How Do Nationalistic Antagonisms Affect Trade?

Online Appendix

Contents

1 Re-Randomization Process

Although we discuss our randomization inference procedures in the paper, we expand on them here for readers who are unfamiliar with randomization inference or who would like to replicate our results from scratch. We began by finding the average change in ln(Trade) for the pairs of countries that were randomly assigned to play in the World Cup group stage (from the first World Cup in 1930 until 2018). We found that these pairs of countries averaged an increase of 0.019 in ln(Trade) during the World Cup year.

To determine if a 0.019 increase was unusually low, we identified the exact randomization procedures for each World Cup from 1930 to 2018. Using these procedures, we built a computer algorithm that re-randomized the groups for every World Cup. Each time we ran this algorithm, we got a new set of World Cup groups for every tournament between 1930 and 2018. We could then identify the pairs of countries that would have played each other at the World Cup under this alternative randomization scheme.

The first time we ran this algorithm, we found that the pairs of countries that would have played in the hypothetical randomization scheme averaged a 0.025 increase in ln(Trade). We then ran the algorithm again, got a new hypothetical randomization scheme, and found that the pairs of countries in that scheme averaged a 0.027 increase in ln(Trade). We repeated this process 100,000 times in total, each time recording the average change in ln(Trade) for the pairs of countries that would have played in each alternative randomization scheme.

This process gave us a list with 100,000 values: $\{Y_{A1} = 0.025, Y_{A2} = 0.027, Y_{A3} = 0.026, Y_{A4} = 0.030, \text{... }, Y_{A100,000} = 0.019\}$. The "A" here stands for alternative, as each of these values comes from one of the 100,000 alternative randomization schemes. The average from all 100,000 of the hypothetical randomization schemes was 0.027. Thus, we had the following:

$Y_{REAL} = 0.019$

$Y_{A1} = 0.025$, $Y_{A2} = 0.027$, $Y_{A3} = 0.026$, $Y_{A4} = 0.030$, ... , $Y_{A100,000} = 0.019$

$\bar{Y}_A = 0.027$

Our null hypothesis was that the World Cup did not decrease bilateral trade. Under this assumption, we should not expect Y_{REAL} to be much lower than the typical number from $\{Y_{A1}$, ... , $Y_{A100,000}\}$. After all, under the null hypothesis, the real randomization scheme did not cause any countries to trade less with each other. The same is obviously true of the hypothetical randomization schemes, simply because they were hypothetical. Moreover, both the real and hypothetical randomization schemes followed the same procedures, so we should expect Y_{REAL} to not be much lower than the typical value from the hypothetical randomization schemes.

However, as we explained in the paper, Y_{REAL} was much lower than the typical value in $\{Y_{A1}$, ... , $Y_{A100,000}\}$. This suggests that the World Cup did have a negative impact on international trade. To calculate the one-sided p-value, we estimated the probability that the value from a hypothetical randomization scheme was as small or smaller than the value from the real randomization, $Y_{REAL} = 0.019$. We calculated this estimate with the following formula:

$$\begin{aligned} p &\approx \frac{\sum_{i=1}^{100,000}[Y_{Ai} \leq Y_{REAL}]}{100{,}000} \\ &\approx \frac{\sum_{i=1}^{100,000}[Y_{Ai} \leq 0.019]}{100{,}000} \\ &\approx 0.048 \end{aligned}$$

To get the p-value for the soccer dyads, we repeated the same procedures, but this time only looking at the pairs of countries where soccer was the most popular sport for both sides. Our

results were as follows:

$Y_{REAL} = 0.015$

$Y_{A1} = 0.023$, $Y_{A2} = 0.025$, $Y_{A3} = 0.028$, $Y_{A4} = 0.031$, ... , $Y_{A100,000} = 0.019$

$\bar{Y}_A = 0.026$

$$\begin{aligned} p &\approx \frac{\sum_{i=1}^{100,000}[Y_{Ai} \leq Y_{REAL}]}{100,000} \\ &\approx \frac{\sum_{i=1}^{100,000}[Y_{Ai} \leq 0.015]}{100,000} \\ &\approx 0.020 \end{aligned}$$

We followed the same approach to calculate the p-values for percentage change in trade and our binary $\{0,1\}$ drop-in-trade variable.

2 World Cup Groups

The following pages show the World Cup pots and groups. The 1930, 1950, 2002, 2006, 2014, and 2018 World Cups had slightly more complicated randomization procedures. We took these more complex formats into account when we conducted the 100,000 re-randomizations. Also, the 1934 and 1938 World Cups did not feature a group stage. Instead, the first round of the knockout stage pitted countries against each other that were randomly drawn from two pots. We counted this first knockout stage round as a miniature group stage where each group had two countries.

Figure 2a. Pots and Groups for the 1930 World Cup

Pots for the 1930 World Cup

Pot 1	Pot 2	
Brazil	Bolivia	Romania
Argentina	Chile	Belgium
Uruguay	Peru	Paraguay
United States	France	Mexico
	Yugoslavia	

Groups for the 1930 World Cup

Group 1	Group 2	Group 3	Group 4
Argentina	Yugoslavia	Uruguay	United States
Chile	Brazil	Romania	Paraguay
France	Bolivia	Peru	Belgium
Mexico			

Note: For the first World Cup, Brazil, Argentina, Uruguay, and the United States were put in one pot, and the remaining participants were randomly selected to make groups with these four countries.

