Getting Along or Getting Ahead? The Domestic Roots of Status-Seeking in International Relations^{*}

Ashani Amarasinghe[†] Kathryn Baragwanath[‡]

January 2025

Abstract

This paper examines how domestic economic conditions shape international status-seeking behavior. We develop a novel measure of inter-government interactions using high-frequency event data across 18,330 country dyads from 2001-2019. To establish causality, we exploit plausibly exogenous variation in countries' natural resource wealth driven by global commodity price shocks. We find that positive resource shocks significantly increase countries' aggressive behavior in international relations, primarily through verbal rather than material confrontation. This effect operates strategically: aggression is targeted at peripheral nations while avoiding major trading partners, suggesting a deliberate approach to status enhancement that preserves The mechanism works through domestic political channels, with economic relationships. resource windfalls reducing public discontent and providing governments with political capital to pursue more assertive foreign policy. Consistent with theories of status-seeking behavior as a tool for enhancing international standing, the effects are concentrated in middle and low-income countries and in political systems with electoral accountability. Our findings highlight how domestic economic conditions influence international relations through the strategic pursuit of status, with implications for understanding the economic roots of geopolitical behavior. **Keywords:** Economic shocks, natural resources, international interactions, status-seeking

JEL Codes: F51, F55, Q34

^{*}We thank Ricardo Dahis, Emilio Depetris Chauvain, Gabriele Gratton, Jeff Frieden, Federico Masera, Paul Raschky, Eik Swee, Russell Toth, Lukas Wellner and participants at the Social Conflict and Political Economy (SCoPE) Workshop (University of Sydney), Resilient Democracy Workshop (UNSW), Australian Development Economics Workshop (ADEW) at the University of Melbourne, Australian Conference of Economists (ACE) at the University of Adelaide, Econometric Society Australaia Meetings (ESAM) at Monash University, Queensland University of Technology and Monash University's SoDa Laboratories for helpful comments and suggestions. Ashani Amarasinghe gratefully acknowledges financial support from the Australian Research Council under Discovery Project DP240101563.

[†]School of Economics, University of Sydney and SoDa Laboratories, Monash University; Email: ashani.amarasinghe@sydney.edu.au.

[‡]Department of Economics, University of Melbourne and SoDa Laboratories, Monash University; Email: kathryn.baragwanath@unimelb.edu.au

1 Introduction

At the height of the Venezuelan oil boom, in a now famous address to the United Nations General Assembly in 2006, Venezuelan president Hugo Chavez made a provocative speech against the United States. Spurred by the domestic economic boom generated by high oil prices and high domestic public approval ratings, Hugo Chavez referred to US president George Bush as " the devil", stating that "The devil came here yesterday... It still smells of sulfur today"¹. Hugo Chávez's "devil" speech at the UN in 2006 exemplifies status-seeking behavior, as he sought to challenge U.S. hegemony and elevate Venezuela's role in global politics. By positioning himself as a leader of the Global South and an anti-imperialist figure, Chávez aimed to assert his influence both internationally and domestically, garnering support from nations opposed to U.S. dominance while bolstering his image at home (Simon and Parody, 2023).

While it is unclear what direct material gains Chavez could obtain from such a speech, his objective can be explained by the literature on status in international relations (Renshon, 2017; Larson *et al.*, 2014; Dafoe *et al.*, 2014; MacDonald and Parent, 2021), which emphasizes that states are motivated not only by survival but also by a desire to achieve recognition and prestige. Status-seeking behavior may manifest in various forms, from diplomatic posturing to aggressive rhetoric, as states aim to enhance their position in the global hierarchy.

What factors motivate states to engage in such status-seeking behavior? In this paper, we propose that states' international behaviors possess domestic roots. Specifically, we show that domestic economic conditions are a critical contributor in empowering states to engage in status-seeking behavior, potentially altering their geopolitical standing. Strong domestic economic conditions empower states to assert themselves on the international stage, leveraging economic strength and increased public support to pursue status and influence (Larson

¹Hugo Chavez at UN General Assembly in 2006. Transcript accessed at https://library.brown.edu/create/modernlatinamerica/chapters/chapter-8-venezuela/primary-documents-with-accompanying-discussion-questions/document-21-address-to-the-united-nations-by-hugo-chavez-2006/ on 10/10/2024.

et al., 2014; Larson and Shevchenko, 2010; Dafoe et al., 2014). The Hugo Chavez speech exemplifies a particular economic condition that produces increased status-seeking behavior: natural resource price shocks. When resource-rich nations experience positive natural resource price shocks, they often find themselves with increased revenues, an appeased domestic public, and enhanced leverage in the international realm. This newfound wealth may empower states, especially those in the middle and lower tiers of the international system, to engage internationally.

As such, this paper exploits the arguably exogenous variation in domestic natural resource wealth to empirically examine the relationship between domestic economic conditions and status-seeking behavior in international relations. In doing so, it provides, to the best of our knowledge, the first causal estimates of how domestic economic conditions lead to systematic changes in interactions between governments across the world, with a focus on "regular" international relations outside of all-out war. Specifically, we combine high-frequency event data on the nature and incidence of inter-government interactions between 18,330 country dyads, with changes in a country's natural resource wealth based on global commodity prices and the country's own export structure, over the years 2001-2019, to investigate whether governments are more likely to behave aggressively towards other governments when experiencing positive economic shocks.

To quantify status-seeking behavior, we construct a novel *monthly* indicator of intergovernment interactions between country dyads, which we refer to as *dyadic aggression* (DA). This index combines high-frequency data on media reported events extracted from the Global Database of Event, Language and Tone (GDELT), with the conflict-cooperation scale by Goldstein (1992), to numerically represent the proportion of aggressive interactions initiated by one country's government towards another. To the best of our knowledge, this is the first globally consistent indicator of both the *frequency* and the *nature* of inter-government interactions between country dyads, at such fine temporal granularity. This dyadic aggression index serves as our main dependent variable. To derive the key explanatory variable, we combine data on country-level agricultural, mineral and fuel export quantities, with their world prices, at the monthly level. Following Asher and Novosad (2023) this index identifies the variation in a country's natural resource wealth based on the changes in world prices in the past three months. We then combine these with a comprehensive set of dyad and year×month fixed effects, which account for a range of time-invariant and time-variant unobservables, to identify whether and how dyadic aggression changes in response to domestic economic conditions.

We find that strong domestic economic conditions, as proxied by natural resource price shocks, lead to an increase in dyadic aggression. That is, when a country experiences a positive natural resource price shock, it's government engages more aggressively with other governments. We interpret this as status-seeking behavior. These interactions are predominantly of a verbally aggressive nature, for example threats and demands, instead of the more materially aggressive events such as fighting or mass violence. This finding is robust to a number of alternative specifications, and numerous tests on the underlying assumption of exogeneity of natural resource prices. Taken together, these findings provide evidence that positive domestic economic conditions increase a country's dominant engagement in the international space at this fine level of temporal granularity, and that such status-seeking behavior predominantly takes the form of low-cost, low-risk verbal aggression.

We then explore the mechanisms that underpin the resource-induced rise in status-seeking behavior, focusing on the effects of natural resource shocks on domestic politics. Economic shocks, particularly those related to natural resources, can improve domestic economic conditions, leading to more favorable public sentiments towards the government. To capture these shifts in sentiments toward the domestic government, we follow Amarasinghe (2022, 2023) in constructing a *domestic public discontent* index (*PD*) using high-frequency event data from GDELT, focusing specifically on events in which the domestic public targets its own government. We find that natural resource shocks significantly reduce domestic public discontent, suggesting that public approval of the government improves during periods of favorable resource price shocks, in turn emboldening governments to be more assertive and vocal on the international stage.

Next, we provide evidence that states engage *strategically* in status-seeking behavior. Specifically, we find that natural resource-driven dyadic aggression is largely directed at non-major trade partners. In contrast, important trade partners experience a reduction in dyadic aggression. Similarly, countries that serve as significant sources of foreign direct investment are less likely to be targeted. Consistent with Amarasinghe (2022), this pattern suggests that while countries assert their dominance internationally, they carefully avoid jeopardizing their economic interests.

Additionally, our analysis reveals that most resource induced status-seeking behavior is initiated by low- and middle-income countries, with the effects in low-income countries being twice as large as in middle-income countries. These findings indicate that such behavior is aimed at elevating status within the global hierarchy—a pursuit that may be unnecessary, or even risky, for large, high-income countries. Interestingly, we also observe that democracies and anocracies are the primary drivers of this behavior, suggesting that the impact of natural resource shocks on international relations is most relevant where electoral survival matters.

An important aspect of these underlying mechanisms becomes evident when considering pre-existing dyadic relationships, particularly in terms of foreign aid and sanctions. In benevolent relationships, where a history of receiving/donating foreign aid exists between countries, there is no evidence of natural resource-driven dyadic aggression. However, in the case of preexisting adverse relationships, such as those characterized by the receipt of sanctions, dyadic aggression increases in the wake of natural resource shocks. Moreover, dyadic aggression is more likely to target countries that are geographically and genetically distant, underscoring the low-risk nature of such status-seeking behavior and the importance of the strength of prior connections.

