

Does a Currency Union affect Trade?

The Time Series Evidence

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Gravity Model

$$\begin{aligned}\ln(X_{ijt}) = & \beta_0 + \beta_1 \ln(Y_i Y_j)_t + \beta_2 \ln(Y_i Y_j / \text{Pop}_i \text{Pop}_j)_t + \beta_3 \ln D_{ij} \\ & + \beta_4 \text{Lang}_{ij} + \beta_5 \text{Cont}_{ij} + \beta_6 \text{FTA}_{ijt} + \beta_7 \text{Landl}_{ij} \\ & + \beta_8 \text{Island}_{ij} + \beta_9 \ln(\text{Area}_i \text{Area}_j) + \beta_{10} \text{ComCol}_{ij} + \beta_{11} \text{CurCol}_{ijt} \\ & + \beta_{12} \text{Colony}_{ij} + \beta_{13} \text{ComNat}_{ij} + \gamma \text{CU}_{ijt} + \varepsilon_{ijt}\end{aligned}$$

- i and j denotes countries, t denotes time
- coefficient of interest is γ , effect of a currency union on trade

Data Set

- Rose (2000): large UN data set, 186 “countries” 1970-1990 (5-yr intervals).
- Here: very large IMF (DoT), 217 “countries” 1948-1997 (annual).
- Includes colonies (e.g., Bermuda), territories (Guam), overseas departments (Guadeloupe), new countries (Guinea-Bissau)

- FOB exports, CIF imports in American dollars
- Deflate by the American CPI.
- Measure average value of bilateral trade by averaging all four possible trade measures.
- WDI/PWT/IFS (in order) for population/income
- CIA's "World Factbook" for country-specific variables
- WTO for free trade agreements

Definition of Currency Union

- Money was interchangeable between countries at 1:1 par for an extended period of time (=> no need to convert prices)
- Hard fixes do not qualify
- Source: IMF's *Schedule of Par Values*, IMF's *Annual Report on Exchange Rate Arrangements and Exchange Restrictions*, *The Statesman's Yearbook*.
- Definition of currency union is transitive

- About 1% of the sample covers currency unions (comparable to Rose, 2000)
- Some missing observations because of integration (\Rightarrow negative bias in γ)
- Transitions: 16 switches into and 130 switches out of currency unions
- Few entries \Rightarrow treat entry, exit symmetrically
- Dependencies (e.g., Bermuda from pound to dollar/CFA entry)

Case Studies

- Ireland-UK is special (Thom and Walsh, 2001)

Caveats

Applicability/Extrapolation

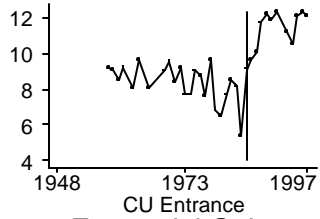
- But true of others too (Ireland '79 small and poor)
- Relevant for “dollarization” candidates
- No evidence of sensitivity (income/size)
- Rose-van Wincoop and structural approach: similar findings

Endogeneity

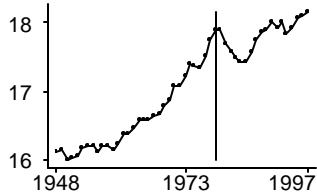
- Little evidence of this, but hard to refute
- Difficult to find good IVs (IV \Rightarrow larger estimates)

Lags

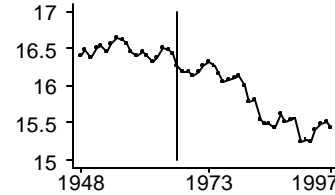
- Probably long; figure 2 on currency union exits



