The World Cup, Nationalism, and International Trade
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ABSTRACT. Can surges of nationalism undermine trade between countries? Past studies have identified several notable cases where nationalism from political disputes seemingly disrupted international trade. However, research on this topic has remained very limited when it comes to both theory and empirics. We provide a theoretical explanation for how nationalism could cause countries to experience a drop in trade. We then take advantage of a natural experiment to test this theory. Building off recent research that uses international sports as an exogenous source of nationalism, we examine whether pairs of countries become more likely to experience drops in trade when they compete at the World Cup. Specifically, we take advantage of the random assignment of countries to compete against each other in the group stage of the World Cup from 1930-2014 (n=486 pairs). Using randomization inference, we find that World Cup competition undermines trade between countries. Overall, the estimates suggest that competing at the World Cup increases the likelihood that two countries will experience a drop in trade by 12%, and 17% if soccer is the most popular sport for both sides. These results should heighten concerns about the potential for rising levels of nationalism to disrupt global markets.
Standard models in political economy assume that individuals are self-interested agents who seek to maximize their material well-being. However, as a growing body of studies in behavioral economics shows, individual preferences are more complex. In addition to our own material well-being, we are often concerned with the welfare of other individuals (Benabou and Tirole 2006), along with the ethical implications of economic activities (Hiscox, Hainmueller, and Sequeira 2015).

In this paper, we explore how nationalism – one of the most important political phenomena in the modern era – affects international trade. This is a timely topic, as both nationalism and protectionism seem to be on the rise today. Following past research that uses international sports as an exogenous source of nationalism (Bertoli 2017), we examine whether countries are more likely to experience drops in trade if they are randomly assigned to compete against each other at the World Cup. Our study is possibly the largest natural experiment in history in terms of the sheer number of people involved. Between 1930 and 2014, 590 pairs of nations were randomly assigned to compete in the group stage of the World Cup. Of these 590 pairs, 486 were trading partners whose trade records are available in the public domain (Barbieri, Keshk, and Pollins 2009). This gives us a very large sample to investigate how trade patterns between these pairs of countries changed due to nationalism from the World Cup.

We find that the pairs of countries that competed against each other in the group stage of the World Cup from 1930-2014 were much more likely than normal to experience drops in trade. Overall, our estimates suggest that competing at the World Cup increases the likelihood that two countries will experience a drop in trade by about 12% from baseline. Moreover, the results are driven by pairs of countries where soccer is the most popular
sport for both sides. The estimates suggest that World Cup competition increases the likelihood that these countries will experience a drop in trade by 17%.

Building on sociological and social psychological theories of identity, we theorize why nationalism triggered by the World Cup depresses trade. We argue that nationalism can cause people to suffer from cognitive dissonance for buying imports from rival countries, which would contradict the nationalist view that such foreign goods are inferior and that individuals are obligated to uphold the well-being and distinctiveness of their national community (Goff 2000; Balabanis et al 2001). For instance, if France and Germany play against each other in the World Cup, the resulting nationalism could make people in Germany less likely to buy French wine and people in France less likely to buy German beer. These behaviors have sociological and social psychological roots.

To our knowledge, this is the first large-n statistical analysis that tests how economic nationalism affects trade relations between countries. Many existing studies that look at the political determinants of economic behavior utilize experiments and surveys (Rho and Tomz 2017). While surveys and experiments are invaluable, they often do not tell us how nationalism – or any other values – actually drive economic behavior in the “real world” beyond sometimes highly artificial scenarios. Moreover, studies that do look at real-world behavior tend to focus on single cases, such as the “Freedom Fries” boycott following the U.S. invasion of Iraq in 2003 (Michaels and Zhi 2010). While these studies are valuable and provide much of the inspiration for this paper, they are inherently limited in their scope. With our study, we explore the nature and consequences of nationalism on trade in a new and much more comprehensive way.
Theoretical Framework

As a starting point, let us clarify what we mean by the term “nationalism,” which often gets used in a variety of different ways. When we use the term, we are referring to attachment to one’s nation-state. This definition corresponds to how the term commonly gets used inside and outside academia (Orwell 1945; Anderson 1983; Hobsbawm 1990; Greenfeld 1993). It is important to note that patriotism – defined as pride in one’s nation (Kosterman and Feshbach 1989) – is distinct from nationalism. Patriotism is an expression of nationalism that can only arise once someone has already adopted a national identity. In other words, nationalism is analytically prior to patriotism. Nationalism also often produces other feelings besides patriotism, such as animosity toward certain foreign countries. Such feelings likewise should not be conflated with nationalism. Like patriotism, they are the consequences of it.

