

Diverting Domestic Turmoil

Ashani Amarasinghe*

November 2020

Abstract

When faced with intense domestic turmoil, governments may strategically engage in foreign interactions to divert the public's attention away from pressing domestic issues. I test this hypothesis for a globally representative sample of 190 countries, at the monthly level, over the years 1997-2014. Using textual data on media-reported events retrieved from the GDELT database, I find robust evidence that governments resort to diversionary tactics in times of domestic turmoil and that such diversion takes the form of verbally aggressive foreign interactions, typically targeted at 'weak' countries and countries closely linked along religious, linguistic and geographic dimensions. Strategically important trade partners are unlikely to be victimized. These findings suggest that diversionary foreign policy is, in fact, systematically practised by governments as a strategic tool, and that such diversion is exercised in a manner that may not lead to large scale costs or risks of retaliation.

Keywords: Diversionary foreign policy, domestic turmoil, football, connectivity.

JEL classification: F51, H77

*SoDa Laboratories, Monash University; email: ashani.amarasinghe@monash.edu. I thank Paul Raschky for detailed conversations that greatly assisted in shaping this paper. I also thank Sascha Becker, Giovanni Caggiano, Gabriele Gratton, Roland Hodler, Sisira Jayasuriya, Claudio Labanca, Federico Maserà, Laura Panza, Laura Puzzello, Eik Swee, Haishan Yuan, Yves Zenou, as well as seminar participants at Monash University, Applied Young Economist Webinar (AYEW) and the Oz Virtual Econ Research Seminar (OVERS) for helpful comments and suggestions. All errors are mine. I gratefully acknowledge support of the Australian Government through its Research Training Program Scholarship.

1 Introduction

During periods of domestic turmoil, it is in the interest of country leaders to divert the attention of the population away from pressing domestic issues. ‘Diversionary foreign policy’ is a manipulative tool used for this purpose, where governments engage in interactions with foreign entities in a manner that distracts the domestic population (Oakes, 2006; Bennet and Nordstrom, 2000; Fearon, 1998; Ostrom and Job, 1986). Such diversion is expected to lead towards increased support for the government, as citizens rally around their common national identity (Sobek, 2007).

The Falklands War of 1982 provides an ideal example in this regard. Argentina’s military *junta* at the time was faced with severe domestic turmoil due to prolonged economic stagnation and accusations of human rights violations. To divert domestic attention, the regime exercised military power to ‘reclaim’ the disputed territories of the Falkland Islands and South Georgia. The subsequent war lasted 74 days, and allowed reprieve for the Argentinian military *junta* to stabilize the tumultuous situation at home (Femenia, 1996). In the United States (US), the 1998 airstrikes against suspected terrorist sites in Sudan and Afghanistan occurred at the height of the Monica Lewinsky scandal, with Bill Clinton at high risk of impeachment. The airstrikes led to a temporary rise in presidential approval ratings, although he was eventually impeached.¹ More recently, there have been signals that diverting the attention of the domestic population can even take a more subtle, verbal form, which involves lower costs and risks compared to violent inter-state conflict. For example, in the years that Donald Trump was in office as president of the US, his use of social media has been widely seen as serving the purpose of distraction in the face of unfavourable domestic conditions.²

¹See, for example, *Washington Post*, “A dirty business,” July 25, 1999.

²Famously, his somewhat surprising tweet mulling the purchase of the autonomous Danish territory Greenland came merely days after the US bond market yield curve inverted amid significant concerns of economic slowdown. The tweet led to major diplomatic tensions between the US and Denmark, including a cancellation of a scheduled presidential visit, thereby diverting the attention of the domestic population. See, for example, *The Independent*, “Trump lashes out after economic gloom deepens, as he jokes about trading Puerto Rico for Greenland”, August 22, 2019. See also, *The Atlantic*, “Trump’s attention-diversion tweet cycle goes international,” November 30, 2017, *Financial Times*, “Donald Trump’s tweets are weapons of mass distraction,” September 26, 2017, and *The Guardian*, “Out of control? Or is Trump’s tweeting designed to distract?,” March 5, 2017.

Apart from such anecdotal evidence, a large literature within the broad domain of political economy documents multiple facets of the concept of diversionary foreign policy. This literature builds on the early work by Simmel (1955) and Coser (1956), who identify conflict as an essential element of group formation. The underlying premise is that conflict with an out-group leads to the strengthening of in-group awareness and unity. Such increase in unity and the consequent boost in popularity serve as motivators for leaders to embark on foreign conflict (Sobek, 2007; Pickering and Kisangani, 1998). In doing so, leaders may choose from substitutable policy alternatives that range from extreme cooperation to extreme aggression, based on the costs and benefits involved (Bennet and Nordstrom, 2000).

My paper extends this literature on diversionary foreign policy by providing, to the best of my knowledge, the first causal estimates of the systematic use of diversionary foreign *interactions*, not necessarily limited to violent inter-state *conflict*, by governments across the world. Specifically, I combine textual data on domestic turmoil and governments' foreign interactions, with 'exogenous' sentiment shocks in the form of football losses, for 190 countries, at the monthly level, over the years 1997-2014, to examine whether governments are more likely to engage in diversionary foreign interactions when domestic turmoil is high.

In the absence of a consistent measure capturing public sentiment towards governments, I first construct a novel quantitative *monthly* index of domestic turmoil, *DT*. For this purpose, I combine textual data on actual physical events from media articles, retrieved from the Global Database of Event, Language and Tone (GDELT), with the conflict-cooperation scale introduced by Goldstein (1992).³ This index acts as the main explanatory variable of my study. Next, I derive the key outcome variables, which are quantitative measures of the cooperative/aggressive foreign interactions initiated by governments, at varying degrees of intensity. Accordingly, I consider four types of foreign interactions that governments engage in i.e., verbal cooperation, material cooperation,

³The Goldstein scale assigns a score ranging from -10 to +10 to each event category, based on the theoretical potential impact a particular event type can have on the political stability of a country. A positive (negative) score identifies the particular event category as theoretically strengthening (weakening) the country's political stability.

verbal conflict and material conflict. I incorporate country \times year fixed effects to control for any unobserved factors that affect a particular country in a given year, as well as time-invariant country-specific features. Moreover, I include month-of-the-year fixed effects to capture any seasonal variations that simultaneously affect domestic turmoil and governments' foreign interactions.⁴

Despite the fine temporal granularity of the data and the comprehensive set of fixed effects, the empirical estimation of the relationship between domestic turmoil and diversionary foreign policy is threatened by potential endogeneity concerns due to joint determination and reverse causality. Therefore, to causally infer the relationship, I use an IV strategy that leverages on the public sentiment shocks resulting from unpredictable outcomes of sporting events. Specifically, I focus on international football 'losses' experienced by a country, against closely ranked teams, as an exogenous shock that affects the level of public sentiment.

In the first part of the analysis I show that, at this fine temporal resolution, international football losses are a formidable shock that increases domestic turmoil faced by governments. Next, using the exogenous variation derived from such football losses, I provide causal evidence that domestic turmoil leads to an increase in governments' foreign interactions, particularly those classified as 'verbal' conflict. More specifically, I find that a one standard deviation increase in domestic turmoil leads to, on average, a 8% increase in foreign interactions classified as verbal conflicts. I argue that such increase in verbal conflict is caused by domestic turmoil, and that it provides evidence of governments diverting the public's attention away from domestic issues by engaging in verbally aggressive interactions with foreign countries. Engaging in verbal aggression, as opposed to material aggression, suggests that diversionary foreign policy is favoured by governments as a low-risk, low-cost policy option to manage domestic turmoil. This result is robust across a range of alternative specifications. I further find that the effect is more prominent for anocratic countries and those with low levels of development.

In the next step, I investigate whether leaders make a conscious decision on which

⁴These baseline results are robust to a number of alternative sets of fixed effects, as indicated in Figure B.9.

countries should be targeted for such verbal aggression. Using dyadic data on a multitude of inter-state connectivity measures, as well as country-specific characteristics of the targets, I show that target selection depends on both the target's own features and the degree of connectivity between countries. Specifically, governments are more likely to direct their verbal aggression at 'weak' countries, as defined by low levels of national capability, military expenditure and population, while strategically important trade partners are unlikely to be victimized. These findings further reiterate that diversionary tactics are only applied by governments in a manner that does not lead to significant economic costs or risks of retaliation. Moreover, I find that verbal aggression is also typically directed at countries closely linked along religious, linguistic and geographic dimensions, suggesting that leaders also pay attention to cultural similarities and minimized heterogeneity in preferences when choosing their targets.

This paper primarily contributes to the vast literature in political economy that studies governments' strategic responses to citizen behavior, in particular, how governments respond to citizen behavior through *diversionary* strategies in their *foreign policy agendas*. Much of the existing work on this area rely on traditional indicators of domestic turmoil, such as economic performance, as proxied by the rate of inflation or unemployment, or government/leader approval ratings and electoral cycles, and/or a dichotomous indicator of inter-state military force (Sobek, 2007; DeRouen, Jr., 2000; Morgan and Anderson, 1999; Leeds and Davis, 1997; Meernik and Waterman, 1996; Miller, 1995; Ostrom and Job, 1986). Mitchell and Prins (2004) find that democracies have the most opportunities to divert public's attention, while Pickering and Kisangani (2010) find that diversion occurs across autocracies as well. Related, but taking a slightly different perspective, Eisensee and Strömberg (2007), Djourelouva and Durante (2020), Durante and Zhuravaskaya (2018) find that government actions are influenced by considerations of whether or not the media and the public are distracted by other important events.⁵ This literature is mainly US-centric,⁶ and provides inconclusive empirical evidence on diversionary foreign interactions

⁵Additionally, within financial markets, DellaVigna and Pollet (2009) observe a relationship between the strategic release of financial information and investor inattention.

⁶A few notable exceptions are Morgan and Anderson (1999) focusing on the United Kingdom; Nicholls, Huth and Appel (2010) focusing on Japan; and Sobek (2007) focusing on renaissance Italy.

taking place in a systematic manner (Chiozza and Goemans, 2003; Leeds and Davis, 1997; Meernik and Waterman, 1996).

My paper contributes to this niche literature in multiple ways. First, I introduce a novel measure of domestic turmoil that goes beyond traditional indicators used in the existing literature. The imperfect suitability of these traditional variables, such as the rate of inflation or the unemployment rate, to measure domestic turmoil, and their coarse level of aggregation, may have hindered existing studies from understanding the true causal relationship between domestic turmoil and governments' foreign interactions. Second, I use a broad set of outcome variables that captures the cooperative/aggressive nature of foreign interactions at varying degrees of intensity, instead of the traditional dichotomous outcome variable on inter-state war. This allows me to flexibly acknowledge the substitutable nature of the policy alternatives governments are faced with, and to provide systematic evidence that diversionary foreign policy takes the subtle form of verbal aggression as opposed to purely violent international conflict. Moreover, I add to the current knowledge of diversionary foreign policy on target selection (Spolaore and Wacziarg, 2016; Jung, 2014; Fordham 2005; Sprecher and DeRouen Jr., 2005) by examining whether governments systematically choose victims, based on a multitude of relationship networks between countries. To the best of my knowledge, this paper is the first to provide a holistic picture of the causal evidence surrounding the systematic use of diversionary foreign policy by governments across the world.

My work also contributes to a burgeoning strand of the literature which focuses on using text-as-data to quantify societal aspects that were previously often overlooked due to data limitations (Gentzkow, Kelly and Taddy, 2019). The more recent work on this area focus on quantifying sentiment, both at a spatially disaggregated level, for example using social media networks data (Baylis, 2020; Mitts, 2019; Barbera and Zeitsoff, 2017), and at a more aggregate level, for example using text data from newspaper articles to predict economic and political uncertainty (Benoit, Munger and Spirling, 2019; Shapiro, Sudhof and Wilson, 2020; Vegard and Thorsrud, 2019; Mueller and Rauh, 2018; Baker, Bloom and Davis, 2016). Bybee et al. (2020), who measure the state of the economy via

textual analysis of business news, show that such text-based inputs accurately track a wide range of economic activity measures, and perform better than standard measures when forecasting macroeconomic outcomes. Closer to my work, Gentzkow and Shapiro (2010) use newspaper articles to develop an index of media slant towards political ideologies, while Beattie (2020) uses a similar index to capture the portrayal of climate change in news articles. I contribute to this literature by developing, to my knowledge, the first quantitative monthly indicator of the prevailing level of public sentiment targeting governments, which I define as ‘domestic turmoil’.

Finally, through the identification strategy, this paper relates to the literature linking outcomes of sports events to people’s sentiments. Ge (2018) and Card and Dahl (2011) link emotions following sporting events outcomes to taxi passengers’ tipping behaviour and family violence, respectively, while Metcalfe, Burgess and Proud (2019) find that the timing of sporting events negatively affect student performance in high-stake examinations. At a more aggregate level, Edmans, García and Norli (2007) show that soccer losses lead to a significant reduction in stock returns. Within the scope of political economy, recent work shows that sports outcomes have broad implications on the behaviors of both citizens and governments. Among the most recent work in this domain, my paper is closely related to Depetris-Chauvin, Durante and Campante (2020) and Bertoli (2017) who explore the impact of football *wins* on nationalistic sentiments. My paper, which focuses on sentiment shocks following football *losses*, is complementary to theirs, and provides evidence of the symmetric nature of the effects of sports outcomes on broad political outcomes, particularly materializing in the form of domestic turmoil targeting governments.

The rest of this paper is organized as follows. I discuss the data and key variables in Section 2. Section 3 provides the empirical framework along with the baseline results, robustness checks and mechanisms. In Section 4, I explore whether countries systematically choose the targets of diversion. Section 5 concludes.

2 Data

The unit of measurement of this study is a country-month. The final data set combines numerous indicators to explore the relationship between domestic turmoil and governments’ foreign interactions, at the monthly level, for 190 countries, over the years 1997-2014.

2.1 Data on domestic turmoil and governments’ foreign interactions

The dearth of data sources quantifying a society’s behavioural aspects at fine spatial and temporal resolutions has led to their under-representation in the policy discourse. However, with the advent of machine learning algorithms and the increased focus on using text-as-data, many avenues enabling such quantification have opened up.

In this study, I focus on quantifying two such societal aspects, i.e. (a) domestic turmoil targeting governments and (b) governments’ interactions with foreign entities. For this purpose, I use data from GDELT, which is a real time open data global graph of the human society, analyzed using the news media (Leetaru and Schrod, 2013).⁷ The GDELT project monitors print, broadcast, and web news media in over 100 languages across every country in the world, and is updated every 15 minutes, thereby tracking breaking developments across the world. After being translated to English, natural language processing algorithms are used to extract over 300 categories of physical activities based on CAMEO event codes (Gerner, Schrod and Yilmaz, 2009), and approximately 60 attributes for each event.

The events reported belong to a wide spectrum of event types, ranging from ‘make a public statement’ to ‘appeal’, ‘demand’, ‘threaten’, and ‘engage in unconventional mass violence’⁸. Each event consists of two actors – ‘target’ and ‘source’. Locations of the actors, and the location of the event itself, are reported. Events are classified under four differ-

⁷www.gdeltproject.org.

⁸A summary list of CAMEO event types and their associated Goldstein scores are available in Table A.1. For further details, please see <http://data.gdeltproject.org/documentation/CAMEO.Manual.1.1b3.pdf>

ent ‘quad’ classes based on their cooperative/aggressive nature – i.e., verbal cooperation, material cooperation, verbal conflict and material conflict. Each event is also assigned a related numeric score on the Goldstein scale (Goldstein, 1992), which is a quantitative measure of the theoretical impact a particular event type poses on the political stability of a country. This database is, therefore, a massive (containing approximately 120 million events over the sample period) and intricate dataset of all media-reported events across the world, with the ability to capture their observed as well as unobserved characteristics.

2.1.1 Quantifying domestic turmoil

The public’s perception of their governments is arguably a controversial societal aspect to quantify. In an ideal setting, we would record perceptions of government performance from a random sample of citizens over a long period of time, at consistent temporal intervals, to arrive at such a quantification. Indeed, in most globally recognized household surveys such as the World Values Survey (WVS) and the Afrobarometer survey (for Africa), respondents do express their views on government performance. However, these survey outcomes are only recorded for particular years and are not available consistently for each spatial and temporal unit over a considerable period.

In the absence of such an ideal data set, in this paper I attempt to generate a reasonably representative quantification of people’s sentiments, using revealed preferences that materialize in the form of actual physical events (worthy of being) reported by the media. For this purpose, I carefully sort through the entirety of events reported by the GDELT database, as per the process outlined below.

First, I identify all ‘domestic’ events that occurred in a country over the sample period. For an event to be classified as ‘domestic’, I require that the locations of the source, the target and the incident itself, be within the same country. Since the objective is to quantify public sentiment *targeting the government*, next I extract all domestic events where the target was the government. To further ensure the capturing of purely relevant and important events, and to rule out any anomalies, from this data set I only preserve events that were reported in at least three media reports.⁹ Once aggregated at the country-

⁹Such filtering is important to address potential media bias in the data. Preserving only the set of

year-month level, this exercise results in a data set of all domestic events targeted at the government, which occurred in a given country in a given month of a given year.

Next, to extract a quantification of domestic turmoil, I leverage on the Goldstein score (Goldstein, 1992) reported by GDELT for each event type. The Goldstein scale captures the theoretical potential impact posed by each event type, on the stability of a country. The numeric score takes in to consideration the inherent intensity of conflict and/or cooperation in these different event types.¹⁰ On the Goldstein scale, each event type is assigned a score on a range of -10 (extreme conflict) to 10 (extreme cooperation). Since the objective of this study is to quantify domestic turmoil, which is a reflection of the public's *negative* sentiments towards their governments, my focus is primarily on events that receive a negative score on the Goldstein scale.

Accordingly, for each time period, I obtain the number of events targeting the government, which scored less than a threshold value of -5 on the Goldstein score,¹¹ to estimate an index of domestic turmoil using equation (1) below.

$$DT_{iymG \leq -5} = \frac{Dom_{iymG \leq -5}}{Dom_{iym-10 \leq G \leq 10}} \quad (1)$$

where $Dom_{iymG \leq -5}$ refers to the number of domestic events targeting the government, recording a maximum Goldstein value of -5 , and $Dom_{iym-10 \leq G \leq 10}$ refers to the total number of domestic events targeting the government, on the full spectrum of the Goldstein scale ($-10 \leq G \leq 10$). Accordingly, $DT_{iymG \leq -5}$ is a standardized indicator of domestic turmoil, which captures people's resentment towards their government, by quantifying events attached with a negative sentiment score relative to all events targeted at the government.

For the purpose of my empirical strategy, I prefer a standardized functional form for events reported in at least three media sources provides corroboration of the occurrence of an event. It establishes confidence that the event was not artificially made prominent by a single media outlet pursuing a particular political agenda.

¹⁰More details are available in Appendix A.

¹¹By using a threshold of -5 and below in the baseline specification, I exclude events with scores near zero, which could be perceived as being more 'neutral' instead of 'negative', and hence not truly representative of 'domestic turmoil'. The results are robust to alternative thresholds, as indicated in Table B.4.

the *DT* index, as opposed to a simple count variable, as the former is able to capture the change in negative sentiment towards the government *relative* to the change in positive sentiment, during each period. By contrast, a count variable would only consider the absolute number of negative events, ignoring a concurrent increase in positive events. The standardization exercise also helps absorb specific short-term shocks that occurred in a given country in the given month – for example, behavioural shocks related to a country’s media that occurred in a particular month – thereby rendering the index comparable across time and space.

