Sanctions and Democracy:

The Limits of Peace

Dawid Walentek

d.walentek@uw.edu.pl

University of Warsaw, Department of Political Science and International Studies

Abstract

Scholars have argued whether democratic peace also holds in the realm of economic sanctions — whether there is an economic peace. Substantial amount of evidence has been gathered both for and against economic peace. This letter provides a new insight, with the use of the updated TIES data set, into the topic of economic peace. It finds that democracies are both more likely to issue economic sanctions and that there is no economic peace. In fact, the opposite holds and democracies are more likely to sanction one another. This letter indicates that absence of economic peace is driven the public opinion of the sender states and that the exercise of power among democracies has been rechannelled to economic coercion.

1 Introduction

Democracies do not go to war with one another (Bueno de Mesquita et al., 1999). However, does this special relation between democracies extend beyond the military domain, to economic sanctions?Although researchers have argued that domestic structural constraints that democratic leaders face (Lektzian and Souva, 2003), or norms that they follow (Cox and Drury, 2006) ought to make democracies less likely to sanction one another, empirical findings on the presence of economic peace are mixed (Lektzian and Souva, 2003; Cox and Drury, 2006; Hafner-Burton and Montgomery, 2008), and the relationship between economic and democratic peace remains unclear.

The expectation of democratic peace is based on the theoretical premises that political leaders are voted out of the office in case of a war that is lost, and that democratic societies are resilient targets of military interventions (Bueno de Mesquita et al., 1999). The argument is that interaction between these structural characteristics of democracies makes war between them unlikely. Scholars also go beyond the structural argument and point to normative factors underlying democratic peace, for example, a common value system shared by democratic societies (Dixon, 1994). These structural and normative approaches to democratic peace are mirrored in the theoretical work on economic peace, which argues that the same set of constraints that restrains democratic leaders from engaging in war ought to diminish the prospects for economic sanctions (Lektzian and Souva, 2003; Cox and Drury, 2006). However, the theoretical frameworks on economic peace, derived from the democratic peace literature, are at odds with research on economic sanctions. First, scholars find that voters favour economic coercion regardless of the outcomes of the policy and the democracy level of the target state (Whang, 2011). Second, there is no evidence that democracies are more resilient targets of economic sanctions, nor that democratic leaders are less likely to impose sanctions on important economic partners (Bapat and Kwon, 2015). This would suggest that the building blocks of the democratic peace theory are not empirically supported with respect to economic peace and, consequently, the relationship between the democratic and the economic peace is not straightforward.

This letter shows that democracies are more likely to issue economic sanctions and that there is no economic peace between democratic states. In fact, democracies are more likely to sanction one another — thus, the opposite of an economic peace seems to exist in international relations. The empirical findings of this letter point to the role of public opinion and signal that democracies are more likely to issue sanctions because the objective of elected leaders is to respond to interest groups and build broad domestic support. Through economic sanctions leaders address both the foreign policy and the protectionist demands from voters. More broadly, while democracies are unlikely to engage in war with one another, democratic leaders do experience pressure from interest groups towards conflict with other democratic states. Consequently, coercion between democracies appears to rechannel away from military conflict to the economic domain — potentially explaining the rise in the use of economic sanctions since the end of the Cold War.

2 What drives economic peace

The idea of democratic peace and the particular behaviour of democracies in conflict situations has prompted a search for parallel trends for economic sanctions. Following the structural democratic peace argument and borrowing from research on public opinion and foreign policy (Kaempfer and Lowenberg, 1988), Lektzian and Souva (2003) propose that the presence of democratic institutions makes democracies less likely to sanction each other but more likely to issue sanctions relative to non-democracies. Both characteristics are a result of the constraints that democratic leaders face. First, following the democratic peace argument, due to high costs of a failed foreign policy — removal from the office — incumbents prefer weak targets. Consequently, as democracies are known for their resilience, democratic leaders are more likely to select non-democracies as targets of economic sanctions, and are less inclined to sanction one another. Second, relating to the public opinion approach, winning coalitions in democracies tend to be broad and encompass a large variety of interest groups, concerning, for example, security, human rights or protectionist demands. Consequently, democratic leaders are more prone to use sanctions in order to stay in office because they have to satisfy a broader audience than their autocratic counterparts, for whom a number of concerns, like championing human rights abroad, are not relevant to staying in power.

