
Nigeria
Norway
Pakistan
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Russia
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Samoa
São Tomé and Príncipe
Senegal
Serbia
Seychelles
Sierra Leone
Singapore
Somalia
South Africa
Sri Lanka
Sudan
Suriname
Swaziland
Switzerland
Tanzania
Thailand
Togo
Tonga
Trinidad and Tobago
Tunisia
Turkey
Tuvalu
Uganda
Ukraine
United States of America
Vanuatu
Venezuela
Vietnam
Zaire
Zambia
Zimbabwe

Countries in the control group, Eastern accession data:
Afghanistan
Albania
Andorra
Armenia
Azerbaijan
Bahrain
Bangladesh
Belarus
Bhutan
Bosnia and Herzegovina
Brunei
Georgia
Iraq
Democratic Republic of Korea
Kosovo
Kuwait
Kyrgyzstan
Laos
Lebanon
Liechtenstein
Maldives
Marshall Islands
Federated States of Micronesia
Moldova
Monaco
Mongolia
Montenegro
North Macedonia
Oman
Palau
Qatar
Rwanda
San Marino
Saudi Arabia
Solomon Islands
South Sudan
Syria
Taiwan
Tajikistan
Timor-Leste
Turkmenistan
United Arab Emirates
Uruguay
Uzbekistan

Yemen

Countries in the treatment group, Northern accession data:
Canada
Chile
China
Costa Rica
Cuba
Ecuador
Iceland
Japan
Mexico
Nicaragua
Norway
Panama
Peru
Russia
United States of America
Vanuatu
Venezuela
Zambia

Countries in the control group, Northern accession data:
Afghanistan
Albania
Algeria
Andorra
Angola
Antigua and Barbuda
Argentina
Armenia
Australia
Azerbaijan
Bahamas
Bahrain
Bangladesh
Barbados
Belarus
Belize
Benin
Bhutan
Bolivia
Bosnia and Herzegovina
Botswana
Brazil

Brunei
Burkina Faso
Burundi
Cambodia
Cameroon
Cape Verde
Central African Republic
Chad
Colombia
Comoros
Republic of the Congo
Côte d'Ivoire
Czechia/Czechoslovakia
Djibouti
Dominica
Dominican Republic
Egypt
El Salvador
Equatorial Guinea
Eritrea
Ethiopia
Fiji
Gabon
The Gambia
Georgia
German Democratic Republic
Ghana
Grenada
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras
India
Indonesia
Iran
Iraq
Israel
Jamaica
Jordan
Kazakhstan
Kenya
Kiribati
Democratic Republic of Korea

Republic of Korea
Kuwait
Kyrgyzstan
Laos
Lebanon
Lesotho
Liberia
Libya
Liechtenstein
Madagascar
Malawi
Malaysia
Maldives
Mali
Marshall Islands
Mauritania
Mauritius
Federated States of Micronesia
Moldova
Monaco
Mongolia
Montenegro
Morocco
Mozambique
Myanmar
Namibia
Nauru
Nepal
New Zealand
Niger
Nigeria
North Macedonia
North Yemen
Oman
Pakistan
Palau
Papua New Guinea
Paraguay
Philippines
Qatar
Rwanda
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Samoa

San Marino
São Tomé and Príncipe
Saudi Arabia
Senegal
Serbia
Seychelles
Sierra Leone
Singapore
Solomon Islands
Somalia
South Africa
South Yemen
Sri Lanka
Sudan
Suriname
Swaziland
Switzerland
Syria
Tajikistan
Tanzania
Thailand
Timor-Leste
Togo
Tonga
Trinidad and Tobago
Tunisia
Turkey
Turkmenistan
Tuvalu
United Arab Emirates
Uganda
Ukraine
Uruguay
Uzbekistan
Vietnam
Yemen
Yugoslavia
Zaire
Zimbabwe

Appendix C: Summary statistics

Table C1 lists the summary statistics for Eastern accession data, which is limited to dyads that include states that joined the EU in 2004. Only observations for years 1990 to 2014 are included. *Ideal point similarity with EU-15* was constructed by taking the pre-treatment average of the non-EU dyad partner's ideal point similarity score with EU-15 members. *Relative economic development* measures the log of the richer state's GDP per capita relative to that of its poorer dyad partner. *Relative economic size* measures the log of the larger state's GDP relative to that of its smaller dyad partner. *Domestic political difference* measures the absolute difference between the dyad partners' Polity5 scores. *Other joint IO memberships* measures the number of IO memberships the dyad partners share (excluding the automatic ones that form the treatment variable). *Geographic distance* measures the distance in miles between the two national capitals in the dyad. Data on GDP and GDP per capita are drawn from the World Bank (2020), while data on domestic political difference are drawn from the Polity5 Project (Center for Systemic Peace 2020). Data on geographic distance are drawn from Bearce and Bondanella (2007). Table C2 lists summary statistics for the data including EU-15 members. Table C3 lists summary statistics for the Northern accession data.