Since this newly generated *DT* index incorporates multiple event categories within the range $-5 \geq G \geq -10$, a natural question arises on its composition, i.e. what kind of events make up the *DT* index? Table A.1, coupled with Figure A.1, seek to answer this question. Table A.1 provides a list of event categories and their associated Goldstein scores. As per the definition of *DT* in Equation 1, *all domestic events targeting the government*, associated with a Goldstein score of $-5 \geq G \geq -10$, i.e. event categories ‘Demand’, ‘Threaten’, ‘Protest’, ‘Coerce’, ‘Exhibit Force Posture’, ‘Assault’, ‘Fight’ and ‘Engage in Unconventional Mass Violence’ are included in the *DT* index.

Next, in Figure A.1, I graphically illustrate, for each country, the relative share of these event categories in the *DT* index. Here, each bar represents a country, and the coloured components indicate the relative share of event categories within each country’s *DT* index, aggregated over the sample period.¹² I observe that there is a high degree of variation in these relative shares between countries, which could be driven by country specific features such as income, population or institutions. I also observe, despite the between-country variation, that the more frequent event categories within *DT* are ‘Demand’, ‘Coerce’ and ‘Fight’. The index also reflects the relative rarity of event categories such as ‘Exhibit Force’ or ‘Mass Violence’, which receive only a marginal weighting within *DT*.

How is the *DT* index distributed within and between countries? To answer this question, Figure A.2 graphically illustrates the distribution of *DT* in a sample of countries. I observe that in countries such as the US, Canada, UK and Australia, *DT* generally

¹²Recall that, as per Eq. 1 the *DT* index is entirely based on domestic events targeting the government.

ranges between 0.2 – 0.6 (on a scale of 0 – 1). The index varies moderately in Europe and Asia, but displays a very high level of volatility in Latin American and African countries, sometimes reaching 1 – the maximum possible value – signalling high levels of resentment towards governments. In the Middle-East, Syria exhibits high levels of DT , but in the United Arab Emirates (UAE) the index lies mostly at the lower end of the spectrum. It is important to note that a number of within-country factors, ranging from a country’s level of political institutions to cultural norms and media behaviour, could explain the levels and variation of DT in different countries, and need to be appropriately addressed in the design of the empirical identification strategy. Despite these factors, what Figure A.2 explicitly reveals is that there is a relatively large variation in the raw DT index, both within and between countries.

2.1.2 Relationship between DT and existing measures of public sentiment

In order to be confidently applied as a quantified indicator of domestic turmoil, it is necessary to confirm that this novel indicator does in fact accurately capture people’s sentiments towards their government. I conduct two exercises aimed at detecting whether the novel index of domestic turmoil introduced in this paper is reasonably representative of existing (imperfect) measures of public sentiment.

As discussed, one of the key challenges in quantifying domestic turmoil is the absence of consistent data that captures the public’s sentiments towards governments. Due to data limitations at the global scale, in the first step of this validation exercise I focus specifically on the US, where a relatively rich set of data is available. Accordingly, in Figure A.3, I graphically illustrate, for the US, the relationships between the DT index and other popular proxies of public sentiment targeting the government.¹³

I first consider the relationship between the US Presidential Approval Rate and DT . It is critical to note that, despite being closely related, by definition the Presidential Approval Rate and the DT index vary in their respective scopes and magnitudes. While

¹³Data on presidential approval ratings was obtained from the American Presidency Project. Data on Consumer Price Index (CPI) and unemployment rate were sourced from the Federal reserve Bank of St. Louis. All data are at the monthly level.

the Presidential Approval Rate measures the public’s sentiment specifically towards the *President*, *DT* is broader in scope and captures public sentiments towards *any branch of the government*, including the President. Nevertheless, understanding the relationship between these two variables can increase confidence in the validity of the *DT* index. It is also important to note that the Presidential Approval Rate typically captures *positive* public sentiments, while by definition the *DT* index captures *negative* public sentiments. Therefore, I expect a negative correlation between these two indicators.

In Panel (a), I plot the *DT* index against the US Presidential Approval Rate over time. As expected, I observe a close negative relationship between the two indicators – the peaks in one measure being closely mirrored by the troughs in the other – indicating that *DT* is able to accurately capture the variations in public sentiment within the country over time. This relationship is further demonstrated in the scatter plot in Panel (b), which quantifies this negative correlation between *DT* and presidential approval ($\beta=0.319$, $p=0.00$), confirming the validity of *DT* in representing the public’s resentment towards the government.

Panels (c) and (d) illustrate the relationship between *DT* and two economic indicators traditionally used as proxies for domestic discontent, i.e. the Consumer Price Index (CPI) and the unemployment rate, respectively. Both relationships are positive and statistically significant.¹⁴ The statistical significance of these correlations suggest that economic hardships are indeed related to the public’s discontent with the government. However, the weak economic significance of the relationship, as signalled by the low β coefficients, suggests that domestic turmoil is a broader concept that transcends economic boundaries, and that economic indicators, applied in isolation, are not ideal tools to gauge its intensity.

Having thus established the validity of the *DT* index in the context of a single country, in the next step I explore its validity within a broader multi-country setting. For this purpose, I generate a survey-based indicator of people’s sentiments towards their governments, using data from waves 3–6 of the WVS (covering 92 countries) and waves 1–6 of

¹⁴For Panel (c), $\beta = 0.002$, $p=0.000$ and for Panel (d), $\beta = 0.010$, $p=0.000$.

the Afrobarometer survey (covering 35 African countries), which overlay with the sample period of this study. Inspired by Sangnier and Zylberberg (2017), for this exercise I use the survey questions related to the level of the public’s trust/confidence in their governments, and explore how closely such trust/confidence indicators mirror the *DT* index.

To capture people’s confidence in their governments in the WVS, I use the question, ‘How much confidence do you have in the government?’ This question yields a set of hedonic answers, which may be ‘a great deal’, ‘quite a lot’, ‘not very much’ or ‘none at all’. Since my objective is to identify negative sentiments towards their governments, I construct an indicator variable equal to 1 if the respondent replied ‘not very much’ or ‘none at all’, and 0 otherwise. After summing up over a given country in a given year, I standardize this measure by expressing it as a proportion of the total number of respondents.

In the Afrobarometer survey, I use the question, ‘Do you approve or disapprove of the way the following people have performed their jobs over the past twelve months, or haven’t you heard enough about them to say: President’ to quantify people’s sentiment. As with the WVS, this question also yields a set of hedonic answers (i.e., ‘strongly disapprove’, ‘disapprove’, ‘approve’, or ‘strongly approve’). I assign a binary variable equal to 1 if the respondent answered ‘strongly disapprove’ or ‘disapprove’, and 0 otherwise. Finally, I sum up over a country and a year, and express this sum as a proportion of the total number of respondents.

Figure A.4 presents the correlation plots between the *DT* index and the survey responses. Consistent with the survey data, these correlations are reported at the country-year level. Panel (a) provides the scatter plot and line of best-fit for *DT* and WVS responses, while Panel (b) plots the responses from the Afrobarometer survey alongside *DT*. I observe that the survey indicators are indeed positively and statistically significantly correlated with the *DT* index, with β coefficients for Panels (a) and (b) being recorded at 0.135 ($p=0.058$) and 0.313 ($p=0.000$), respectively. These results highlight that the *DT* index proposed in this paper is indeed representative of the existing, albeit imperfect, measures of public sentiment towards their governments. Accordingly, in the

absence of comprehensive and consistent global data that quantifies domestic turmoil at a very fine level of temporal granularity, this *DT* index can be confidently applied for academic and policy making purposes.

2.1.3 Quantifying governments’ foreign interactions

Next, I focus on generating the outcome variables for my study. Recall that the purpose of this study is to examine how governments’ foreign interactions respond to domestic turmoil. Therefore, the outcome variables should capture the nature as well as the frequency of the international interactions initiated by a government in a given time period.

To generate a quantified measure of the nature of governments’ foreign interactions using GDELT, I again take a step-wise approach. Here, I first extract activities where the source is a country’s government. Second, based on the location of the target, I filter out government activities specifically targeted at foreign parties. These two steps ensure that the outcome variables only capture those activities (a) initiated by a government, and (b) targeted at foreign entities, thereby satisfying the minimal requirements to be classified as ‘government’s foreign interactions’. To maintain consistency with the *DT* index, and to rule out any anomalies in reporting, I then preserve only those events appearing in at least three media reports.

Next, I gather further information on the nature of these events. GDELT, using its natural language processing algorithms, classifies all events in to four primary ‘quad classes’ (based on an event’s inherent cooperative/aggressive nature) as per the CAMEO taxonomy: Verbal Cooperation (quad class 1), Material Cooperation (quad class 2), Verbal Conflict (quad class 3), and Material Conflict (quad class 4).¹⁵ I leverage on this classification to quantify the nature of government interactions. Accordingly, I calculate a measure of the nature of governments’ foreign interactions by taking the counts under each quad class, and expressing them as a fraction of the total number of foreign interactions initiated by the government, as indicated in equation (2).

¹⁵More details on event categorization are available in Appendix A.

$$FP_{iymQ} = \frac{Foreign_{iymQ}}{Foreign_{iym}} \quad (2)$$

where $Foreign_{iymQ}$ refers to the number of foreign interactions initiated by the government belonging to the quad class Q, and $Foreign_{iym}$ refers to the *total* number of foreign interactions initiated by the government. Accordingly, consistent with the *DT* index, the outcome variables on governments' foreign interactions are also standardized indicators, which express foreign interactions belonging to a particular category as a proportion of the total foreign interactions initiated by a government. The ability of such standardized measures to capture the relative change in interactions belonging to a particular quad class vis á vis other quad classes make them well-suited for my empirical strategy, as opposed to count variables.

Despite the somewhat self-explanatory titles attached to each quad class, the constitution of these *FP* outcome variables is still a black box. Therefore, next I provide some descriptive information to deliver clarity on the event types belonging to each *FP* category. As already highlighted, Table A.1 provides a first glance on the event types and their associations with the relevant quad classes. In Figure A.5 I dig deeper to identify, for each country, the relative shares of the event types that make up the *FP* categories. Each bar in these graphs represents a country, and the coloured components show the weighting assumed by an event type within the *FP* category, aggregated over the sample period. Recall that by definition, each *FP* quad class in the context of this paper only contains those events initiated by a country's government and targeted at a foreign entity.

Panels (a) and (b) show the dispersion of cooperative event types across the *FP* categories 'Verbal Cooperation' and 'Material Cooperation'. In Panel (a) I observe, between countries, a somewhat consistent constitution of 'Verbal Cooperation' in terms of the relative share of event types, with the event category 'Consult' assuming the largest share in most countries. In Panel (b), which graphically illustrates the more materially cooperative events however, there appears to be a higher level of between-country variation. Engaging in a materially cooperative foreign event, for example the provision of aid, requires a higher level of government capacity, which naturally differs between countries,

and this could be a potential reason for such high levels of variation.

In Panels (c) and (d), I graphically illustrate the *FP* categories based on aggression i.e. Verbal Conflict and Material Conflict. Within the Verbal Conflict *FP* category, I observe 6 event types, i.e. ‘Investigate’, ‘Disapprove’, ‘Reduce Relations’, ‘Reject’, ‘Demand’ and ‘Threaten’. Observe that by definition, these event types portray a low degree of aggression, and do not involve actions that generate costly or high-risk repercussions. For example, a statement issued by the government of country A *disapproving* human rights violations in country B would be classified as ‘Verbal Conflict’ as per this definition. Indeed, as observed in Panel (c) most foreign interactions under the ‘Verbal Conflict’ category belong to the ‘Disapprove’ event type. Similarly, a statement by the leader of country A *demanding* country B hold an inquiry on its human rights violations would also be classified as ‘Verbal Conflict’. However, if country A *engages in mass violence* towards country B, by virtue of being an event of extreme aggression, it would be classified as ‘Material Conflict’ for the purposes of this paper, and would reflect in Panel (d). I observe that, as with Panel (b), there is a high level of between-country variation in the ‘Material Conflict’ *FP* category (Panel (d)), again reflecting the differences in government capacity necessary to engage in materially aggressive foreign interactions.

2.1.4 Relationship between *FP* and existing measures of foreign interactions

Next, similar to the exercise conducted with respect to the *DT* index, I examine the validity of these four *FP* indicators in representing the cooperative and aggressive nature of international interactions, based on existing alternative data sets.

At the outset I acknowledge that this is indeed a difficult validation exercise to conduct, due to a number of reasons. First, while the *FP* categories identify events based on four different levels of intensity in their cooperative/aggressive elements, i.e. verbal cooperation, material cooperation, verbal conflict and material conflict, almost all existing data sets on international interactions focus on the two extremes, i.e. material aggression, as reflected in interstate conflict or the imposition of sanctions and trade barriers or, on the other end of the spectrum, i.e. on material cooperation, as indicated mostly in the

provision of aid to other countries in need. The concepts of verbal aggression and verbal cooperation, to the best of my knowledge, have no quantitative representation in the empirical data domains, thus making it impossible to find close alternatives for validation purposes.¹⁶ Accordingly, in the following validation exercise, I focus on the two extreme *FP* categories, i.e. material conflict and material cooperation, using existing data sets. Moreover, it is important to note that each *FP* indicator variable used in this paper is an aggregation of a number of event types displaying similar degrees of intensity in cooperation and aggression, whereas other data sets focus on a single event type, for example, provision of aid or imposition of sanctions. Therefore, any correlation I observe will be between the *FP* quad class and a single event type for which an alternative data set is available. These caveats need to be borne in mind when evaluating the following exercise.

In the first step, I focus on validating the quantified indicator of the *FP* category ‘Material Cooperation’. The closest and most prominent indicator of material cooperation available in international relations is the provision of international development assistance. I use data on bilateral development assistance from the AidData database (Tierney et al., 2011), which provides a list of development finance activities funded between 1947 and 2013, covering 96 donors, for the purpose of this validation exercise.

To align with my base data set, I exclude development assistance provided by non-governmental organizations, and focus only on development assistance donated by a sovereign country. I first match these donors to the countries in my data set and then calculate the number of times, within a year, each country donated development assistance. Panel (a) in Figure A.6 plots these counts against my quantified indicator of *FP* - ‘Material Cooperation’. Since development assistance donations are not as granular as the GDELT data, I observe a cluster of observations at the origin. Irrespective, there exists a positive and statistically significant relationship between the ‘Material Cooperation’ indicator and development assistance donations ($\beta=0.0001(p=0.0000)$). However, as discussed above, donations of development assistance is only a single component of the ‘Material Cooperation’ indicator, which is a potential reason for the low economic

¹⁶Indeed, by using high frequency data obtained through newspaper articles, this paper takes a first step towards filling this data vacuum.

significance underlying this relationship, as represented in the low β value.

Next, I consider the other end of the spectrum, i.e. ‘Material Conflict’. The closest available data set to identify events of material aggression between countries is the Global Sanctions Database (Felbermayr, Kirilakha, Syropoulos, Yalcin and Yotov, 2020), which provides a list of publicly traceable international sanctions (classified as military, trade, arms, financial or travel sanctions) over the period 1950-2016. I create a variable which identifies the number of sanctions issued by each country for each year in my sample, and examine how these sanctions, which are intrinsically punitive in nature, are related with the quantified indicator of material aggression constructed in this paper using GDELT data. Panel (b) of Figure A.6 plots the number of sanctions issued by a country against the quantified indicator of ‘Material Conflict’. Despite the differing levels of granularity in the two data sets, I observe that there is a positive and statistically significant relationship between ‘Material Conflict’ and the imposition of sanctions ($\beta=0.0011(p=0.0000)$). However, it is important to reiterate that the imposition of sanctions is merely a single constituent of the quantified indicator of the ‘Material Conflict’ *FP* category, which is a potential reason for the low β coefficient.

2.2 Football data

I use the *outcomes* of men’s international association football (soccer) matches as an exogenous shock that affects domestic turmoil. Data on football matches and their outcomes were retrieved from the official website of the International Federation of Association Football (FIFA) as well as the six regional confederations associated with FIFA: the Asian Football Confederation (AFC); Confederation of African Football (CAF); Union of European Football Associations (UEFA); Confederation of North, Central American and Caribbean Association Football (CONCACAF); Oceania Football Confederation (OFC); and South American Football Confederation (CONMEBOL). I collect data on approximately 15,000 football matches played over the period 1997–2014, including information on the date, location, opponent, scores and outcome (win, loss, draw or penalty) of each match.

By definition, an international football match involves two opposing countries. Since the unit of analysis is at the country-month level, I assign each match to both participating countries, and the match outcome is also assigned accordingly. More specifically, a match *event* is assigned to both opposing countries of a single match, while the *outcome* is assigned to the relevant countries as a *win* and a *loss*. A match with no definitive outcome is assigned as a *draw* for both countries. In the data, approximately 77% of the matches recorded a definitive outcome while 23% of the matches ended in a draw.

Next, inspired by Edmans, García and Norli (2007), I identify ‘close’ matches using the annual performance ratings of the two opponents. The relevant annual ratings for the sample period were extracted from World Football Elo Ratings, which is the world’s leading ranking system of football teams.¹⁷ For each national team, Elo Ratings provides an annual rating score indicative of its performance, with higher (lower) Elo scores signaling higher (lower) levels of performance. I leverage this information to calculate the rating differential between two teams that play in each football match in the sample. To maintain the exogeneity of the IV, I focus on ‘unpredictable’ matches, i.e. matches played between teams with ‘close’ rating scores. I consider a match as *close* if the rating differential between opponents is less than 150 points.¹⁸

I then define binary and count variables to capture both the occurrence of a football match and their outcomes. My preferred variables are count variables, as they are able to more effectively capture the intensity and variation of the effects of football outcomes on domestic turmoil, at this fine level of temporal resolution. Accordingly, $Football\ Match_{iym}$ is a count variable of the ‘close’ football matches played by country i in month m of year y . $Football\ Win_{iym}$, $Football\ Loss_{iym}$ and $Football\ Draw_{iym}$ are count variables that capture outcomes of such ‘close’ matches (i.e. wins, losses and draws, respectively), for country i in month m of year y .

¹⁷www.eloratings.net.

¹⁸The rating differential between the top five teams over the sample period is approximately 110 points, while the rating difference between the top ten teams is 190. Based on these estimates, I use a rating difference of 150 points between opposing teams to define a match as a ‘close’ match. I also show robustness to multiple alternative rating differences. Edmans, García and Norli (2007) use a rating differential of 125 points, and observe that at a date reasonably near to their exercise, (i.e. 31 October 2005), the rating difference between the top-ranked country and the country ranked tenth is 122 points.

Table 1 provides descriptive statistics for the key variables.