Given our definition of nationalism, we define economic nationalism as one’s exhibition of national attachment when one thinks about economic affairs. We consciously depart from the conventional definition of economic nationalism, which conceptualizes the term as a type of ideology, e.g. mercantilism or statism (Viner 1945). We make this choice for three reasons. First, we do not derive any additional analytical utility by equating economic nationalism with either mercantilism or statism. Indeed, this approach to economic nationalism risks conflating very different terms in political economy (Baldwin 1980). Second, equating economic nationalism with mercantilism or statism is anachronistic; both mercantilism and statism predates the emergence of modern nation-states (Nakano 2004, 2). Third, and most importantly, nationalism – if we accept its standard definition above – is potentially compatible with a range of different economic ideologies as long as they promise economic prosperity for the nation (Pickel 2003).
How might nationalism affect broad patterns in consumer behavior? As the prominent sociologist Pierre Bourdieu argues, we are defined by what we buy. Teenagers buy certain apparel to appear “cool,” and aspiring members of the middle class buy houses in particular areas to signal their new socio-economic status. In a globalized world, consumption of foreign goods, television programs and music is associated with the emergence of a global culture, if not a cosmopolitan identity (Falk 1999; Goff 2000; Holton 2000; Parameswaran 2002; Daniels 2003). Nationalism could therefore make people less inclined to buy foreign goods. This is especially true for products that come from countries that individuals view as competitors or adversaries to their nations. People’s national identities are not just defined by their languages and habits, but also by what they own and consume.

Specifically, we theorize that national identity is linked to consumption in three ways. First, nationalism should lead people to view products from rival countries as inferior. This derives from the standard social identity theory (SIT) argument that individuals who highly value their group identity – in this case, their national identity – are more likely to denigrate out-groups and everything associated with them to boost their self-esteem (Tajfel and Turner 1979). Therefore, nationalism should make people less likely to consume foreign goods that come from countries that they perceive as competitors to their nations.

Second, nationalism should make people less willing to buy products from rival countries because they do not want the members of those nations to benefit economically (Balabanis et al 2001; Mansfield and Mutz 2009). Thus, they may prefer to purchase goods that were produced domestically, or that at least come from countries that have better relations with their nation. By doing so, they are supporting other individuals who they perceive to be on their own side as opposed to the members of a rival nation-state.
Third, people who are very nationalistic might worry that buying imports could undermine their own nation’s cultural distinctiveness and potentially help spread the cultures of rival nations (Goff 2000). As the “McWorld” of “fast food, fast music and fast computers” expands, local cultures and identity disappear (Barber 2000). Nationalism should therefore encourage people to prefer domestic products and openly discriminate against imports from rival countries. By buying such imports, they are likely to suffer from a “identity cost,” which derives from an “inappropriate” behavior that would contradict their attitudes toward rival countries and generate cognitive dissonance (Festinger 1957).

Beyond the impact on one’s nationalist psyche, consuming imports from rival countries could also have social consequences. Buying imports from a country that is widely viewed as a competitor could signal to others that one is not nationalistic and encourage sanctions from nationalists. For instance, during episodes of anti-Japanese protests in China in recent decades, Chinese individuals with Japanese cars have often been attacked by the protesters (Weiss 2014). Consequently, even non-nationalistic individuals might have good reason to discriminate against products from a rival country if they are surrounded by nationalists.

Therefore, there are strong theoretical reasons for believing that a surge of nationalism could cause people to become less willing to buy goods from a rival country. It could lead them to perceive products from that country as inferior, make them resist its economic and cultural influence, and create social pressures to avoid purchasing goods from that country.

**Existing Research**

A number of past studies have found evidence that temporary spikes in nationalism can lead to trade disruptions. For example, one notable article found that when France protested the U.S. invasion of Iraq in 2003, the resulting controversy caused a 9% drop
in trade between the two nations (Michaels and Zhi 2010). This drop reflected a sharp
decline in imports on both sides as the political situation sparked nationalist passions in
each country. For instance, in the United States, France’s approval rating dropped by 48
percentage points between 2002 and 2003. Micheals and Zhi use a number of statisti-
cal models to illustrate that this rising animosity had serious consequences on consumer
behavior in the two countries.