Table C1: Summary statistics, Eastern accession data.

	Mean	Standard deviation	Minimum	Maximum
Treatment	0.74	0.44	0	1
Treatment$_{levels}$	1.32	1.22	0	4
Ideal point similarity	−1.39	0.65	−3.41	0
Ideal point similarity with EU-15	−1.59	0.62	−2.91	−0.18
Relative economic development	1.74	1.07	0	4.99
Relative economic size	2.28	1.64	0	9.95
Domestic political difference	7.44	6.28	0	20
Other joint IO memberships	28.54	9.60	0	71
Geographic distance	4,456.53	2,396.41	0	11,326

Table C2: Summary statistics, data including EU-15 members.

	Mean	Standard deviation	Minimum	Maximum
Number of joint IO memberships	32.18	11.43	0	96
New EU member state	0.41	0.49	0	1
Ideal point similarity	−1.46	0.68	−4.10	0
Relative economic development	2.24	1.30	0	6.22
Relative economic size	3.28	2.20	0	12.37
Domestic political difference	7.88	6.45	0	20
Geographic distance	4,205.35	2,281.04	0	12,347

Table C3: Summary statistics, Northern accession data.

	Mean	Standard deviation	Minimum	Maximum
Treatment	0.10	0.30	0	1
Ideal point similarity	−1.35	0.62	−3.31	0

Appendix D: Robustness checks

Table D1 reports full results for Model 2 in Table 1. Table D2 reports results using clustered standard errors.

Table D1: The effect of automatic joint IO membership on state preference similarity, full results.

	Ideal point similarity
Post	-0.24^*
	(0.01)
Treatment $\times$ post	0.25^*
	(0.01)
Other joint IO memberships	0.002
	(0.001)
Relative economic development	0.06^*
	(0.01)
Relative economic size	-0.04^*
	(0.01)
Domestic political difference	0.002^*
	(0.001)
Geographic distance	0.0004^*
	(0.0001)
Observations	13,451
Dyads	643
R^2	0.04

Note: Coefficients from OLS regression with standard errors in parentheses. Dyad fixed effects included. As the *treatment* variable is time-invariant (and therefore perfectly collinear with dyad fixed effects), it is omitted. $^*p < 0.05$

Table D2: The effect of automatic joint IO membership on state preference similarity, clustered standard errors.

	Ideal point similarity
Post	-0.10^{*}
	(0.01)
Treatment $\times$ post	0.10^{*}
	(0.02)
Observations	40,232
Dyads	1,786
R^2	0.01

Note: Coefficients from OLS regression with standard errors clustered on dyads in parentheses. Dyad fixed effects included. As the *treatment* variable is time-invariant (and therefore perfectly collinear with dyad fixed effects), it is omitted. $^{*}p < 0.05$

Appendix E: Evaluating the parallel trends assumption

While the results reported in Table 1 give us confidence that our findings are not driven solely by differences in time trends between the treatment and control groups, we also examine how differences between these two groups evolve during our pre-treatment period. Difference-in-differences designs rest on the assumption that, in the absence of treatment, the treatment group would have developed similarly to the control group—in other words, the assumption that in the counterfactual world of no treatment, the trends would have been parallel (Cunningham 2021). We therefore analyze the pre-treatment trends in order to determine whether the assumption of parallel trends in the counterfactual is reasonable. Parallel pre-treatment trends strengthen our confidence that the parallel trends assumption is valid. To analyze the pre-treatment trends, we estimate regression models that include treatment leads and lags (Cunningham 2021). This means that we interact the treatment variable with year dummies for the pre- and post-treatment periods to determine whether the estimated difference in *ideal point similarity* between the treatment and control groups changes over time in the pre-treatment period.[1]