Table 1: Descriptive Statistics for Key Variables

	No. of Observations	Mean	Standard Deviation	Minimum	Maximum
<i>Domestic Turmoil</i>	41,040	0.2179	0.3113	0	1
<i>Foreign Verbal Cooperation</i>	41,040	0.6835	0.3483	0	1
<i>Foreign Material Cooperation</i>	41,040	0.0478	0.1036	0	1
<i>Foreign Verbal Conflict</i>	41,040	0.0692	0.1249	0	1
<i>Foreign Material Conflict</i>	41,040	0.0420	0.1018	0	1
<i>Football Loss</i>	41,040	0.1149	0.3639	0	4
<i>Football Match</i>	41,040	0.3165	0.6918	0	8

Notes: *Domestic Turmoil* is a standardized indicator recording all domestic events targeting the government, recording a Goldstein score of -5 or less, expressed as a fraction of all domestic events targeting the government. Foreign interactions initiated by a country's government, classified as *Verb Coop*, *Mat Coop*, *Verb Conf* and *Mat Conf*, are also standardized indicators, expressed as a fraction of the total number of foreign interactions initiated by the government. *Football Loss* and *Football Match* are the counts of all football losses and matches experienced by a country, respectively, against an opponent with a rating differential of 150 points or less.

2.3 Other variables

I use a range of variables to identify the heterogeneous effects of diversionary foreign policy. First, I use data from the Polity IV project (Marshall, Gurr and Jaggers, 2019) to generate time-invariant binary indicators that classify countries as democracies, autocracies and anocracies. Countries with an average polity score ≥ 6 (≤ -6) over the sample period are identified as democracies (autocracies). A country with a score between 5 and -5 is classified as an anocracy.

Next, to examine the role of a country's level development in the exercise of diversionary foreign policy, I use World Bank data on country income classifications (Fantom and Serajuddin, 2016). I generate a time-invariant binary indicator $Income_i$, which equals 1 if the country was classified as a high or upper middle income country in at least one year of the sample, and assumes a value of zero otherwise. Additionally, I consider the heterogeneous effects of diversionary foreign policy using the Human Development Index (HDI),¹⁹ where I calculate a time-invariant binary indicator that equals 1 for countries

¹⁹HDI is a quantitative measure capturing three key areas of human development, estimated annually for each country using life expectancy at birth, average years of schooling and per capita Gross National Income.

that recorded an average HDI of above 0.5 over the sample period (on a scale of 0–1). Moreover, to examine heterogeneity in governments’ foreign interactions within election cycles, I source global data on elections from the Constituency-Level Elections Archive (CLEA).

2.4 Connectivity measures

Data on historical conflict and trade between countries, as well as on individual country features such as population, national capability and military expenditure, are obtained from the Correlates of War Project (Barbieri and Keshk, 2016).

I extract data from the the GeoDist database to identify the geodesic distance between two countries, and whether they belong to the same continent, or share a common language/common colonizer. Additionally, I use data on genetic distance between countries as estimated by Spolaore and Wacziarg (2016), as well as data on linguistic and religious distance as provided by Spolaore and Wacziarg (2016), who in turn rely on estimations by Fearon (2003) and Mecham, Fearon and Laitin (2006), respectively. To incorporate these distance measures in to the analysis, I convert the time-invariant genetic, linguistic, religious and geodesic distance measures to binary indicators based on the median distance value.

3 Empirical framework

3.1 Baseline specification

To estimate the effect of domestic turmoil on the frequency and nature of governments’ foreign interactions, I use the following econometric specification.

$$FP_{iy m} = \alpha DT_{iy m} + \mathbf{FE}_{iy} + \mathbf{FE}_m + \epsilon_{iy m} \quad (3)$$

Here, i , y and m refer to country, year and month, respectively. The dependent variable $FP_{iy m}$ is a standardized indicator which expresses the number of governments’ foreign

interactions belonging to a FP category, i.e. Verbal Cooperation, Material Cooperation, Verbal Conflict and Material Conflict, as a fraction of the total number of governments' foreign interactions in the period. The independent variable DT_{iym} is the standardized indicator of domestic turmoil faced by the government in the given period, which expresses the number of domestic events targeting the government that record a Goldstein score of -5 or below, as a fraction of the total number of domestic events targeted at the government.²⁰ \mathbf{FE}_{iy} is a vector of country \times year fixed effects, which accounts for time-variant unobservables affecting a given country in a given year, as well as time-invariant country-specific features. \mathbf{FE}_m is a vector of month-of-the-year fixed effects, and accounts for unobserved seasonal variation that can simultaneously affect FP and DT .²¹

The coefficient of interest, α , is the estimated effect of domestic turmoil on governments' foreign interactions. Since governments are faced with a spectrum of substitutable foreign interactions ranging from extreme cooperation to extreme aggression (as represented by the distinct FP categories identified in the data), α captures the governments' propensity to choose a particular type of such substitutable action, over the alternatives. Accordingly, if $\alpha > 0$ (< 0) for a given FP category, this indicates that when domestic turmoil is high, governments are more (less) likely to choose foreign interactions belonging to this particular category.

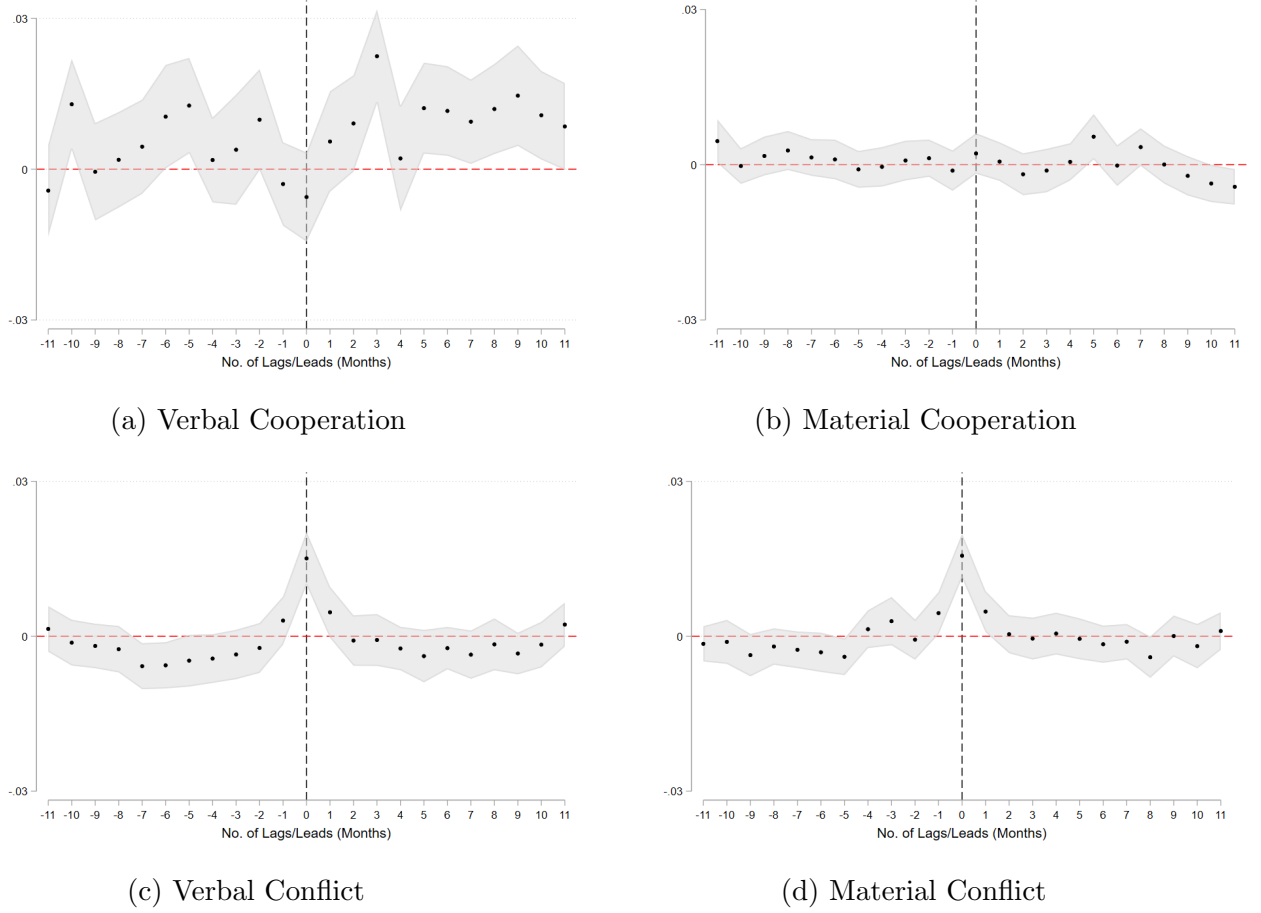
Figure 1 plots the simple OLS relationship between the four FP categories and DT . Leveraging on the fine temporal granularity of the data set, these plots depict the relationship between domestic turmoil and foreign interactions over 11 monthly lags and leads. At a glance, two interesting features of the relationship can be observed in these plots. First, as per Panels (a) and (b) of Figure 1, there appears to be no obvious pattern with respect to the relationship between *cooperative* foreign interactions (both verbal and material) and DT . Secondly, and quite interestingly, Panels (c) and (d) indicate that there is a striking positive relationship between domestic turmoil and aggressive foreign interactions, both verbal and material in nature. These results provide a first hint of a

²⁰The results are robust across alternative thresholds of the Goldstein score. See Table B.4.

²¹As indicated in Figure B.9, results are robust to the inclusion of a number of alternative sets of fixed effects.

positive association between the level of domestic turmoil faced by a government, and the government's likelihood of being aggressive on the international front.

Figure 1: Foreign interactions and *DT* over time - OLS estimates



Note: Figure shows the OLS correlations between governments' foreign interactions and *Domestic Turmoil* (*DT*) as per Equation 3, and additionally includes 11 monthly lags ($t < 0$) and leads ($t > 0$). All specifications include country \times year fixed effects and month fixed effects. The unit of measurement is a country-month. Standard errors are clustered at the country level. Shaded area indicates 90% confidence intervals.

However, despite the fine temporal granularity and the large set of fixed effects, the possibility of reverse causality and joint determination threaten the precise estimation and causal interpretation of α . For instance, at this stage, we cannot rule out the possibility that governments' foreign interactions affect the level of domestic turmoil in a country. There could also exist unobservable factors that lead to a simultaneous change in both domestic turmoil and governments' foreign interactions. Therefore, disentangling the causal relationship between domestic turmoil and foreign interactions is critically important, from an academic as well as policy perspective.

3.2 Instrumental Variable

To address such biases and to causally infer the relationship between domestic turmoil and governments’ foreign interactions, in this next part of the analysis I propose an IV strategy, where I focus on outcomes of sporting events, particularly football losses, as *exogenous* shocks that affect the level of domestic turmoil. Accordingly, the first-stage is defined as follows.

$$DT_{iym} = \beta SL_{iym} + \mathbf{FE}_{iy} + \mathbf{FE}_m + \epsilon_{iym} \quad (4)$$

The IV, SL_{iym} , is a count variable of the (men’s) international football losses recorded by a country in a given month of a given year. The coefficient β captures the effect of football losses on domestic turmoil, and at the outset, I expect $\beta > 0$, indicating that a football loss would lead to increased domestic turmoil.

How do football losses affect the level of domestic turmoil in a country? Indeed, for the instrument to be relevant, it is critical that football outcomes have a direct and significant impact on public sentiments. Football is, by a large margin, the world’s most popular sport (Nielsen, 2018),²² and throughout history there is ample anecdotal evidence of this widespread interest in football influencing public sentiment, and shaping societies.

Perhaps the most important example comes from the 1954 FIFA World Cup Final, famously known as the ‘miracle of Bern’, where West Germany beat the heavily favoured Hungarian team. For Germans, this win and the consequent euphoria led to the re-ignition of national pride and the creation of a collective identity (Foster, 2003), as well as the regaining of lost international recognition. Conversely for Hungarians, the loss led to widespread national discontent targeted at the communist-authoritarian regime in the run-up to the 1956 Hungarian Revolution.²³ Another example comes from the football war of 1969, where tensions between fans of El Salvador and Honduras following a FIFA

²² 43% of the respondents surveyed by Nielsen (equivalent to 736 million people), in geographies covering North and South America, Europe, Middle East and Asia, reported football as their most popular sport, with basketball recording the second place with 36% of the votes (equivalent to 626 million people).

²³ See, for example, www.thehardtackle.com, “The miracle of Bern: A game that changed Germany and Hungary forever,” October 11, 2012.

World Cup qualifier led to the breakout of war between the two countries. More recently, Iraq’s win of the AFC Asian Cup in 2007 is widely believed to have unified the country despite many domestic political issues ranging from ethnic factionalism to invasion by the US military.²⁴ ²⁵

Complementing such anecdotal evidence is a growing body of literature which suggests that sports outcomes, and in particular, football outcomes, do drive people’s sentiments in a manner that leads to substantive changes in their behavior. For instance, Edmans, García and Norli (2007) find evidence of a significant decline in stock market performance following soccer losses. Card and Dahl (2011) find that emotional cues related to football losses affect reported events of family violence, while Ge (2018) shows that sports outcomes affect the tipping behaviour of taxi commuters. More relevant to my work, Depetris-Chauvín, Durante and Campante (2020) find that football wins lead to the emergence of the national identity, overriding ethnic identity, in the context of Africa. Along similar lines, Bertoli (2017) suggests that the increased level of nationalism following football wins induces governments to behave aggressively on the international front. My empirical strategy builds on and complements these two recent works, and explores the symmetric nature of the effects of sports outcomes on public sentiment by focusing on the negative public sentiment shock following football *losses*, instead of the positive sentiment shock following football *wins*.

The relevance of the IV in this setting relies heavily on the unpredictable nature of the football outcome. For instance, where an extremely strong team plays against an extremely weak team, the public may have a fairly confident and accurate prediction of the outcome, which eliminates the ‘surprise’ element of the public sentiment shock, and in turn threatens the identifying assumptions. It is, however, more difficult to predict the outcome correctly in matches played against teams exhibiting similar levels of performance. Therefore, inspired by Edmans, García and Norli (2007), my empirical strategy focuses purely on ‘close’ football losses, i.e. losses in matches played between teams ex-

²⁴ www.reuters.com, “Iraq’s Asian Cup win transcends sports,” July 30, 2007.

²⁵ Related, but in a different sport, South Africa’s win at the 1995 Rugby World Cup is cited as the ‘game that made the nation’ (Carlin, 2008), uniting a heavily fragmented nation just recovering from the end of apartheid.

hibiting a similar level of performance. I identify close football matches using data on football performance ratings of national teams from Eloratings.com. For each match, I calculate the rating differential between opposing teams, and for the purpose of this study, define a match as ‘close’ if the rating differential in the contemporary year is less than 150 points.²⁶

Another potential concern on the relevance of the IV is that the effect of a football loss on public sentiment may vary between countries, depending on the popularity of the sport in each country. Considering the high and increasing popularity of football across the globe, this seems a minute concern. Even in countries such as India, where cricket is predominantly the most popular sport, interest in football has risen considerably (Nielsen, 2018). Nevertheless, in Figures B.7 and B.8 I provide a number of robustness checks indicating that baseline results do not change quantitatively or qualitatively even after excluding countries based on football popularity and a range of other distinct features.

With respect to the instrument’s validity, the identification strategy rests on the assumption that sports outcomes affect governments’ foreign interactions (FP_{iym}) only through domestic turmoil (DT_{iym}). I implement numerous measures to mitigate the risk that the exclusion restriction is violated. First, I include a comprehensive set of country \times year fixed effects in equation (4), which absorbs all time-invariant characteristics at the country level, as well as any time-variant factors that might simultaneously drive sports outcomes and domestic turmoil. Accordingly, any unobservables that are specific to a country and year, such as the behavior of media and their propensity for selective reporting, changes in socio-economic factors that affect people’s attitude towards their governments, or annual performance variations of the national football team, are captured by this set of country \times year fixed effects. Moreover, any seasonal variations in DT_{iym} are captured by the vector of month fixed effects.²⁷

Second, I disentangle the effects of the match *outcome* from the effects of the *timing* of

²⁶The cutoff of 150 points is inspired by the methodology employed by Edmans, García and Norli (2007). Please see Section 2.2 for more details. I also show robustness across alternative rating differential windows in Table B.6.

²⁷As indicated in Figure B.9, the baseline results are also robust to the inclusion of a number of alternative fixed effects.

the match, which is critical for maintaining the validity of the exclusion restriction. The specific dates of football matches are typically predetermined by football authorities, and this information is commonly available to the general public. A threat to the exclusion restriction would arise if, knowing that the public is likely to be distracted by the sports, governments strategically manipulate such predetermined timings to engage in unpopular foreign interactions, leading to sporting events having a direct effect on FP . Moreover, in an extreme situation, governments' foreign interactions could also lead to the cancellation of existing matches or planning of new matches, which would then raise a concern of reverse causality. Therefore, to maintain the validity of the IV, it is important to exploit the purely *exogenous* variation in domestic turmoil attributable to the unpredictable occurrence of the *football loss* (SL_{iym}), conditional on the *football match* (SM_{iym}) effect. To account for this distinction, I revise the first-stage specification in equation (4) as below.

$$DT_{iym} = \beta SL_{iym} + \gamma SM_{iym} + \mathbf{FE}_{iy} + \mathbf{FE}_m + \epsilon_{iym} \quad (5)$$

where SL_{iym} and SM_{iym} refer to *football loss* and *football match*, respectively. Accordingly, the coefficient of interest β captures the direct effect of SL_{iym} on domestic turmoil, conditional on SM_{iym} .

To maintain consistency between the first and second-stages, I also revise the second-stage specification, by incorporating SM_{iym} .

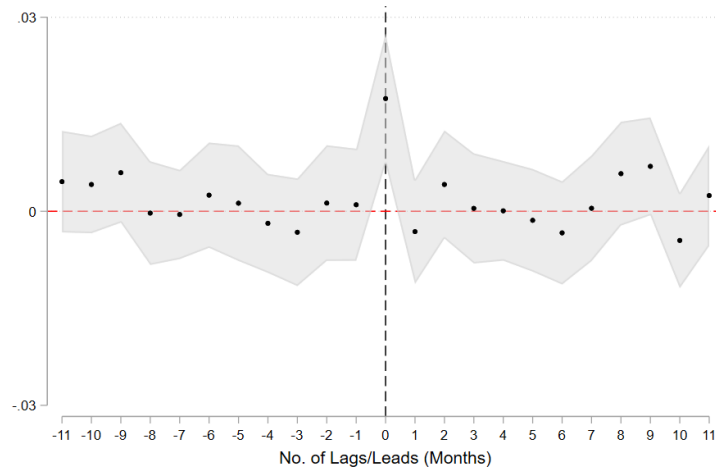
$$FP_{iym} = \alpha DT_{iym} + \gamma SM_{iym} + \mathbf{FE}_{iy} + \mathbf{FE}_m + \epsilon_{iym} \quad (6)$$

Finally, I address the concern that a further threat to the exclusion restriction arises if sports outcomes directly influence governments to systematically interact with countries against whom football matches were played over the period. To eliminate any threats to the identification strategy arising from such interactions, I conduct a test of robustness in Table B.2, where I exclude all foreign interactions of governments directed at football opponents, and the baseline results remain qualitatively and quantitatively similar.

By virtue of the IV strategy implemented, these estimates represent the local average treatment effect (LATE), i.e. the average effect for observations complying with the instrument (Imbens and Angrist, 1994). Accordingly, compliers in this context are country-month observations that recorded an increase in DT following a football loss. The estimates are not driven by country-months where football losses had no effect on domestic turmoil. Football outcomes may have very particular effects on domestic turmoil and these effects may vary systematically from other potential sentiment shocks, and this caveat should be borne in mind when drawing general conclusions using these estimates.