Similarly, Fisman, Hamao, and Wang (2014) identify two cases where nationalistic ten-
sions between China and Japan caused a temporary drop in trade. The first occurred in
2005, when the Japanese government authorized the use of a history textbook that white-
washed Japanese atrocities during World War II. The second dispute started in 2010, after
a Chinese trawler collided with two Japanese coast guard ships near the Senkaku Islands.
In both cases, the researchers found that the rising nationalism significantly damaged eco-
nomic relations between the two countries.

The tendency for nationalism to cause trade disruptions has been documented in sev-
eral other contexts as well. For instance, Fouka and Voth (2016) find that the 2010-2014
sovereign debt dispute between Germany and Greece led to a sharp decline in the sale
of German cars in Greece, especially in regions where the Nazis carried out massacres
during World War II. Du, Ju, Ramirez, and Yao (2017) find further evidence that political
disputes can cause temporary drops in trade when they look at China’s trade relations with
a number of countries, including France, India, Russia, and the United States. Likewise,
Clerides, Davis, and Michis (2010) find that U.S. soft drink sales dropped substantially in
seven Middle Eastern countries during the Iraq War.

These studies provide important evidence that surges of nationalism can undermine
trade between countries, but their focus on individual cases has two drawbacks. First,
when it comes to analyzing any given political development, establishing a clear causal relationship can be difficult. The reason is that drawing causal inferences in such contexts requires speculation about counterfactuals. For instance, in the “Freedom Fries” example, it is straightforward to show that the United States and France experienced a drop in trade between 2002 and 2003. However, it is much more difficult to know what would have happened to their trade levels had the dispute over the Iraq War never taken place. How much their trade would have gone up or down is ultimately unknown. This makes it hard to be certain exactly how the surge of nationalism affected trade. Second, even when such studies make very compelling causal arguments, which they sometimes do, the fact that they focus on single cases raises questions about the generalizability of their findings. It is therefore difficult to know whether these studies provide a good representation of how surges of nationalism influence trade, or whether the cases that they focus on are outliers.

In the next section, we will conduct a large-n statistical test that overcomes these two problems. It can establish a clear causal relationship because it takes advantage of a natural experiment where countries were randomly assigned to experience surges of nationalism against each other. It also involves a very large sample size that allows us to analyze how nationalism affects trade across a much broader range of cases. It is to this empirical test that we now turn.

**Empirical Analysis**

To test the hypothesis that surges of nationalism can disrupt trade between countries, we look at the World Cup. There are two advantages with using this event to study how nationalism affects international trade. First, even though social scientists lack a comprehensive
dataset that tracks nationalism, they generally agree that participation in major international sports tournaments increases it (Maguire, Poulton, and Possamai 1999; Garland and Rowe 1999; Toohey and Taylor 2006; Tzanelli 2006; Cha 2009; Vincent et al. 2010). Competition on the playing field often creates nationalist animosities between the opposing sides. This is especially true for countries where soccer is very popular (Markovits and Rensmann 2010). Second, the group stage randomization process, which has been in place since the first World Cup in 1930, provides us with a large natural experiment where certain pairs of countries were randomly assigned to compete against each other. Therefore, if nationalism from World Cup competition does undermine trade between countries, then it should be fairly straightforward to identify that effect in the data.

Over the entire history of the World Cup, the basic format of the group stage randomization process has been essentially the same. First, each participating country is put into one of four pots. These pots are usually based on geography, although there is sometimes a pot that contains the highest ranked teams in the world. Next, groups are created by randomly selecting one team from each pot. The purpose of this format is to ensure that the teams in each group are geographically diverse. Figure 1 shows the pots and groups for the 1994 World Cup, and the details from all other World Cups are provided in the online appendix.

Because half of the World Cup participants failed to advance to the knockout stage, the selection of groups largely determined which countries played each other at the World Cup. Two countries that were selected into the same group were guaranteed to play against each other, whereas two countries that were not had on average about a 5.1% chance of meeting in the knockout stage. Thus, group selection was key to determining which countries would play head-to-head.
The random assignment of countries to groups created a natural experiment that can be analyzed with randomization (or permutation) inference. The first step is to calculate what percentage of countries that played against each other in the World Cup group stage experienced a drop in trade during the World Cup year (compared to the previous year). In total, 40.9% of these pairs of countries saw a drop in trade during the World Cup year (n=486). Next, we can test whether this number is unusually high. To answer this question, we need to get an idea of how likely countries that could have played against each other in the group stage were to experience a drop in trade. We can estimate this value by redoing the randomization many times and calculating the percentage of pairs of countries that experienced a drop in trade in each of these hypothetical scenarios.
Figure 2. World Cup (1930-2014): Mapping Drops in Trade

Notes: The map on the left shows the real data, while the map on the right shows what we would expect if the World Cup had no effect on international trade.