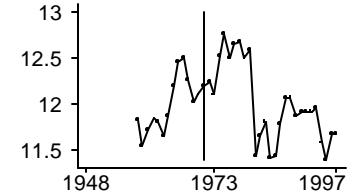
Cameroon: Equatorial Guinea



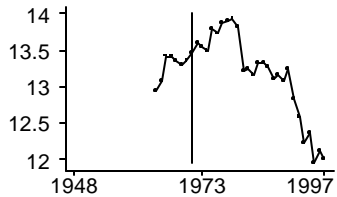
UK: Ireland



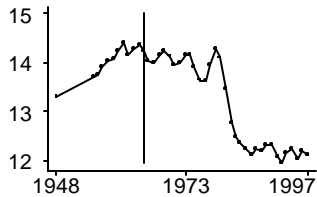
UK: New Zealand



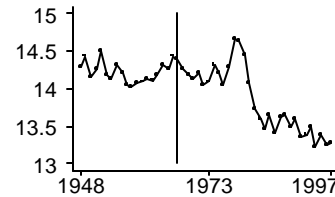
UK: Gambia



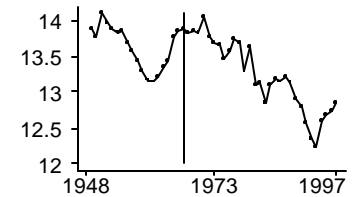
UK: Malawi



UK: Sierra Leone



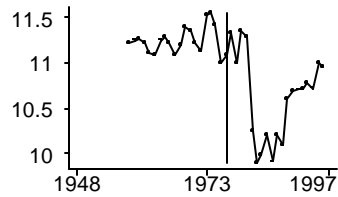
UK: Tanzania



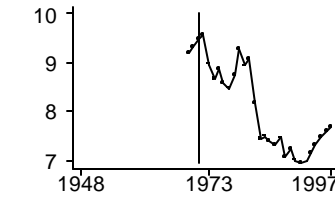
UK: Uganda



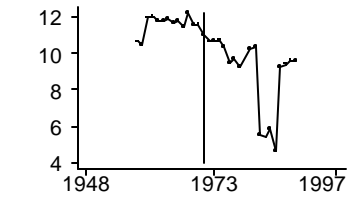
UK: Zambia



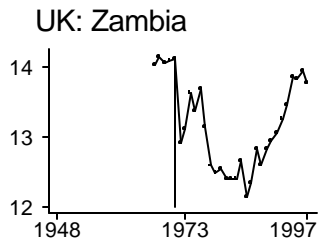
Portugal: Sao Tome&Principe



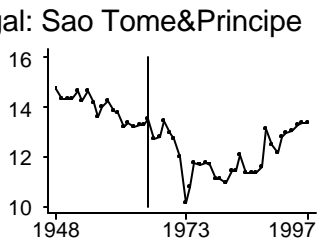
Grenada: Guyana



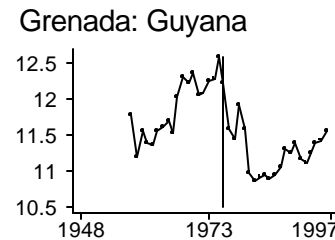
Aden/Yemen: Kenya



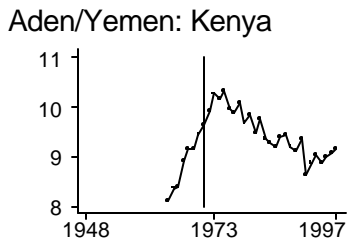
Brunei: Malaysia



Burma/Myanmar: India



Madagascar: Reunion



New Caledonia: Vanuatu

Log Real \$ Trade; vertical scales differ. Currency Union Exit marked.