Being, to the best of our knowledge, the first to provide systematic evidence on the frequency, nature, mechanisms and implications of natural resource induced international interactions, this paper provides important policy implications for the international system. Our findings indicate that domestic wealth induces international aggression, and it is therefore important for all governments to monitor, prepare and react to such aggression emanating from other countries. From a welfare perspective, it is also crucial to implement checks and balances to nip these at the bud, and ensure that these verbal aggressions do not escalate to destructive conflicts that may threaten world peace.

This paper primarily contributes to the literature on strategic government behaviors in the international system. The determinants of international aggression have been a longstanding topic of interest across the social sciences. For instance, Spolaore and Wacziarg (2016) document that countries are more likely to exhibit aggression towards those with closer genetic and cultural proximity. Similarly, a growing strand of the literature, including Liou (2024), Amarasinghe (2022), Djourelova and Durante (2022), Lewandowsky *et al.* (2020) Durante and Zhuravskaya (2018) and Eisensee and Strömberg (2007), show how international interactions often stem from strategic responses to domestic turmoil.

On the economic determinants of these strategic interactions, the relationship between economic power and international relations was first systematically explored by Hirschman (1945, 1958). These seminal works demonstrated how international trade patterns shape power relationships between nations and how economic linkages influence both international relations and domestic development. Building on these insights, the recent literature on geoeconomics focuses on the economic causes of these strategic interactions (Clayton *et al.*, 2024a,b, 2025; Scholvin and Wigell, 2018; Blackwill and Harris, 2016; Farrell and Newman, 2023). Within this literature, Clayton *et al.* (2024a) develop a formal model showing how hegemonic countries use their economic strength from financial and trade relationships to achieve geopolitical goals, particularly through coordinating threats across different economic relationships. While they focus on how hegemons extract concessions through economic coercion, we examine a different dimension: how a state's economic conditions affect incentives to engage in statusseeking behavior. This connection between economic conditions and international behavior is further highlighted by Hendrix (2015), who demonstrates how fluctuations in oil prices can fuel international conflict.

Building on this literature, our paper examines how domestic developments affect international interactions. While much of the existing work uses indices of violent conflict, such as the Militarized Interstate Disputes (MID) data employed by Hendrix (2015), these datasets capture only extreme interactions, i.e. military conflicts, which occur sporadically and are not consistently observed over time. Our work introduces a novel index that quantifies the frequency and nature of inter-government interactions, transcending traditional data limitations to measure both verbal and material aggression/cooperation between states in a consistent, continuous manner. This index, based on high-frequency, media-reported event data, is standardized and comparable across time and space. As such, it allows for a more nuanced examination of international interactions and offers new insights into government behavior.

We also contribute to the broader literature on the consequences of natural resource shocks. A substantial body of research documents the so-called "resource curse," wherein countries abundant in natural resources tend to experience slower economic growth, lower levels of democracy, and poorer development outcomes compared to resource-scarce countries (Sachs and Warner, 2001; Ross, 2001). Natural resource price shocks, particularly in resource-dependent countries, can have significant effects on the likelihood of conflict and public sentiment. For example, while many argue that commodity price booms increase the risk of civil conflict by incentivizing state capture (Dube and Vargas, 2013; Besley and Persson, 2008), some find that conflict increases as commodity prices of exported goods fall (Brueckner and Ciccone, 2010; Savun and Cook, 2010). Bazzi and Blattman (2014) find limited evidence of this effect. Instead, they find that price booms tend to shorten existing conflicts and reduce their intensity, likely because rising revenues strengthen state capacity for counterinsurgency and lower individuals' incentives to continue fighting. Conversely, Bellemare (2014) finds that food price shocks can exacerbate social unrest, as higher food prices strain household budgets and fuel public dissatisfaction.

While much of this literature has focused on the domestic impacts of natural resource

shocks, particularly how they trigger violence within a country, our paper takes a significant departure by examining how natural resources drive aggressive behaviors towards other nations. By adopting a novel, temporally granular approach, we demonstrate that the effects of natural resource price shocks extend beyond national borders, contributing to tensions at the international level. This perspective offers crucial insights for shaping global policy agendas.

The remainder of this paper is organized as follows. Section 2 describes the various data sources and our methodology of generating quantified indices of inter-government interactions and natural resource price shocks. Section 3 discusses the empirical strategy and presents the baseline estimates and robustness checks. We discuss potential underlying mechanisms in Section 4. Section 5 concludes.

2 Data

The unit of analysis is a dyad, composed of two countries i and j. The final data set consists of *monthly* observations for 18,330 such dyads, over the years 2001-2019, equivalent to 4,179,240 dyad \times year \times month observations.

2.1 Data on dyadic aggression

Our measure of dyadic aggression is derived from high-frequency, media reported event data obtained from GDELT (Leetaru and Schrodt, 2013). GDELT is a real time data set of global events, analyzed using print, broadcast, and web news media in over 100 languages across every country in the world, in 15 minute intervals (Leetaru and Schrodt, 2013). Using NLP algorithms, it extracts over 300 categories of physical activities based on Conflict and Mediation Event Observations (CAMEO) event codes (Gerner *et al.*, 2008). For each event, GDELT provides information on approximately 60 attributes such as, what kind of event it was (ranging from 'make a public statement' to 'appeal', 'threaten', and 'engage in unconventional mass violence'), the types of actors involved, the location and how many media articles reported the event. As such, GDELT is a massive database of millions of media-reported events across the world. Its high-frequency nature enables us to quantify international aggression at very fine levels of temporal granularity, thereby taking a microscopic view of dyadic interactions, which is largely understudied in the literature thus far.

In recent work applying the GDELT data set, Amarasinghe (2022, 2023) quantify public discontent towards governments, and show that this indicator is strongly correlated with other traditional, albeit imperfect, indicators of such discontent.² Our paper builds on, and extends, such previous work, by quantifying the nature and frequency of interactions *between countries*, as opposed to within-country interactions. We approach this quantification using the following step-by-step procedure.

First, we identify the set of all 'foreign' events which occurred within the sample period. Specifically, events where the source (i.e. initiator) and the target were located in different countries are labeled 'foreign'. There are approximately 19 million foreign events occurring over the sample period. As a measure of precaution against nonsensical event entries, we only retain the set of events which were recorded in at least 3 media reports.³ Since our objective is to quantify *government-involved* international interactions, we then retain the subset of foreign events which are specifically between governments, based on reported actor types.

In the next step, we identify the sentiments associated with each of these events using the reported score on the Goldstein scale (Goldstein, 1992), which captures the theoretical potential impact posed by each event type on the stability of a country. On the Goldstein scale, each event type is assigned a score on a range of -10 (extreme conflict) to 10 (extreme cooperation), based on its inherent intensity of conflict and/or cooperation. A summary list of CAMEO event types and associated Goldstein scores are available in Table 1.

Since the primary objective here is to quantify dyadic *aggression*, our focus is specifically

²Other related work using media reported data for similar quantifications include Caldara and Iacoviello (2022), Shapiro *et al.* (2022) Mueller and C. (2018) and Baker *et al.* (2016). For an overview, see Gentzkow *et al.* (2019).

³For transparency, in Table B.2 we provide estimates for alternative cutoffs on the number of media reports reporting each event.

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				

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

Source: The Computational Event Data System

on events that receive a *negative* score on the Goldstein scale. We estimate the index of Dyadic Aggression (DA) using Equation 1,

$$DA_{ijymG<0} = \frac{Foreign_{ijymG<0}}{Foreign_{ijym-10\leq G\leq 10}} \tag{1}$$

where $Foreign_{ijymG\leq0}$ refers to the number of dyadic events initiated by the government of country *i*, targeting the government of country *j*, and recording a Goldstein value of less than 0, i.e., lying on the negative spectrum of the scale. The denominator $Foreign_{ijym-10\leq G\leq10}$ refers to the *total* number of dyadic events initiated by the government of country *i* and targeting the government of country *j*, on the full spectrum of the Goldstein scale (-10 \leq G \leq 10). $DA_{ijymG<0}$ is then a standardized indicator of Dyadic Aggression, which expresses the proportion of negative dyadic events initiated by the government of country *i*, relative to all dyadic events initiated by the government of country *j*.

To better understand the intuition underlying this DA index, in Section A we examine a number of descriptive statistics. Figure A.1 shows the overtime trends in the total number of dyadic events, as well as the number of aggressive and cooperative events between countries, in GDELT. We observe that, as technology expands, the number of events reported by GDELT has increased overtime. This trend underlies our preferred functional form of the DA index, which we define as the share of dyadic aggressive events over the total number of dyadic events, as opposed to a simple count variable. Within our empirical strategy, we also incorporate a granular set of time fixed effects, specifically, year×month fixed effects, to absorb such timevarying unobservables. We further note that the number of aggressive events is always below the number of cooperative events, there by alleviating any concerns on aggressive events potentially being overreported in GDELT.