Before delving deeper in to the baseline results in Section 3.3, Figure 2 provides a quick look in to the first stage results. It plots the effect of SL_{iym} on DT_{iym} as per Equation 5, and further leverages on the fine temporal granularity of the data set by including 11 monthly lags and leads in the specification. The plot clearly exhibits that football losses have an immediate, positive and statistically significant effect on DT and that this effect is only visible in the contemporary time period.

Figure 2: Effect of football losses on DT over time



Note: Figure shows the effect of football losses on *Domestic Turmoil* (DT) as per Equation 5, including 11 monthly lags ($t < 0$) and leads ($t > 0$). Additional controls include country \times year fixed effects and month fixed effects. The unit of measurement is a country-month. Standard errors are clustered at the country level. Vertical lines indicate 90% confidence intervals.

3.3 Main results

Table 2 presents the baseline results exploring the relationship between DT and governments' foreign interactions. Here, the dependent variables are the four categories of governments' foreign interactions – verbal cooperation (Columns 1 and 2), material cooperation (Columns 3 and 4), verbal conflict (Columns 5 and 6) and material conflict (Columns 7 and 8). For each dependent variable I report two specifications with different sets of fixed effects. In Columns 1, 3, 5 and 7, I include country and year fixed effects separately. My preferred specifications appear in Columns 2, 4, 6 and 8, where I impose the more stringent set of country \times year fixed effects.²⁸

I begin by reporting the OLS estimates of equation (6), which are presented in Panel A of Table 2. In Columns 1 and 2, I observe that domestic turmoil is negatively correlated with verbally cooperative foreign interactions initiated by governments. The positive correlation between domestic turmoil and materially cooperative foreign interactions in Column 3 disappears when country \times year fixed effects are included (Column 4). Interestingly, and in line with the graphical illustration in Figure 1, in Columns 5–8 I observe a strong positive correlation between domestic turmoil and governments' aggressive foreign interactions, both verbal and material.

Next, in Panel B, I present the reduced form estimates. Observe that football losses have a positive and statistically significant effect on governments' verbally aggressive foreign interactions, and this relationship holds when controlling for country \times year fixed effects as well. I do not observe an effect of football losses on the other three categories of foreign interactions initiated by governments.

Now I turn to the IV estimates. First-stage estimates of equation (5) are presented in Panel D. As already hinted in Figure 2, I observe a strong positive relationship between football losses and domestic turmoil. The effect is statistically significant at the 1% level, and in my preferred specification, which includes country \times year fixed effects, the first-stage Kleibergen-Paap F -statistic for the excluded instrument is 13.12. This results confirms my

²⁸These results are robust to the inclusion of a range of alternative sets of fixed effects, as demonstrated in Figure B.9.

proposition that football losses have a role to play in shaping people’s sentiments towards their governments. More interestingly, in a setting where the existing literature has only thus far focused on the effects of football *wins* in shaping *positive* public sentiments, this result is an important step in establishing the symmetry of the relationship, by providing empirical evidence that football *losses* shape *negative* public sentiments.

Table 2: Baseline Estimates: The Effect of Domestic Turmoil on Governments’ Foreign Interactions

	(1) <i>Verb Coop_{iy}</i>	(2)	(3) <i>Mat Coop_{iy}</i>	(4)	(5) <i>Verb Conf_{iy}</i>	(6)	(7) <i>Mat Conf_{iy}</i>	(8)
Panel A: OLS Estimates								
<i>Domestic Turmoil_{iy}</i>	-0.0151** (0.0063)	-0.0133*** (0.0043)	0.0040* (0.0021)	0.0005 (0.0020)	0.0249*** (0.0028)	0.0168*** (0.0026)	0.0214*** (0.0022)	0.0154*** (0.0023)
Panel B: Reduced Form Estimates								
<i>Football Loss_{iy}</i>	-0.0021 (0.0043)	-0.0008 (0.0041)	-0.0002 (0.0016)	-0.0003 (0.0017)	0.0046** (0.0020)	0.0048** (0.0020)	0.0006 (0.0015)	-0.0007 (0.0017)
Panel C: IV Estimates								
<i>Domestic Turmoil_{iy}</i>	-0.1296 (0.2691)	-0.0424 (0.2233)	-0.0095 (0.0971)	-0.0158 (0.0912)	0.2833* (0.1449)	0.2632** (0.1262)	0.0379 (0.0937)	-0.0369 (0.0910)
<i>Domestic Turmoil_{iy}</i>								
Panel D: First-Stage Estimates								
<i>Football Loss_{iy}</i>	0.0164*** (0.0051)	0.0182*** (0.0050)	0.0164*** (0.0051)	0.0182*** (0.0050)	0.0164*** (0.0051)	0.0182*** (0.0050)	0.0164*** (0.0051)	0.0182*** (0.0050)
Kleibergen-Paap <i>F</i> -statistic	10.16	13.12	10.16	13.12	10.16	13.12	10.16	13.12
Controls:								
Country FE	YES	NO	YES	NO	YES	NO	YES	NO
Year FE	YES	NO	YES	NO	YES	NO	YES	NO
Country-Year FE	NO	YES	NO	YES	NO	YES	NO	YES
Month FE	YES	YES	YES	YES	YES	YES	YES	YES
Football Match	YES	YES	YES	YES	YES	YES	YES	YES
No. of Observations	41,040	41,040	41,040	41,040	41,040	41,040	41,040	41,040
No. of countries	190	190	190	190	190	190	190	190
Maximum Goldstein Score	-5	-5	-5	-5	-5	-5	-5	-5

Notes: The dependent variables in Panels A, B and C are foreign interactions initiated by a country’s government, classified as *Verb Coop*, *Mat Coop*, *Verb Conf* and *Mat Conf*, expressed as a fraction of the total number of foreign interactions initiated. *Domestic Turmoil* expresses all domestic events targeting the government that record a Goldstein score of -5 or less, as a fraction of all domestic events targeting the government. *Football Loss* is the count of all football losses experienced by a country against an opponent with a rating differential of 150 points or less. Columns (1), (3), (5) and (7) include country and year fixed effects separately, while Columns (2), (4), (6) and (8) include country × year fixed effects. Both stages additionally control for *Football Match*, which is the number of close football matches played by the country over the period. The unit of measurement is a country-month. Standard errors, clustered at the country level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

Finally, in Panel C of Table 2, I present the second-stage estimates of equation (6), which highlight a number of interesting observations. First, observe that, once instrumented via football losses, there is no evidence of high levels of domestic turmoil leading to governments engaging in cooperative foreign interactions, whether verbal or material

(Columns 1-4 in Panel C). This suggests that cooperative international interactions are not viewed by governments as being sufficiently capable of distracting the domestic population away from pressing domestic issues.

Next, these results indicate that between the aggressive alternatives, governments favor verbal aggression over material aggression as the primary tool of diversionary foreign policy. The coefficient of interest in Column 6 is 0.2632, which indicates that a one standard deviation increase in domestic turmoil leads to a 8% increase in verbal conflict. I do not observe any statistically significant effect of domestic turmoil on materially aggressive foreign interactions.

Taken together, these findings add interesting insights to the current academic knowledge on the exercise of diversionary foreign policy tactics. First, they provide strong causal evidence that diversionary foreign policy is exercised, not just by a single country or a handful of countries as established in the existing literature, but by governments across the globe, in a systematic manner, to strategically manipulate the public away from pressing domestic issues.

Second, and more importantly, these results re-define the existing literature's understanding of diversionary foreign policy as an extreme form of violence involving war, arms, militants and death. Instead, I show that there is a tendency to engage in diversionary tactics using subtle verbally aggressive foreign interactions. Indeed, in the increasingly inter-connected international system, waging war on another country involves non-trivial costs and risks. A fully-fledged military conflict is therefore not a rational choice for most countries and, in most instances, even for those with sufficient resources. By contrast, verbally aggressive foreign interactions, such as issuing a statement criticizing a foreign entity's actions or a verbal demand made in the course of a presidential speech, involve lower costs and risks, and are therefore exercised with greater ease. This finding, which quantifies hitherto ignored subtle international interactions, and which takes in to consideration the full spectrum of the substitutable options of foreign interactions available to governments, thereby establishes fresh evidence on the nature of diversionary tactics employed by governments, and would be of critical importance to academics and policy

makers alike.

3.4 Robustness checks

I now discuss a number of robustness checks on these baseline results, which are included in Appendix [B](#).

3.4.1 Robustness checks on sample selection

Could the baseline results be driven by one country or a handful of countries with very specific characteristics? In order to confidently address any such concerns, I conduct a number of robustness checks on the characteristics of the countries included in the sample, as exhibited in Figure [B.7](#).

First, in Panel (a), I exclude from the sample all ‘small’ countries, defined as those with a population of below 500,000. As the plot suggests, baseline results do not change drastically, suggesting that they are not driven specifically by this set of small countries. In Panel (b), I exclude all OECD countries from the original sample. Again, I find that the baseline result remains unchanged in magnitude and statistical significance, confidently ruling out any concern of being driven by the more developed countries.

Another potential concern with respect to the identification strategy is that football popularity varies between countries. Citizens in countries with high football popularity may react more intensely to a football loss, as opposed to citizens of countries where football is less popular. This leads to the question on whether the baseline results capture an effect specific to those countries where football is the most popular sport. I address this concern in Panels (c) and (d).

In Panel (c), I exclude all countries that ever played a world cup from the sample. Countries are typically selected to play the world cup through an intense and competitive process. Therefore, being selected to play the world cup, by itself, is an important achievement for the country as a whole, and may increase the public’s affiliation with the sport. Public sentiment in such countries may be more responsive to shocks in the form of football losses than in other countries. However, as indicated in Panel (c), the baseline

results do not vary in magnitude or statistical significance when I exclude these countries from the sample. Next, in Panel (d), I exclude the top 20 countries where football is identified as the most popular sport as per Nielsen (2018), again based on the premise that higher football popularity may lead to more intense reactions to football losses. The baseline results are robust to the exclusion of such countries as well.

In Figure B.8 I go a step further to confirm that the results are not driven by a single country. Here, I re-estimate the baseline specification, separately for the four dependent variables, excluding one country at a time. Panels (a), (b), (c) and (d) use Verbal Cooperation, Material Cooperation, Verbal Conflict and Material Conflict as the dependent variables, respectively. In each panel, the red circle indicates the baseline estimate. I observe that the results excluding one country at a time do not digress greatly from the baseline estimate. More importantly, the key result that diversion occurs through verbal cooperation holds strong, both qualitatively and quantitatively, in this leave-one-out exercise as well.

These stringent robustness checks on sample selection therefore affords confidence that the baseline results are not driven by a specific characteristic, a specific country or a specific set of countries.

3.4.2 Alternative fixed effects

Another potential concern with the baseline estimates is that there may be unobservable factors, beyond what is captured in the included set of fixed effects, that influence the estimation results. I address any such concern in Figure B.9, where I re-estimate the baseline estimates using alternative sets of fixed effects.

In Figure B.9, Panel (a) plots the baseline estimates. These include *country* \times *year* fixed effects (\mathbf{FE}_{iy}), which account for time-invariant unobservables affecting country i in year y , as well as time-invariant characteristics specific to country i , and *month* fixed effects (\mathbf{FE}_m), which account for any unobserved seasonal variations. As discussed, there is a positive and statistically significant effect of *DT* on foreign interactions classified as ‘Verbal Conflict’. I do not observe an effect for other categories of foreign interactions.

Panel (b) includes a somewhat less stringent set of fixed effects, with *country* (\mathbf{FE}_i), *year* (\mathbf{FE}_y), *month* (\mathbf{FE}_m) fixed effects being included separately. I observe that the baseline results do not change quantitatively or qualitatively in Panel (b).

In Panel (c), I include a more stringent set of fixed effects that captures *year* \times *month* fixed effects (\mathbf{FE}_{ym}), which would control for any time-varying unobservables that occurred in a given month of a given year. I also include *country* fixed effects (\mathbf{FE}_i) which account for any country-specific time-invariant characteristics. As exhibited in Panel (c), baseline results do not change drastically in magnitude or statistical significance when this set of fixed effects is included.

Finally, in Panel (d), I include a broader set of fixed effects that captures unobservables varying along both spatial and temporal dimensions. By including a comprehensive set of *continent* \times *year* \times *month* fixed effects (\mathbf{FE}_{cym}), I am able to control for unobservable intra-annual common shocks that affect all countries within a *continent*, including seasonal shocks. Panel (d) indicates that the baseline results remain robust to the inclusion of this broader set of fixed effects as well.

3.4.3 Accounting for the total number of reported events

One potential concern when using data derived from news media is that the total universe of news varies over time, and needs to be appropriately considered in the empirical estimates. This concern is more relevant in situations where an analysis specifically depends on the ‘number of news articles’. For example, Baker, Bloom and Davis (2016), who focus on the number of newspaper articles containing certain key words, use a method of standardization to account for such variations in the universe of newspaper articles. My approach differs slightly, since the focus is on the number of *actual physical events* that occurred, instead of the number of *news articles* where such events were reported. Even if an event was reported by multiple news articles, it would be considered as a single event within my analysis. As such, my outcome and explanatory variables are subsamples of the universe of total physical events that occurred in reality, and not of the universe of news articles.

It could, nevertheless, be argued that variations in the universe of news articles leads to selection bias in reporting, which in turn affects the universe of actual physical events being reported. Although this is less of a concern in the age of digital news media (which, unlike physical newspapers or television/radio broadcasts, are not constrained by the number of pages or air time, respectively), I address this concern in a number of ways.

First, the explanatory and outcome variable in my analysis are standardized using the total number of events targeting the government and the total number of foreign actions initiated by governments, respectively, in the given period. This standardization accounts for a majority of the variation in the news universe over time. Second, by incorporating a comprehensive set of country \times year fixed effects, I absorb specific media attributes, such as reporting bias, reporting capacity and tendency for selective reporting, relevant to a particular country in a given year. Third, by considering only those events reported in at least three media reports, I filter out trivial events and instead focus on the more prominent physical events, again accounting for potential concerns of media bias.

Finally, to further address this concern, in Table [B.1](#) I conduct a robustness check where I control for the total number of events reported in a country in a given month of a given year. Results indicate that the baseline estimates do not change drastically, both in terms of magnitude and statistical significance.

3.4.4 Government interactions with football opponents

A potential threat to the empirical strategy arises if football matches lead to systematic government interactions between the two opposing countries. If this was indeed the case, we would observe a direct effect of football losses on governments' foreign interactions, which would be in violation of the exclusion restriction. I address this concern in Table [B.2](#). Here, I exclude all government foreign interactions directed at countries with whom a football match was played in the given period, and re-estimate the baseline specification. I observe that the results remain qualitatively and quantitatively similar to the baseline estimates.

3.4.5 Trends in government behavior

In Table B.3, I re-estimate the baseline specification after including a lagged dependent variable (LDV) to capture any potential trends in government behaviour that would influence the results. Again, I observe that the baseline results are robust to this inclusion and thus, are not driven by such persistent trends in governments' interactions.

3.4.6 Alternative definitions of domestic turmoil

In the baseline results, I use a threshold Goldstein scale score of -5 to identify events contributing to domestic turmoil (See Eq 1). In Table B.4, I conduct a robustness check to examine whether the baseline estimates change significantly when alternative thresholds are applied. Accordingly, in Columns (1), (2), (3), (4) and (5), I redefine domestic turmoil as all domestic events targeting the government, with maximum Goldstein scores of -3 , -4 , -5 , -6 and -7 , respectively. Again I observe that, consistent with the baseline estimates, verbal conflict emerges as the more prominent form of diversionary foreign policy, even when using alternative cutoffs for domestic turmoil. The magnitude of the effect also remains similar.

3.4.7 Alternative definitions of the IV

In Table B.5, I consider alternative definitions of the IV. For comparison purposes, Column (1) provides the baseline specification where the IV is the number of football losses experienced by a country in a given month of a given year. In Column (2), I use the inverse hyperbolic sine (IHS)-transformed count of football losses as the instrumental variable. I observe that the first-stage in Panel E is positive and statistically significant, and not drastically different in magnitude from the baseline result presented in Column (1), although the reported F -statistic is marginally below 10. The second-stage results, presented in Panels A–D are again meaningfully reflective of the baseline results, with verbal conflict emerging as the prominent form of diversionary foreign policy. In Column (3), I use a binary indicator of a football loss as the instrument. Here, although verbal conflict is again identified prominently, the first-stage estimates are weaker compared

to the baseline estimates. This is potentially because a binary indicator lacks the rich variation of a count variable and therefore leads to less precise estimates, especially for countries experiencing more than one football loss over a given month.

Another prominent assumption used in the baseline estimates relate to the definition of ‘close’ matches, which is a critical component of the identification strategy. In the baseline specification, a ‘close’ match is one where the rating difference between the opponents is less than 150 points. I now check the robustness of the results to the use of alternative rating differences to identify ‘close’ football matches. In Columns (1)–(9) of Table B.6, I consider rating differences (in 10–point intervals) starting from 120 points (a narrower definition of closeness) up to 200 points (a broader definition). The results are quantitatively similar to the baseline specification, suggesting that the baseline estimates are not driven by the choice of rating difference.

3.5 Heterogeneous effects across different contexts

In the next part of the empirical analysis, I examine whether the effects of domestic turmoil on diversionary foreign policy are heterogeneous across different contexts. Arguably, causal identification of heterogeneous effects within an IV setting is an empirically challenging task, due to the requirement of strong IVs for the multiple endogenous regressors (Sanderson and Windmeijer, 2016). Faced with a similar situation, and in acknowledgement of the importance of identifying heterogeneous effects, Nunn and Qian (2014) report such estimates, while cautioning of potential bias due to weak instruments. In the next section, I follow their approach and consider the underlying mechanisms, subject to this caveat.

I proceed with the heterogeneity analysis as follows. First, I define a variable C_i which identifies time-invariant country-specific characteristics. Next I construct interaction terms with C_i and DT_{iym} , allowing the effects of domestic turmoil on diversionary foreign policy to differ based on such country-specific characteristics. Once heterogeneity is accounted for, the second-stage equation is revised as follows.

$$FP_{iytm} = \alpha_1 DT_{iytm} + \alpha_2 (DT_{iytm} \times C_i) + \gamma SM_{iytm} + \mathbf{FE}_{iy} + \mathbf{FE}_m + \epsilon_{iytm} \quad (7)$$

To establish causality, I then instrument for DT_{iytm} and $DT_{iytm} \times C_i$ using SL_{iytm} and $SL_{iytm} \times C_i$, and accordingly, the first-stage equation for DT_{iytm} is revised as follows.

$$DT_{iytm} = \beta_1 SL_{iytm} + \beta_2 (SL_{iytm} \times C_i) + \gamma SM_{iytm} + \mathbf{FE}_{iy} + \mathbf{FE}_m + \epsilon_{iytm} \quad (8)$$

The other first-stage equation, which is for the interaction term $DT_{iytm} \times C_i$, is identical to equation 8 but with $DT_{iytm} \times C_i$ as the dependent variable. Since C_i is time-invariant and country specific, it is already absorbed by the vector of country \times year fixed effects, and therefore, C_i by itself does not need to enter the specification.