Trade and Currency Union Dissolutions

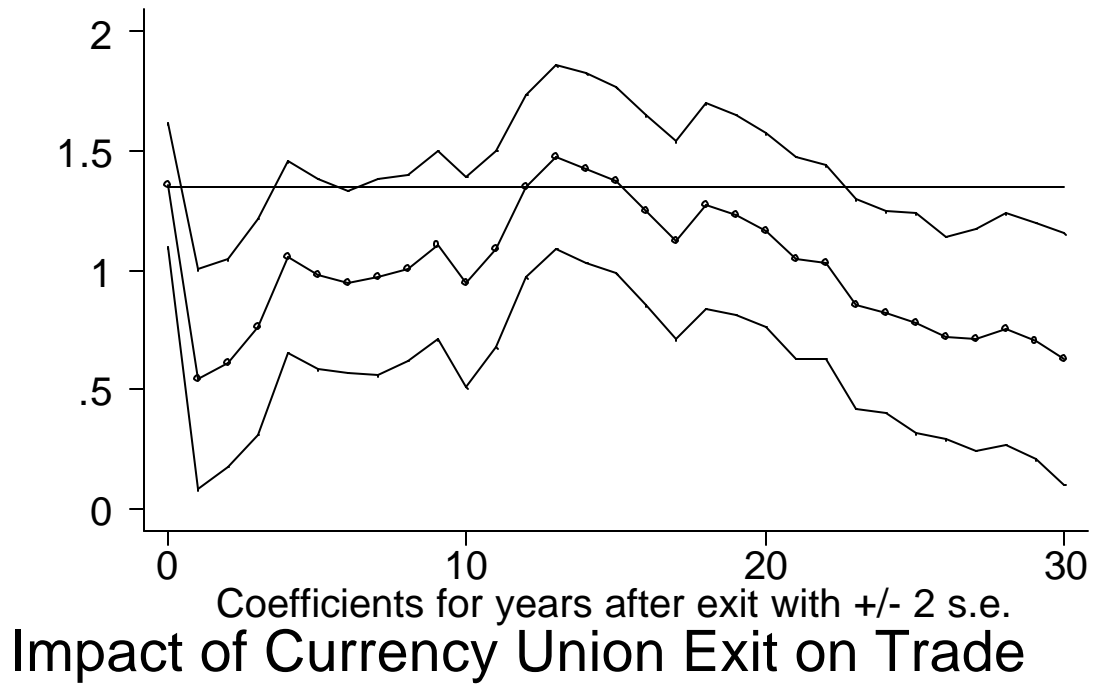


Table 1: Descriptive Statistics

	Non-Unions	Currency Unions
Observations	422,715	4,077
Log Real Trade	10.7 (3.7)	10.6 (3.1)
Log Distance	8.2 (.8)	7.1 (1.0)
Log product GDP	47.9 (2.6)	44.7 (3.1)
Log product GDP/capita	16.1 (1.4)	14.5 (1.6)
Common Language Dummy	.15 (.35)	.85 (.36)
Land Border Dummy	.02 (.14)	.16 (.36)
Regional Trade Agreement	.01 (.08)	.07 (.26)
Number Landlocked	.23 (.45)	.31 (.54)
Number Islands	.35 (.54)	.44 (.71)
Log Product Land Areas	23.8 (3.6)	23.2 (4.3)
Common Colonizer	.06 (.24)	.66 (.47)
Current Colony	.002 (.04)	.16 (.37)
Ever Colony	.01 (.11)	.23 (.42)
Same Nation	.001 (.02)	.09 (.28)

Means, with standard deviations reported in parentheses

Table 2: Pooled Panel OLS Gravity Estimates

Currency Union	1.30 (.13)
Log Distance	-1.11 (.02)
Log Product Real GDPs	.93 (.01)
Log Product Real GDP/capita	.46 (.02)
Common Language	.32 (.04)
Common Land Border	.43 (.12)
Regional Trade Agreement	.99 (.13)
Number Landlocked	-.14 (.03)
Number Islands	.05 (.04)
Log Product Land Areas	-.09 (.01)
Common Colonizer	.45 (.07)
Current Colony	.82 (.25)
Ever Colony	1.31 (.13)
Same Nation	-.23 (1.05)
Observations	219,558
R²	.64
RMSE	2.02

Intercept and year controls not recorded.

Standard errors robust to country-pair clustering recorded in parentheses.

Annual data for 217 countries, 1948-1997.

Table 3: Cross-Sectional OLS Gravity Estimates of the Currency Union Effect

Year	γ (se)
1950	.98 (.32)
1955	1.04 (.26)
1960	.71 (.17)
1965	.84 (.15)
1970	1.40 (.21)
1975	1.23 (.23)
1980	1.13 (.24)
1985	1.81 (.23)
1990	2.39 (.25)
1995	1.49 (.23)

Controls not reported: distance, output, output per capita, language, land border, FTA, landlocked, islands, land area, common colonizer, current colony, ever colony, same nation, and constant.

Standard errors recorded in parentheses.

Annual data for 217 countries.

Table 4: Pooled Panel Gravity Estimates

	Fixed effects (“within”)	Random effects GLS	Between Estimator	Maximum Likelihood
Currency Union	.65 (.05)	.70 (.05)	1.52 (.25)	.69 (.05)
Log Distance		-1.35 (.03)	-1.42 (.03)	-1.35 (.04)
Log Product Real GDPs	.05 (.01)	.27 (.01)	.98 (.01)	.23 (.01)
Log Product Real GDP/capita	.79 (.01)	.52 (.01)	.46 (.02)	.57 (.01)
Common Language		.18 (.06)	.38 (.06)	.16 (.07)
Common Land Border		.53 (.16)	.50 (.17)	.54 (.19)
R²: Within	.12	.12	.11	
R²: Between	.23	.52	.63	
R²: Overall	.22	.47	.58	
Hausman Test (p-value)		.00		

219,558 observations in 11,178 country-pair groups. Obs per group within [1,50], mean=19.6.

Intercepts not recorded. Other controls not recorded: a) regional FTA membership; b) # landlocked; c) # islands; d) area; e) common colonizer; f) current colony/colonizer; g) ever colony/colonizer; h) common country.