Second, we examine the event composition of the DA index. As demonstrated in Table 1, a range of event types receive negative scores on the Goldstein scale, starting from "verbally aggressive" actions such as "investigate", "disapprove" and "demand" to more materially aggressive events such as "coercion" and "fight", all of which are captured in the numerator of the DA index. As such, the DA index is not limited to one particular 'type' of interaction, but instead captures a broad set of event types underlying interactions between countries. Figure A.2 presents the event composition within the DA index. Here, we have the average shares of event categories within the DA index for each country i in the sample, over the sample period. Each bar represents a country, and the colors denote the relative average weight received by each event category, within a country's DA index. We observe that most countries follow a similar composition pattern and that event categories "disapprove" and "coerce" are the most prominent event types in dyadic aggression.

We examine country level variation in DA in Figure 1, and observe that the most intense levels of dyadic aggression originate from politically "powerful" countries. Within the sample period, the highest level of aggression originated from the USA, followed by the United Kingdom, France, Russia and China. Complementing these observations is Figure A.3, which provides the overtime variation in DA initiated by a selected set of countries. Again, we observe that countries such as the USA, and the United Kingdom are at the forefront in terms of both the level and variation in DA over the sample period.

Next we move on to dyad-level interactions, which is the unit of observation in our study. Recall that the data set contains information on 18,330 country dyads, which makes it a massive and detailed data set of international relations. This allows us to observe granular patterns in inter-government relations, which have largely been unexplored in the literature so far due to the absence of detailed data. One such example, which is particularly relevant to our quantification exercise, is presented in Figure A.4. Here we provide a graphical illustration of the flow of aggressive interactions between governments, recording a Goldstein score < 0(i.e., the numerator in Eq. 1), between the top 20 most active dyads over the sample period.⁴ Intuitively, one would expect that the bulk of negative international interactions originate from

 $^{^{4}\}mathrm{We}$ present only the top 20 dyads here due to practical complications when illustrating the full set of 18,330 dyads.

Figure 1: Global distribution of DA_{ij}



Note: Figure shows the average level of DA initiated by country i, towards all other countries j, over the sample period. DA is calculated as per Equation 1.

economically and politically powerful countries, and this prior is confirmed in the data. The largest number of aggressive interactions over the sample period originate from the US towards Russia, closely followed by aggressive interactions originating from USA towards Iran.⁵

2.1.1 Validation of DA Index with Alternative Indicators

Since the DA index is a novel quantification, it is important to examine how it correlates with existing, albeit imperfect, alternative indicators on international relations. We now examine a series of such correlations. First, in Figure A.5 we examine how the DA index correlates with the Geopolitical Risk (GPR) index by Caldara and Iacoviello (2022). The GPR index is a compilation of threats to "global" geopolitics and is therefore calculated at the spatially aggregate global level, but is available at the temporally granular year×month level. To compare with this index, we aggregate our DA index at the global level too. Figure

⁵One potential concern could be that these "powerful" countries are overrepresented in the data set due to relatively high news media focus. In our empirical strategy, we address this concern using a granular set of fixed effects, which can account for both dyad-specific and time-specific variations in media focus.

A.5 shows that the DA index, when aggregated at the global level, is strongly positively correlated with the GPR index.

In Table A.1 we examine further correlations based on dyadic relationships. Because these alternative data sets are only available at the year level, all such correlations are conducted at this more aggregate temporal unit. In Column (1) we consider sanctions imposed by country i on country j, data on which is sourced from the Global Sanctions Database. Column (2) uses data on UN voting distance from Voeten *et al.* (2009), while Column (3) uses data on militarized interstate disputes from the Correlates of War Project. Across these three columns, we observe that these standard indices of dyadic aggression are strongly positively correlated with our DA index. Moreover in Column (4), when using data on dyadic development assistance, which is a proxy for cooperative interactions within a dyad, we observe a strong negative correlation, confirming that our DA index is able to accurately capture the underlying direction of these dyadic interactions.

What such descriptive information and strong correlations suggest is that the DA index is a reliable, granular indicator of dyadic interactions, providing a consistent, globally representative quantification of between-country sentiments. Additionally, by virtue of it being a standardized index, as opposed to a simple count variable, it is comparable across time and space. Combined with the fine level of temporal granularity, and its ability to quantify both verbal and material aggression, this index is, to the best of our knowledge, the first of its kind to provide microscopic insights on how countries engage within the international system.

The key caveat in using this index, however, is that many unobservable factors can affect the levels and variation of aggression within and between dyads. For example, the number of events reported in the media can vary over time due to changes in media accessibility or expansion of the internet. It could also be that domestic or international shocks, such as natural disasters and international military operations, could hinder or exacerbate reporting of events. Country specific unobservables, such as political institutions to cultural norms can also affect the level of reported aggression. As we discuss in Section 3, we take all these concerns into account when designing our empirical identification strategy based on the index of dyadic aggression.

2.2 Defining natural resource price shocks

Natural resource rents serve as our proxy for domestic economic conditions. For each countrymonth, we rely on global price changes to identify exogenous shocks to country level resource rents. We define a rent shock as the change in rents driven by global prices alone, without considering changes in production or exports. Since countries generally produce and export more than one commodity, we weight the natural resource price shocks with the country's average level of exports of each commodity. Following Asher and Novosad (2023), the price shock for country i in month m, is defined as

$$PriceShock_{iym} = \frac{\sum_{c \in C} q_{i,c} * \frac{price_{c,m-1}}{price_{c,m-3}}}{\sum_{c \in C} q_{i,c}}$$
(2)

where C is the set of commodities exported by country i, $q_{i,c}$ is the average export value of commodity c in country i over the sample period, and $price_{c,m}$ is the global price of commodity c in month m.

The *PriceShock* index thus captures an export weighted index of the changes in prices for commodities exported by country i in the three months prior to m^6 . Our decision to fix the export structure based on the average over the sample period is an attempt to avoid endogenous adjustments in export quantities as a response to price variations.⁷ This strategy closely follows Asher and Novosad (2023). However, while they rely on yearly price data, we narrow in on the monthly variance in global prices, thus capturing the effects of shorter term price shocks, which further ensures the exogeneity of our measures. Additionally, we focus

⁶We measure the shock using a general price index based on exports to all countries, rather than a dyadic price index that considers bilateral trade exposure. This choice reflects our focus on how resource price fluctuations affect overall domestic economic conditions, rather than bilateral terms of trade or other country-pair specific measures.

 $^{^{7}}$ As presented in Table B.6, our estimates are robust to using the export structure of the initial year of the sample period.

on agricultural, mineral and fuel resources, while Asher and Novosad (2023) focus only on mineral rents. Figure 2 illustrates the intensity of the distribution of the *PriceShock* index over the sample period. We note that the index accurately captures resource rich countries in across the world, with special prominence to Africa, South America and Central Asia. Figure A.6 presents the overtime variation in the *PriceShock* index for a selected set of countries.

Figure 2: Global distribution of $Price \ Shock_i$



Note: Figure shows the average level of exposure to global *Price Shock*, over the sample period, for all countries in the sample, calculated as per Equation 2.

2.3 Other Data

We use a number of other datasets to examine the heterogeneity and mechanisms underlying our estimates. Specifically, we use data from Spolaore and Wacziarg (2016) to identify the genetic and geographic distance between countries. Polity V database provides us with data on each country's political regime, enabling us to classify them as democracies, autocracies or anocracies. Data on foreign aid flows between countries is sourced from the Aiddata database, while data on sanctions between countries is sourced from the Global Sanctions Database (Felbermayr *et al.*, 2020). Data on dyadic trade is sourced from the United Nations Conference on Trade and Development (UNCTAD), where we get a complete picture of dyadic export/import structures for the entire sample period. We source data on dyadic foreign direct investments from the Global Indicators for Dyadic Engagement (GIDE) database and data on country income levels from the World Bank.

3 Empirical framework

To examine the effect of domestic economic conditions on dyadic aggression, we use Eq. 3.

$$DA_{ijym} = \beta PriceShock_{iym} + \mathbf{FE}_{ij} + \mathbf{FE}_{ym} + \epsilon_{ijym}$$
(3)

Note that the unit of observation is a dyad, composed of countries i and j, with country i being the "source" country that experiences the natural resource price shock. The outcome variable DA_{ijym} is the index of aggressive interactions initiated by the government of country i towards the government of country j, in month m of year y, calculated as per Eq.1 above. $PriceShock_{iym}$ is, as per Eq.2, a quantified index which represents the global commodity price shock in the past three months, weighted by country i's export structure. \mathbf{FE}_{ij} is a vector of dyad fixed effects, which accounts for any time-invariant unobservables specific to the dyad (i, j), such as geographic proximity or historical colonial affiliation. It also accounts for time-invariant unobservables relating to the countries making up the dyad, such as population or area in countries i and j. \mathbf{FE}_{ym} is a vector of year×month fixed effects, which accounts for time-invariant global conditions or changes in political landscapes as well as seasonal unobservables.⁸

The coefficient of interest, β , captures the effect of domestic economic conditions, as proxied by a natural resource price shock in country *i*, on aggression initiated by country *i* towards country *j*. Since DA_{ijym} is a quantification of dyadic *aggression*, a positive value for β would indicate that country *i* becomes *more* aggressive towards country *j* when country *i* experiences positive domestic economic conditions, and vice versa. To the extent that global natural

⁸In Table B.3, we show that our estimates are also robust to alternative sets of fixed effects.

resource price shocks are exogeneously determined, and accounting for time-variant and timeinvariant unobservables, the coefficient β can be interpreted causally. We discuss potential threats to identification in Section 3.1 below.