I commence the empirical analysis of heterogeneous effects by examining whether the nature of political institutions in a country has a role to play in governments engaging in diversionary foreign policy. I use the average polity score assigned for each country in the Polity IV project over the sample period to generate time-invariant binary indicators classifying countries as democracies (average polity score ≥ 6), autocracies (average polity score ≤ -6) and anocracies (average polity score $5 \leq$ to ≥ -5). Panel A in Table B.7 presents the results for this specification.

Consistent with the baseline estimates, the only statistically significant result is for the specification with verbal conflict as the dependent variable, and this effect is manifested particularly for anocracies. It seems plausible that anocratic regimes are more susceptible to the use of diversionary foreign policy where, in the absence of consistent and developed political institutions, political leaders attempt to keep the population diverted and satiated in the short run using manipulative tactics. I also report the joint estimates for the three types of political institutions, and the joint standard error, and here too, the results suggest that the effect of domestic turmoil is largely on verbal conflict.

Next, I explore whether the effects of domestic turmoil on diversionary foreign policy differ by the income levels of a country. For this purpose, I generate a time-invariant binary variable $Income_i$, which is equal to 1 if a country was classified as a high income

or upper middle income country in at least one year of the sample, and 0 otherwise. Again, as per the estimates presented in Panel B in Table B.7, domestic turmoil is observed as leading to increased foreign interactions classified as verbal conflict, and this effect is observed particularly in the case of low-income countries.

In Panel C of Table B.7, I conduct a similar exercise based on the HDI, which is a comprehensive development indicator that accounts for developments in literacy, health and income. I classify a country as recording a high level of human development if its average HDI score over the sample period is above 0.5 (on a scale of 0–1). Results suggest that diversionary foreign policy occurs mostly in countries with low levels of human development. Accordingly, the cumulative understanding from the results presented in Panels A, B and C is that diversionary foreign policy is more prominently observed in developing countries with unstable political institutions.

Are diversionary tactics motivated by election cycles? I answer this question in Panel D of Table B.7. Here, I define a binary variable $Election_{iym}$ which is equal to 1 if the country experienced an election in the given month of the given year, and 0 otherwise. Results do not provide evidence that diversionary foreign policy is driven by election-related political agendas. Although somewhat counter-intuitive, this result supports the observations from Panel A in Table B.7 where no evidence of diversionary foreign policy was observed in democracies, where elections assume greater importance compared to anocracies and autocracies.

4 Which countries are targeted?

In the next part of this study, I focus on identifying whether leaders who engage in diversionary foreign policy choose their targets in a systematic manner. To achieve this objective, I first build a dyadic data set containing the monthly interactions between countries i and j (FP_{ijym}), as well as indicators of connectivity between countries based on a number of dimensions, Z_{ij} . Next I generate an interaction term $FP_{ijym} \times Z_{ij}$ which couples together the foreign interactions and the connectivity measures between these countries.

However, although this key outcome variable of the analysis can be expressed in a dyadic manner, the independent variable DT_{iym} is purely domestic in nature and does not vary by dyad. To maintain consistency between the two measures, I aggregate the outcome variable to the country level such that $\sum_{j=1}^J FP_{ijym} \times Z_{ij}$ indicates the foreign interactions with all countries j with whom country i is linked through the connectivity measure Z .

Accordingly, the second-stage equation is revised as follows.

$$\sum_{j=1}^J FP_{ijym} \times Z_{ij} = \alpha DT_{iym} + \gamma SM_{iym} + \mathbf{FE}_{iy} + \mathbf{FE}_m + \epsilon_{iym} \quad (9)$$

Since both the dependent and independent variables in the first-stage are purely domestic, the first-stage remains unchanged, and is as per equation (10).

$$DT_{iym} = \beta SL_{iym} + \gamma SM_{iym} + \mathbf{FE}_{iy} + \mathbf{FE}_m + \epsilon_{iym} \quad (10)$$

To begin the analysis, I consider a broad range of connectivity measures that define relationships between countries. Figure 3 presents the estimated second-stage coefficients of *Domestic Turmoil*_{*iym*}, with *Verb Conf*_{*iym*} $\times Z_{ij}$ as the dependent variable.

The first set of connectivity measures I consider are based on indicators of distance between countries. ‘Distance’ in this context is a broad measure that encompasses not only geographic distance, but also religious distance (Mecham, Fearon and Laitin, 2006), genetic distance (Spolaore and Wacziarg, 2016) and linguistic distance (Fearon, 2003). To define a degree of connectivity in a meaningful way, I convert these continuous measures of distance to binary variables based on the median distance value. More specifically, I generate a time-invariant binary indicator Z_{ij} of low (high) distance equal to 1 (0) if the distance between two countries is less (more) than the median distance value. By definition therefore, low distance signals a higher degree of connectivity between the countries.

Based on the results for the set of distance-based outcome variables in Figure 3, I observe that governments are more likely to target their diversionary tactics at coun-

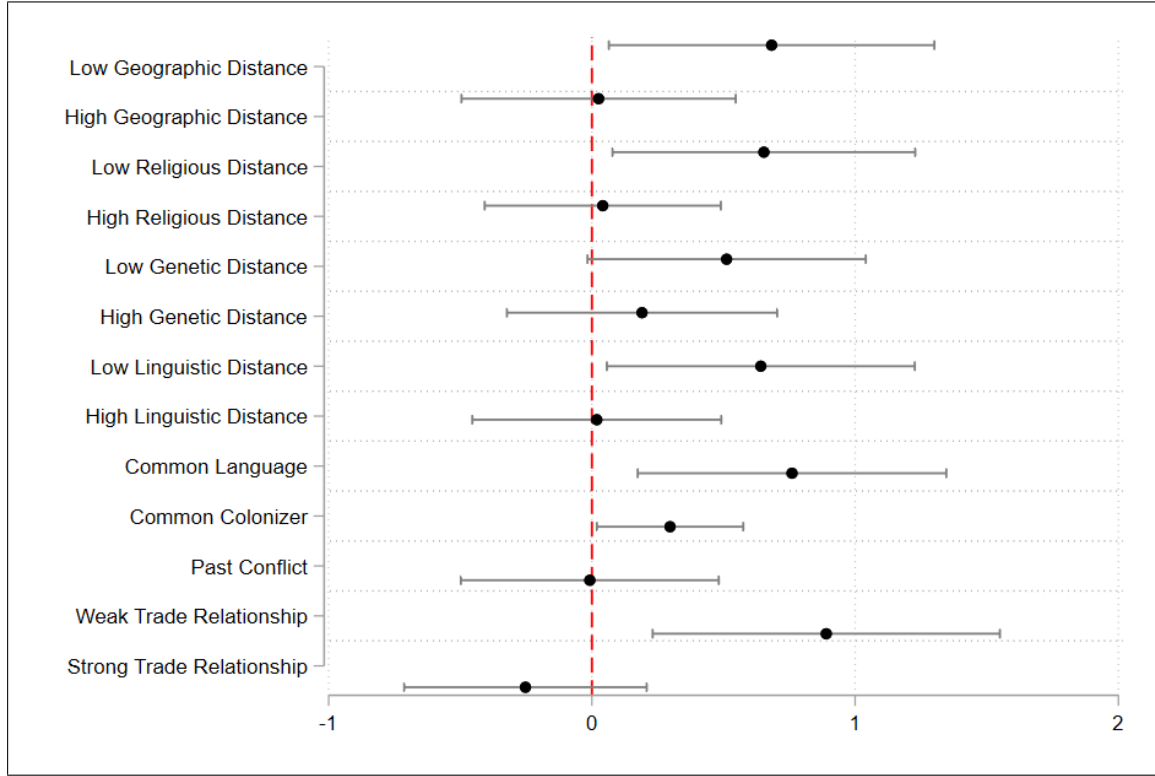
tries closely linked to their own, not only in terms of geographic distance, but also in terms of the other ‘softer’ distance-based outcome measures such as religious and linguistic distance.²⁹ Although the idea that verbal aggression is more likely to be targeted at culturally similar countries might appear somewhat intuitively contradictory at first, this finding resonates with the work of Spolaore and Wacziarg (2016) who document that closely related populations are more likely to enter in to disagreements due to their minimal heterogeneity in preferences over rival goods, government types or policies.

Next, I consider another set of potential factors that define relationships between countries. Accordingly, I define Z_{ij} as binary indicators equal to 1 if the two countries had a common colonizer, share a common official language or have engaged in past conflict, and 0 otherwise. Results indicate that leaders typically target countries with whom their own country shares a colonial history or a common language. However, somewhat surprisingly, I do not observe diversionary tactics being targeted at countries with whom a history of conflict is shared.

Finally, I explore whether the trade relationship between countries has a role to play in determining the victims of diversionary foreign policy. Here, I generate a binary indicator of trade connectivity, using the median export value in 1997 (the first year of the sample) as the cutoff. Accordingly, Z_{ij} as a binary indicator equal to 1 if the export quantity between the two countries is larger than the median export quantity for dyads in the sample, reflecting a strong trade relationship, and zero otherwise. Results indicate that leaders are likely to target countries with whom they maintain a weak trade relationship. The fact that no relationship is observed between strong trade partners again signals that while leaders use diversionary foreign policy as a strategic tool, they are hesitant to allow such policy to lead to significant economic costs.

²⁹An important caveat to these results is that the connectivity measures may be correlated with each other. For example, countries closely linked in terms of geographic distance are also likely to be closer in terms of genetic, religious and linguistic distance. However, untangling such effects within the current IV setting is an empirical challenge due to the first-stage not varying on the level of inter-state connectivity and due to potential weak instruments bias.

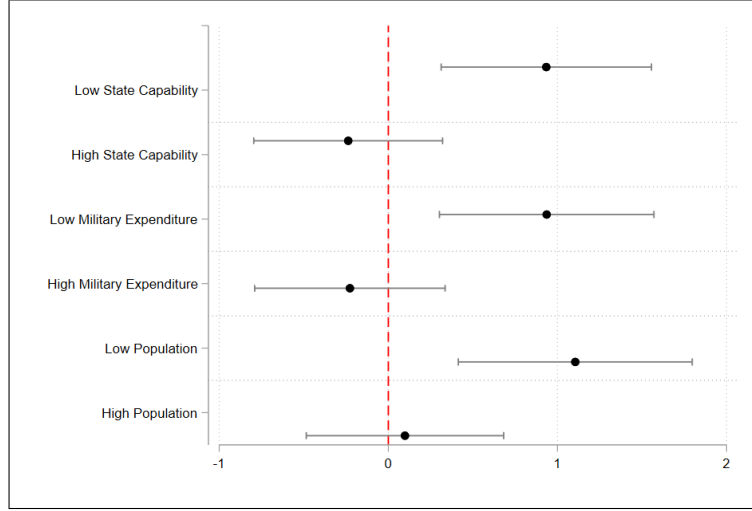
Figure 3: Target Countries by Relationships



Notes: Dots show the second-stage estimated coefficients of $Domestic\ Turmoil_{iym}$, with $Verb\ Conf_{iym} \times Z_{ij}$ as the dependent variable. Each dot represents a separate regression estimate. Here, Z_{ij} is an indicator of the connectivity between countries. Where the relationship is defined based on distance (i.e. geographic, religious, genetic and linguistic distance), Z_{ij} assumes a value of 1 if the distance between countries is less than the median distance in the sample, and zero otherwise. In the case of relationships based on common language, common colonizer and past conflict, Z_{ij} assumes a value of 1 if the countries share a common colonizer, a common language, or a history of conflict. Countries are identified as having a strong (weak) trade relationship if the export quantity between countries is larger (smaller) than the median export quantity in the sample. All specifications include country \times year fixed effects and month fixed effects. Both stages additionally control for $Football\ Match_{iym}$. The unit of measurement is a country-month. Horizontal lines show the 90% confidence interval based on standard errors clustered at the country level.

In Figure 4, I consider whether any particular characteristics of the victim countries could define their selection in to the target group for diversionary tactics. To do so, I generate time-invariant binary indicators of national capability, military power and population based on the median values for the first year of the sample. Here, the indicator Z_j is specific for country j , and does not represent a dyadic relationship. As shown in Figure 4, country leaders typically target weak countries, as proxied by low national capability, low military power and low population. This is again illustrative of the use of diversionary foreign policy as a low risk strategic tool, because weak countries, despite being targeted, are unlikely to respond with costly retaliations.

Figure 4: Target Countries by Features



Notes: Dots show the second-stage estimated coefficients of $Domestic\ Turmoil_{iym}$, with $Verb\ Conf_{iym} \times Z_j$ as the dependent variable. Each dot represents a separate regression estimate. Here, Z_j assumes a value of 1 based on the country's national capability, military expenditure and population. All specifications include country \times year fixed effects and month fixed effects. Both stages additionally control for $Football\ Match_{iym}$. The unit of measurement is a country-month. Horizontal lines show the 90% confidence interval based on standard errors clustered at the country level.

5 Conclusion

This paper provides an important contribution to the existing literature on diversionary foreign policy by presenting new and systematic evidence of how governments divert domestic turmoil. Existing studies demonstrate a lack of consensus on the importance of diversion as a policy tool, mainly due to the absence of consistent and universal indicators on the public's sentiments towards their governments. To address this shortcoming, I propose a novel indicator, based on textual data from approximately 120 million actual physical events recorded in news media articles, that achieves a quantification of the prevailing level of domestic turmoil in a country at a fine degree of temporal granularity. I show that this index is strongly correlated with existing 'imperfect' measures of public sentiment towards their governments and can therefore be confidently applied as a proxy for domestic turmoil.

Next, I combine this index of domestic turmoil with quantitative indicators of the nature of governments' foreign interactions, to generate a novel panel dataset for 190 countries from 1997–2014. In defining the outcome variables, I improve on the current

literature by considering the full spectrum of interaction choices available to governments, based on their cooperative/aggressive nature, as well as on the degree of intensity. Using ‘close’ football losses as a sentiment shock that negatively affects the public’s perception of their governments, and accounting for a comprehensive set of fixed effects, I find that governments do resort to diversionary tactics in times of domestic turmoil and that such diversion takes the form of verbal aggression, as opposed to material aggression which involves larger costs and risks. This effect is more prominent for less developed and anocratic countries.

In the final step, I investigate whether governments systematically choose the targets of their diversionary policies. Applying a number of inter-state connectivity measures that capture a range of connectivity types, I find that diversion in the form of verbal aggression is typically targeted at countries closely linked along religious, linguistic and geographic dimensions, supporting the literature that highlights the tendency to minimize heterogeneity when choosing victims of international conflict. I also find that ‘strong’ countries and countries sharing a close trade relationship, are unlikely to be victimized. These results suggest that foreign policy is in fact systematically used by governments as a strategic tool to divert domestic turmoil, and that such diversion is only exercised in a manner that aims to avoid large-scale costs or risks of retaliation.

Taken as a whole, the exercise undertaken in this paper expands empirical boundaries of the existing literature in a number of ways. To the best of my knowledge, this is the first paper that provides a comprehensive global overview of the causal evidence surrounding the exercising of diversionary foreign policy. As discussed, the lack of consistent data sources, on a global scale, and at a fine level of temporal resolution, is a key reason why the literature has thus far placed limited attention on the variation of sentiments both within and between countries. This paper takes a first step in filling this void by applying textual data from newspaper articles to generate a quantification of such sentiments. As the technology expands and the development, accessibility and applicability of such fine-grained novel data sources increases, researchers will be able to obtain further in-depth understandings of the sentiments underlying the mechanisms of societies.

Finally, and most importantly, this empirical exercise sheds light, at a very fine level of temporal granularity, on ‘subtle’ manipulative government behaviour which typically gets overlooked in the face of the obvious and ‘visible’ interactions on the international front. In an age where verbal arguments are increasingly replacing full-scale wars between countries, paying attention to such ‘subtle’ manipulative government behaviour will be of increasing interest and importance to citizens and policy makers alike. This becomes further relevant when considering that countries are increasingly resorting to diversionary foreign interactions as low-cost, low-risk options, as empirically evidenced in this paper. Moreover, by focusing on the global effects of domestic sentiment shocks, this paper highlights the importance of monitoring the domestic roots of international relationships, which is a critical success factor in maintaining solidarity within the international system.

References

- Baker, S., Bloom, N. and S. Davis (2016), “Measuring economic policy uncertainty,” *Quarterly Journal of Economics* 131, 593—1636.
- Barberá, P. and T. Zeitzoff (2017) , “The new public address system: Why do world leaders adopt social media?,” *International Studies Quarterly* 62, 121-130.
- Barbieri, K. and O. Keshk, (2016), *Correlates of war project trade data set codebook version 4.0*, Retrieved from <http://correlatesofwar.org>.
- Baylis, P. (2020), “Temperature and temperament: Evidence from twitter,” *Journal of Public Economics* forthcoming.
- Bennet, S. and T. Nordstrom (2000), “Foreign policy substitutability and internal economic problems in enduring rivalries,” *Journal of Conflict Resolution* 44, 33–61.
- Beattie, G. (2020), “Advertising and media capture: The case of climate change,” *Journal of Public Economics* forthcoming.
- Benoit, K., Munger, K. and A. Spirling (2019) , “Measuring and explaining political sophistication through textual complexity,” *American Journal of Political Science* 63, 491–508.
- Bertoli, A. (2017) , “Nationalism and conflict: Lessons from international sports,” *International Studies Quarterly* 61, 835–849.
- Bybee, L., Kelly, B., Manela, A. and D. Xiu (2020), “The structure of economic news,” NBER Working Paper No. 26648.
- Card, D. and G. Dahl (2011), “Family violence and football: The effect of unexpected emotional cues on violent behaviour,” *Quarterly Journal of Economics* 126, 103—143.
- Carlin, J. (2008), *Playing the Enemy: Nelson Mandela and the Game that Made a Nation*, London, UK: Penguin Press.
- Chiozza, G. and H. Goemans (2003), “Peace through insecurity: Tenure and international conflict,” *Journal of Conflict Resolution* 47, 443–467.
- Coser, L. (1956), *The Functions of Social Conflict*, New York, NY: Free Press.
- Depetris-Chauvín, E., Durante, R. and F. R. Campante (2020), “Building nations through

- shared experiences: Evidence from African football,” *American Economic Review* 110, 1572–1602.
- DeRouen Jr, K. (2000), “Presidents and the diversionary use of force: A research note,” *International Studies Quarterly* 44, 317–328.
- Djourelouva, M. and R. Durante (2020), “Media attention and strategic timing in politics: Evidence from US presidential executive orders,” CEPR Discussion Paper No. 13961.
- Durante, R. and E. Zhuravaskaya (2018), “Attack when the world is not watching? US news and the Israeli-Palestinian conflict,” *Journal of Political Economy* 126, 1085–1133.
- Edmans, A., García, D. and O. Norli (2007), “Sports sentiment and stock returns,” *Journal of Finance* 62, 1967–1998.
- Eisensee, T. and D. Stromberg (2007), “News droughts, news floods, and U.S. disaster relief,” *Quarterly Journal of Economics* 122, 693–728.
- Fantom, N. and U. Serajuddin (2016), “The World Bank’s classification of countries by income (English),” World Bank Policy Research working paper WPS-7528.
- Fearon, J. (1998), “Domestic politics, foreign policy and theories of international relations,” *Annual Review of Political Science* 1, 289–313.
- Fearon, J. (2003) , “Ethnic and cultural diversity by country,” *Journal of Economic Growth* 8, 195–222.
- Felbermayr, G., Kirilakha, A., Syropoulos, C., Yalcin, E. and Y. Yotov (2020) , “The global sanctions database,” *European Economic Review* forthcoming.
- Femenia, N. (1996), *National Identity in Times of Crises: The Scripts of the Falklands-Malvinas War*, New York, NY: Penguin Press.
- Fordham, B. (2005), “Strategic conflict avoidance and the diversionary use of force,” *Journal of Politics* 67, 132–153.
- Foster, D. (2003), “The 1954 Soccer World Cup and the Federal Republic of Germany’s self-discovery,” *American Behavioral Scientist* 46, 1491–1505.
- Ge, Q. (2018), “Sports sentiment and tipping behavior,” *Journal of Economic Behavior & Organization* 145, 95–113.