Standard errors in parentheses.

Annual data for 217 countries, 1948-1997.

Table 5: Sensitivity Analysis of the Panel Currency Union Effect

	Fixed effects ("within")	Random effects GLS
Year Controls	.59 (.05)	.58 (.05)
Data at Five-Year Intervals	.80 (.11)	.88 (.10)
Quadratic Output Terms Added	.61 (.05)	.64 (.05)
No Industrial Countries	.65 (.08)	.68 (.08)
No Small Countries	.68 (.06)	.73 (.06)
No Poor Countries	.67 (.08)	.72 (.08)
Similarly-Size Countries	.69 (.08)	.71 (.08)
Countries with Unimportant Bilateral Trade	.65 (.06)	.69 (.06)
No Pre-1960 Observations	.62 (.05)	.68 (.05)
No CFA Observations	.69 (.06)	.79 (.06)
No ECCB/American Dollar/French Franc/British Pound Observations	.71 (.06)	.74 (.06)

Controls not reported: distance, output, output per capita, language, land border, FTA, landlocked, islands, land area, common colonizer, current colony, ever colony, same nation, and constant.

Standard errors in parentheses.

Annual data, 1948-1997.

Appendix 1: Countries in Sample

Afghanistan	Djibouti	Kuwait
Albania	Dominica	Kyrgyz Republic
Algeria	Dominican Rep.	Lao People's Dem. Rep.
American Samoa	Eastern Germany	Latvia
Angola	Ecuador	Lebanon
Anguilla	Egypt	Lesotho
Antigua and Barbuda	El Salvador	Liberia
Argentina	Equatorial Guinea	Libya
Armenia	Eritrea	Lithuania
Aruba	Estonia	Luxembourg
Australia	Ethiopia	Macao
Austria	Faeroe Islands	Macedonia
Azerbaijan	Falkland Islands	Madagascar
Bahamas	Fiji	Malawi
Bahrain	Finland	Malaysia
Bangladesh	France	Maldives
Barbados	French Guiana	Mali
Belarus	French Polynesia	Malta
Belgium	Gabon	Martinique
Belize	Gambia	Mauritania
Benin	Georgia	Mauritius
Bermuda	Germany	Mexico
Bhutan	Ghana	Moldova
Bolivia	Gibraltar	Mongolia
Bosnia & Herzegovina	Greece	Montserrat
Botswana	Greenland	Morocco
Brazil	Grenada	Mozambique
Brunei Darussalam	Guadeloupe	Namibia
Bulgaria	Guam	Nauru
Burkina Faso	Guatemala	Nepal
Burma (Myanmar)	Guinea	Netherlands
Burundi	Guinea-Bissau	Netherlands Antilles
Cambodia	Guyana	New Caledonia
Cameroon	Haiti	New Zealand
Canada	Honduras	Nicaragua
Cape Verde	Hong Kong	Niger
Cayman Islands	Hungary	Nigeria
Central African Rep.	Iceland	Norway
Chad	India	Oman
Chile	Indonesia	Pakistan
China	Iran	Panama
Colombia	Iraq	Papua N. Guinea
Comoros	Ireland	Paraguay
Congo, Dem. Rep. of (Zaire)	Israel	Peru
Congo, Rep. of	Italy	Philippines
Costa Rica	Jamaica	Poland
Cote D'Ivoire (Ivory Coast)	Japan	Portugal
Croatia	Jordan	Qatar
Cuba	Kazakhstan	Reunion
Cyprus	Kenya	Romania
Czech Republic	Kiribati	Russia
Czechoslovakia	Korea, North	Rwanda
Denmark	Korea, South (R)	Samoa

Sao Tome & Principe
Saudi Arabia
Senegal
Seychelles
Sierra Leone
Singapore
Slovak Republic
Slovenia
Solomon Islands
Somalia
Somaliland, British
South Africa
Spain
Spanish Sahara
Sri Lanka
St. Helena
St. Kitts&Nevis
St. Pierre&Miquelon
St.Lucia
St.Vincent & Gren.