Figure 2b. Pots and Groups for the 1934 World Cup

Pots for the 1934 World Cup

Pot 1	Pot 2
Argentina	United States
Brazil	Spain
Germany	France
Italy	Egypt
Netherlands	Romania
Austria	Switzerland
Czechoslovakia	Belgium
Hungary	Sweden

Groups for the 1934 World Cup

Group 1	Group 2	Group 3	Group 4
Italy	Spain	Austria	Hungary
United States	Brazil	France	Egypt
Group 5	**Group 6**	**Group 7**	**Group 8**
Czechoslovakia	Switzerland	Germany	Sweden
Romania	Netherlands	Belgium	Argentina

Note: For the second World Cup, there was no official group stage. The participants from Pot 1 were randomly assigned competitors from Pot 2, and the resulting pairs played in the first round of the knockout stage. However, given this random assignment, the first round of the knockout stage can essentially be thought of as a miniature group stage and analyzed in the same way as before.

Figure 2c. Pots and Groups for the 1938 World Cup

Pots for the 1938 World Cup

Pot 1	Pot 2
Germany	Belgium
France	Switzerland
Italy	Dutch East Indies
Czechoslovakia	Netherlands
Hungary	Norway
Cuba	Poland
Brazil	Romania
Austria (withdrew)	Sweden

Groups for the 1938 World Cup

Group 1	Group 2	Group 3	Group 4
Italy	France	Brazil	Czechoslovakia
Norway	Belgium	Poland	Netherlands
Group 5	**Group 6**	**Group 7**	**Group 8**
Hungary	Switzerland	Sweden	Cuba
Dutch East Indies	Germany	Austria (withdrew)	Romania

Note: The format of the 1938 World Cup was the same as for the 1934 World Cup.

Figure 2d. Pots and Groups for the 1950 World Cup

Pots for the 1950 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Brazil	England	Sweden	Uruguay
Mexico	Spain	Italy	France (withdrew)
Yugoslavia	Chile	Paraguay	Bolivia
Switzerland	United States	India (withdrew)	

Groups for the 1950 World Cup

Group 1	Group 2	Group 3	Group 4
Brazil	Spain	Sweden	Uruguay
Yugoslavia	England	Italy	Bolivia
Switzerland	Chile	Paraguay	France (withdrew)
Mexico	United States	India (withdrew)	

Figure 2e. Pots and Groups for the 1954 World Cup

Pots for the 1954 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Switzerland	Austria	France	Belgium
Uruguay	England	Italy	Mexico
Brazil	West Germany	Czechoslovakia	South Korea
Hungary	Yugoslavia	Turkey	Scotland

Groups for the 1954 World Cup

Group 1	Group 2	Group 3	Group 4
Brazil	Hungary	Uruguay	England
Yugoslavia	West Germany	Austria	Switzerland
France	Turkey	Czechoslovakia	Italy
Mexico	South Korea	Scotland	Belgium

Figure 2f. Pots and Groups for the 1958 World Cup

Pots for the 1958 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Sweden	Czechoslovakia	England	Argentina
West Germany	Hungary	Northern Ireland	Brazil
Austria	Soviet Union	Scotland	Mexico
France	Yugoslavia	Wales	Paraguay

Groups for the 1958 World Cup

Group 1	Group 2	Group 3	Group 4
West Germany	France	Sweden	Brazil
Northern Ireland	Yugoslavia	Wales	Soviet Union
Czechoslovakia	Paraguay	Hungary	England
Argentina	Scotland	Mexico	Austria

Figure 2g. Pots and Groups for the 1962 World Cup

Pots for the 1962 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Chile	Czechoslovakia	Italy	Bulgaria
Brazil	England	Hungary	Colombia
Argentina	Soviet Union	Spain	Mexico
Uruguay	West Germany	Yugoslaiva	Switzerland

Groups for the 1962 World Cup

Group 1	Group 2	Group 3	Group 4
Soviet Union	West Germany	Brazil	Hungary
Yugoslavia	Chile	Czechoslovakia	England
Uruguay	Italy	Mexico	Argentina
Colombia	Switzerland	Spain	Bulgaria

Figure 2h. Pots and Groups for the 1966 World Cup

Pots for the 1966 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Brazil	England	France	Bulgaria
Argentina	Hungary	Portugal	North Korea
Chile	Soviet Union	Spain	Mexico
Uruguay	West Germany	Italy	Switzerland

Groups for the 1966 World Cup

Group 1	Group 2	Group 3	Group 4
England	West Germany	Portugal	Soviet Union
Uruguay	Argentina	Hungary	North Korea
Mexico	Spain	Brazil	Italy
France	Switzerland	Bulgaria	Chile

Figure 2i. Pots and Groups for the 1970 World Cup

Pots for the 1970 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
England	Brazil	Belgium	El Salvador
Italy	Mexico	Bulgaria	Israel
Soviet Union	Peru	Czechoslovakia	Morocco
West Germany	Uruguay	Sweden	Romania

Groups for the 1970 World Cup

Group 1	Group 2	Group 3	Group 4
Soviet Union	Italy	Brazil	West Germany
Mexico	Uruguay	England	Peru
Belgium	Sweden	Romania	Bulgaria
El Salvador	Israel	Czechoslovakia	Morocco

Figure 2j. Pots and Groups for the 1974 World Cup

Pots for the 1974 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
West Germany	Bulgaria	Brazil	Australia
Italy	East Germany	Argentina	Haiti
Netherlands	Poland	Chile	Sweden
Scotland	Yugoslavia	Uruguay	Zaire

Groups for the 1974 World Cup

Group 1	Group 2	Group 3	Group 4
East Germany	Yugoslavia	Netherlands	Poland
West Germany	Brazil	Sweden	Argentina
Chile	Scotland	Bulgaria	Italy
Australia	Zaire	Uruguay	Haiti

Figure 2k. Pots and Groups for the 1978 World Cup

Pots for the 1978 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Argentina	Italy	Hungary	Austria
West Germany	Sweden	Poland	France
Netherlands	Mexico	Scotland	Iran
Brazil	Peru	Spain	Tunisia

Groups for the 1978 World Cup

Group 1	Group 2	Group 3	Group 4
Italy	Poland	Austria	Peru
Argentina	West Germany	Brazil	Netherlands
France	Tunisia	Spain	Scotland
Hungary	Mexico	Sweden	Iran