	(1)	(2)	(3)
	DA_{ijym}	DA_{ijym}	DA_{ijym}
$PriceShock_{iym}$	-0.0113^{***} (0.0011)	$\begin{array}{c} 0.0093^{***} \\ (0.0015) \end{array}$	0.0062^{***} (0.0017)
Observations	4,179,240	4,179,240	4,179,240
Dyad FE	No	Yes	Yes
Year FE	No	Yes	No
YearMonth FE	No	No	Yes
Mean DA_{ijum}	0.0185	0.0185	0.0185

 Table 2: Baseline estimates

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country i, targeting the government of country j, in month m of year y, as per Eq. 1). PriceShock_{iym} is a quantified index which represents the global commodity price shock (past three months) weighted by country i's export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

Table 2 presents the baseline estimates. In Column (1), we present estimates with no fixed effects. The coefficient here is negative, but no inference can be drawn from this coefficient because a range of time-invariant and time-variant unobservables could threaten it's causal interpretability. To address this concern, we gradually add sets of fixed effects in the next two columns. In Column (2) we first incorporate dyad and year fixed effects. In Column (3), where we present our preferred estimates, we include dyad, year and month fixed effects. The incorporation of these comprehensive sets of fixed effects considerably improves the precision and causal interpretability of our estimates. In summary, we find that a positive natural resource price shock increases aggression from country i towards country j. In terms of

magnitude, the coefficient of in Column (3) suggests that a 1 standard deviation increase in $PriceShock_{iym}$ increases DA_{ijym} by approximately 0.0017 percentage points, which is a sizable 9% increase over the sample mean of DA_{ijym} . As such, strong domestic economic conditions, proxied by increases in the value of domestic natural resources, increase aggressive interactions initiated by the source country towards other countries.

These findings align well with theories of status-seeking behavior in international relations, which propose that states use aggressive posturing as a tool to enhance their position in the global hierarchy. They are particularly compelling given the nature of our DA measure, which captures a broad spectrum of aggressive interactions, from diplomatic protests to verbal threats, rather than material conflicts *per se*. The significant positive effect we find indicates that countries become more assertive in their international interactions when their domestic economic position strengthens, consistent with status-seeking motivations rather than purely material interests. This behavior resembles the case of Hugo Chavez's rhetoric at the 2006 UN General Assembly, where Venezuela's strong economic position from high oil prices emboldened more aggressive international posturing. In the following sections, we further substantiate this status-seeking interpretation by examining the specific types of aggressive actions taken, their strategic targeting, and their relationship with domestic political conditions.

3.1 Threats to identification

A large literature in economics and political science exploits global commodity prices as "exogenous" shocks to identify causal relationships. (See for example, Brueckner and Ciccone (2010); Brueckner *et al.* (2012); Berman *et al.* (2017).) Within the context of our paper too, the exogenous nature of global commodity prices renders the coefficient β causally interpretable. In this section, we discuss potential threats to this identifying assumption and how we address these within our setting.

A key threat to the identifying assumption arises from the potential for reverse causality. That is, just as we expect *PriceShock* to affect *DA* in Equation 3, could *DA* affect *PriceShock* as well? We address this concern in two ways. First, following Asher and Novosad (2023) the treatment variable $PriceShock_{iym}$ is calculated considering the cumulative change in prices in the three to one month *prior* to the contemporary month, while DA is measured in the contemporary month. By definition therefore, the outcome variable cannot cause the treatment variable.

Second, the primary variation we exploit via $PriceShock_{iym}$ is derived from global fluctuations in natural resource prices. As with previous work in this literature, the underlying assumption here is that a single player/country cannot solely determine the level and variation in global prices. However, one may argue that certain countries are such large contributors to international trade that they can single-handedly affect the direction of global prices, which would render our estimates biased. A standard robustness check in this literature is to reestimate the baseline specification while excluding top producers of a given resource. (See for example, Berman *et al.* (2017).) In Table B.1 we conduct this test and show that the baseline estimates remain robust when excluding countries identified as top 5 producers of a given resource.

Another potential threat to the identifying assumption is related to simultaneity, i.e. that DA and $Price\ Shock\ can be simultaneously determined by unobservable factors. Considering the retrospective nature of the <math>Price\ Shock\ _{iym}$ variable and the finely granular temporal unit of analysis (i.e. month) this seems a minute concern. Moreover, our baseline empirical strategy incorporates an extensive set of dyad and year \times month fixed effects, which account for time-invariant dyad-specific unobservables, time-variant (annual) unobservables as well as any seasonal unobservables. Additionally, in Table B.3, we present estimates based on three alternative sets of fixed effects, which accounts for unobservables at different combinations of spatial and temporal dimensions. Despite these stringent sets of fixed effects too, the estimates remain quantitatively and qualitatively similar to the baseline estimates.

3.2 Robustness tests

We now discuss a number of robustness tests. The first set of robustness tests examine the sensitivity of the outcome variable to alternative decision rules. To start, recall that in the baseline estimates, we only considered events reported in at least 3 media articles. In Table B.2 we additionally present estimates based on events reported in at least 1 or 5 media articles, and they remain qualitatively and quantitatively similar to baseline estimates. Next, Table B.3 presents estimates with alternative sets of fixed effects. Column (1) incorporates $dyad \times year$ fixed effects along with month fixed effects. Column (2) is based on dyad fixed effects along with year×month fixed effects, while Column (3) includes dyad×month fixed effects and year fixed effects. Across the specifications, the estimates remain robust. In Table B.4, we use the number of aggressive dyadic events (i.e. the numerator of Eq. 1) as the outcome variable, instead of relative shares. Panel A presents estimates using the log transformed count variables, while Panel B presents estimates using the inverse hyperbolic sine (IHS) transformed count variables. Reassuringly, the pattern observed in baseline estimates persists when using these alternative outcome variables as well. In Table B.5, we address any concerns relating the to the effects of pre-existing aggression between countries, by controlling for dyadic aggression in the previous period, i.e. DA_{ijym-1} . While acknowledging that the inclusion of an autoregressive term in the presence of unit fixed effects, as in this robustness test in Table B.5, gives rise to the famous "Nickell Bias", we find that the estimates remain robust to this inclusion as well.

The second set of robustness tests focus on the treatment variable. Recall that in Eq. 2, the time invariant component of the *PriceShock* was based on the average export structure of country i over the sample period. In Table B.6, we test the robustness of baseline estimates when basing the time invariant component to the export structure of country i in the initial year of the sample period. Reassuringly, we observe that the estimates remain qualitatively and quantitatively similar to baseline estimates. Table B.7 restricts the treatment to large price shocks only, where "large" is defined as at least a 5% price shock, either positive or

negative. The results remain similar to the baseline estimates, although the coefficient is slightly smaller, potentially due to the exclusion of a large portion of the variation in the treatment variable. In Table B.8 we observe that the effect holds when examining agricultural commodities and minerals/fuels separately. This suggests that the effect of the shock likely goes through an overall improvement of domestic economic conditions as the commodities exported by country i become more valuable, ruling out the more complex channels through which point source resource shocks such as oil shocks work, for example by directly affecting government coffers and indirectly affecting local populations through government spending.

In Table B.9 we explore alternative definitions of the treatment variable. Column (1) provides the baseline estimates, based on the price shock up to 3 months prior to the contemporary month. Columns (2) and (3) expand the time horizon up to 6 and 12 months prior, and the effect remains statistically significant. This pattern is also observed when using log converted prices, in Columns (4), (5) and (6). We go one step further in Table B.10 by aggregating the data set at the dyad×year level to examine the effect of yearly price shocks. As with the baseline estimates, in Column (1) we observe a negative effect when unit and time fixed effects are not incorporated. However in Column 2, when time-variant and time-invariant unobservables are accounted for via dyad and year fixed effects, we observe that natural resource price shocks have a positive effect on DA, at this unit of observation as well.