Sudan
Suriname
Swaziland
Sweden
Switzerland
Syria
Tajikistan
Tanzania
Thailand
Timor
Togo
Tonga
Trinidad&Tobago
Tunisia
Turkey
Turkmenistan
Tuvalu
U.S.S.R.
Uganda
Ukraine

United Arab Emirates
United Kingdom
United States
Uruguay
Uzbekistan
Vanuatu
Venezuela
Vietnam
Wake Islands
Wallis & Futuna
West Bank/Gaza Strip
Yemen Arab Rep.
Yemen, P.D.R.
Yemen, Republic of
Yugoslavia, Fr
(Serbia/Montenegro)
Yugoslavia, Socialist Fed. Rep.
Zambia
Zimbabwe

Appendix 2: Currency Unions in Sample

Currency Union Members		End			
			Bhutan	Pakistan	1966
Antigua And Barbuda	Barbados	1975	Botswana	Lesotho	1977
Antigua And Barbuda	Dominica	ongoing	Botswana	Swaziland	1977
Antigua And Barbuda	Grenada	ongoing	Brunei Darussalam	Malaysia	1971
Antigua And Barbuda	Guyana	1971	Brunei Darussalam	Singapore	ongoing
Antigua And Barbuda	Montserrat	ongoing	Burma(Myanmar)	India	1966
Antigua And Barbuda	St. Kitts&Nevis	ongoing	Burma(Myanmar)	Pakistan	1971
Antigua And Barbuda	St.Lucia	ongoing	Cameroon	Benin	ongoing
Antigua And Barbuda	St.Vincent&Gren	ongoing	Cameroon	Burkina Faso	ongoing
Antigua And Barbuda	Trinidad&Tobago	1976	Cameroon	Central African Rep.	ongoing
Aruba	Netherlands Antilles	ongoing	Cameroon	Chad	ongoing
Aruba	Suriname	1994	Cameroon	Comoros	1994
Australia	Kiribati	ongoing	Cameroon	Congo, Rep. Of	ongoing
Australia	Nauru	ongoing	Cameroon	Cote D'ivorie (Ivory Coast)	ongoing
Australia	Solomon Islands	1979	Cameroon	Equatorial Guinea	ongoing
Australia	Tonga	1991	Cameroon	Gabon	ongoing
Australia	Tuvalu	ongoing	Cameroon	Guinea	1969
Bangladesh	India	1974	Cameroon	Guinea-Bissau	ongoing
Barbados	Dominica	1975	Cameroon	Madagascar	1982
Barbados	Grenada	1975	Cameroon	Mali	ongoing
Barbados	Guyana	1971	Cameroon	Mauritania	1974
Barbados	Montserrat	1975	Cameroon	Niger	ongoing
Barbados	St. Kitts&Nevis	1975	Cameroon	Reunion	1976
Barbados	St.Lucia	1975	Cameroon	Senegal	ongoing
Barbados	St.Vincent&Gren	1975	Cameroon	Togo	ongoing
Barbados	Trinidad&Tobago	1975	Central African Rep.	Benin	ongoing
Belgium	Burundi	1964	Central African Rep.	Burkina Faso	ongoing
Belgium	Congo, Dem. Rep. Of (Zaire)	1961	Central African Rep.	Chad	ongoing
Belgium	Rwanda	1966	Central African Rep.	Comoros	1994
Belgium-Luxembourg	Burundi	1964	Central African Rep.	Congo, Rep. Of	ongoing
Belgium-Luxembourg	Congo, Dem. Rep. Of (Zaire)	1961	Central African Rep.	Cote D'ivorie (Ivory Coast)	ongoing
Belgium-Luxembourg	Rwanda	1966	Central African Rep.	Equatorial Guinea	ongoing
Benin	Burkina Faso	ongoing	Central African Rep.	Gabon	ongoing
Benin	Cote D'ivorie (Ivory Coast)	ongoing	Central African Rep.	Guinea	1969
Benin	Equatorial Guinea	ongoing	Central African Rep.	Guinea-Bissau	ongoing
Benin	Gabon	ongoing	Central African Rep.	Madagascar	1982
Benin	Guinea	1969	Central African Rep.	Mali	ongoing
Benin	Guinea-Bissau	ongoing	Central African Rep.	Mauritania	1974
Benin	Madagascar	1982	Central African Rep.	Niger	ongoing
Benin	Mali	ongoing	Central African Rep.	Reunion	1976
Benin	Mauritania	1974	Central African Rep.	Senegal	ongoing
Benin	Niger	ongoing	Central African Rep.	Togo	ongoing
Benin	Reunion	1976	Chad	Benin	ongoing
Benin	Senegal	ongoing	Chad	Burkina Faso	ongoing
Benin	Togo	ongoing	Chad	Comoros	1994
Bhutan	India	ongoing	Chad	Congo, Rep. Of	ongoing