Lektzian and Souva (2003) find empirical support for the structural economic peace argument, and observe that democracies are both more likely to issue sanctions and less likely to sanction one another. Nevertheless, other recent empirical evidence suggests that, regardless of the policy outcome, democratic leaders receive a domestic audience benefit from the use of economic sanctions (Whang, 2011), and that there is no empirical evidence for democracies being more resilient in face of economic coercion (Bapat and Kwon, 2015). Furthermore, the structural democratic peace and public opinion approach to sanctions — two frameworks that, according to Lektzian and Souva, work together — may hold independently. If the benefit to a democratic leader from pursuing a sanction policy, for example by additionally sheltering a domestic industry from foreign competition (Pond, 2017) or from the symbolic value of an intervention to voters (Whang, 2011), is greater than the cost resulting from a failed policy attempt, then we will not observe economic peace, but there will be a higher propensity among democracies to issue sanctions (regardless of the target) — driven by the sentiments of the public and the responsiveness of democratic leaders. On the other hand, we may observe economic peace only, because of the potentially large audience costs (Schultz, 1999) for a democratically elected leader associated with losing a sanction episode — under the assumption that democracies are resilient targets of economic coercion. This may occur while sanctions generate a coalition broad enough to boost popularity for a democratic leader and result in an inclination to restore more frequently to economic coercion; however, only against non-democracies.

Cox and Drury (2006) provide empirical evidence on economic democratic peace and highlight the effects of norms, rather than institutions, on the relations between democracies. This follows

the normative argument in the democratic peace literature (Dixon, 1994) that democracies are more likely to pursue a norms-based foreign policy. Since democracies advocate human rights and democratisation with economic sanctions, they exhibit a higher propensity to target non-democracies with economic coercion. Cox and Drury (2006) further argue that the fact that democracies do not sanction each other is a result of shared values. This contrasts with Lektzian and Souva (2003), who argue that only strong economic ties and structural incentives drive economic peace between democracies. However, scholarship on economic sanctions appears at odds with the normative economic peace framework. The domestic audience rewards the political leader of the sender state regardless of the motivation for imposition (Whang, 2011) and, more broadly, economic sanctions show a poor record with respect to addressing human rights issues (Peksen, 2009).

Consequently, we can summarise the existing theoretical work on economic peace in four sets of observable implications. First, if both the structural economic peace and the public opinion arguments hold, we ought to observe that democracies are less likely to sanction one another, more likely to issue sanctions, and less likely to be a target of economic sanctions. Second, if only the structural economic peace argument holds, we ought to observe that democracies are less likely to sanction one another and less likely to be a target of economic coercion. Third, if only the public opinion argument holds, we ought to only observe that democracies are more likely to issue economic sanctions, regardless of the target. Finally, if only the normative approach holds, we ought to observe that democracies are less likely to sanction one another and more likely to issue sanctions. In order to assess these theoretical arguments, this letter tests the following three hypotheses:

H1: Democracies are less likely than non-democracies to sanction one another.

H2: Democracies are more likely than non-democracies to issue economic sanctions.

H3: Democracies are less likely than non-democracies to be the target of economic sanctions.

What is more, Hafner-Burton and Montgomery (2008) show that democracies indeed issue sanctions more often (public choice argument), but are *not* less likely to sanction one another. Authors argue that it is the specific behaviour of the United States (US) that drives the presence of economic peace among democracies and propose that the argument of public opinion and economic peace holds, yet only for the US.

H4: The US is the only democracy less likely to sanction other democracies rather than non-democracies.

Finally, Wallace (2013) shows that while democracies are more likely to issue sanctions (public opinion argument) and are less likely to sanction one another (economic peace argument), this is only true for security issues. For non-security issues (e.g. trade or environmental policy) there is no economic peace between democracies and the special role of the US is absent.

H5: Economic peace between democracies holds only for sanctions in the security domain.