The third set of robustness tests includes falsification exercises. Here, we first examine whether domestic economic conditions specifically increase dyadic aggression only or whether they lead to a general increase in any kind of dyadic interactions. If the latter was the case, we would expect to also see an increase in dyadic cooperative interactions, i.e. those on the positive spectrum of the Goldstein scale. In Table B.11, the outcome variable DC_{ijym} quantifies Dyadic Cooperation, which expresses the number of events initiated by the government of country *i* targeting the government of country *j*, recording a positive Goldstein score, as a proportion of all events initiated by the government of country *i* targeting the government of country *j*. Interestingly, we do not find any evidence that cooperative interactions within the dyad are affected by price shocks. This provides further confirmation that the effect of natural resource price shocks on international relations is through aggressive interactions, and not cooperative interactions. This finding is suggestive of an aggression bias in status-seeking behavior, as countries attempt to assert their weight in the international system.

Recall that when defining DA in Eq. 1, we only retained events initiated by the government of country *i* towards the *government* in country *j*, i.e. inter-government aggression. Could it be that this price shock-induced aggression affects interactions targeted at other entities in country *j* as well? In Table B.12, we quantify aggression targeted at a range of such alternative entities in country *j*, i.e. Businesses, Political Opposition, Elites, Medical Entities and Civilians. We do not find any evidence of effects on aggression towards other target categories, apart from a marginally statistically significant positive effect on entities categorised as "Businesses". This suggests that the profit orientation associated with natural resource price shocks may be affecting dyadic aggression overall.

Finally, in Table B.13 we examine whether the aggression initiated by country i depends on developments in country j. Specifically, in Column (1) we present estimates controlling for natural resource price shocks in country j. We observe that the coefficient remains identical to our preferred baseline estimates, suggesting that country j's natural resource price shocks has a negligible impact on country i's aggression towards country j. In Column (2), we control for aggression initiated by country j towards country i and again the coefficient remains quantitatively and qualitatively similar, suggesting that the baseline effect holds conditional on this control as well. In Column (3) we include both these controls together. These estimates confirm that the aggression initiated by country i towards country j is independent of the actions of country j. In other words, the aggression caused by the price shocks does not seem to be retaliatory in nature, but rather an attempt by country i to appear in the world stage through posturing and aggressive rhetoric.

Taken together, these robustness tests provide compelling evidence that commodity price shocks systematically alter how states engage in international relations. The findings remain consistent across multiple specifications, alternative measures of price shocks, and different temporal aggregations, demonstrating that positive economic shocks embolden governments to pursue more aggressive international posturing. Two findings particularly support our interpretation that this represents status-seeking behavior rather than purely conflictual engagement: First, the aggression is non-retaliatory and independent of target country conditions, suggesting it stems from the initiating country's strategic choice to assert itself internationally. Second, the effect manifests specifically through aggressive rather than cooperative interactions, indicating an intentional assertion of dominance rather than a general increase in international engagement. This pattern of behavior – strategic, assertive, and deliberately chosen – aligns with theories of status-seeking, where states leverage improved domestic conditions to enhance their perceived position in the international hierarchy.

4 Transmission mechanisms

4.1 Nature of dyadic aggression: Status-seeking behavior as lowcost, low-risk engagement

A key question that emerges from our baseline estimates is: "What type of events drive international engagement following a natural resource price shock?" Specifically, is the aggression we observe a form of material aggression, such as warfare, or is it more in the form of verbal and strategic posturing aimed at asserting dominance without significant risk? The latter strategy would be more aligned with status-seeking behavior, where states are seeking recognition without attempting to directly extract material gains from their targets.

Recall in Eq.1 when defining DA, we relied on all aggressive events recording a Goldstein score between 0 to -10, in the numerator. As such, the baseline estimates incorporate both material and verbally aggressive interactions initiated following a natural resource price shock. We examine these deeper in Figure 3. Here we redifine DA based on alternative cutoffs on the Goldstein scale, ranging from -1 to -9, with lower values representing materially aggressive interactions, and vice versa. Interestingly, we observe that the estimates remain robust and statistically significant for up to a Goldstein score of -6, and become statistically insignificant (albeit positive) thereafter. Combined with information on events categories and their associated Goldstein scores on Table 1, this finding suggests that the effect on DA is primarily driven by event types considered as *verbally aggressive*, such as "reject", "disapprove", "demand" or "threaten". We don't observe an effect on *materially aggressive* events, such as "exhibit force", "fight" or "engage in unconventional mass violence". Considering the short term nature of these effects, and the high costs associated with engaging in materially aggressive interactions, this finding suggests that dyadic aggression is used mostly as a low-cost, low-risk strategy to improve one's position in international relations by seeking status and recognition.

4.2 Domestic public discontent towards the government

We next explore the mechanisms that underpin the resource-induced rise in status-seeking behavior, focusing on the effects of natural resource shocks on domestic politics. Economic shocks, particularly those related to natural resources, can improve domestic economic conditions. Increased government revenues from resource booms often translate into improved public services and greater economic stability, reducing public discontent and bolstering support for the government. The increase in dyadic aggression observed after resource price shocks can thus be driven by a confident domestic mandate where, by leveraging positive public sentiment, governments can seek status and pursue assertive foreign policies without jeopardizing domestic stability. ⁹

To test whether we observe this effect of the natural resource shock on domestic senti-

⁹On the other hand, natural resource wealth can also fuel perceptions of corruption or inequality, especially if the benefits of the resource boom are not evenly distributed among the population. When this occurs, public discontent may rise, leading to political instability. In such scenarios, governments may resort to diversionary tactics, using international aggression as a tool to distract from domestic unrest and consolidate their power. This strategy, often referred to as the "diversionary conflict hypothesis," suggests that leaders facing internal crises may escalate external conflicts to rally the public around a common enemy, thereby shifting attention away from domestic grievances (Amarasinghe, 2022; Morgan and Anderson, 1999; Leeds and Davis, 1997).



Figure 3: Alternative cutoffs of Goldstein score

Note: The unit of measurement is a dyad-yearmonth. Figure shows the effect of $PriceShock_{iym}$ on DA_{ijym} . The dependent variable DA_{ijym} is a standardized indicator of negative sentiments targeted at the government of country *i*, initiating from country *j*, as per Eq. 1), based on cutoffs of the Goldstein score, ranging from -1 to -9. $PriceShock_{iym}$ is a quantified index which represents the global mineral and fuel price shock (past three months) weighted by country *i*'s export structure. Each dot represents a separate regression estimate. Vertical bars depict 90% confidence intervals, clustered at the dyad level.

ments, we generate an indicator of domestic Public Discontent, PD, following Amarasinghe (2022, 2023), which is based on the same logic as Eq.1, but limited to *domestic* interactions targeting the government. The index PD_{iym} therefore expresses all domestic events targeting the government of country i with a negative score on the Goldstein scale, as a share of total domestic events targeting the government. We then examine the effect of $PriceShock_{iym}$ on PD_{iym} within a country×year-level panel data set.

	$(1) \\ PD_{iym}$	$(2) \\ PD_{iym}$		
$PriceShock_{iym}$	0.0066 (0.0087)	-0.0852^{**} (0.0395)		
Observations Country FE YearMonth FE Mean PD_{ijym}	35,568 No No 0.3006	35,568 Yes Yes 0.3006		
Mean PD_{ijym} 0.3006 0.3006 The unit of measurement is a country- yearmonth. The dependent variable PD_{iym} is a standardized indicator of domestic aggressive actions, targeted at the government of country <i>i</i> , in month <i>m</i> of year <i>y</i> . <i>PriceShockiym</i> is a quantified index which represents the global com- modity price shock (past three months) weighted by country <i>i</i> 's export struc- ture. Standard errors, clustered at the country×year level, are in parentheses. *** ** indicate significance at the 1				

Table 3: Effects on domestic public discontent

Table 3 provides these estimates. Estimates in Column (1) contains no fixed effects, while those in Column (2) incorporates country and year×month fixed effects to account for timeinvariant and time-variant unobservables. Interestingly, we observe that an increase in a PriceShock leads to a decline in domestic public discontent towards the government. This finding suggests that improved public support for the government following a natural resource price shock contribute towards its status-seeking behaviour in the international stage.

4.3 Trade, income and institutional determinants

We now examine whether the dyadic aggression induced by natural resource price shocks, as we observe in the baseline estimates, is driven by any dyad or country specific characteristics. Specifically, we analyze whether trade relationships, the level of economic development, and institutional characteristics such as democratic governance, influence status-seeking behavior.

For this purpose, we use a generalized form of the econometric specification depicted in Eq. 4.

$$DA_{ijym} = \beta_1 PriceShock_{iym} \times \mathbf{X} + \beta_2 PriceShock_{iym} + \beta_3 \mathbf{X} + \mathbf{FE_{ij}} + \mathbf{FE_{ym}} + \epsilon_{ijym}$$

$$(4)$$

Here, **X** is a time-invariant, country-specific or dyad-specific indicator variable that groups countries/dyads sharing the particular characteristic. As with baseline estimates, we include granular sets of fixed effects to capture a range of time-variant and time-invariant unobservables. The coefficient of interest, β_1 , then captures the effect of *PriceShock*_{iym} on countries/dyads sharing this characteristic.