- Gentzkow, M. and J. Shapiro (2010), “What drives media slant?: Evidence from U.S. daily newspapers,” *Econometrica* 78, 35–71.
- Gentzkow, M., Kelly, B. and M. Taddy (2019), “Text as data,” *Journal of Economic Literature* 57, 535–575.
- Gerner, D., Schrodt, P. and O. Yilmaz (2009), “Conflict and mediation event observations (CAMEO): An event data framework for a post cold war world,” In: J. Bercovitch and S. Gartner (Eds.), *International Conflict Mediation: New Approaches and Findings*, New York, NY: Routledge, pp. 287–304.
- Goldstein, J. S. (1992), “A conflict-cooperation scale for WEIS events data,” *Journal of Conflict Resolution* 36, 369–385.
- Imbens, G. and J. Angrist (1994), “Identification and estimation of local average treatment effects,” *Econometrica* 62, 467–476.
- Jung, S. (2014), “Foreign targets and diversionary conflict,” *International Studies Quarterly* 58, 566–578.
- Leeds, B. and D. Davis (1997), “Domestic political vulnerability and international disputes,” *Journal of Conflict Resolution* 41, 814–834.
- Leetaru, K., and P. Schrodt (2013), “GDELT: Global data on events, location and tone,” *mimeo*.
- Marshall, M., Gurr, T. and K. Jaggers (2019), *Polity IV project: Political regime characteristics and transitions, 1800-2018 dataset users’ manual*, Centre for Systemic Peace.
- Mecham, R., Fearon, J. and D. Laitin (2006), “Religious classification and data on shares of major world religions,” *mimeo*.
- Meernik, J. and P. Waterman (1996), “The myth of the diversionary use of force by American presidents,” *Political Research Quarterly* 49, 573–590.
- Metcalfe, R., Burgess, S. and S. Proud (2019), “Students’ effort and educational achievement: Using the timing of the World Cup to vary the value of leisure,” *Journal of Public Economics* 172, 111–126.
- Miller, R. (1995), “Domestic structures and the diversionary use of force,” *American Journal of Political Science* 39, 760–785.

- Mitchell, S. and B. Prins (2004), “Rivalry and diversionary uses of force,” *Journal of Conflict Resolution* 48, 937–961.
- Mitts, T. (2019), “From isolation to radicalization: Anti-Muslim hostility and support for ISIS in the West,” *American Political Science Review* 113, 173–194.
- Morgan, T.C. and C. Anderson (1999), “Domestic support and diversionary external conflict in Great Britain, 1950–1992,” *Journal of Politics* 61, 799–814.
- Mueller, H. and C. Rauh (2018), “Reading between the lines: Prediction of political violence using newspaper text,” *American Political Science Review* 112, 358–375.
- Nicholls, N., Huth, P. and B. Appel (2010), “When is domestic political unrest related to international conflict? Diversionary theory and Japanese foreign policy, 1890–1941,” *International Studies Quarterly* 54, 915–937.
- Nielsen (2018), “*World football report*,”
Retrieved from <https://www.nielsen.com/us/en/insights/report/2018/world-football-report/>.
- Nunn, N. and N. Qian (2014), “US food aid and civil conflict,” *American Economic Review* 104, 1630–1666.
- Oakes, A. (2006), “Diversionary war and Argentina’s invasion of the Falkland Islands,” *Security Studies* 15, 431–463.
- Ostrom, C., and B. Job (1986) , “The president and the political use of force,” *American Political Science Review* 80, 541–566.
- Pickering, J. and E. Kisangani (1998), “Diversionary despots? Comparing autocracies’ propensities to use and to benefit from military force,” *American Journal of Political Science* 54, 477–493.
- Sanderson, E., and F. Windmeijer (2016) , “A weak instrument F-test in linear IV models with multiple endogenous variables,” *Journal of Econometrics* 190, 212–221.
- Sangnier, M., and Y. Zylberberg (2017) , “Protests and trust in the state: Evidence from African countries,” *Journal of Public Economics* 152, 55–67.
- Shapiro, A., Sudhof, M. and D. Wilson (2019), “Measuring news sentiment,” *Journal of Econometrics* forthcoming.

- Simmel, G. (1955), *Conflict and the Web of Group Affiliations* (K. Wolff and R. Bendix, Trans.), New York, NY: Free Press.
- Sobek, D. (2007), “Rallying around the podesta: Testing diversionary theory across time,” *Journal of Peace Research* 44, 29–45.
- Spolaore, E. and R. Wacziarg (2016), “War and relatedness,” *Review of Economics and Statistics* 98, 925–939.
- Sprecher, C. and K. Derouen Jr (2005), “The domestic determinants of foreign policy behavior in Middle Eastern enduring rivals 1948–1998,” *Foreign Policy Analysis* 1, 121–141.
- Tierney, M., Nielson, D., Hawkins, D., Roberts, T., Findley, M., Powers, R., Parks, B., Wilson, S. and R. Hicks (2011), “More dollars than sense: Refining our knowledge of development finance using AidData,” *World Development* 39, 1891–1906.
- Vegard, L. and L. Thorsrud (2019), “The value of news for economic developments,” *Journal of Econometrics* 210, 203–218.

Online Appendix

Diverting Domestic Turmoil

Ashani Amarasinghe¹

A Additional data description

A.1 Goldstein scale

The Goldstein scale captures the theoretical potential impact posed by an event on the stability of a country. The assignment of the numeric score takes in to consideration the inherent intensity of conflict and/or cooperation in these different event types. Scores range from -10 (extreme conflict) to 10 (extreme cooperation). Each event type is assigned a relevant score based on the classification shown in Table A.1.

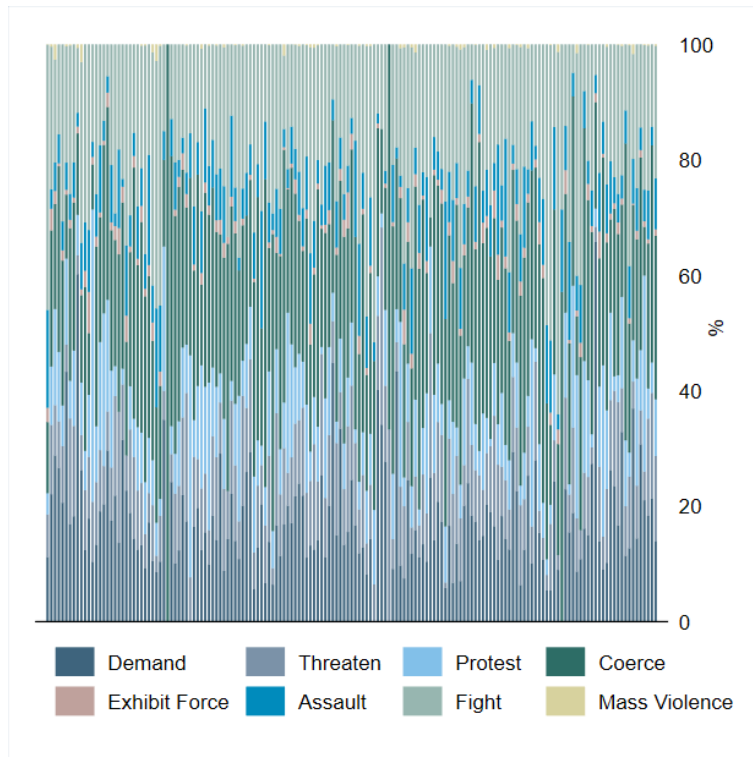
Table A.1: CAMEO Events, Goldstein Scores, and Quad Class Classification

Goldstein Scale	CAMEO Event Description	Quad Class
7.0	Provide Aid	Material Cooperation
6.0	Engage in Material Cooperation	Material Cooperation
5.0	Yield	Material Cooperation
4.0	Express Intent to Cooperate	Verbal Cooperation
3.5	Engage in Diplomatic Cooperation	Verbal Cooperation
3.0	Appeal	Verbal Cooperation
1.0	Consult	Verbal Cooperation
0.0	Make Public Statement	Verbal Cooperation
-2.0	Investigate	Verbal Conflict
-2.0	Disapprove	Verbal Conflict
-4.0	Reduce Relations	Verbal Conflict
-4.0	Reject	Verbal Conflict
-5.0	Demand	Verbal Conflict
-6.0	Threaten	Verbal Conflict
-6.5	Protest	Material Conflict
-7.0	Coerce	Material Conflict
-7.2	Exhibit Force Posture	Material Conflict
-9.0	Assault	Material Conflict
-10.0	Fight	Material Conflict
-10.0	Engage in Unconventional Mass Violence	Material Conflict

Source: The Computational Event Data System

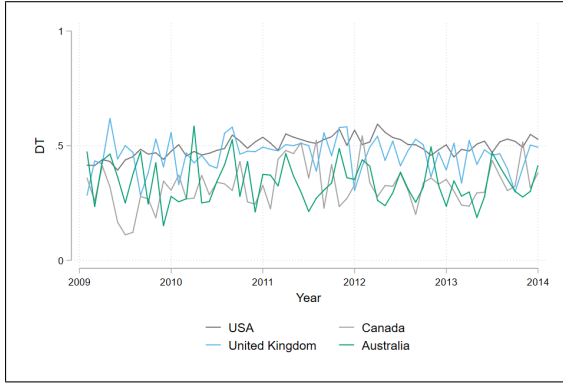
¹SoDa Laboratories, Monash University. Email: ashani.amarasinghe@monash.edu.

Figure A.1: Components of DT

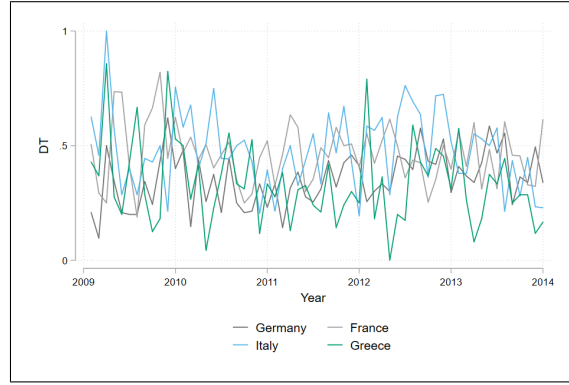


Note: Figure shows the components of (DT) for each country in the sample. Each stacked bar represents a country's DT index. The coloured components show the percentage share of the different event categories within the DT index. DT is calculated as per Equation 1, and is entirely based on *domestic* events targeted at the *government*.

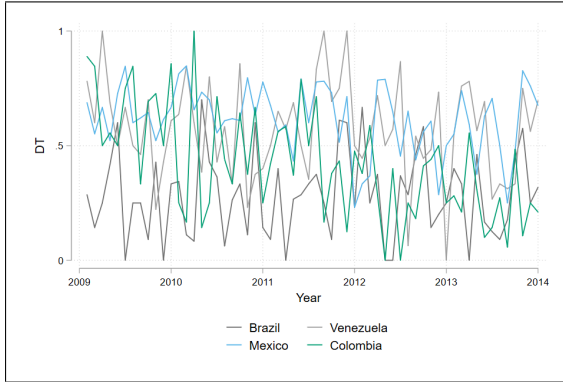
Figure A.2: Domestic Turmoil in Selected Countries



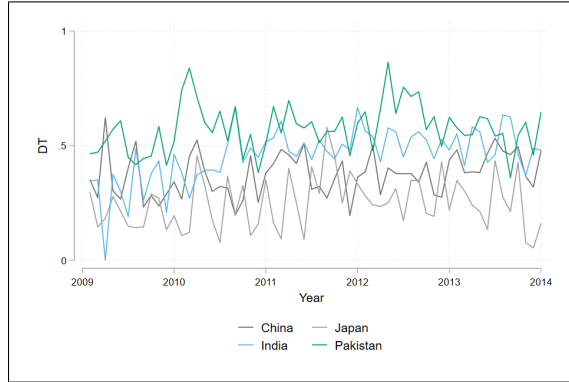
(a) “Western” Countries



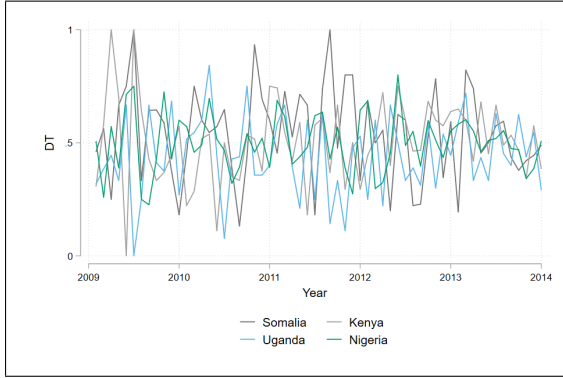
(b) European Countries



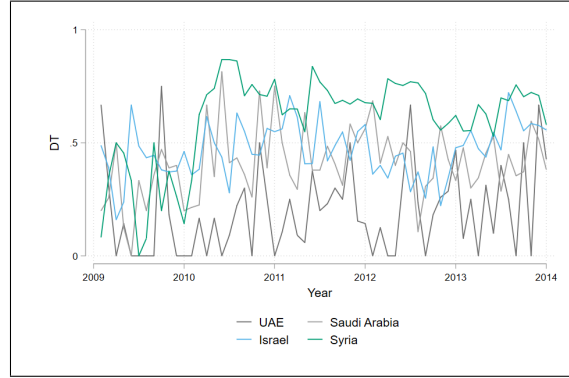
(c) Latin American Countries



(d) Asian Countries



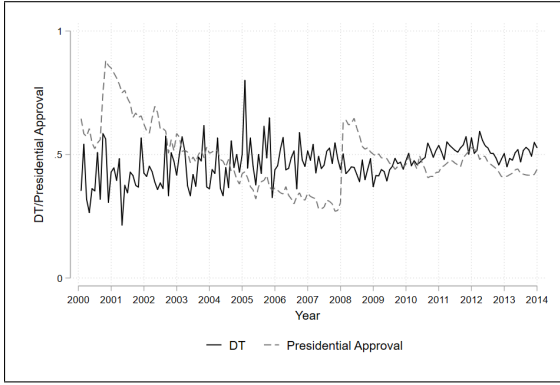
(e) African Countries



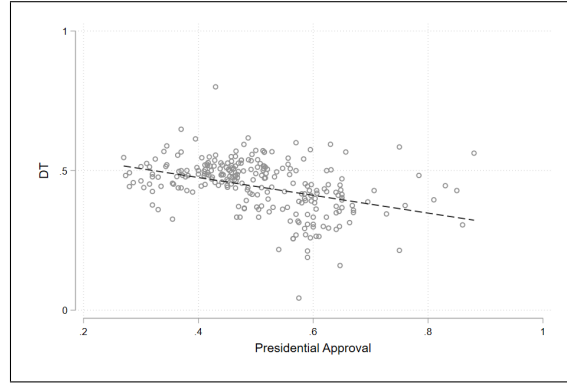
(f) Middle-Eastern Countries

Note: Figure shows the distribution of *Domestic Turmoil* (DT) for a set of selected countries representing the key global regions. DT is calculated as per the procedure set down in Section 2.1.1, and using Equation 1. $0 \leq DT \leq 1$.

Figure A.3: Domestic Turmoil in the US



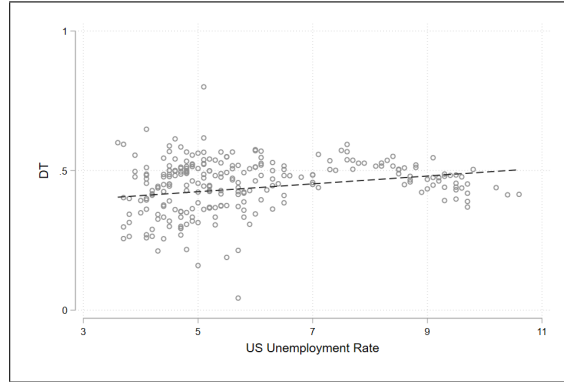
(a) DT vs Presidential Approval Over Time



(b) DT vs Presidential Approval



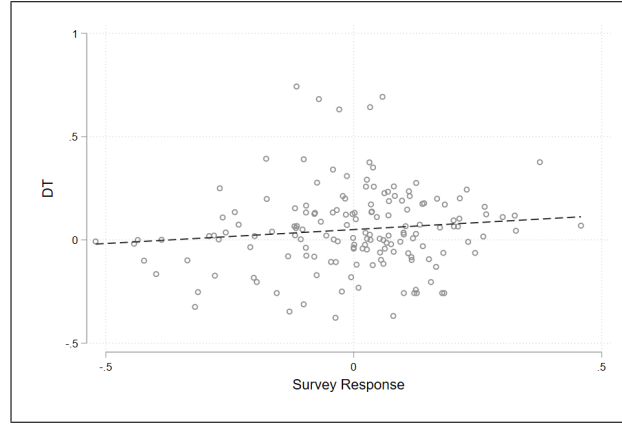
(c) DT vs Consumer Price Index



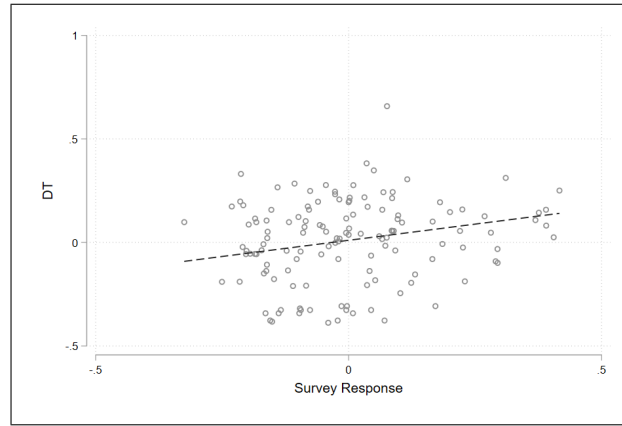
(d) DT vs Unemployment Rate

Notes: Figure shows the relationship between DT and key sentiment/economic indicators in the US. Panel (a) shows the relationship between the DT index and the US Presidential Approval Rate over time. Panels (b), (c) and (d) demonstrate the scatter plots and lines of best-fit between DT and US Presidential Approval Rate, Consumer Price Index and Unemployment Rate, respectively. Data is at the monthly level. The β coefficients for Panels (b), (c) and (d) are -0.319 ($p=0.00$), 0.002 ($p=0.00$) and 0.014 ($p=0.00$), respectively.