3 Research design

Recent work on economic peace (Wallace, 2013) is based on the first edition of the TIES data set. In this letter, I use the updated TIES data set; it contains 59% more cases and covers additional years, relative to the first edition (Morgan et al., 2014); I also use the Polity IV data set (Marshall et al., 2018), and the Political Regimes data set (Boix et al., 2013) to obtain democracy measures.[1] With respect to the empirical strategy, I assess whether more democratic states are more (or less) likely to impose sanctions, to receive sanctions, and to impose sanction on one another. I conduct the analysis with a logistic regression and treat threats of sanctions that have not been followed with an imposition as a counterfactual to imposed sanctions. This design is possible thanks to a unique quality of the TIES data set, where both information on imposed sanctions and on threats-only is reported. The argument that threats-only are a counterfactual to the use of coercion has been acknowledged in the literature on economic sanctions (Drezner, 2003; Smith, 1995; Eaton and Engers, 1999; Lacy and Niou, 2004) and war (Schultz, 1999), and is present in the recent empirical work on economic sanctions too (Schmid et al., 2021; Walentek et al., 2021; Gutmann et al., 2021). The use of threats as counterfactuals is also relevant from the perspective of the mechanism potentially underlying economic peace; namely — issuing empty threats generates audience costs, as voters punish inconsistent behaviour (Schultz, 1999).

The dependent variable *Imposition* allows us to observe whether the sender decides to move from the threat level to actual imposition of economic sanctions. The variable is binary and generated from the TIES data set. I employ two independent variables— *Democracy score sender* and *Democracy score target* — both are based on the Polity IV data set and identify the level of democracy of the sender state and of the target state, respectively.[2] I use these two variables to study whether democracies are more or less likely to issue and receive sanctions, and to generate the interaction effect necessary for testing the economic peace hypotheses. The two scores vary from 0 to 10, where 10 is a full democracy and 0 an autocracy. The *Dyad Democracy* variable is an interaction (product) between the democracy levels of the sender and the target; the higher the value of the variable, the more democratic the sender-target pair.

Part of the variation in the sample can be explained by success of threats: senders do not follow up with an imposition of economic measures because the policy demand has been met at the threat stage. In fact, the crisis bargaining literature suggests that those economic sanctions most likely to succeed should end at the threat stage (Drezner, 2003), that democracies ought to be more likely to succeed at the threat stage (Schultz, 1999), and that threats are more successful for economically interdependent states (Whang et al., 2013). Thus, based on the crisis bargaining

[1] For details on the respective data sets, please see the Data Section (A.1) in the Appendix

[2] In order to allow for easier cross-study comparison, I standardise the democracy score of the sender and the target state (Afshartous and Preston, 2011). In the summary table and the regression models, I refer to the variables with an (std) prefix to indicate the standardisation. I standardise the variables to a standard deviation of 1 and a mean of 0. This operation does not have any effect on the significance level or the sign in the regression results.

literature, democracies should be less likely to follow up on threats of sanctions in general, a result arising from the success rate at the threat stage. Thus, the crisis bargaining literature suggests that it is precisely the high effectiveness of democracies at the threat stage that may drive economic peace, offering an alternative theoretical underpinning for this empirical phenomenon. Consequently, removing the successful cases of economic coercion from the sample could lead to biased results, as we could overlook a potential, theory-informed, driver of economic peace; namely — success at the threat stage. I therefore do not remove successful threats from the sample.[3]

In the analysis, I account for the trade dependence and market openness (Gartzke, 2007) of the sender of economic sanctions by controlling for the (natural logarithm of) total exports of the sender state, based on the COW Trade Data. I expect that part of the variation in the decision of states to engage in economic coercion is determined by the strength of the trade ties between the sender and the target of economic coercion. I also control for the reputation effect (Peterson, 2013) by accounting for the commitment of the sender to past sanction episodes, based on the sender's commitment indicator in the TIES data set. I also control for the objective of the sanction, following the specification offered by the TIES data set. I introduce the *Trade* variable, which separates economic sanctions with a trade and economic liberalisation objective from other sanctions (Morgan et al., 2014). Following Wallace (2013), I control for security objectives, and offer a control variable that separates economic measures with a security objective from other sanctions.[4] This follows from the expectation that part of the trend in the sample can be explained by the issue type of the sanction regime. Next, I control for whether the sanction is multilateral (Bapat and Morgan, 2009), based on the information on sanction senders from the TIES data set. I also control for the role of the US (Wallace, 2013; Hafner-Burton and Montgomery, 2008; Haas, 1997) with a dichotomous variable that takes a value of one if the US participated in the sanction regime as a sender, based on the TIES data set. By introducing a squared term of the dyadic democracy score, I also test whether the dyadic relation between the sender's and the target's democracy level and sanction imposition is non-linear. Scholars find that similar regime types — both democracies and autocracies — are less likely to engage in conflict, suggesting that there is not only a democratic peace but also an authoritarian one (Bennett, 2006).