4.3.1 Dyadic economic relationships

We start with economic relationships within dyads. On the one hand, it could be that country i is mindful of the importance of country j for its own economic survival, such that aggression is used in a manner that does not jeopardize such economic benefits. If this is the case, we would observe the majority of dyadic aggression being directed at countries less important in terms of economic relationships, a behavioral form which would be consistent with statusseking, rather than bargaining. On the other hand, it could be that country i uses its boosted economic condition due to the natural resource shock to pressurize economic partners in a manner that brings it further rewards. If this is country i's agenda, we expect to observe the bulk of the aggression being directed at important economic partner countries.

We use two proxies to represent the strength of the economic relationship within a dyad. First, we examine the strength of the trade relationship between countries i and j using data on dyadic trade from UNCTAD. For each dyad, this dataset provides the value of natural resource exports and imports between country i to country j in a given year. It also provides the value of the total exports/imports from a given country to the rest of the world for each year of the sample. This allows us to identify the share of natural resources *exported* by country i to country j, compared to country i's total global exports. We also calculate the share of natural resources *imported* to country i from country j, compared to country i's total global imports. In addition to these indicators of export and import intensity, we also generate a variable on the strength of the overall trade relationship by summing up these relative shares for each dyad. To avoid endogeneity concerns, we convert these to time-invariant indicators based on average values for the sample period.

Second, we complement this trade data using data on dyadic foreign direct investments (FDI), sourced from the GIDE database. Similar to the trade indicators, we obtain the values of the stock of inward and outward FDI within a dyad, and calculate their average values for the sample period, as an alternative proxy to gauge the economic importance of dyads.

Table 4 presents the estimates examining the importance of these economic relationships. Column (1) identifies trade partners at the aggregate level (i.e. exports and imports both), and we observe that dyadic aggression induced by natural resource price shocks is primarily targeted at countries who are *not* country *i*'s trade partners. In fact, we observe a statistically and quantitatively strong reduction in dyadic aggression towards trade partner countries. In Columns (2) and (3), we observe that this effect persists for both export partners as well as import partners. In Column (4) we observe a statistically significant reduction in aggression towards countries who hold a high share of FDI in country *i*. Column (5) shows that there is a reduction in aggression towards countries in whom country *i* maintains a high share of FDI, although this effect is imprecisely estimated.

These findings are particularly interesting in the context of potential motivations for ini-

	(1)	(2)	(3)	(4)	(5)	
	DA_{ijym}	DA_{ijym}	DA_{ijym}	DA_{ijym}	DA_{ijym}	
$PriceShock_{iym}$	0.0088^{***}	0.0075^{***}	0.0095^{***}	0.0074^{***}	0.0063^{***}	
	(0.0016)	(0.0016)	(0.0016)	(0.0016)	(0.0017)	
$PriceShock_{iym} \times AvgTrade_{ij}$	-0.1619^{***}					
	(0.0447)					
$PriceShock_{iym} \times AvgExports_{ij}$		-0.1588^{***}				
		(0.0604)				
$PriceShock_{iym} \times AvgImports_{ij}$			-0.4182^{***}			
			(0.0960)			
$PriceShock_{iym} \times AvgFDI \ Inward \ Stock_{ij}$				-0.1478^{***}		
				(0.0560)		
$PriceShock_{iym} \times AvgFDI \ Outward \ Stock_{ij}$					-0.0065	
					(0.0125)	
Observations	$4,\!179,\!240$	$4,\!179,\!240$	$4,\!179,\!240$	$4,\!179,\!240$	$4,\!179,\!240$	
Dyad FE	Yes	Yes	Yes	Yes	Yes	
YearMonth FE	Yes	Yes	Yes	Yes	Yes	

Table 4: Dyadic economic relationships

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShock_{iym}* is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure. $AvgExports_{ij}$ presents exports from country *i* to country *j*, as a share of country *i*'s total exports, averaged over the sample period. $AvgImports_{ij}$ presents imports to country *i* from country *j*, as a share of country *i*'s total imports, averaged over the sample period. $AvgTrade_{ij}$ represents the magnitude of the total trade relationship between countries *i* and *j*, and is the sum of $AvgExports_{ij}$ and $AvgImports_{ij}$. AvgFDI Inward Stock_{ij} and AvgFDI Outward Stock_{ij} are the shares of the stock of foreign direct investments from country *i* to country *j* and from country *j* to country *i*, respectively, averaged over the sample period. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

tiating dyadic aggression. When the value of natural resources increases, it gives country *i* incentives to engage in status-seeking behavior in the global space, as it's domestic public becomes more positive towards the government, empowering it to take international actions which increase its standing in the hierarchy. However, behaving aggressively towards key economic partners could jeopardize its ability to capitalize on the windfall, which would have short term consequences via reduced trade or FDI, as well as long term consequences via damaged trade and economic relationships. Taken together, estimates in Table 4 suggests that states engage in status-seeking behavior in a manner that does not jeopardize it's economic relationships. While a country may behave aggressively to increase its political dominance, it is careful to not let such aggression damage their economic relationships. This finding further strengthens the proposition that dyadic aggression is used as a *low-cost* tool to assert dominance in international relations.

4.3.2 Dyadic income categories and political regimes

Next, we examine how dynamics in income and political regime differences within countries affect international relations.

Column (1) of Table 5 shows how the baseline effect differs based on country *i*'s income levels. We classify countries in to high, middle or low income countries based on the World Bank country income classification. We observe that middle and low income countries are more likely to engage in dyadic aggression following a price shock. Interestingly, we observe that dyadic aggression emanating from high income countries reduces following a resource price shock. What this reiterates is that, consequent to natural resource price shocks, dyadic aggression is primarily aimed at elevating status within the global hierarchy—a pursuit that may be unnecessary, or even risky, for large, high income countries, but which may be considered necessary for low and middle income countries.

Next, in Column (2) of Table 5, we examine the heterogeneity of baseline effects based on political regimes. We classify countries in to democracies, anocracies or autocracies based on

	(1)	(2)
	DA_{ijym}	DA_{ijym}
$PriceShock_{iym} \times High \ Income_i$	-0.0159***	
	(0.0055)	
$PriceShock_{iym} \times Middle\ Income_i$	0.0054**	
U U	(0.0024)	
$PriceShock_{iym} \times Low \ Income_i$	0.0120***	
U U	(0.0021)	
PriceShock × Democracy		0 0077**
1 $reconcentrym \times Democracy_i$		(0.0011)
$PriceShock_{ium} \times Anocracy_i$		0.0112^{***}
- y 01		(0.0022)
$PriceShock_{iym} \times Autocracy_i$		-0.0020
U -		(0.0030)
Observations	$4,\!135,\!464$	3,754,800
Dyad FE	Yes	Yes
YearMonth FE	Yes	Yes

Table 5: Heterogeneity by income and political regime

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShock*_{iym} is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively. their average polity scores over the sample period. Countries with polity scores above 5 are classified as democracies, while those with polity scores less than -5 are classified as autocracies. Countries with polity scores between 5 and -5 are classified as anocracies. Anocracies are political systems that blend democratic and autocratic features, often characterized by weak institutions and unstable governance. They usually hold elections, though these are often not fully free or fair. Interestingly, we find that democracies and anocracies are more likely to engage in dyadic aggression following a price shock. We do not find any such effects for autocracies. These estimates suggest that status-seeking behavior is predominant in contexts where electoral survival is relevant, even if the electoral process is not fully free and fair.

4.3.3 Other relationships within dyads

Finally, we examine the effects of a number of other dyadic relationships, the estimates of which are provided in Figure 4.

Using data from Spolaore and Wacziarg (2016) we first consider connectivity between countries based on genetic and geographic distance. Interestingly, we find that price shocks increase dyadic aggression when countries are more distant genetically and geographically, suggesting that hostilities are targeted at perceived *outgroups*. This finding resonates with the idea of status-seeking behavior being mostly low-cost, whereby local governments do not want to engage in aggressive behavior against countries with which domestic audiences might have a sense of kinship or connection.

Moving on to ideology, we use an indicator on the ideological similarity between countries, based on data on UN voting distance (Voeten *et al.*, 2009). We do not find any statistically significant evidence that alignment on political viewpoints is incorporated in the decision to initiate dyadic aggression. Likewise, we do not find differential effects based on countries which have awarded/received foreign aid. Interestingly, when using data on sanctions, we find evidence to suggest that aggression is more likely to be targeted at countries who have imposed sanctions on country i. Again, this is in line with the theory that status-seeking will look to also raise support from domestic audiences, and countries with a history of sanction imposition might be viewed as a deserving target by local populations.



Figure 4: Heterogeneity based on dyadic relationships

Note: The unit of measurement is a dyad-yearmonth. Each relationship category represents a separate regression estimate. All specifications include dyad fixed effects and yearmonth fixed effects. Vertical lines depict 90% confidence intervals, clustered at the dyad level.