Figure 2l. Pots and Groups for the 1982 World Cup

Pots for the 1982 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Spain	Austria	Belgium	Algeria
Argentina	Czechoslovakia	France	Cameroon
Brazil	Hungary	Northern Ireland	Kuwait
England	Poland	Scotland	El Salvador
Italy	Soviet Union	Chile	Honduras
West Germany	Yugoslavia	Peru	New Zealand

Groups for the 1982 World Cup

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Poland	West Germany	Belgium	England	Northern Ireland	Brazil
Italy	Austria	Argentina	France	Spain	Soviet Union
Cameroon	Algeria	Hungary	Czechoslovakia	Yugoslavia	Scotland
Peru	Chile	El Salvador	Kuwait	Honduras	New Zealand

Figure 2m. Pots and Groups for the 1986 World Cup

Pots for the 1986 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Mexico	England	Algeria	Belgium
Italy	Soviet Union	Canada	Bulgaria
West Germany	Argentina	Denmark	Hungary
Poland	Spain	Iraq	Northern Ireland
France	Paraguay	Morocco	Portugal
Brazil	Uruguay	South Korea	Scotland

Groups for the 1986 World Cup

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Argentina	Mexico	Soviet Union	Brazil	Denmark	Morocco
Italy	Paraguay	France	Spain	West Germany	England
Bulgaria	Belgium	Hungary	Northern Ireland	Uruguay	Poland
South Korea	Iraq	Canada	Algeria	Scotland	Portugal

Figure 2n. Pots and Groups for the 1990 World Cup

Pots for the 1990 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Italy	Cameroon	Colombia	Austria
Argentina	Costa Rica	Czechoslovakia	Netherlands
Brazil	Egypt	Ireland	Scotland
West Germany	South Korea	Romania	Spain
Belgium	United Arab Emirates	Sweden	Soviet Union
England	United States	Uruguay	Yugoslavia

Groups for the 1990 World Cup

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Italy	Cameroon	Brazil	West Germany	Spain	England
Czechoslovakia	Romania	Costa Rica	Yugoslavia	Belgium	Ireland
Austria	Argentina	Scotland	Colombia	Uruguay	Netherlands
United States	Soviet Union	Sweden	United Arab Emirates	South Korea	Egypt

Figure 2o. Pots and Groups for the 1998 World Cup

Pots for the 1998 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
France	Austria	Chile	Cameroon
Brazil	Belgium	Colombia	Jamaica
Argentina	Bulgaria	Iran	Mexico
Germany	Croatia	Japan	Morocco
Italy	Denmark	Paraguay	Nigeria
Netherlands	England	Saudi Arabia	South Africa
Romania	Scotland	South Korea	Tunisia
Spain	Yugoslavia		United States
	Norway		

Groups for the 1998 World Cup

Group 1	Group 2	Group 3	Group 4
Brazil	Italy	France	Nigeria
Norway	Chile	Denmark	Paraguay
Morocco	Austria	South Africa	Spain
Scotland	Cameroon	Saudi Arabia	Bulgaria
Group 5	**Group 6**	**Group 7**	**Group 8**
Netherlands	Germany	Romania	Argentina
Mexico	Yugoslavia	England	Croatia
Belgium	Iran	Colombia	Jamaica
South Korea	United States	Tunisia	Japan

Note: The final team from Pot 2 was drawn into one of the two groups that did not already have two European teams (either Brazil or Argentina's group).

Figure 2p. Pots and Groups for the 2002 World Cup

Pots for the 2002 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Argentina	Belgium	China	Cameroon
Brazil	Croatia	Ecuador	Costa Rica
France	Denmark	Paraguay	Mexico
Germany	England	Saudi Arabia	Nigeria
Italy	Poland	Uruguay	Senegal
Japan	Portugal		South Africa
South Korea	Ireland		Tunisia
Spain	Russia		United States
	Slovenia		
	Sweden		
	Turkey		

Groups for the 2002 World Cup

Group 1	Group 2	Group 3	Group 4
Denmark	Spain	Brazil	South Korea
Senegal	Paraguay	Turkey	United States
Uruguay	South Africa	Costa Rica	Portugal
France	Slovenia	China	Poland
Group 5	**Group 6**	**Group 7**	**Group 8**
Germany	Sweden	Mexico	Japan
Ireland	England	Italy	Belgium
Cameroon	Argentina	Croatia	Russia
Saudi Arabia	Nigeria	Ecuador	Tunisia

Note: The last three teams in Pot 2 were drawn into three of the four groups which did not already have two European teams. Also, no South American team from Pot 2, 3, or 4 could be in the same group as Brazil or Argentina, and no Asian team from Pot 2, 3, or 4 could be in the same group as South Korea or Japan.

Figure 2q. Pots and Groups for the 2006 World Cup

Pots for the 2006 World Cup

Pot 1	Pot 2	Pot 3	Pot 4	Pot 5
Argentina	Angola	Croatia	Costa Rica	Serbia and Montenegro
Brazil	Australia	Czech Republic	Iran	
England	Ecuador	Netherlands	Japan	
France	Ghana	Poland	Saudi Arabia	
Germany	Ivory Coast	Portugal	South Korea	
Italy	Paraguay	Sweden	Trinidad	
Mexico	Togo	Switzerland	United States	
Spain	Tunisia	Ukraine		

Groups for the 2006 World Cup

Group 1	Group 2	Group 3	Group 4
Germany	England	Argentina	Portugal
Ecuador	Sweden	Netherlands	Mexico
Poland	Paraguay	Ivory Coast	Angola
Costa Rica	Trinidad and Tobago	Serbia and Montenegro	Iran
Group 5	**Group 6**	**Group 7**	**Group 8**
Italy	Brazil	Switzerland	Spain
Ghana	Australia	France	Ukraine
Czech Republic	Croatia	South Korea	Tunisia
United States	Japan	Togo	Saudi Arabia

Note: Serbia and Montenegro was put in a special pot and drawn first with one country from Pot 2, one country from Pot 3, and one of the three non-European teams from Pot 1 (Argentina, Brazil, or Mexico).