[3] A robustness test on a censored sample, without cases of successful threats, yields consistent results to the findings reported in this letter.

[4] I identify the following categories from the TIES data set as security-related: "Contain Political Influence"; "Contain Military Behavior"; "Destabilize Regime"; "Release Citizens, Property, or Material"; "Solve Territorial Dispute"; "Deny Strategic Materials"; "Retaliate for Alliance or Alignment Choice"; "End Weapons/Materials Proliferation" and "Terminate Support of Non-State Actors".

4 Results

Table A.1, in the Appendix, presents the results of the logistic regression of the continuous and standardised variable of the democracy score (*DEMOC* based on Polity IV data set) of the sender and the target of economic sanctions (Model (1)) and an interaction term between the two (Model (2)). I also test for potential non-linear relation between the democracy of sender-target dyad and probability of sanctions imposition (Model (3)), and for the role of the US (Model 4) and the impact of security as the issue motivating sanctions imposition (Model (5)). In Model (4) and Model (5), I use a three-way interaction.

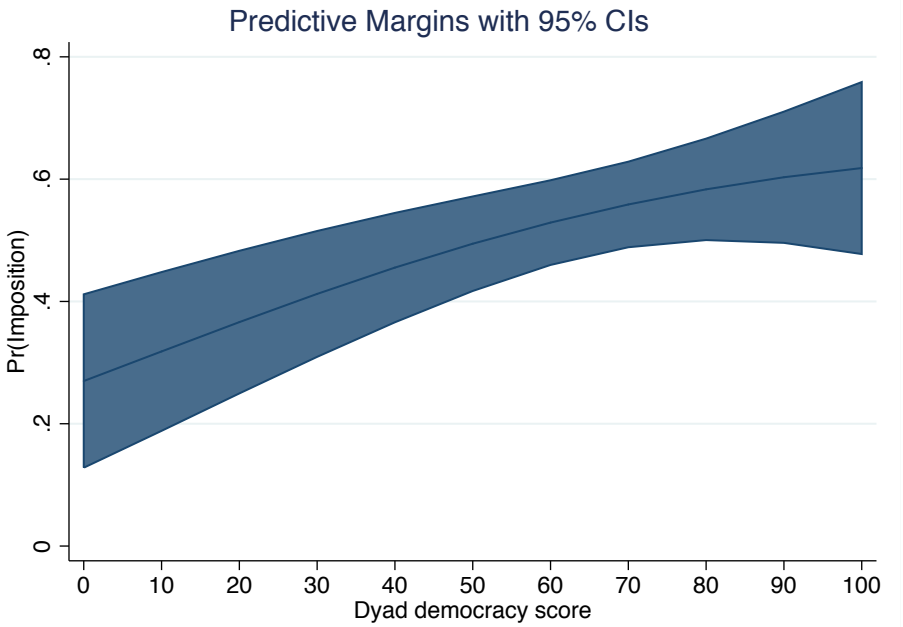
In Model (1), I show that the level of democracy is positively and significantly related to the prospects of sanction imposition ($OR = 1.452$, $p < .01$). This supports the argument about the role public opinion for imposition of economic sanction that argues that democratic leaders serve broader domestic constituencies and, consequently, are more likely to engage in economic coercion. I find no evidence for democracies being less or more likely to be a target of economic sanctions, a result at odds with the structural economic peace argument. I expected democracies to be less likely to be a target of sanctions' imposition, for example as a result of the rally-round-the-flag effect. Hence, I accept H2, that democracies are more likely to issue economic sanctions, and I reject H3, that democracies are less likely to be a target of economic sanctions.

Results from Model (2), where the interaction term between democracy of the sender and the target state is introduced, suggest that there is no economic peace between democracies. In fact, the results point in the opposite direction, with democracies appearing to be more likely to sanction one another ($OR = 1.248$, $p < .1$). This dynamic is depicted in Figure 1 Panel (a), where I plot the predicted probability of sanction imposition and the dyad democracy score. I reject H1, that democracies are less likely to sanction one another. In addition, given that I reject H1 and H3, but accept H2, I neither find evidence to support the structural nor the normative economic peace argument. However, I do find evidence for the role of public opinion in formation of the behaviour of democracies with respect to economic sanctions. Democracies are more likely to issue economic sanctions, regardless of the target, and they are actually more likely to sanction one another.