The left panel in Figure E1 plots the coefficients on the interactions between the treatment group and each year, using *ideal point similarity* as the outcome variable. The dashed vertical line represents the start of the post-treatment period. As the figure shows, a substantial number of the coefficients on the pre-treatment interaction terms are significantly different from zero. This suggests that parallel trends did not hold for at least part of the pre-treatment period. To ensure our results are not driven by these differences in pre-treatment trends, we use coarsened exact matching to establish balance on relative economic size, relative economic development, domestic political difference, and geographic distance. The R package `cem` was used for the coarsened exact matching (Iacus, King, and Porro 2009). The right panel in Figure E1 shows the same parallel trends test conducted on the matched data, to explore whether we see parallel trends in the pre-treatment period, conditional on these additional factors. Once matching is applied, there are only two years in the pre-treatment period for which the interaction terms are statistically significant,

[1] In these analyses, the year 2003 (the last pre-treatment year) is the omitted reference category.

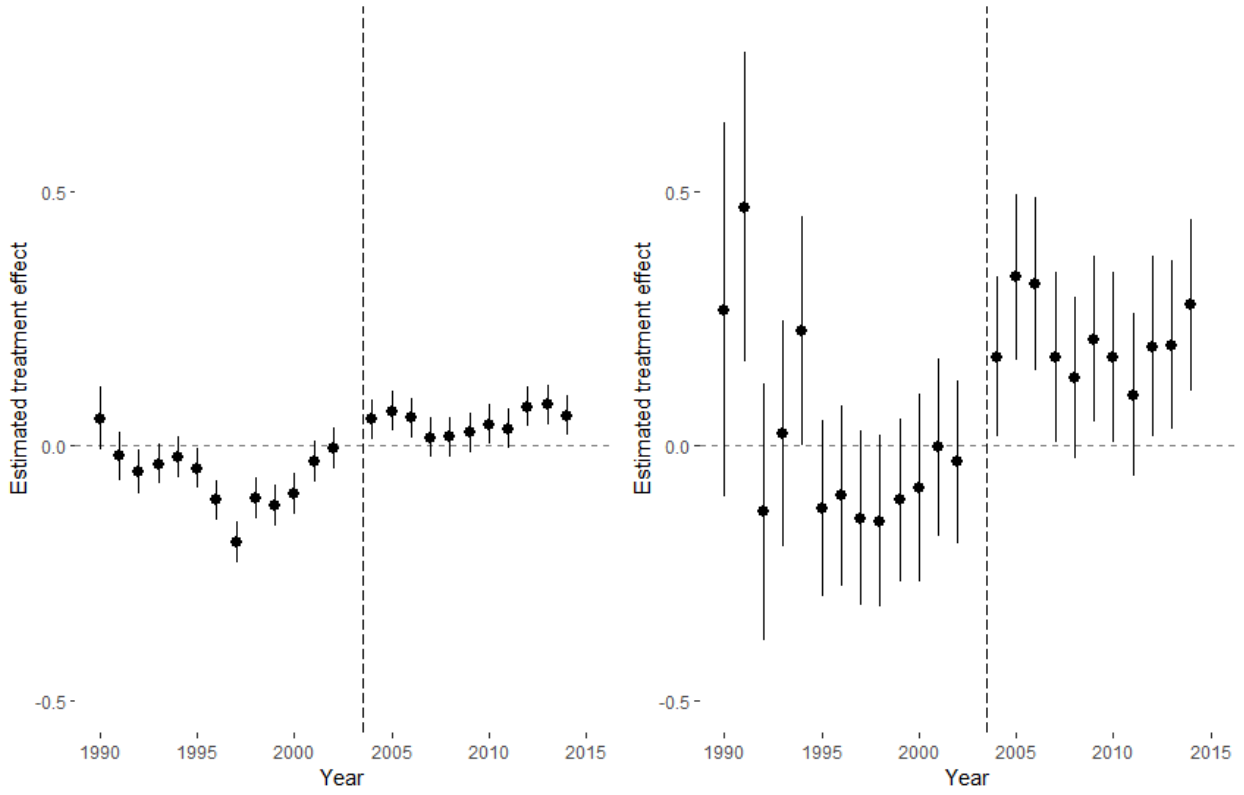

Figure E1: Differences in estimated treatment effect on ideal point similarity over time, using unmatched (left) and matched (right) data.
OLS regression coefficients on interactions between the treatment group and each year are shown with 95% confidence intervals. The dashed vertical line represents the start of the post-treatment period.

and none after 1994. This suggests that the pre-treatment trends in the treatment and control group are parallel, once balance on covariates is established.