4.3.4 Summary of transmission mechanisms

The analysis of transmission mechanisms provides strong evidence that natural resource price shocks drive status-seeking behavior through multiple channels. First, the finding that effects are primarily manifested through verbal rather than material aggression suggests countries use aggressive rhetoric as a low-cost, low-risk strategy to enhance their international standing, but are unwilling to use material force given the riskier implications of such actions. Second, the reduction in domestic public discontent following price shocks indicates that improved economic conditions strengthen governments' domestic mandate. This enhanced public support emboldens governments to assert themselves internationally, as they can pursue status-enhancement strategies abroad without fear of domestic backlash. Unlike diversionary theories where governments use international aggression to distract from domestic problems, we observe governments strategically leveraging periods of domestic strength to enhance their international standing.

Third, the strategic nature of this assertion is evident in how countries target their aggression: they deliberately avoid confrontations with major trade partners and significant sources of FDI, indicating a calculated approach to status enhancement that preserves vital economic relationships. This pattern rules out that governments are using aggressive behavior to negotiate better economic terms, as we would expect such bargaining to be directed primarily at major trading partners. Instead, the selective targeting suggests countries use aggressive posturing as a tool for status enhancement while carefully avoiding actions that could jeopardize their economic interests. Fourth, the concentration of these effects among middle- and low-income countries, along with their prevalence in democracies and anocracies where electoral accountability matters, suggests that status-seeking is particularly important for rising powers seeking to improve their position in the global hierarchy.

Finally, the targeting of geographically and genetically distant countries, and those with pre-existing adverse relationships (such as sanctions), while avoiding aid partners, reveals how countries carefully choose their targets to maximize status gains while minimizing potential costs. Together, these mechanisms paint a picture of strategic status-seeking behavior where countries leverage domestic economic windfalls to enhance their international standing through carefully calibrated aggressive posturing, rather than engaging in indiscriminate or materially costly conflicts.

5 Conclusion

This paper provides new insights into the domestic drivers of international behavior, specifically examining how positive economic shocks, such as natural resource price shocks, influence status-seeking actions on the global stage. While much of the literature on international relations has traditionally focused on material aggression, such as military conflicts and economic sanctions, our study highlights the importance of rhetorical interactions and symbolic gestures as tools of international assertiveness. Using a novel measure of dyadic aggression and exploiting exogenous variation in commodity prices, we demonstrate that countries experiencing favorable economic conditions, particularly resource-rich nations, systematically assert themselves more aggressively in the international arena. This assertiveness, primarily expressed through diplomatic rhetoric and symbolic gestures rather than material actions, allows governments to project strength without directly risking economic or military conflict. Our findings thus reveal how states strategically translate domestic economic windfalls into international status-seeking behavior.

The calculated nature of these actions is particularly evident in how countries target their aggression. Governments strategically limit their aggressive behavior toward major trade partners while being more assertive toward peripheral nations, especially those that are geographically and genetically distant. This pattern, combined with evidence that such behavior increases when domestic public support is high, suggests that governments carefully balance the pursuit of international status against potential economic risks. The fact that these effects are strongest in middle and low income democracies and anocracies further supports our interpretation that this behavior represents strategic status-seeking rather than simple economic bargaining or conflict.

These findings have important implications for understanding the broader geopolitical landscape. As commodity prices fluctuate and resource-rich nations experience economic booms, their behavior on the global stage can become more assertive, potentially influencing global diplomacy and international stability. Our results suggest that such assertiveness is not randomly directed but follows predictable patterns based on domestic conditions and international relationships. Policymakers and international organizations should consider these dynamics when addressing global cooperation and conflict prevention, as shifts in economic fortunes can translate into heightened diplomatic tensions and competitive posturing, particularly from rising powers seeking to enhance their global standing.

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Online Appendix Getting Along or Getting Ahead? The Domestic Roots of Status-Seeking in International Relations

Ashani Amarasinghe¹ and Kathryn Baragwanath²

A Additional data description



Figure A.1: GDELT dyadic event distribution over time

Note: Figure shows the distribution of the total number of dyadic events, as well as of cooperative and aggressive events, over time, for the full sample period.

¹School of Economics, University of Sydney and SoDa Laboratories, Monash University; Email: ashani.amarasinghe@sydney.edu.au.

²Department of Economics, University of Melbourne and SoDa Laboratories, Monash University; Email: kathryn.baragwanath@unimelb.edu.au



Figure A.2: Composition of DA

Note: Figure shows event categories included in the DA index, for each country in the sample, for the full sample period. Each bar represents a country. The coloured components show the percentage share of the different event categories within the DA index for the relevant country. DA is calculated as per Equation 1.



Figure A.3: Over time variation in DA for selected countries

Note: Each line represents the overtime variation in DA initiated by the relevant country i, towards all other countries j, over the sample period. DA is calculated as per Equation 1.

Figure A.4: Dyadic interactions initiated by governments, recording a Goldstein score < 0, for the top 20 active dyads



Note: Figure shows number of interactions recording a Goldstein score < -5, between the top 20 most active dyads over the sample period. Dyadic interactions originate from the countries listed on the left of the figure, and are targeted at countries on the right of the figure.

Figure A.5: Correlation between DA_{ym} and Geopolitical Risk Index as per Caldara and Iacoviello (2022)



Note: Figure shows the correlation between DA_{ym} and the Geo Political Risk index GPR_{ym} as per Caldara and Iacoviello (2022). The unit of observation is a year \times month. The β coefficient, accounting for year and month fixed effects is 2.42 (p=0.016). Number of observations is 228.



Figure A.6: Over time variation in *Price Shock* for selected countries

Note: Each line represents the overtime variation in DA initiated by the relevant country i, towards all other countries j, over the sample period. DA is calculated as per Equation 1.

	(1)	(2)	(3)	(4)
	DA_{ijy}	DA_{ijy}	DA_{ijy}	DA_{ijy}
$Sanctions_{ijy}$	0.0248^{***}			
	(0.0021)			
$UN Voting Distance_{ijy}$		0.0059^{***}		
		(0.0014)		
$Militarized \ Dispute_{ijy}$			0.0832^{***}	
			(0.0116)	
Aid_{ijy}				-0.0106***
				(0.0022)
Observations	$348,\!270$	334,494	$256,\!620$	348,270
R-squared	0.2150	0.2152	0.2276	0.2145
Dyad FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Table A.1: Correlation between DA_{iym} and other indicators of dyadic relationships

The unit of measurement is a dyad-year. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). Sanctions_{ijy} and Aid_{ijy} is a binary indicator taking a value of 1 if country *i* initiated sanctions or development assistance towards country *j* in year *y*, and 0 otherwise, respectively. $UN \ Voting \ Distance_{ijy}$ is the distance in countries *i* and *j*'s voting positions on UN resolutions. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)
	Observations	Mean	Standard Deviation	Minimum	Maximum
DA_{ijym} DC_{ijym} $PriceShock_{iym}$	4,179,240 4,179,240 4,179,240	0.0185 0.0683 0.332	$0.117 \\ 0.243 \\ 0.276$	0 0 0.003	$\begin{array}{c}1\\1\\1.353\end{array}$

Table A.2: Descriptive statistics

 DA_{ijym} is a standardized indicator of aggressive actions (i.e. Goldstein score < 0) initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). DC_{ijym} is a standardized indicator of cooperative actions (i.e. Goldstein score > 0) initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*. *PriceShock*_{iym} is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure.

B Robustness tests

	(1)	(2)	(3)
	DA_{ijym}	DA_{ijym}	DA_{ijym}
$PriceShock_{ium}$	0.0096***	0.0081***	0.0060**
- Jane	(0.0015)	(0.0027)	(0.0029)
Observations	747,708	747,708	747,708
Dyad FE	No	Yes	Yes
Year FE	No	Yes	No
YearMonth FE	No	No	Yes
Exclude	Top5	Top5	Top5
Mean DA_{ijum}	0.0110	0.0110	0.0110

Table B.1: Excluding top producing countries for all commodities

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShockiym* is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	(1)	(2)	(3)
	DA_{ijym}	DA_{ijym}	DA_{ijym}
$PriceShock_{iym}$	0.0062^{***} (0.0017)	0.0062^{***} (0.0017)	0.0031^{**} (0.0016)
	()	()	· · ·
Observations	4,179,240	4,179,240	4,179,240
Dyad FE	No	Yes	Yes
Year FE	No	Yes	No
YearMonth FE	No	No	Yes
No. of articles reporting an event	1	3	5
Mean DA_{ijym}	0.0185	0.0185	0.0185

Table B.2: DA based on alternative number of reports on events

The unit of measurement is a dyad-yearmonth. TThe dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShock*_{iym} is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	(1) DA_{iium}	(2) DA_{ijum}	(3) DAiium
	Diligni	Diliyym	Dirijym
$PriceShock_{iym}$	0.0097***	0.0074***	0.0108***
	(0.0015)	(0.0015)	(0.0015)
Observations	4,179,240	$4,\!179,\!240$	4,179,240
Dyad FE	Yes	No	No
Year FE	Yes	No	Yes
Month FE	Yes	Yes	No
DyadYear FE	No	Yes	No
DyadMonth FE	No	No	Yes
Mean DA_{ijum}	0.0185	0.0185	0.0185