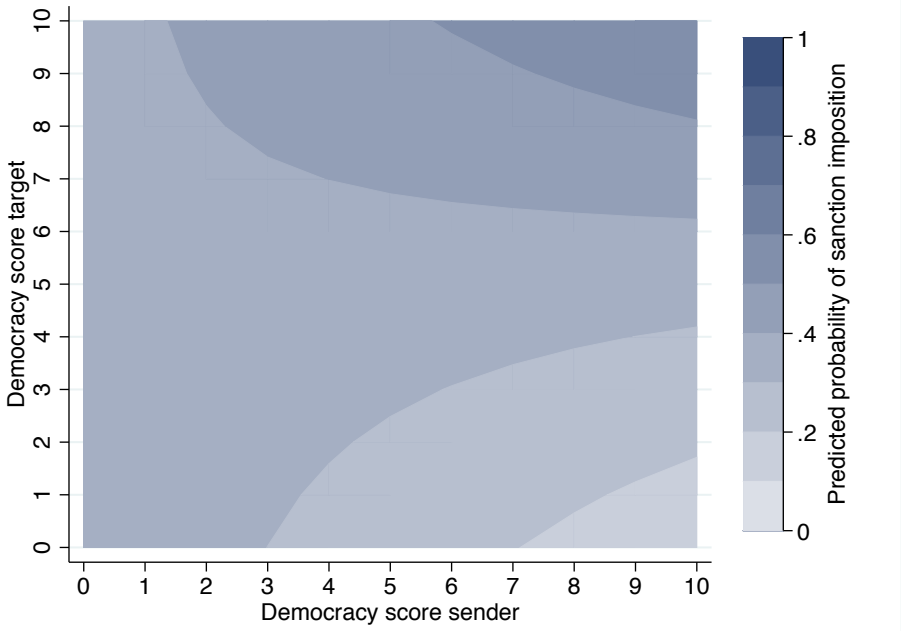
Model (3) incorporates the squared dyad democracy score in order to identify a potential non-linear relation. First, the squared term is not statistically significant, yet it does increase the precision of our interaction *Dyad Democracy* ($p < .05$). Second, a joint significance test — to assess whether both the linear and quadratic dyad democracy score coefficients are zero — shows evidence for a potential non-linear relation ($p < .1$). I investigate this relation further and identify a semi-concave relation between probability of sanction imposition and dyad democracy score. Thus, I do not find evidence for an autocratic peace. This relation is graphically depicted in Figure 1 Panel (a).

Model (4) provides no evidence for H4 that the observable aggregated behaviour of democracies with respect to economic sanctions is driven by the policy of the US. The three-way interaction

term *US* × *(std) Demo Sender* × *(std) Demo Target* is not statistically significant. Furthermore, Model (5) does not support H5 that economic peace is subject to economic sanctions over security issues. The three-way interaction term *Security* × *(std) Demo Sender* × *(std) Demo Target* is not statistically significant.



(a)



(b)

Figure 1: **Panel (a)**: Impact of dyadic democracy score on predicted probability of sanction imposition. **Panel (b)**: Heat-map of predicted probability of sanction imposition for democracy score of the sender and the target (DEMOC score).

Finally, in order to study the detailed structure of the relation between democracy level of the sender and the target state and the probability of sanction imposition, I offer a heat map in Figure 1 Panel (b). This visualisation of the results in Table A.1 (Model (3)) allows disaggregation of the dyadic democracy score and takes advantage of the continuous variables used in the analysis. We observe that states with a democracy score of 7 or higher show a large variation in their behaviour towards imposition of economic sanctions. They are not likely to impose sanctions against states with a low democracy scores, and increasingly likely to impose sanctions as the democracy score of the target increases. In contrast, senders with a democracy score of 3 or lower are largely indifferent in their sanctioning behaviour to the democracy level of the target state. This result suggests that a small number of democratic institutions have no constraining effect on leaders. While senders with a democracy score between 3 and 7 are more likely to impose sanctions against more democratic targets, the dynamic is not as strong as for states with a democracy score of 7 or higher. These findings are consistent with the traditional cut-off point for a state to be considered a democracy — a score above 6 (Jeong and Peksen, 2019) or above 7 (Wallace, 2013) on the Polity IV scale.[5]