Figure 2r. Pots and Groups for the 2010 World Cup

Pots for the 2010 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
South Africa	Australia	Algeria	Denmark
Brazil	Japan	Cameroon	France
Spain	North Korea	Ghana	Greece
Netherlands	South Korea	Ivory Coast	Portugal
Italy	Spain	Nigeria	Serbia
Germany	Mexico	Chile	Slovakia
Argentina	United States	Paraguay	Slovenia
England	New Zealand	Uruguay	Switzerland

Groups for the 2010 World Cup

Group 1	Group 2	Group 3	Group 4
Uruguay	Argentina	United States	Germany
Mexico	South Korea	England	Ghana
South Africa	Greece	Slovenia	Australia
France	Nigeria	Algeria	Serbia
Group 5	**Group 6**	**Group 7**	**Group 8**
Netherlands	Paraguay	Brazil	Spain
Japan	Slovakia	Portugal	Chile
Denmark	New Zealand	Ivory Coast	Switzerland
Cameroon	Italy	North Korea	Honduras

Figure 2s. Pots and Groups for the 2014 World Cup

Pots for the 2014 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Brazil	Algeria	Australia	Portugal
Argentina	Cameroon	Iran	Bosnia and Herzegovina
Colombia	Ghana	Japan	Croatia
Uruguay	Ivory Coast	South Korea	England
Belgium	Nigeria	Costa Rica	France
Germany	Chile	Honduras	Greece
Spain	Ecuador	Mexico	Netherlands
Switzerland	Italy	United States	Russia

Groups for the 2014 World Cup

Group 1	Group 2	Group 3	Group 4
Brazil	Netherlands	Colombia	Costa Rica
Mexico	Chile	Greece	Uruguay
Croatia	Spain	Ivory Coast	Italy
Cameroon	Australia	Japan	England
Group 5	**Group 6**	**Group 7**	**Group 8**
France	Argentina	Germany	Belgium
Switzerland	Nigeria	United States	Algeria
Ecuador	Bosnia and Herzegovina	Portugal	Russia
Honduras	Iran	Ghana	South Korea

Note: Italy was initially in Pot 4, which started with nine European teams. Italy was randomly selected from that pot to be in Pot 2. After Italy was moved to Pot 2, it was arranged that they would be selected into the same group as one of the four South American teams in Pot 1. Doing this ensured that no group would have three European teams. Similarly, the two South American teams in Pot 2 could not be selected into a group that had a South American team from Pot 1.

Figure 2t. Pots and Groups for the 2018 World Cup

Pots for the 2018 World Cup

Pot 1	Pot 2	Pot 3	Pot 4
Germany	Spain	Denmark	Serbia
Brazil	Peru	Iceland	Nigeria
Portugal	Switzerland	Costa Rica	Australia
Argentina	England	Sweden	Japan
Belgium	Colombia	Tunisia	Morocco
Poland	Mexico	Egypt	Panama
France	Uruguay	Senegal	South Korea
Russia	Croatia	Iran	Saudi Arabia

Groups for the 2018 World Cup

Group 1	Group 2	Group 3	Group 4
Russia	Portugal	France	Argentina
Uruguay	Spain	Peru	Croatia
Egypt	Iran	Morocco	Iceland
Saudi Arabia	Australia	Denmark	Nigeria

Group 5	Group 6	Group 7	Group 8
Brazil	Germany	Belgium	Poland
Switzerland	Mexico	England	Colombia
Costa Rica	Sweden	Tunisia	Algeria
Serbia	South Korea	Panama	Japan

Note: It was prearranged that no teams from the same continent would be assigned to the same group, except for European teams. Every group was required to have either one or two European teams.

3 Verifying Balance in the Data

Figure 3a shows how similar the alternative randomization schemes were to the actual randomization scheme. Basically, we just want to make sure that the actual randomization scheme looked similar to most of the hypothetical randomization schemes. If not, then it would suggest that the real randomization scheme was not actually random (because FIFA rigged the draws in some way) or that it was random but turned out very atypical because of some fluke. However, Figure 3a indicates that the real randomization scheme looked pretty normal. For balance tests like this, we should expect the p-values for the covariates to be distributed about uniformly between 0 and 1, and that seems to bear out in the data.

Figure 3b shows the balance for our regression discontinuity analysis. This balance looks even better than what we would expect in an actual experiment. Therefore, there is little reason to think that our findings might be explained by confounding.

Figure 3a. Balance for the Soccer Dyads in Table 1 (Played vs. Did Not Play)