Figure 2 maps the results. The left-hand graph shows the pairs of countries that actually played at the World Cup and whether they experienced a drop (red) or increase (blue) in trade. The right-hand graph shows one example of the countries that could have played against each other in the World Cup group stage, had the randomization gone differently. This example is one of 10,000 that we constructed for this study. Each was produced by redoing the group draws from 1930-2014 following the exact procedures that FIFA used. The example presented here was about average in terms of the number of pairs of countries that experienced a drop in trade. Since the graph on the left features many more red lines than the graph on the right, this comparison indicates that the actual number of pairs of countries that experienced a drop in trade was much larger than the expected number.

To test how significant this difference is, we can compare the left-hand graph to all 10,000 alternative randomizations. Figure 3 presents the results from this analysis. The left-hand histogram shows the distribution of the percent of countries that experienced a drop in trade in the 10,000 alternative randomizations. As the gold horizontal line shows, the true percent of pairs of countries that experienced a drop in trade, 40.9%, is substantially larger than the percentages for the vast majority of hypothetical randomizations.
(p=0.033, n=486). Overall, these results suggest that when two countries play against each other at the World Cup, it increases the chances that they will experience a drop in trade by 4.3 percentage points (or 12.0% from baseline).

Moreover, the results are largely driven by pairs of countries where soccer is the most popular sport. The right-hand histogram in Figure 3 shows the results for such pairs. These results suggest that group stage competition increased the chances that these pairs of countries would experience a drop in trade by 6.1 percentage points (or 17.1% from baseline) (p=0.013, n=420). In other words, if World Cup competition did not undermine international trade, then the probability that we would have seen a decrease in trade this large or larger by chance is about 1/100.

Figure 4 tracks the trade fluctuations in the years before and after the World Cup for the pairs of countries where soccer was the most popular sport for both sides. The graph shows that these pairs were not abnormally likely to experience trade drops in other periods. It was only during the World Cup year that they became significantly more likely to do so. Therefore, we can be pretty confident that these pairs were not already very prone to
experience declines in trade. It was only during the World Cup year that they were much more likely than normal to experience a trade drop.

These results prove very robust. For example, they hold after controlling for a number of baseline factors, including military disputes in the previous year, regime type, and distance between capital cities. They also hold if you change the baseline level of trade from being just the total amount of trade the year before to the average amount of yearly trade in the 2-5 prior years. Lastly, we also checked whether our results held for an alternative source of historical trade data—the CEPII TradHist dataset. The results remained significant for pairs where soccer was the most popular sport for both countries (n=429, p=0.033), although they were not quite significant for all pairs (n=486, p=0.184). Further information about these robustness checks can be found in the online appendix.

## Conclusion

These findings suggest that policymakers should recognize that highly competitive sports competitions like the World Cup can create tensions between countries, and they should
try to avoid games that could lead to significant political or economic fallout. This study has highlighted the dangers of international soccer, but other sports that people take very seriously could have similar effects. For instance, one of the greatest diplomatic disputes in the history of Anglo-Australian relations came from a cricket controversy in 1932. This disagreement arose after the English team invented a dangerous style of pitching called “Bodyline” that involved throwing the ball directly at the batter. The incident caused widespread outrage in both countries. It sparked riots, prompted boycotts, incited acts of vandalism, and created feelings of antagonism between the two sides that lasted until World War II (Frith 2013, Swan 2013).

It would therefore be prudent to revise the formats of major international sports competitions to reduce the chances that they cause serious damage to international relations. For instance, rather than randomizing who plays against each other at the World Cup, FIFA could assign countries to compete against other states that are far away geographically. This approach could greatly limit the problems that competition on the playing field can create. For example, when the Uruguay forward Luis Suarez bit the Italian defender Giorgio Chiellini at the 2014 World Cup, the incident did little damage simply because the two countries were so far apart geographically. It is fortunate that such a provocation did not occur between Germany and Russia or Japan and China.

No doubt, convincing FIFA to adopt these changes would be difficult. Doing so would implicitly acknowledge that the World Cup can make relations between countries worse, which goes against FIFA’s claims that the sporting event promotes international cooperation (Blatter 2012). However, FIFA actually has postponed international soccer games when there are significant political tensions between the two sides (Reuters 2008). This policy suggests that its leaders believe that soccer can exacerbate international rivalries,
and that they try to reduce the likelihood of undesirable political and economic fallout when possible.

References


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