5 Conclusion

The main purpose of this letter has been to provide insight into the behaviour of democracies with respect to economic sanctions. Drawing on an updated TIES data set on economic sanctions, I conclude that there is no economic peace between democracies — democracies are not less likely to sanction one another, even after accounting for a special role of the US or issue salience. This indicates that there is no direct relation between democratic peace and economic peace, which contrasts with past research (Hafner-Burton and Montgomery, 2008; Cox and Drury, 2006; Wallace, 2013; Lektzian and Souva, 2003). In fact, I find evidence that democracies are more likely to sanction one another, which may signal a rechannelling of the exercise of power from military intervention to economic coercion among democratic states. Besides, I find that, compared to non-democratic states, democracies are more likely to impose economic sanctions, once a threat has been issued. This is in line with research on economic sanctions that identifies public opinion as the driver of economic coercion (Whang, 2011).

This letter, apart from directly contributing to the literature on economic peace, also engages with the debate on the variation in the frequency of economic sanctions over time. Since the end of the Cold War, scholars have observed a major increase in the use of economic sanctions (Morgan et al., 2014), an increase contrary to the expectations of the academic community and coinciding with the post-Cold War wave of democratisation. The general expectation was that advances in the liberal economic and political order that accompany democratisation would make economic sanctions an obsolete tool in foreign policy (Hufbauer et al., 2007). Yet, the increase in the frequency of economic

[5]For a set of additional tests please see Section A.2. Robustness in the Appendix.

coercion may be a consequence of democratisation. The peace-building effect of democracy, as argued by democratic peace scholars (Bueno de Mesquita et al., 1999), may not be sufficient to offset the sanction-enhancing effect of democratisation — driven by public opinion. It may produce a rechannelling effect further contributing to the rise in the frequency of economic coercion and accounting for the key result of this letter — that democracies are more likely to sanction one another.

References

Afshartous, D. and R. A. Preston (2011). Key results of interaction models with centering. *Journal of Statistics Education 19*(3), 2–24.

Bapat, N. and B. R. Kwon (2015). When Are Sanctions Effective? A Bargaining and Enforcement Framework. *International Organization 69*(01), 131–162.

Bapat, N. and C. Morgan (2009). Multilateral versus unilateral sanctions reconsidered: A test using new data. *International Studies Quarterly 53*(4), 1075–1094.

Barbieri, K. and O. M. G. Keshk (2016). Correlates of War Project Trade Data Set Codebook, Version 4.0.

Bennett, S. D. (2006). Toward a Continuous Specification of the Democracy-Autocracy Connection. *International Studies Quarterly 50*(2), 313–338.

Boix, C., M. Miller, and S. Rosato (2013). A Complete Data Set of Political Regimes, 1800-2007. *Comparative Political Studies 46*(12), 1523–1554.

Bueno de Mesquita, B., J. D. Morrow, R. M. Siverson, and A. Smith (1999). An Institutional Explanation of the Democratic Peace. *American Political Science Review 93*(4), 791–807.

Cox, D. G. and A. C. Drury (2006). Democratic Sanctions: Connecting the Democratic Peace and Economic Sanctions. *Journal of Peace Research 43*(6), 709–722.

Dixon, W. J. (1994). Democracy and the Peaceful Settlement of International Conflict. *American Political Science Review 88*(1), 14–32.

Drezner, D. (2003). The Hidden Hand of Economic Coercion. *International Organization 57*(03), 643–659.

Eaton, J. and M. Engers (1999). Sanctions: Some simple analytics. *American Economic Review 89*(2), 409–414.

Gartzke, E. (2007). The Capitalist Peace. *American Journal of Political Science 51*(1), 166–191.

Gutmann, J., M. Neuenkirch, and F. Neumeier (2021). The Economic Effects of International Sanctions: An Event Study. *SSRN Electronic Journal* (April).

Haas, R. N. (1997). Sanctioning Madness. *Foreign Affairs 76*(6), 74–85.

Hafner-Burton, E. M. and A. H. Montgomery (2008). The Hegemon's Purse: No Economic Peace Between Democracies. *Journal of Peace Research 45*(1), 111–120.

Hufbauer, G. C., J. J. Schott, K. A. Elliott, and B. Oegg (2007). *Economic Sanctions Reconsidered* (3 ed.). Washington, D.C.: Peterson Institute for International Economics.

Jeong, J. M. and D. Peksen (2019). Domestic Institutional Constraints, Veto Players, and Sanction Effectiveness. *Journal of Conflict Resolution 63*(1), 194–217.