Table B.3: Alternative sets of fixed effects

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShock*_{iym} is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

Table B.4: DA based on Log and IHS-transformed event counts

	(1)	(2)	(3)			
	DA_{ijym}	DA_{ijym}	DA_{ijym}			
Panel A - Outcome: Log transformed event counts						
$PriceShock_{iym}$	-0.0330***	0.0177***	0.0108***			
	(0.0045)	(0.0030)	(0.0035)			
Mean DA_{ijym}	0.0422	0.0422	0.0422			
Panel B - Out	come: IHS	transforme	d event counts			
$PriceShock_{iym}$	-0.0416***	0.0227***	0.0141***			
-	(0.0056)	(0.0037)	(0.0043)			
Mean DA_{ijym}	0.0535	0.0535	0.0535			
Observations	4,179,240	4,179,240	4,179,240			
Dyad FE	Yes	Yes	Yes			
YearMonth FE	Yes	Yes	Yes			

The unit of measurement is a dyad-yearmonth. The dependent variable in Panel A is the long transformed number of events with a negative Goldstein score, initiated by the government of country i, targeting the government of country j, in month m of year y. The dependent variable in Panel A is the Inverse Hyperbolic Sine (IHS)transformed number of events with a negative Goldstein score, initiated by the government of country i, targeting the government of country j, in month m of year y. PriceShock_{iym} is a quantified index which represents the global commodity price shock (past three months) weighted by country i's export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	(1)	(2)	(3)
	DA_{ijym}	DA_{ijym}	DA_{ijym}
$PriceShock_{iym}$	-0.0090*** (0.0009)	0.0085^{***} (0.0014)	0.0057^{***} (0.0016)
Observations	4,179,240	4,179,240	4,179,240
Dyad FE	No	Yes	Yes
Year FE	No	Yes	No
YearMonth FE	No	No	Yes
DA_{ijym-1}	No	No	Yes
Mean DA_{ijum}	0.0185	0.0185	0.0185

Table B.5: Controlling for DA_{ijym-1}

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShock_{iym}* is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	(1)	(2)	(3)
	DA_{ijym}	DA_{ijym}	DA_{ijym}
$PriceShock_{iym}$	-0.0098^{***} (0.0011)	$\begin{array}{c} 0.0073^{***} \\ (0.0013) \end{array}$	$\begin{array}{c} 0.0044^{***} \\ (0.0015) \end{array}$
Observations	4,179,240	4,179,240	4,179,240
Dyad FE	No	Yes	Yes
Year FE	No	Yes	No
YearMonth FE	No	No	Yes
Mean DA_{ijum}	0.0185	0.0185	0.0185

Table B.6: Using export structure of the initial year of the sample period

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShock*_{iym} is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure in the initial year of the sample period. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	(1)	(0)	(2)
	(1)	(2)	(3)
	DA_{ijym}	DA_{ijym}	DA_{ijym}
$PriceShock_{ium}$	-0.0065***	0.0020***	0.0021***
i giri	(0.0010)	(0.0003)	(0.0004)
	· · · ·	(/	· · · ·
Observations	$4,\!179,\!240$	$4,\!179,\!240$	$4,\!179,\!240$
Dyad FE	No	Yes	Yes
Year FE	No	Yes	No
YearMonth FE	No	No	Yes
Mean DA_{ijum}	0.0185	0.0185	0.0185

Table B.7: Effects of "large" price shocks

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShock*_{iym} is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure, where the shock is at least a 5% increase/decrease. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	(1)	(2)
	DA_{ijym}	DA_{ijym}
Agri PriceShock _{iym} Minerals/Fuels PriceShock _{iym}	0.0235^{***} (0.0039)	0.0041^{**} (0.0017)
Observations	$4,\!179,\!240$	$4,\!179,\!240$
Dyad FE	Yes	Yes
YearMonth FE	Yes	Yes
Mean DA_{ijym}	0.0185	0.0185

Table B.8: Price shocks by commodity type

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShock*_{iym} is a quantified index which represents the global commodity price shock (past three months), for the relevant commodity type, weighted by country *i*'s export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	$\begin{array}{c} (1) \\ DA_{ijym} \end{array}$	$\begin{array}{c} (2) \\ DA_{ijym} \end{array}$	$\begin{array}{c} (3) \\ DA_{ijym} \end{array}$	$\begin{pmatrix} (4) \\ DA_{ijym} \end{pmatrix}$	$(5) \\ DA_{ijym}$	$\begin{array}{c} (6) \\ DA_{ijym} \end{array}$
$PriceShock_{iy,m-3,m-1}$ (Baseline)	0.0062^{***} (0.0017)					
$PriceShock_{iy,m-6,m-1}$	· · · ·	0.0044^{***}				
$PriceShock_{iy,m-12,m-1}$		(0.0011)	0.0030***			
Log PriceShock _{iy,m-3,m-1}			(0.0009)	0.0056***		
$Log \ PriceShock_{iy,m-6,m-1}$				(0.0016)	0.0041***	
$Log \ PriceShock_{iy,m-12,m-1}$					(0.0010)	$\begin{array}{c} 0.0028^{***} \\ (0.0009) \end{array}$
Observations	4,179,240	4,179,240	4,179,240	4,179,240	4,179,240	4,179,240
Dyad FE	Yes	Yes	Yes	Yes	Yes	Yes
YearMonth FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean DA_{ijym}	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185

Table B.9: Alternative definitions of Price Shock

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShock*_{*iy*,*m*-3,*m*-1}, *PriceShock*_{*iy*,*m*-6,*m*-1} and *PriceShock*_{*iy*,*m*-12,*m*-1} are quantified indices which represents the global commodity price shocks in the past three, six and twelve months, respectively, weighted by country *i*'s export structure. *Log PriceShock*_{*iy*,*m*-3,*m*-1}, *Log PriceShock*_{*iy*,*m*-12,*m*-1</sup> and *Log PriceShock*_{*iy*,*m*-12,*m*-1} use log converted prices. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.}

Table B.10: A	Annual p	rice s	hocks
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	$\begin{array}{c} (1) \\ DA_{ijy} \end{array}$	$(2) \\ DA_{ijy}$
$PriceShock_{iy}$	-0.0260^{***} (0.0020)	0.0104^{**} (0.0050)
Observations Dyad FE Year FE	348,270 No No	348,270 Yes Yes

The unit of measurement is a dyadyear. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in year *y*. PriceShock_{iy} is a quantified index which represents the global commodity price shock of the past year weighted by country *i*'s export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	(1)	(2)
	DC_{ijym}	DC_{ijym}
$PriceShock_{iym}$	-0.0365^{***} (0.0031)	0.0016 (0.0033)
Observations	4,179,240	4,179,240
Dyad FE	No	Yes
YearMonth FE	No	Yes
Mean DC_{ijym}	0.0683	0.0683

Table B.11: Effect on dyadic cooperation

The unit of measurement is a dyad-yearmonth. The dependent variable DC_{ijym} is a standardized indicator of cooperative actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*. *PriceShock*_{iym} is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)
	DA_{ijym}	DA_{ijym}	DA_{ijym}	DA_{ijym}	DA_{ijym}
Target	Business	Opposition	Elites	Medical	Civilians
$PriceShock_{iym}$	0.0006^{*} (0.0003)	0.0002 (0.0003)	0.0003 (0.0004)	-0.0003 (0.0006)	-0.0002 (0.0005)
Observations	4,179,240	4,179,240	4,179,240	4,179,240	4,179,240
Dyad FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes
Mean DA_{ijym}	0.0006	0.0003	0.0007	0.0021	0.0011

Table B.12: Effect on DA targeted at alternative entities

The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the specific entities of country *j*, in month *m* of year *y*. *PriceShock*_{*iym*} is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.

	(1)	(2)	(3)
	DA_{ijym}	DA_{ijym}	DA_{ijym}
$PriceShock_{iym}$	0.0062^{***}	0.0059^{***}	0.0059^{***}
v	(0.0017)	(0.0016)	(0.0016)
	· · · ·	, , ,	
Observations	4,179,240	4,179,240	4,179,240
Dyad FE	Yes	Yes	Yes
YearMonth FE	Yes	Yes	Yes
$PriceShock_{jym}$	Yes	No	Yes
DA_{jiym}	No	Yes	Yes
Mean DAijum	0.0185	0.0185	0.0185

Table B.13: Controlling for $PriceShock_{jym}$ and DA_{jiym}

Mean DA_{ijym} 0.0185 0.0185 0.0185 The unit of measurement is a dyad-yearmonth. The dependent variable DA_{ijym} is a standardized indicator of aggressive actions initiated by the government of country *i*, targeting the government of country *j*, in month *m* of year *y*, as per Eq. 1). *PriceShock*_{iym} is a quantified index which represents the global commodity price shock (past three months) weighted by country *i*'s export structure. Standard errors, clustered at the dyad level, are in parentheses. ***, **, * indicate significance at the 1, 5 and 10% level, respectively.