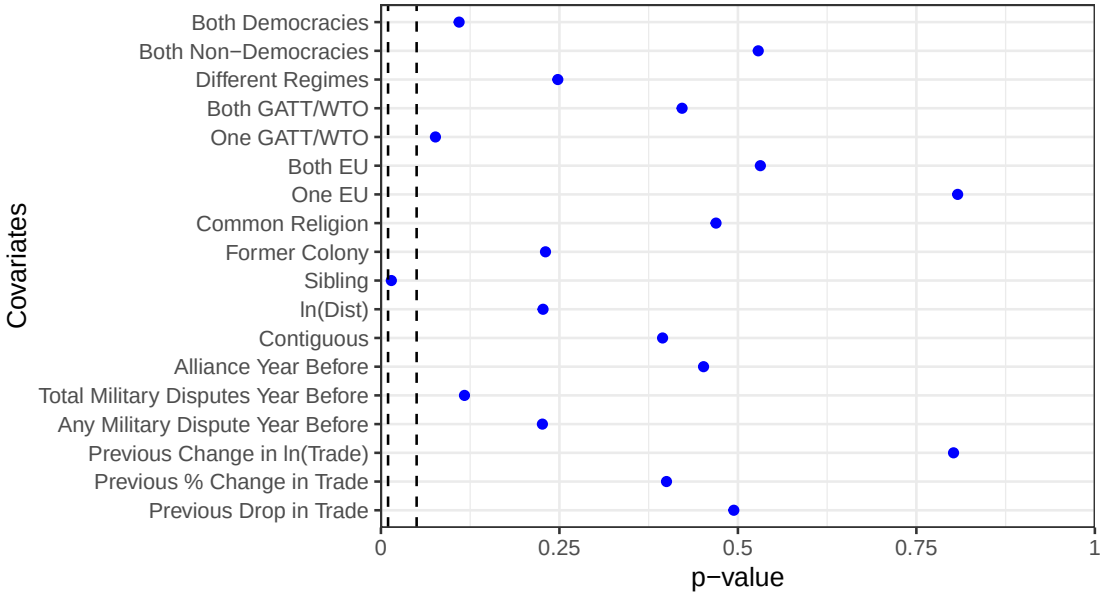
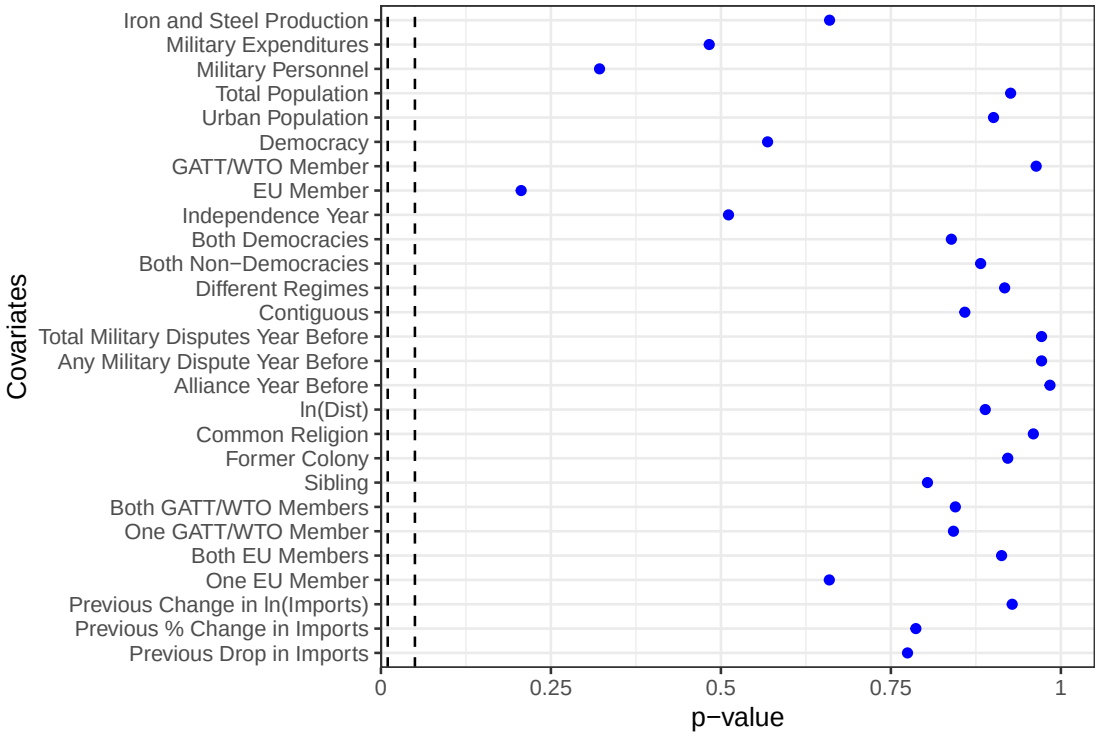


Figure 3b. Balance for the Soccer Countries in Table 2 (Losers vs. Winners)



4 Controlling for Baseline Covariates

To test the robustness of our results, we created an algorithm that randomly selected different combinations of the covariates and checked to see if the results remained significant for each combination (Hainmueller and Hangartner 2013). In total, we randomly selected 10,000 different sets of covariates and ran regression models for each of them. The results proved very robust. The distributions of the p-values are presented in Figures 4a-4f. This high level of robustness is not surprising, because controlling for baseline factors should matter little for natural experiments and regression discontinuities with large sample sizes.

Figure 4a. Controlling for Random Combinations of the Covariates (Soccer Dyads–Played vs. Did Not Play–Change in ln(Trade))