Chad	Cote D'ivoirie (Ivory Coast)	ongoing	Cote D'ivoirie (Ivory Coast)	Togo	ongoing
Chad	Equatorial Guinea	ongoing	Denmark	Faeroe Islands	ongoing
Chad	Gabon	ongoing	Denmark	Greenland	ongoing
Chad	Guinea	1969	Djibouti	Benin	1949
Chad	Guinea-Bissau	ongoing	Djibouti	Burkina Faso	1949
Chad	Madagascar	1982	Djibouti	Cameroon	1949
Chad	Mali	ongoing	Djibouti	Central African Rep.	1949
Chad	Mauritania	1974	Djibouti	Chad	1949
Chad	Niger	ongoing	Djibouti	Comoros	1949
Chad	Reunion	1976	Djibouti	Congo, Rep. Of	1949
Chad	Senegal	ongoing	Djibouti	Cote D'ivoirie (Ivory Coast)	1949
Chad	Togo	ongoing	Djibouti	Gabon	1949
Comoros	Benin	1994	Djibouti	Guinea	1949
Comoros	Burkina Faso	1994	Djibouti	Madagascar	1949
Comoros	Congo, Rep. Of	1994	Djibouti	Mali	1949
Comoros	Cote D'ivoirie (Ivory Coast)	1994	Djibouti	Mauritania	1949
Comoros	Equatorial Guinea	1994	Djibouti	Niger	1949
Comoros	Gabon	1994	Djibouti	Reunion	1949
Comoros	Guinea	1969	Djibouti	Senegal	1949
Comoros	Madagascar	1982	Djibouti	Togo	1949
Comoros	Mali	1994	Dominica	Grenada	ongoing
Comoros	Mauritania	1974	Dominica	Guyana	1971
Comoros	Niger	1994	Dominica	Montserrat	ongoing
Comoros	Reunion	1976	Dominica	St. Kitts&Nevis	ongoing
Comoros	Senegal	1994	Dominica	St.Lucia	ongoing
Comoros	Togo	1994	Dominica	St.Vincent&Gren	ongoing
Congo, Rep. Of	Benin	ongoing	Dominica	Trinidad&Tobago	1976
Congo, Rep. Of	Burkina Faso	ongoing	Equatorial Guinea	Burkina Faso	ongoing
Congo, Rep. Of	Cote D'ivoirie (Ivory Coast)	ongoing	Equatorial Guinea	Cote D'ivoirie (Ivory Coast)	ongoing
Congo, Rep. Of	Equatorial Guinea	ongoing	Equatorial Guinea	Gabon	ongoing
Congo, Rep. Of	Gabon	ongoing	Equatorial Guinea	Guinea-Bissau	ongoing
Congo, Rep. Of	Guinea	1969	Equatorial Guinea	Mali	ongoing
Congo, Rep. Of	Guinea-Bissau	ongoing	Equatorial Guinea	Niger	ongoing
Congo, Rep. Of	Madagascar	1982	Equatorial Guinea	Senegal	ongoing
Congo, Rep. Of	Mali	ongoing	Equatorial Guinea	Togo	ongoing
Congo, Rep. Of	Mauritania	1974	France	Algeria	1969
Congo, Rep. Of	Niger	ongoing	France	French Guiana	ongoing
Congo, Rep. Of	Reunion	1976	France	Guadeloupe	ongoing
Congo, Rep. Of	Senegal	ongoing	France	Martinique	ongoing
Congo, Rep. Of	Togo	ongoing	France	Morocco	1959
Cote D'ivoirie (Ivory Coast)	Burkina Faso	ongoing	France	Reunion	ongoing
Cote D'ivoirie (Ivory Coast)	Madagascar	1982	France	St. Pierre&Miquelon	ongoing
Cote D'ivoirie (Ivory Coast)	Mali	ongoing	France	Tunisia	1958
Cote D'ivoirie (Ivory Coast)	Mauritania	1974	Gabon	Burkina Faso	ongoing
Cote D'ivoirie (Ivory Coast)	Niger	ongoing	Gabon	Cote D'ivoirie (Ivory Coast)	ongoing
Cote D'ivoirie (Ivory Coast)	Reunion	1976	Gabon	Guinea	1969
Cote D'ivoirie (Ivory Coast)	Senegal	ongoing	Gabon	Guinea-Bissau	ongoing