Kaempfer, W. and A. Lowenberg (1988). The Theory of International Economic Sanctions: A Public Choice Approach. *American Economic Review 78*(4), 786–793.

Lacy, D. and E. M. Niou (2004). A Theory of Economic Sanctions and Issue Linkage: The Roles of Preferences, Information, and Threats. *Journal of Politics 66*(1), 25–42.

Lektzian, D. and M. Souva (2003). The Economic Peace Between Democracies: Economic Sanctions and Domestic Institutions. *Journal of Peace Research 40*(6), 641–659.

Linsi, L. and D. K. Mügge (2019). Globalization and the growing defects of international economic statistics. *Review of International Political Economy 26*(3), 361–383.

Marshall, M. G., T. R. Gurr, and K. Jaggers (2018). Polity IV Project.

Morgan, T. C., N. Bapat, and Y. Kobayashi (2014). Threat and imposition of economic sanctions 1945–2005: Updating the TIES dataset. *Conflict Management and Peace Science 31*(5), 541–558.

Peksen, D. (2009). Better or Worse? The Effect of Economic Sanctions on Human Rights. *Journal of Peace Research 46*(1), 59–77.

Peterson, T. M. (2013). Sending a Message: The Reputation Effect of US Sanction Threat Behavior. *International Studies Quarterly 57*(4), 672–682.

Pond, A. (2017). Economic Sanctions and Demand for Protection. *Journal of Conflict Resolution 61*(5), 1073–1094.

Schmid, L., K. Chatterjee, C. Hilbe, and M. A. Nowak (2021). A unified framework of direct and indirect reciprocity. *Nature Human Behaviour 5*, 1292–1302.

Schultz, K. (1999). Do Domestic Institutions Constrain or Inform? *International Organization 53*(2), 233–266.

Smith, A. (1995). The success and use of economic sanctions. *International Interactions 21*(3), 229–245.

Walentek, D., J. Broere, M. Cinelli, M. M. Dekker, and J. M. Haslbeck (2021). Success of economic sanctions threats: coercion, information and commitment. *International Interactions 47*(3), 417–448.

Wallace, G. P. R. (2013). Regime type, issues of contention, and economic sanctions: Re-evaluating the economic peace between democracies. *Journal of Peace Research 50*(4), 479–493.

Whang, T. (2011). Playing to the home crowd? Symbolic use of economic sanctions in the United States. *International Studies Quarterly 55*(3), 787–801.

Whang, T., E. V. Mclean, and D. W. Kuberski (2013). Coercion, Information, and the Success of Sanction Threats. *American Journal of Political Science 57*(1), 65–81.

Appendix

A.1. Data

Threat and Imposition of Sanctions The TIES (v4.0) data set (Morgan et al., 2014) is currently the most complete collection of data on economic sanctions; it draws on 1,412 cases and covers the period from 1945 to 2005.[6] The key contribution of this data set is information on sanction threats, for 1,053 cases. This allows researchers to distinguish between imposed sanctions and threats only, creating scope for a counterfactual analysis. The HSE (Hufbauer et al., 2007) data set does not incorporate information on sanction threats. In the TIES data set 48% of sanctions are in the trade domain. The remaining 52% are sanctions related to non-trade issues, for example non-proliferation. The US is the most active actor with respect to economic coercion, and has participated in 48% of the cases in the data set. If a negotiated settlement outcome and an on-going case are treated as failures, the effectiveness of economic sanction in the TIES data is 27%. If negotiated settlement is treated as a success but the on-going cases still as a failure, the success rate of sanctions increases to 40%. In this study, I employ the latter definition of success, as is common in research using the TIES data (Bapat and Kwon, 2015; Bapat and Morgan, 2009).

POLITY IV The Polity IV data set (Marshall et al., 2018) provides information about the level of democratisation of states over time.[7] The observations, from 1800 to 2017, offer insight into the quality of democracy among 167 states. I use the democracy score (*DEMOC*) variable, which varies from 0 to 10, a numerical score for the number of democratic institutions that a country has, where 0 is a full autocracy, where citizens have no influence on the government, and 10 stands for a fully democratic society, with a complete array of democratic institutions. However, the democracy score is only available for 1,221 sender states and 1,249 target states and for 1,100 sender-target pairs. If an economic sanction is multilateral, I use the democracy score of the primary sender of the sanction, as identified by the TIES data coders. Focusing solely on cases where a public threat was issued decreases the number for the sender-target democracy dyad further, to 807 cases.