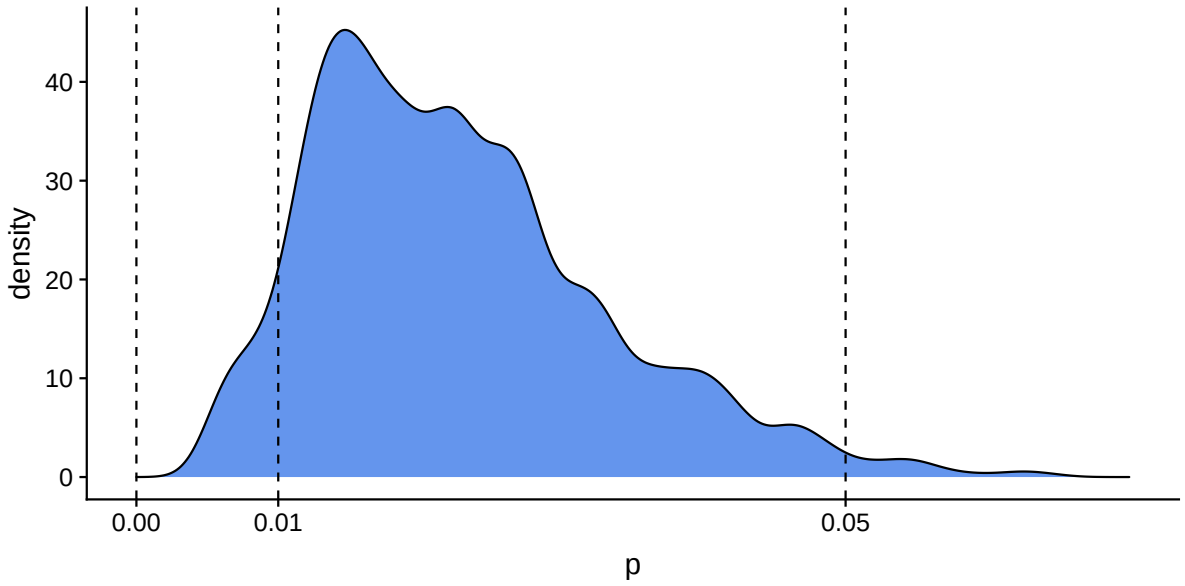


Figure 4b. Controlling for Random Combinations of the Covariates (Soccer Dyads–Played vs. Did Not Play–Percentage Change in Trade)

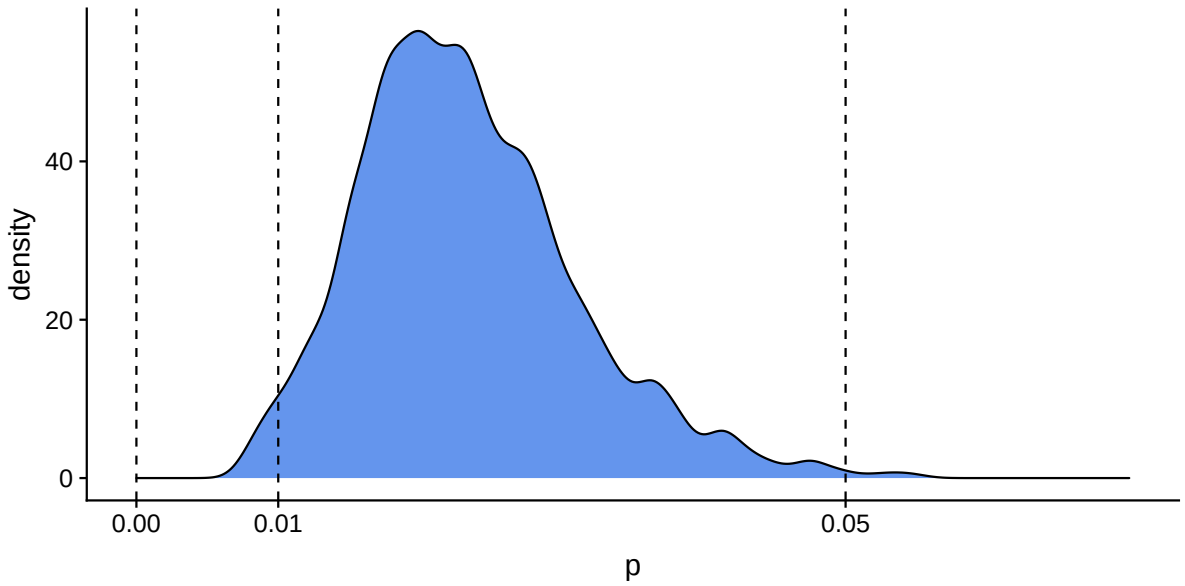


Figure 4c. Controlling for Random Combinations of the Covariates (Soccer Dyads–Played vs. Did Not Play–Drop in Trade)

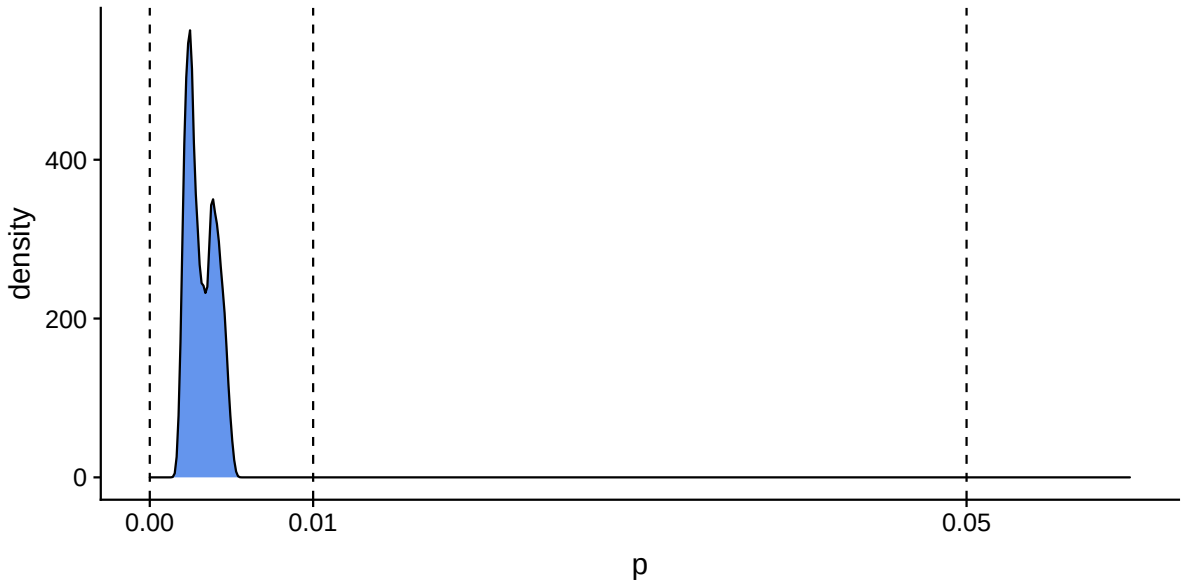


Figure 4d. Controlling for Random Combinations of the Covariates (Soccer Countries–Losers vs. Winners–Change in ln(Imports))