Gabon	Madagascar	1982	Madagascar	Burkina Faso	1982
Gabon	Mali	ongoing	Madagascar	Mali	1982
Gabon	Mauritania	1974	Madagascar	Mauritania	1974
Gabon	Niger	ongoing	Madagascar	Niger	1982
Gabon	Reunion	1976	Madagascar	Reunion	1976
Gabon	Senegal	ongoing	Madagascar	Senegal	1982
Gabon	Togo	ongoing	Madagascar	Togo	1982
Gambia	Ghana	1965	Malawi	Zambia	1967
Gambia	Nigeria	1967	Malawi	Zimbabwe	1967
Gambia	Sierra Leone	1965	Malaysia	Singapore	1971
Ghana	Nigeria	1965	Maldives	Mauritius	1967
Ghana	Sierra Leone	1965	Maldives	Pakistan	1971
Grenada	Guyana	1971	Mali	Burkina Faso	ongoing
Grenada	Montserrat	ongoing	Mali	Mauritania	1974
Grenada	St. Kitts&Nevis	ongoing	Mali	Niger	ongoing
Grenada	St.Lucia	ongoing	Mali	Reunion	1976
Grenada	St.Vincent&Gren	ongoing	Mali	Senegal	ongoing
Grenada	Trinidad&Tobago	1976	Mali	Togo	ongoing
Guinea	Burkina Faso	1969	Mauritania	Burkina Faso	1974
Guinea	Cote D'ivoire (Ivory Coast)	1969	Mauritania	Niger	1974
Guinea	Madagascar	1969	Mauritania	Reunion	1974
Guinea	Mali	1969	Mauritania	Senegal	1974
Guinea	Mauritania	1969	Mauritania	Togo	1974
Guinea	Niger	1969	Mauritius	Seychelles	1976
Guinea	Reunion	1969	Montserrat	St. Kitts&Nevis	ongoing
Guinea	Senegal	1969	Montserrat	St.Lucia	ongoing
Guinea	Togo	1969	Montserrat	St.Vincent&Gren	ongoing
Guinea-Bissau	Burkina Faso	ongoing	Montserrat	Trinidad&Tobago	1976
Guinea-Bissau	Cote D'ivoire (Ivory Coast)	ongoing	Netherlands Antilles	Suriname	1994
Guinea-Bissau	Mali	ongoing	New Caledonia	French Polynesia	ongoing
Guinea-Bissau	Niger	ongoing	New Caledonia	Vanuatu	1971
Guinea-Bissau	Senegal	ongoing	New Caledonia	Wallis & Futuna	ongoing
Guinea-Bissau	Togo	ongoing	New Zealand	Samoa	1967
Guyana	Montserrat	1971	Niger	Burkina Faso	ongoing
Guyana	St. Kitts&Nevis	1971	Niger	Reunion	1976
Guyana	St.Lucia	1971	Niger	Senegal	ongoing
Guyana	St.Vincent&Gren	1971	Niger	Togo	ongoing
Guyana	Trinidad&Tobago	1971	Nigeria	Sierra Leone	1965
India	Maldives	1966	Oman	India	1970
India	Mauritius	1966	Pakistan	Mauritius	1967
India	Pakistan	1966	Pakistan	Seychelles	1967
India	Seychelles	1966	Portugal	Angola	1976
Kenya	Somalia	1971	Portugal	Cape Verde	1977
Kenya	Tanzania	1978	Portugal	Guinea-Bissau	1977
Kenya	Uganda	1978	Portugal	Mozambique	1977
Kuwait	India	1961	Portugal	Sao Tome & Principe	1977
Lesotho	Swaziland	ongoing	Qatar	India	1966