Figure A.4: Domestic Turmoil and Survey Indicators



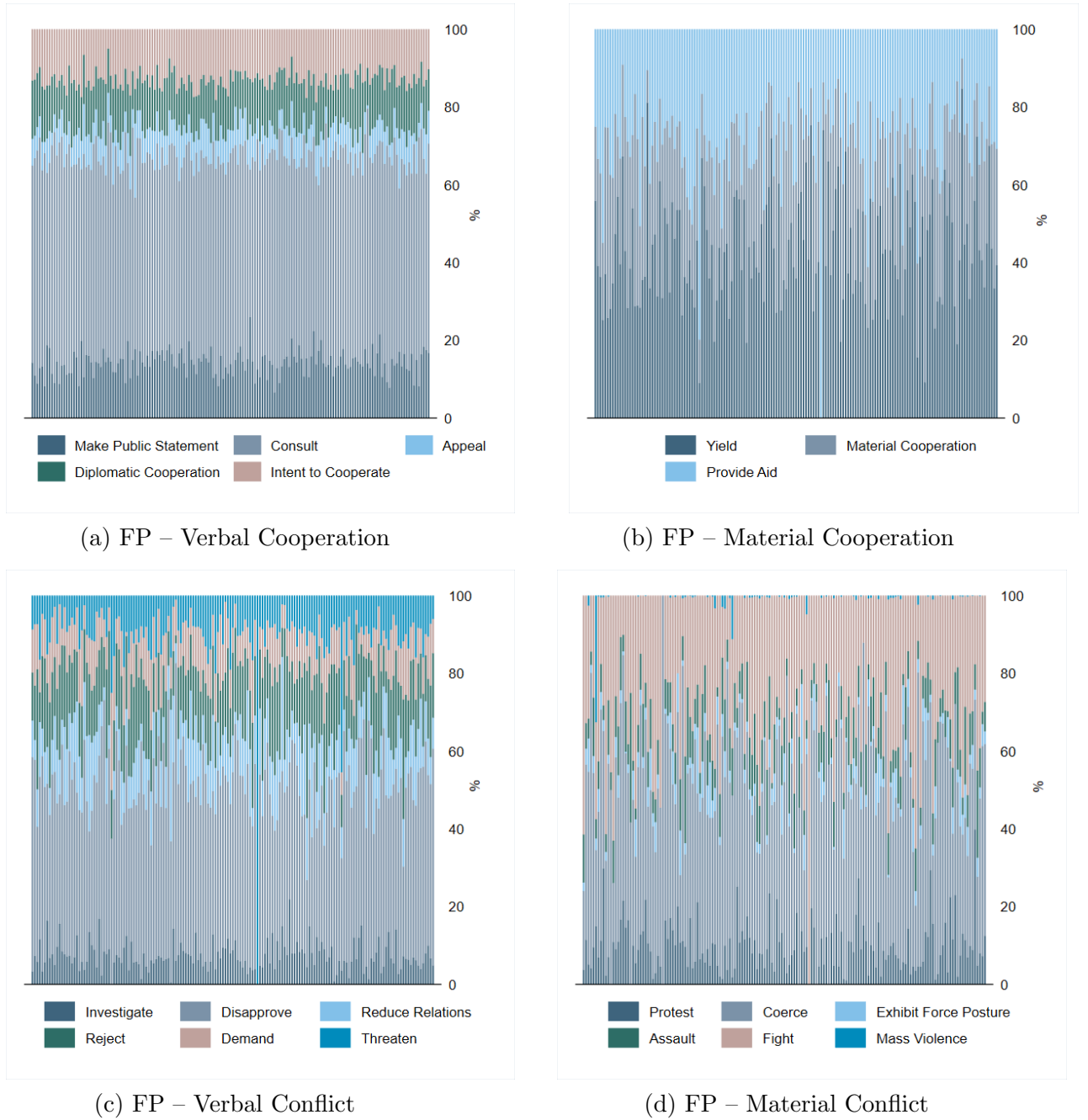
(a) World Values Survey



(b) Afrobarometer Survey

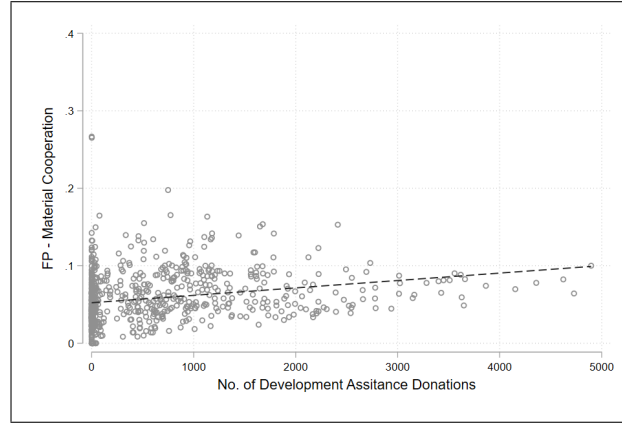
Notes: Figure shows the relationship between DT and survey responses. Panels (a) and (b) plot DT against a standardized measure of expressed confidence in government/president as per the World Values Survey and the Afrobarometer survey, respectively. Details on the construction of the indicator variables are given in Section 2.1.2. The unit of measurement is a country-year. The β coefficients for Panels (a) and (b) are 0.135 ($p=0.058$) and 0.313 ($p=0.00$), respectively. Number of observations is 157 (Panel (a)) and 101 (Panel (b)).

Figure A.5: Components of FP Categories

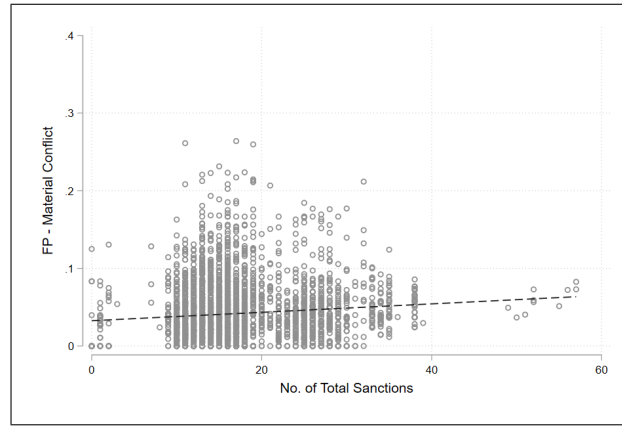


Note: Figure shows the components of each *FP* category for each country in the sample. The *FP* categories are Verbal Cooperation, Material Cooperation, Verbal Conflict and Material Conflict. Each stacked bar represents a country. The coloured components show the percentage share of the different event categories within each *FP* category. *FP* is calculated as per Equation 2, and is entirely based on events *initiated by the government and targeted at a foreign entity*.

Figure A.6: External Validity of *FP* Categories



(a) FP - Material Cooperation vs Donations of Development Assistance

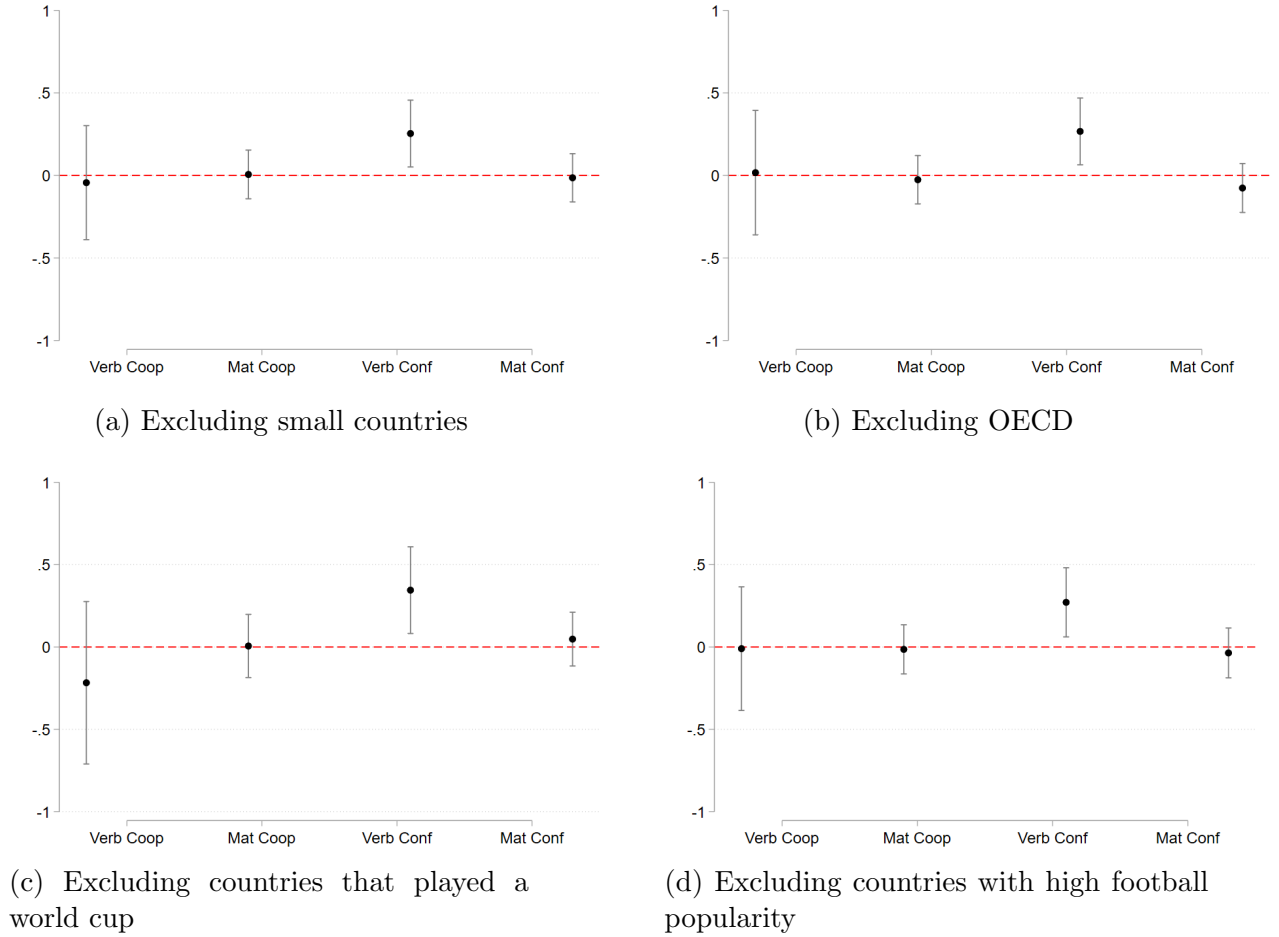


(b) FP- Material Aggression vs Imposition of Sanctions

Notes: Figure shows the relationship between *FP* and related alternative data sets. Panel (a) plots the quantified indicator of 'FP - Material Cooperation' against the number of times a country engaged in donations of development assistance. Panel (b) plots the quantified indicator of 'FP - Material Conflict' against the number of sanctions imposed by the country. Details on the construction of the indicator variables are given in Section 2.1.3. The unit of measurement is a country-year. The β coefficients for Panels (a) and (b) are 0.0001 ($p=0.0000$) and 0.0011 ($p=0.0000$), respectively. Number of observations is 724 (Panel (a)) and 3,340 (Panel (b)).

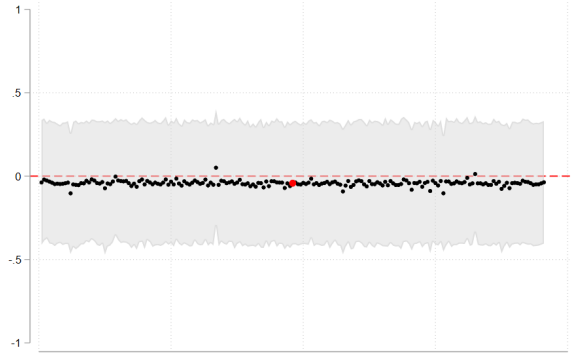
B Robustness checks and heterogeneity

Figure B.7: Robustness Checks on Sample Selection

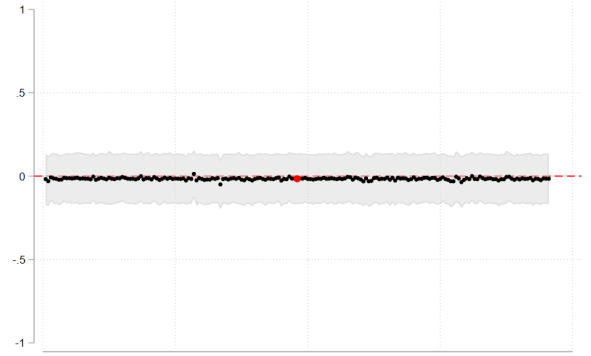


Note: Figure shows second stage estimates as per Equation 6, but each panel excludes a set of countries from the sample, as indicated in the panel captions. First stage KP F -statistics for Panels (a), (b), (c) and (d) are 13.03, 14.70, 9.26 and 14.21, respectively. All specifications include country \times year fixed effects and month fixed effects. The unit of measurement is a country-month. Standard errors are clustered at the country level. Vertical lines indicate 90% confidence intervals.

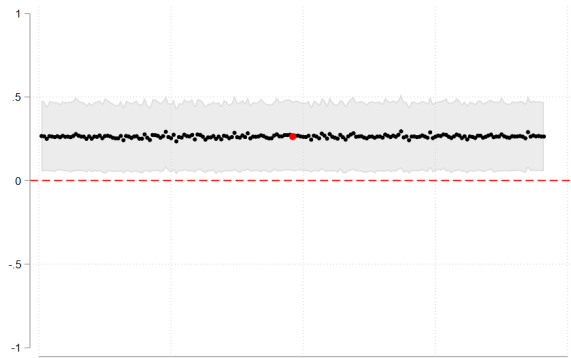
Figure B.8: Dropping One Country at a Time



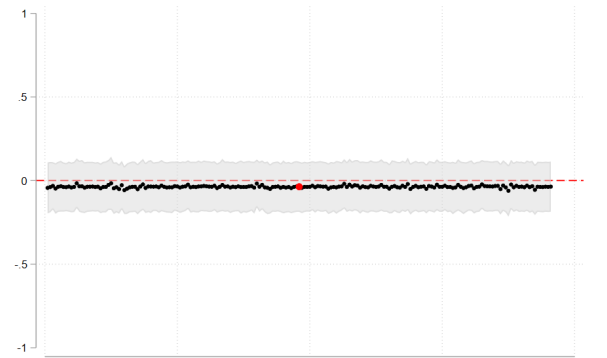
(a) Verbal Cooperation



(b) Material Cooperation



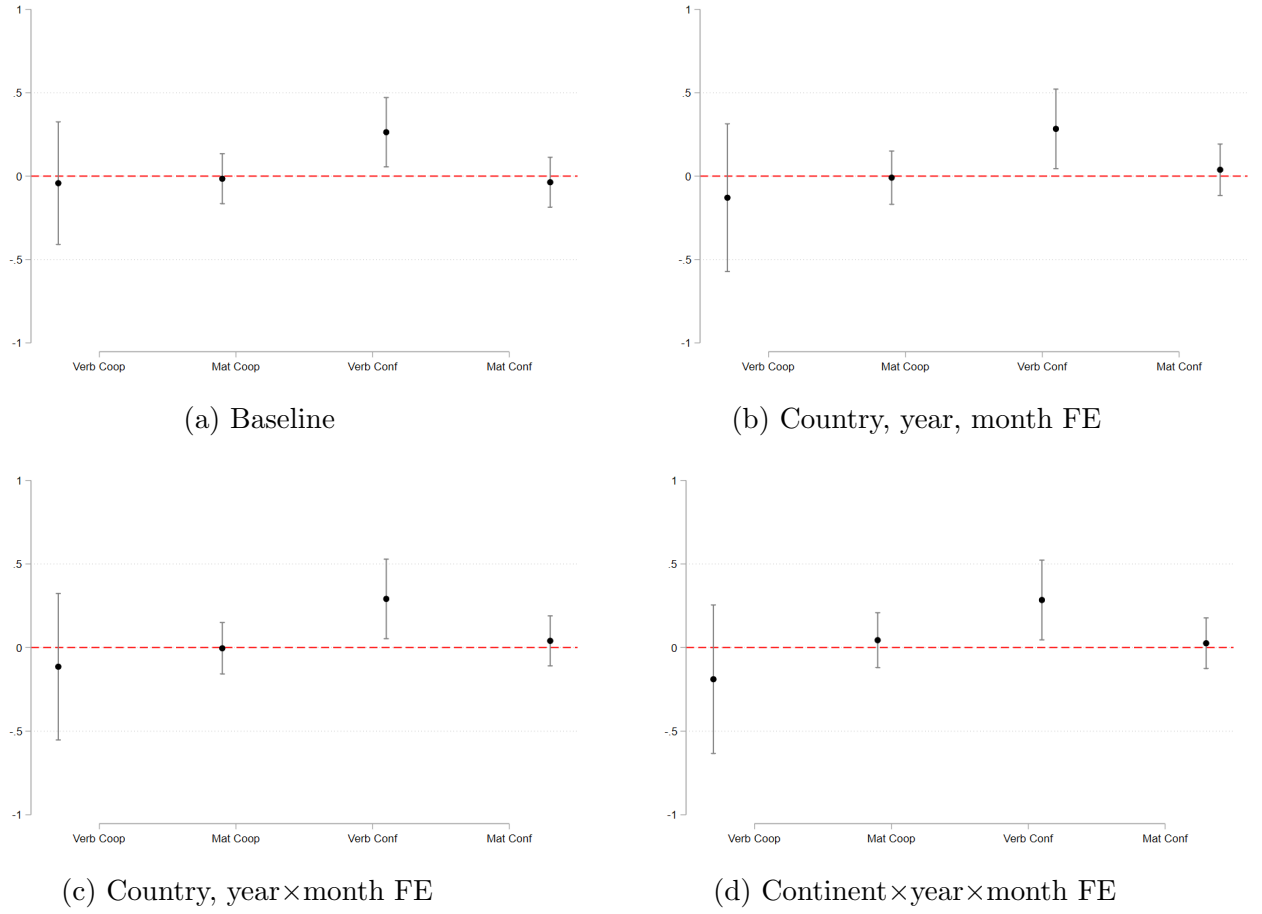
(c) Verbal Conflict



(d) Material Conflict

Note: Figure shows second stage estimates as per Equation 6, when excluding one country at a time from the sample. Each dot represents a separate regression estimate. The dependent variable for Panels (a), (b), (c) and (d) are *Verb Coop*, *Mat Coop*, *Verbal Conf* and *Mat Conf*, respectively. The red circle in each panel indicates the baseline estimate for the full sample. All specifications include country \times year fixed effects and month fixed effects. The unit of measurement is a country-month. Standard errors are clustered at the country level. Shaded area indicates the 90% confidence interval.

Figure B.9: Alternative Fixed Effects



Note: Figure shows 2SLS estimates as per Equation 6, but each panel incorporates a different set of fixed effects. Panel (a) shows the baseline estimates, where *country* \times *year* fixed effects and *month* fixed effects are incorporated. Panel (b) shows the estimates when including *country*, *year* and *month* fixed effects separately. In Panel (c), *country* and *year* \times *month* fixed effects are included. Panel (d) incorporates *continent* \times *year* \times *month* fixed effects. First stage KP *F*-statistics for Panels (a), (b), (c) and (d) are 13.12, 10.16, 10.89 and 9.94, respectively. The unit of measurement is a country-month. Standard errors are clustered at the country level. Vertical lines indicate 90% confidence intervals.