Since we are only able to obtain pre-treatment parallel trends for preference similarity using the matched data, we repeat the difference-in-differences analysis using these data. The results are reported in Table E1. The coefficient on the interaction term is positive and statistically significant, providing additional evidence of a treatment effect even when accounting for differing pre-treatment trends.

Table E1: The effect of automatic joint IO membership on state preference similarity, using matched data to account for different pre-treatment trends.

	Ideal point similarity
Post	-0.24^{*}
	(0.02)
Treatment $\times$ post	0.27^{*}
	(0.03)
Observations	1,226
Dyads	170
R^2	0.05

Note: Coefficients from OLS regression with standard errors clustered on dyads in parentheses. Dyad fixed effects included. As the *treatment* variable is time-invariant (and therefore perfectly collinear with dyad fixed effects), it is omitted. $^{*}p < 0.05$

Appendix F: Testing for new EU member state preference convergence to EU-15 members

A plausible alternative explanation for the results we obtain in Table 1 could be that new EU member states are changing their preferences in a way that aligns with states that are members of the 19 IOs in our analysis due to their post-accession convergence in policies and preferences with EU-15 members. If this is the case, we would expect that the relationship between the total number of joint IO memberships and preference similarity would be stronger for dyads including new EU member states—once they join the EU—than for dyads including EU-15 members. We therefore conduct an additional analysis including dyads with EU-15 member states. We regress our measure of preference similarity on a three-way interaction of the total number of joint IO memberships, *post* (to capture pre- versus post-accession for the new EU member states), and *new EU member state*, a dummy variable that indicates whether dyads include new EU member states or EU-15 members. We include the same control variables as in our main analysis. The results are reported in Table F1. The coefficient on the three-way interaction term is negative and does not reach statistical significance at the 95% confidence level, suggesting that we cannot conclude that there is a difference in the relationship between the number of joint IO memberships and preference similarity for new EU member states post-accession compared to EU-15 members.

Table F1: The effect of joint IO membership on preference similarity, by new EU member state status.

	Model 1
Joint IO membership	0.003*
	(0.000)
Post	0.097*
	(0.011)
Joint IO membership × new EU member state	−0.004*
	(0.001)
Joint IO membership × post	0.000
	(0.000)
New EU member state × post	−0.071*
	(0.019)
Joint IO membership × new EU member state × post	−0.001
	(0.001)
Relative economic development	0.051*
	(0.006)
Relative economic size	−0.012*
	(0.003)
Domestic political difference	−0.009*
	(0.000)
Geographic distance	0.000
	(0.000)
Observations	70,859
Dyads	3,315
R^2	0.05

Note: Coefficients from OLS regression with standard errors in parentheses. Dyad fixed effects included. As the *new EU member state* variable is time-invariant (and therefore perfectly collinear with dyad fixed effects), it is omitted. $^*p < 0.05$

Appendix G: Northern accession analysis

For this analysis, we restrict our data set to dyads that include Austria, Finland, or Sweden (states that joined the EU in 1995) and years 1982 to 2007, to ensure a balanced pre- and post-treatment sample. We code dyads as belonging to the treatment group if the non-EU state in the dyad is a member of the five IOs in which the EU as a whole held membership in 1995.[2] All other dyads are coded as belonging to the control group.[3] The *post* period is defined as 1995 to 2007. We conduct the same difference-in-differences analysis as in Table 1 on this alternative data set. Results are reported in Table G1.

Table G1: The effect of automatic joint IO membership on state preference similarity, using Northern accession data.

	Ideal point similarity
Post	-0.26^{*}
	(0.01)
Treatment $\times$ post	0.30^{*}
	(0.02)
Observations	11,517
Dyads	504
R^2	0.11

Note: Coefficients from OLS regression with standard errors clustered on dyads in parentheses. Dyad fixed effects included. As the *treatment* variable is time-invariant (and therefore perfectly collinear with dyad fixed effects), it is omitted. $^{*}p < 0.05$

[2]These IOs are the Council of the Baltic Sea States, the Northwest Atlantic Fisheries Organization, the Inter-American Tropical Tuna Commission, the International Copper Study Group, and the North Atlantic Salmon Conservation Organization. Finland joined the International Copper Study Group prior to 1995, and Finland and Sweden both joined the Council of Baltic Sea States prior to 1995. For this reason, dyads including states in the International Copper Study Group were only coded as belonging to the treatment group if they also included Austria or Sweden, while dyads including states in the Council of Baltic Sea States were only coded as belonging to the treatment group if they also included Austria.

[3]See Appendix B for a full list of the countries in the treatment and control groups.

References

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