Qatar	United Arab Emirates	ongoing	United Kingdom	Iraq	1967
Reunion	Burkina Faso	1976	United Kingdom	Ireland	1979
Reunion	Senegal	1976	United Kingdom	Israel	1954
Reunion	Togo	1976	United Kingdom	Jamaica	1969
Senegal	Burkina Faso	ongoing	United Kingdom	Jordan	1967
Senegal	Togo	ongoing	United Kingdom	Kenya	1967
Somalia	Tanzania	1971	United Kingdom	Kuwait	1967
Somalia	Uganda	1971	United Kingdom	Libya	1967
South Africa	Botswana	1977	United Kingdom	Malawi	1971
South Africa	Lesotho	ongoing	United Kingdom	Malta	1971
South Africa	Swaziland	ongoing	United Kingdom	New Zealand	1967
Spain	Equatorial Guinea	1969	United Kingdom	Nigeria	1967
Sri Lanka	India	1966	United Kingdom	Oman	1971
Sri Lanka	Pakistan	1967	United Kingdom	Samoa	1967
St. Kitts&Nevis	St.Lucia	ongoing	United Kingdom	Sierra Leone	1965
St. Kitts&Nevis	St.Vincent&Gren	ongoing	United Kingdom	Somalia	1967
St. Kitts&Nevis	Trinidad&Tobago	1976	United Kingdom	South Africa	1961
St. Pierre&Miquelon	Benin	1976	United Kingdom	St. Helena	ongoing
St. Pierre&Miquelon	Burkina Faso	1976	United Kingdom	Tanzania	1967
St. Pierre&Miquelon	Cameroon	1976	United Kingdom	Uganda	1967
St. Pierre&Miquelon	Central African Rep.	1976	United Kingdom	Yemen, P.D.R.	1972
St. Pierre&Miquelon	Chad	1976	United Kingdom	Yemen, Republic Of	1972
St. Pierre&Miquelon	Comoros	1976	United Kingdom	Zambia	1967
St. Pierre&Miquelon	Congo, Rep. Of	1976	United Kingdom	Zimbabwe	1967
St. Pierre&Miquelon	Cote D'ivoirie (Ivory Coast)	1976	United States	American Samoa	ongoing
St. Pierre&Miquelon	Djibouti	1949	United States	Bahamas	ongoing
St. Pierre&Miquelon	Gabon	1976	United States	Belize	1949
St. Pierre&Miquelon	Guinea	1969	United States	Bermuda	ongoing
St. Pierre&Miquelon	Madagascar	1976	United States	Dominican Rep.	1985
St. Pierre&Miquelon	Mali	1976	United States	Guam	ongoing
St. Pierre&Miquelon	Mauritania	1974	United States	Guatemala	1986
St. Pierre&Miquelon	Niger	1976	United States	Liberia	ongoing
St. Pierre&Miquelon	Reunion	1976	United States	Panama	ongoing
St. Pierre&Miquelon	Senegal	1976	Vanuatu	French Polynesia	1971
St. Pierre&Miquelon	Togo	1976	Vanuatu	Wallis & Futuna	1971
St.Lucia	St.Vincent&Gren	ongoing	Wallis & Futuna	French Polynesia	ongoing
St.Lucia	Trinidad&Tobago	1976	Yemen, P.D.R.	India	1951
St.Vincent&Gren	Trinidad&Tobago	1976	Yemen, P.D.R.	Kenya	1972
Tanzania	Uganda	1978	Yemen, P.D.R.	Somalia	1971
Togo	Burkina Faso	ongoing	Yemen, P.D.R.	Tanzania	1972
United Kingdom	Bahamas	1966	Yemen, P.D.R.	Uganda	1972
United Kingdom	Bermuda	1970	Yemen, Republic Of	India	1951
United Kingdom	Cyprus	1972	Yemen, Republic Of	Kenya	1972
United Kingdom	Falkland Islands	ongoing	Yemen, Republic Of	Somalia	1971
United Kingdom	Gambia	1971	Yemen, Republic Of	Tanzania	1972
United Kingdom	Ghana	1965	Yemen, Republic Of	Uganda	1972
United Kingdom	Gibraltar	ongoing	Zimbabwe	Zambia	1967

Appendix 3: Simple Bivariate Correlations

	Trade	Curr. Union	Distance	GDP	GDP p/c	Lang.	Border	Regional	Landlck	Island	Area	Com Col	Cur.Col	Ever Col
Curr. Union	.00													
Distance	-.17	-.18												
GDP	.67	-.14	.18											
GDP p/c	.41	-.13	.11	.38										
Language	-.01	.19	-.13	-.18	-.05									
Border	.11	.12	-.42	-.02	-.12	.12								
FTA	.08	.08	-.25	-.06	.08	.10	.08							
Landlocked	-.15	.04	-.09	-.12	-.21	-.01	.08	-.05						
Island	-.17	.00	.15	-.30	.20	.10	-.11	.08	-.19					
Area	.27	-.01	.10	.57	-.22	-.11	.10	-.13	.04	-.51				
Com. Colonizer	-.16	.26	-.15	-.32	-.18	.37	.06	.12	.02	.19	-.26			
Cur. Colony	.05	.15	.01	-.01	.01	.07	-.01	-.01	-.02	.01	-.03	-.02		
Ever Colony	.15	.08	-.02	.08	.06	.19	.03	.00	-.03	-.03	.01	-.05	.31	
Same Nation	.02	.05	.00	-.00	.02	.03	-.00	-.00	-.01	.02	-.03	-.01	.39	.12

Number of Observations = 219,558 => standard error ≈ .002.