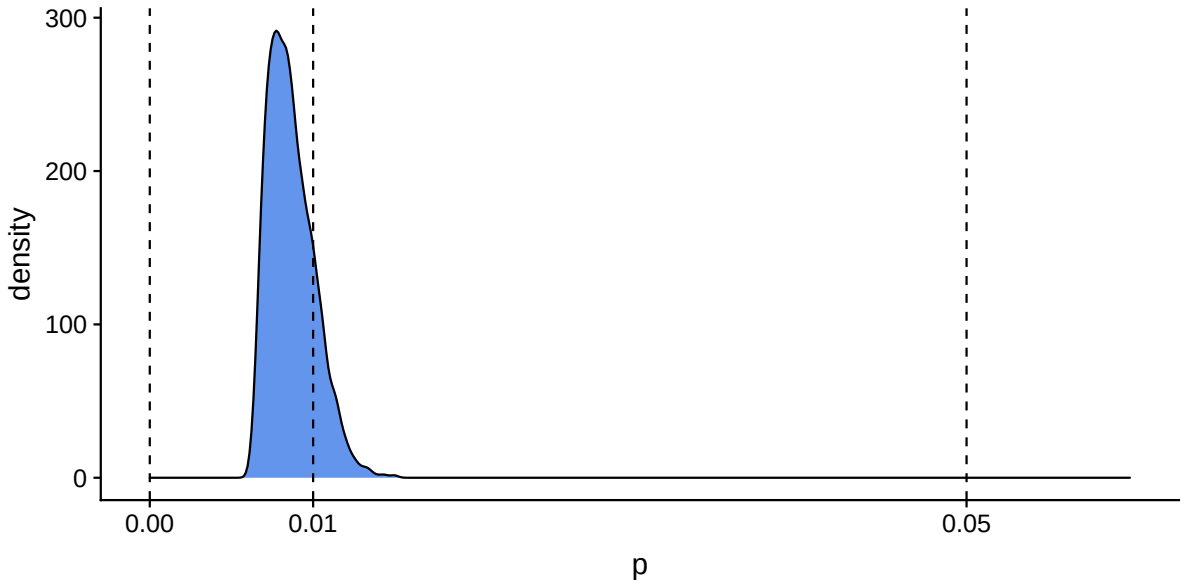


Figure 4e. Controlling for Random Combinations of the Covariates (Soccer Countries–Losers vs. Winners–Percentage Change in Imports)

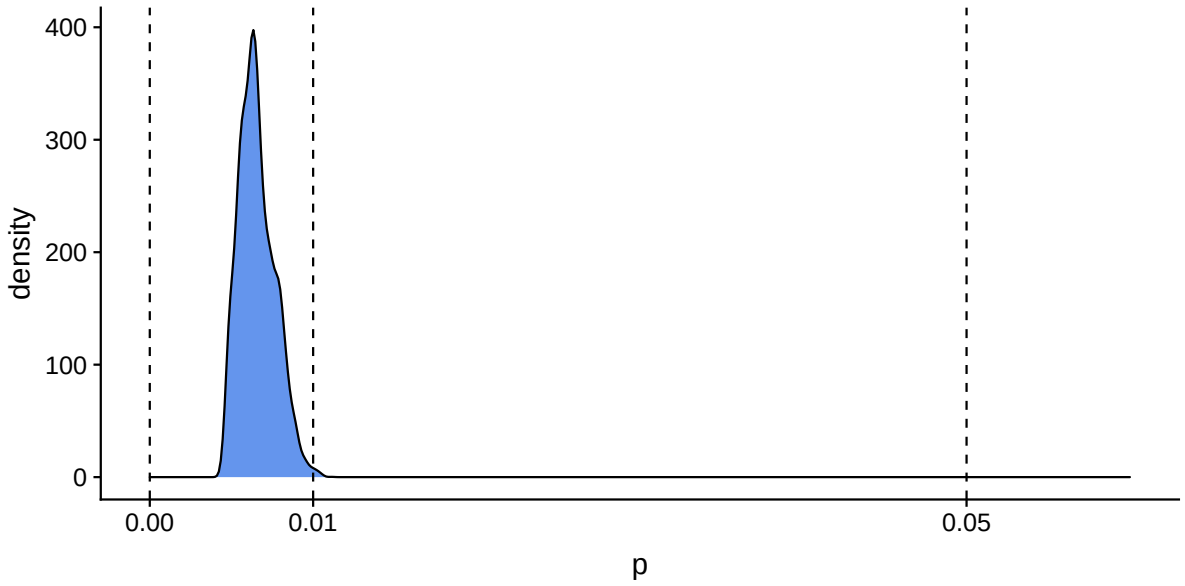


Figure 4f. Controlling for Random Combinations of the Covariates (Soccer Countries–Losers vs. Winners–Drop in Imports)