Table B.1: Controlling for All Reported Events

	(1) <i>Verb Coop_{iy}m</i>	(2) <i>Mat Coop_{iy}m</i>	(3) <i>Verb Conf_{iy}m</i>	(4) <i>Mat Conf_{iy}m</i>
Panel A: OLS Estimates				
<i>Domestic Turmoil_{iy}m</i>	-0.0133*** (0.0043)	0.0005 (0.0020)	0.0168*** (0.0026)	0.0154*** (0.0023)
Panel B: Reduced Form Estimates				
<i>Football Loss_{iy}m</i>	-0.0008 (0.0041)	-0.0003 (0.0017)	0.0048** (0.0020)	-0.0007 (0.0017)
Panel C: IV Estimates				
<i>Domestic Turmoil_{iy}m</i>	-0.0438 (0.2230)	-0.0157 (0.0910)	0.2649** (0.1262)	-0.0357 (0.0909)
Panel D: First-Stage Estimates				
<i>Football Loss_{iy}m</i>	0.0183*** (0.0050)	0.0183*** (0.0050)	0.0183*** (0.0050)	0.0183*** (0.0050)
Kleibergen-Paap <i>F</i> -statistic	13.16	13.16	13.16	13.16
Controls:				
Country-Year FE	YES	YES	YES	YES
Month FE	YES	YES	YES	YES
Football Match	YES	YES	YES	YES
All Events	YES	YES	YES	YES
No. of Observations	41,040	41,040	41,040	41,040
No. of countries	190	190	190	190
Maximum Goldstein Score	-5	-5	-5	-5

Notes: This table replicates Table 2 but additionally controls for all reported events in the given country over the given month. All specifications include country \times year fixed effects and month fixed effects. Both stages additionally control for *Football Match_{iy}m*. The unit of measurement is a country-month. Standard errors, clustered at the country level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

Table B.2: Excluding Football Opponents

	(1) <i>Verb Coop_{iy}m</i>	(2) <i>Mat Coop_{iy}m</i>	(3) <i>Verb Conf_{iy}m</i>	(4) <i>Mat Conf_{iy}m</i>
Panel A: OLS Estimates				
<i>Domestic Turmoil_{iy}m</i>	-0.0132*** (0.0043)	0.0002 (0.0020)	0.0165*** (0.0026)	0.0152*** (0.0023)
Panel B: Reduced Form Estimates				
<i>Football Loss_{iy}m</i>	-0.0005 (0.0042)	-0.0004 (0.0017)	0.0048** (0.0020)	0.0002 (0.0017)
Panel C: IV Estimates				
<i>Domestic Turmoil_{iy}m</i>	-0.0248 (0.2288)	-0.0207 (0.0934)	0.2660** (0.1257)	0.0095 (0.0935)
Panel D: First-Stage Estimates				
<i>Football Loss_{iy}m</i>	0.0182*** (0.0050)	0.0182*** (0.0050)	0.0182*** (0.0050)	0.0182*** (0.0050)
Kleibergen-Paap <i>F</i> -statistic	13.12	13.12	13.12	13.12
Controls:				
Country-Year FE	YES	YES	YES	YES
Month FE	YES	YES	YES	YES
Football Match	YES	YES	YES	YES
No. of Observations	41,040	41,040	41,040	41,040
No. of countries	190	190	190	190
Maximum Goldstein Score	-5	-5	-5	-5

Notes: This table replicates Table 2 but excludes foreign interactions with countries who were football opponents in the given time period. All specifications include country \times year fixed effects and month fixed effects. Both stages additionally control for *Football Match_{iy}m*. The unit of measurement is a country-month. Standard errors, clustered at the country level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

Table B.3: Including the Lagged Dependent Variable

	(1) <i>Verb Coop_{iy}</i>	(2) <i>Mat Coop_{iy}</i>	(3) <i>Verb Conf_{iy}</i>	(4) <i>Mat Conf_{iy}</i>
Panel A: OLS Estimates				
<i>Domestic Turmoil_{iy}</i>	-0.0135*** (0.0043)	0.0005 (0.0020)	0.0170*** (0.0026)	0.0155*** (0.0023)
Panel B: Reduced Form Estimates				
<i>Football Loss_{iy}</i>	-0.0022 (0.0040)	-0.0002 (0.0017)	0.0052** (0.0021)	-0.0006 (0.0017)
Panel C: IV Estimates				
<i>Domestic Turmoil_{iy}</i>	-0.1054 (0.2228)	-0.0147 (0.0909)	0.2810** (0.1309)	-0.0318 (0.0910)
<i>Domestic Turmoil_{iy}</i>				
Panel D: First-Stage Estimates				
<i>Football Loss_{iy}</i>	0.0184*** (0.0050)	0.0184*** (0.0051)	0.0183*** (0.0051)	0.0184*** (0.0051)
Kleibergen-Paap <i>F</i> -statistic	13.00	13.03	12.81	12.94
Controls:				
Country-Year FE	YES	YES	YES	YES
Month FE	YES	YES	YES	YES
Football Match	YES	YES	YES	YES
Lagged Dependent Variable	YES	YES	YES	YES
No. of Observations	40,850	40,850	40,850	40,850
No. of countries	190	190	190	190
Maximum Goldstein Score	-5	-5	-5	-5

Notes: This table replicates Table 2 but additionally controls for the lagged dependent variable in both stages. All specifications include country \times year fixed effects and month fixed effects. Both stages additionally control for *Football Match_{iy}*. The unit of measurement is a country-month. Standard errors, clustered at the country level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

Table B.4: Alternative Definition of Domestic Turmoil

<i>Goldstein Score</i>	(1) ≤ -3	(2) ≤ -4	(3) ≤ -5	(4) ≤ -6	(5) ≤ -7
Panel A: IV Estimates	Dependent Variable: <i>Verb Coop</i> _{iy} <i>m</i>				
<i>Domestic Turmoil</i> _{iy} <i>m</i>	-0.0907 (0.4786)	-0.0640 (0.3376)	-0.0424 (0.2233)	-0.0469 (0.2460)	-0.0538 (0.2829)
Panel B: IV Estimates	Dependent Variable: <i>Mat Coop</i> _{iy} <i>m</i>				
<i>Domestic Turmoil</i> _{iy} <i>m</i>	-0.0338 (0.1966)	-0.0239 (0.1380)	-0.0158 (0.0912)	-0.0175 (0.1009)	-0.0200 (0.1155)
Panel C : IV Estimates	Dependent Variable: <i>Verb Conf</i> _{iy} <i>m</i>				
<i>Domestic Turmoil</i> _{iy} <i>m</i>	0.5627 (0.3470)	0.3966* (0.2128)	0.2632** (0.1262)	0.2907** (0.1419)	0.3333** (0.1619)
Panel D: IV Estimates	Dependent Variable: <i>Mat Conf</i> _{iy} <i>m</i>				
<i>Domestic Turmoil</i> _{iy} <i>m</i>	-0.0789 (0.1957)	-0.0556 (0.1374)	-0.0369 (0.0910)	-0.0408 (0.1015)	-0.0467 (0.1171)
Panel E: First-Stage Estimates	Dependent Variable: <i>Domestic Turmoil</i> _{iy} <i>m</i>				
<i>Football Loss</i> _{iy} <i>m</i>	0.0085** (0.0040)	0.0121*** (0.0046)	0.0182*** (0.0050)	0.0165*** (0.0044)	0.0144*** (0.0040)
Kleibergen-Paap <i>F</i> -statistic	4.562	7.047	13.12	14.09	13.03
Controls:					
Country-Year FE	YES	YES	YES	YES	YES
Month FE	YES	YES	YES	YES	YES
Football Match	YES	YES	YES	YES	YES
No. of Observations	41,040	41,040	41,040	41,040	41,040
No. of countries	190	190	190	190	190
Maximum Goldstein Score	-3	-4	-5	-6	-7

Notes: This table provides the 2SLS estimates of the baseline specification under alternative definitions of *Domestic Turmoil*, ranging from Goldstein scores of ≤-3 to ≤-7. The dependent variables in Panels A, B, C and D are *Verb Coop*, *Mat Coop*, *Verb Conf* and *Mat Conf*, respectively. Panel E provides first-stage estimates. All specifications include country × year fixed effects and month fixed effects. Both stages additionally control for *Football Match*. The unit of measurement is a country-month. Standard errors, clustered at the country level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

Table B.5: Alternative Football Outcomes

	(1)	(2)	(3)
Panel A: IV Second-Stage Estimates	Dependent Variable: <i>Verb Coop_{iy}</i>		
<i>Domestic Turmoil_{iy}</i>	-0.0424 (0.2233)	-0.0694 (0.2547)	-0.0443 (0.4095)
Panel B: IV Second-Stage Estimates	Dependent Variable: <i>Mat Coop_{iy}</i>		
<i>Domestic Turmoil_{iy}</i> -0.0158	0.0263 (0.0912)	0.1418 (0.1015)	(0.1666)
Panel C: IV Second-Stage Estimates	Dependent Variable: <i>Verb Conf_{iy}</i>		
<i>Domestic Turmoil_{iy}</i>	0.2632** (0.1262)	0.3068** (0.1469)	0.4339* (0.2613)
Panel D: IV Second-Stage Estimates	Dependent Variable: <i>Mat Conf_{iy}</i>		
<i>Domestic Turmoil_{iy}</i>	-0.0369 (0.0910)	-0.0188 (0.1028)	0.0288 (0.1573)
Panel E: IV First-Stage Estimates	Dependent Variable: <i>Domestic Turmoil_{iy}</i>		
<i>Football Loss_{iy}</i> (Count)	0.0182*** (0.0050)		
<i>Football Loss_{iy}</i> (IHS – transformed Count)		0.0198*** (0.0064)	
<i>Football Loss_{iy}</i> (Dummy)			0.0101** (0.0048)
Kleibergen-Paap <i>F</i> -statistic	13.12	9.657	3.874
Controls:			
Country-Year FE	YES	YES	YES
Month FE	YES	YES	YES
Football Match	YES	YES	YES
No. of Observations	41,040	41,040	41,040
No. of countries	190	190	190
Maximum Goldstein Score	-5	-5	-5

Notes: This table provides the 2SLS estimates when using alternative forms of the football loss variable (i.e. Football Loss, IHS-transformed Football Loss and Football Dummy) as the IV. The dependent variables in Panels A, B, C and D are *Verb Coop*, *Mat Coop*, *Verb Conf* and *Mat Conf*, respectively. Panel E provides first-stage estimates. All specifications include country \times year fixed effects and month fixed effects. Both stages additionally control for *Football Match_{iy}*. The unit of measurement is a country-month. Standard errors, clustered at the country level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

Table B.6: Alternative Definition of ‘Close’ Football Losses

<i>Rating Difference</i>	(1) ≤ 120	(2) ≤ 130	(3) ≤ 140	(4) ≤ 150	(5) ≤ 160	(6) ≤ 170	(7) ≤ 180	(8) ≤ 190	(9) ≤ 200
Panel A: IV Second-Stage Estimates	Dependent Variable: <i>Verb Coop</i> _{iy}								
<i>Domestic Turmoil</i> _{iy}	-0.0601 (0.3083)	-0.0372 (0.2524)	-0.0526 (0.2271)	-0.0424 (0.2233)	-0.0001 (0.2477)	-0.0585 (0.2558)	0.0372 (0.2524)	0.0301 (0.3260)	0.0340 (0.3875)
Panel B: IV Second-Stage Estimates	Dependent Variable: <i>Mat Coop</i> _{iy}								
<i>Domestic Turmoil</i> _{iy}	0.0185 (0.1268)	0.0300 (0.1062)	0.0089 (0.0900)	-0.0158 (0.0912)	-0.0562 (0.0995)	-0.0161 (0.0977)	-0.0313 (0.0956)	-0.0495 (0.1170)	-0.0333 (0.1397)
Panel C: IV Second-Stage Estimates	Dependent Variable: <i>Verb Conf</i> _{iy}								
<i>Domestic Turmoil</i> _{iy}	0.3134 (0.1930)	0.2695* (0.1510)	0.2674** (0.1353)	0.2632** (0.1262)	0.2727* (0.1464)	0.2453* (0.1401)	0.2803** (0.1361)	0.3576* (0.1841)	0.4092 (0.2490)
Panel D: IV Second-Stage Estimates	Dependent Variable: <i>Mat Conf</i> _{iy}								
<i>Domestic Turmoil</i> _{iy}	-0.0687 (0.1210)	-0.0809 (0.1065)	-0.0367 (0.0907)	-0.0369 (0.0910)	-0.0563 (0.0982)	-0.0581 (0.0979)	-0.0735 (0.0952)	-0.0755 (0.1240)	-0.0952 (0.1517)
Panel E: IV First-Stage Estimates	Dependent Variable: <i>Domestic Turmoil</i> _{iy}								
<i>Football Loss</i> _{iy}	0.0149*** (0.0056)	0.0166*** (0.0052)	0.0185*** (0.0052)	0.0182*** (0.0050)	0.0168*** (0.0051)	0.0165*** (0.0049)	0.0172*** (0.0048)	0.0136*** (0.0047)	0.0109** (0.0046)
Kleibergen-Paap <i>F</i> -statistic	7.143	10.06	12.49	13.12	11	11.49	13.03	8.433	5.531
Controls:									
Country-Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Month FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Football Match	YES	YES	YES	YES	YES	YES	YES	YES	YES
No. of Observations	41,040	41,040	41,040	41,040	41,040	41,040	41,040	41,040	41,040
No. of countries	190	190	190	190	190	190	190	190	190
Maximum Goldstein Score	-5	-5	-5	-5	-5	-5	-5	-5	-5
Rating Difference	120	130	140	150	160	170	180	190	200

Notes: This Table provides the 2SLS estimates of the baseline specification under alternative specifications of ‘close’ football matches, ranging from rating differences of 120–200 between opposing teams. The dependent variables in Panels A, B, C and D are *Verb Coop*, *Mat Coop*, *Verb Conf* and *Mat Conf*, respectively. Panel E provides first-stage estimates. All specifications include country × year fixed effects and month fixed effects. Both stages additionally control for *Football Match*. The unit of measurement is a country-month. Standard errors, clustered at the country level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

Table B.7: Heterogeneous Effects of DT on Diversionary Foreign Interactions

	(1) <i>Verb Coop_{iy}</i>	(2) <i>Mat Coop_{iy}</i>	(3) <i>Verb Conf_{iy}</i>	(4) <i>Mat Conf_{iy}</i>
Panel A: Political Institutions				
<i>Domestic Turmoil_{iy}</i> \times <i>Anocracy_i</i>	-0.2054 (0.2866)	0.0960 (0.1281)	0.3460* (0.1780)	0.2509 (0.1565)
<i>Domestic Turmoil_{iy}</i> \times <i>Autocracy_i</i>	-0.4497 (0.6323)	0.3965 (0.3373)	0.0343 (0.2735)	-0.3149 (0.3497)
<i>Domestic Turmoil_{iy}</i> \times <i>Democracy_i</i>	0.5329 (0.5657)	-0.3332 (0.2828)	0.2644 (0.2895)	-0.1840 (0.2443)
<i>Domestic Turmoil_{iy}</i> \times <i>Anocracy_i</i> + <i>Domestic Turmoil_{iy}</i> \times <i>Autocracy_i</i> + <i>Domestic Turmoil_{iy}</i> \times <i>Democracy_i</i>	-0.1222 (0.7037)	0.1594 (0.3638)	0.6447* (0.3500)	-0.2479 (0.3233)
First-stage F -statistic	3.24;2.51;1.76	3.24;2.51;1.76	3.24;2.51;1.76	3.24;2.51;1.76
No. of Observations	34,776	34,776	34,776	34,776
No. of countries	161	161	161	161
Panel B: Income Level				
<i>Domestic Turmoil_{iy}</i>	-0.2874 (0.3604)	0.1565 (0.1735)	0.3015* (0.1827)	0.0010 (0.1297)
<i>Domestic Turmoil_{iy}</i> \times <i>Income_i</i>	1.043 (1.4869)	-0.7334 (0.9468)	-0.1628 (0.6304)	-0.1613 (0.5050)
<i>Domestic Turmoil_{iy}</i> + <i>Domestic Turmoil_{iy}</i> \times <i>Income_i</i>	0.7554 (1.244)	-0.5770 (0.8266)	0.1386 (0.5107)	-1603 (0.4232)
First-stage F -statistic	7.07;1.09	7.07;1.09	7.07;1.09	7.07;1.09
Observations	41,040	41,040	41,040	41,040
No. of countries	190	190	190	190
Panel C: Human Development				
<i>Domestic Turmoil_{iy}</i>	-0.7168 (0.4560)	0.2877 (0.2054)	0.3490* (0.2088)	0.0592 (0.1439)
<i>Domestic Turmoil_{iy}</i> \times <i>HDI_i</i>	1.210 (0.7698)	-0.5801 (0.3516)	-0.1765 (0.3555)	-0.1888 (0.2594)
<i>Domestic Turmoil_{iy}</i> + <i>Domestic Turmoil_{iy}</i> \times <i>HDI_i</i>	0.4933 (0.4763)	-0.2924 (0.2260)	0.1725 (0.2220)	-0.1296 (0.1764)
First-stage F -statistic	7.55;3.26	7.55;3.26	7.55;3.26	7.55;3.26
Observations	38,316	38,316	38,316	38,316
No. of countries	181	181	181	181
Panel D: Election Cycle				
<i>Domestic Turmoil_{iy}</i>	-0.0477 (0.2248)	-0.0140 (0.0910)	0.2685** (0.1286)	-0.0351 (0.0920)
<i>Domestic Turmoil_{iy}</i> \times <i>Election_{iy}</i>	-0.2093 (0.2054)	0.0744 (0.0630)	0.2114 (0.1461)	0.0709 (0.1446)
<i>Domestic Turmoil_{iy}</i> + <i>Domestic Turmoil_{iy}</i> \times <i>Election_{iy}</i>	-0.2570 (0.3532)	0.0605 (0.1156)	0.4800** (0.2184)	0.0358 (0.1906)
First-stage F -statistic	7.19;22.77	7.19;22.77	7.19;22.77	7.19;22.77
Observations	41,040	41,040	41,040	41,040
No. of countries	190	190	190	190
Controls:				
Country-Year FE	YES	YES	YES	YES
Month FE	YES	YES	YES	YES
Football Match	YES	YES	YES	YES
Maximum Goldstein Score	-5	-5	-5	-5

Notes: Second-stage IV estimates are reported. *Anocracy_i* is a time-invariant indicator that equals 1 if the average polity score over the sample period was ≥ -5 to ≤ 5 . *Democracy_i* (*Autocracy_i*) is a time-invariant indicator that equals 1 if average polity score over the sample period was ≥ 6 (≤ -6). *Income_i* is a time-invariant that equals 1 if the country was classified as a high or upper-middle income country in at least one of the sample years. *HDI_i* is a time-invariant that equals 1 if the average HDI score over the sample period was ≥ 0.5 (on a scale of 0–1). *Election_{iy}* is a binary indicator that equals 1 if the country reported an election in the given month of the given year. All specifications include country \times year fixed effects and month fixed effects. Both stages additionally control for *Football Match_{iy}*. The unit of measurement is a country-month. Sample size is determined by data availability. The joint estimate for the variables is reported at the bottom of the table. When multiple F -statistics are reported, they are from the first-stage regression with *Domestic Turmoil_{iy}* and the interaction terms as the dependent variable, respectively. Standard errors, clustered at the country level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.