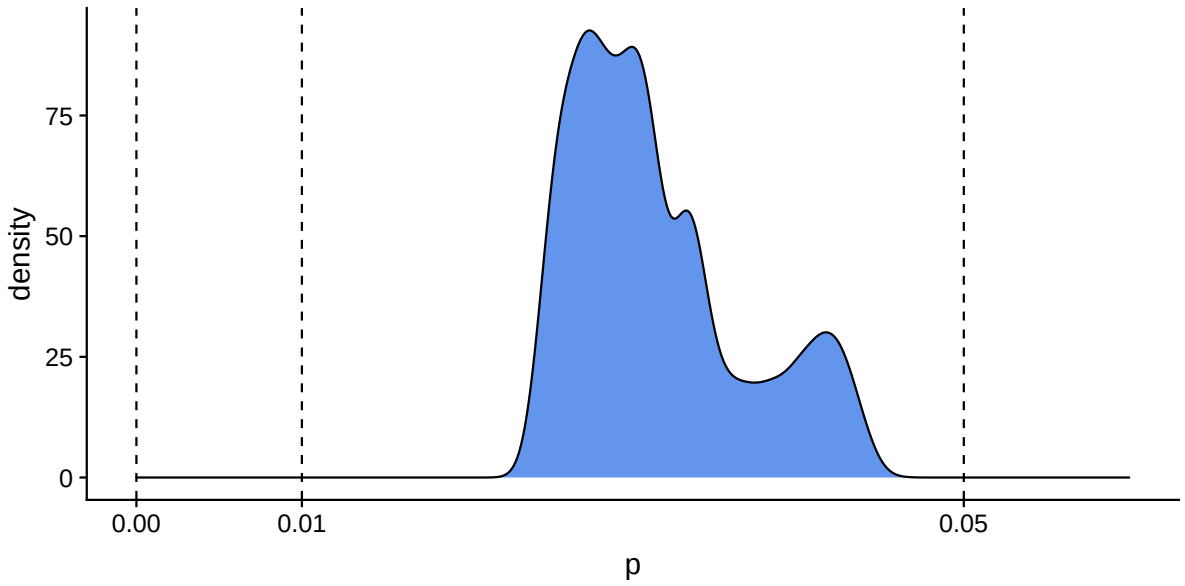
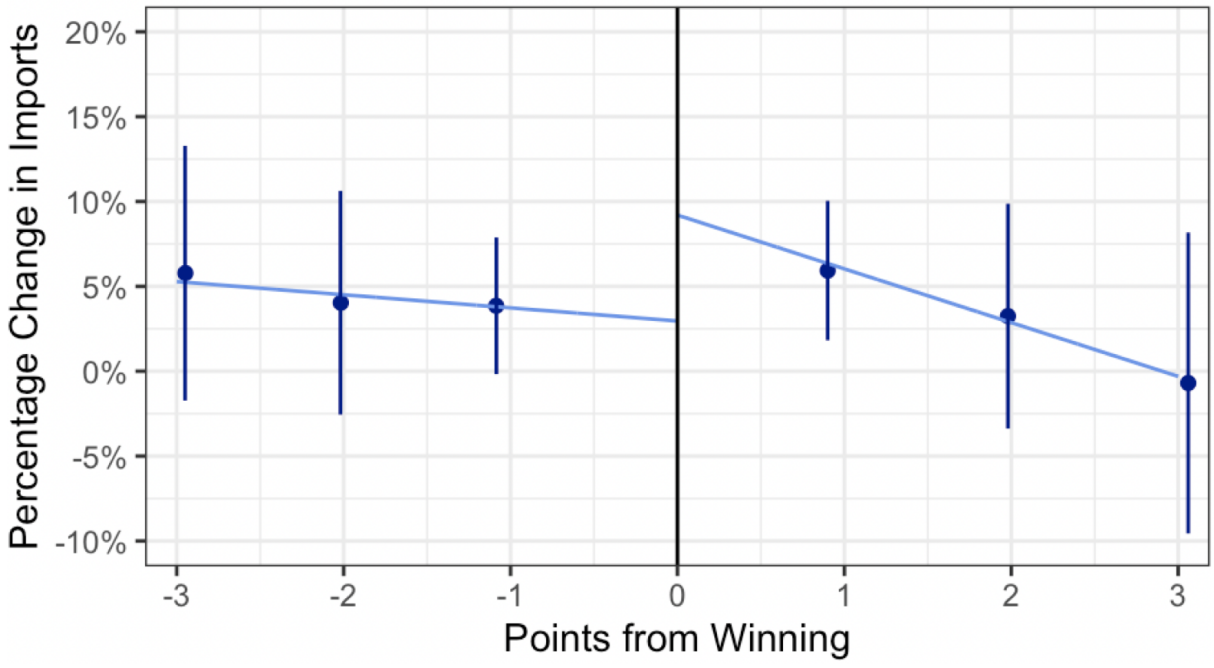


Figure 5. Illustrating the Discontinuity at the Cut-point



5 Regression Discontinuity Graph

Figure 5 plots the data around the cut-point, using the rdrobust optimal bandwidth of h≈3.6. On both sides of the cut-point, there is a clear linear downward trend. However, the graph shows a notable discontinuity at the cut-point as countries move from barely losing to barely winning. The data therefore appears to be very linear except where countries shift from losing to winning, where we see a clear difference. The local linear regression approach adjusts for these trends. The results for percent change in trade are also statistically significant for the comparison of countries that won or lost by one point (with controls–p≈0.043). However, the results for this more narrow comparison are not quite statistically significant at the 5% level for ln(Change in Imports) (p≈0.099) or our binary variable for whether countries experienced a drop in imports (p≈0.191).

6 Data Sources

The data for trade was taken from the Trade dataset (v4.0) from the Correlates of War database (Barbieri, Keshk, and Pollins 2009; Barbieri and Keshk 2016). It can be downloaded here. The data on iron and steel production, military expenditures, military personnel, total population, and urban population are also available in the Correlates of War database, in the National Material Capabilities dataset (v5.0), available here (Singer, Bremer, and Stuckey 1972). The data on alliances came from the Formal Alliance dataset (v4.1) in the Correlates of War database, available here (Gibler 2009). The data on military disputes was taken from the Militarized Interstate Dispute dataset (v5.0), available here (Palmer et al. 2021). The data on which countries are democracies came from the Polity IV dataset, available here (Marshall, Gurr, and Jaggers 2013). The data on state independence years was obtained from the State Membership dataset (v2016) in the Correlates of War database, available here (Correlates of War Project 2017). The data on which countries are contiguous is provided in the Correlates of War Direct Contiguity dataset (v3.2), available here (Stinnett et al. 2002; Correlates of War Project 2016). The data on GATT and EU Membership, colonial history, distance between countries, and religious similarity came from the CEPII Gravity dataset, available here (Head, Mayer, and Ries 2010).

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