Political Regimes The Political Regimes (PR) data set (Boix et al., 2013) allows us to test the robustness of the findings.[8] This data set contains information about the democracy level of 219 countries between 1800 and 2007, focusing not only on institutions, as in the Polity IV data set, but also on political contestation and popular participation. This allows testing of the findings from a different perspective on democracy and autocracy. The authors of the PR data set use a dichotomous coding, where states are either a democracy or an autocracy. I observe the PR democracy score for 1,239 sender states, 1,323 target states and 1,165 sender-target dyads in the sample.

With respect to the relation between the PR and Polity IV data, I observe the following. The

[6] Available at: http://sanctions.web.unc.edu.
[7] Available at: http://www.systemicpeace.org/inscrdata.html.
[8] Available at: https://journals.sagepub.com/doi/suppl/10.1177/0010414012463905.

(dichotomised) democracy score of the sender state based on the Polity IV data set (a state is a democracy for a score equal to or higher than 7) is strongly correlated with the corresponding score in the PR data set (*r=0.92*). The (dichotomised) democracy score of the target state resulting from the Polity IV and the PR data set is less, yet still strongly, correlated (*r=0.86*). The dichotomous democracy score of the sender-target dyad based the Polity IV and the PR data set are also strongly correlated (*r=0.87*). While the PR data set also provides information on democratic transition or breakdown, too few of the observations in the TIES data set are states in transition (< 25), so the information cannot be used in the analysis.

Correlates of War Trade Data The Correlates of War (COW) Trade Data set (Barbieri and Keshk, 2016) allows us to combine data on economic sanctions with trade data in order to assess the role of trade dependency on economic peace.[9] The COW Trade Data offers information on trade flows for the years 1870 to 2014, both bilateral and total trade figures. Given the scarcity of bilateral trade data in this study, and substantial scope for bias in this type of data (Linsi and Mügge, 2019), I use the total trade figures. This limits the ability to assess the trade dependency between the sender and the target, but allows study of the general dependency on trade and openness toward global markets (Gartzke, 2007). I observe total trade (in current USD) for the sender of the economic sanctions in 1,238 cases.In case of a multilateral sanction, I report the total trade figure for the primary sender — as reported by the TIES data set authors. However, taking into account public threats of economic sanctions and information on the democracy level of the sender and the target reduces the sample to 780 cases.

A.2. Robustness

In Table A.4, I offer a robustness test of the results using the Political Regimes (Boix et al., 2013) data set, an alternative to the Polity IV measure of democracy. I do not observe different results to the main findings. Next, I limit the sample to the years observed in the study of Wallace (2013) and report the results in the Appendix, in Table A.3 — the findings are not meaningfully different to the results reported in this letter. Second, in Table A.6, I provide a three-way test with the *Trade* variable, following Morgan et al.'s (2014) suggestion that trade-related sanctions may follow a different dynamic to other sanctions, as they are often imposed "automatically". However, I do not find evidence supporting this argument in the data. Finally, for 359 cases of imposition of sanctions in the TIES data set coders could not find a public record of a threat. In Table A.5, I provide a study where these observations are included in the analysis and coded as failed threats. The results are also consistent with the findings presented in this letter.

[9] Available at: http://correlatesofwar.org.

A.3. Tables

Table A.1: Democracy and economic sanctions — continuous score, all years. Robust standard errors are displayed in parentheses: *** indicates $p < 0.01$, ** indicates $p < 0.05$ and * indicate $p < 0.1$.

Variables	Model (1) Odds ratio	Model (2) Odds ratio	Model (3) Odds ratio	Model (4) Odds ratio	Model (5) Odds ratio
Imposition					
(Std) Demo Sender	**1.452*****	**1.349****	**1.665****	**1.340****	0.916
	(±0.195)	(±0.190)	(±0.364)	(±0.188)	(±0.345)
(Std) Demo Target	1.016	0.957	1.375	1.138	0.962
	(±0.0857)	(±0.0856)	(±0.407)	(±0.188)	(±0.237)
Dyad Democracy		**1.248***	**1.447****	**1.301****	1.755
		(±0.148)	(±0.239)	(±0.171)	(±0.860)
US*(Std) Demo Sender				0.747	
				(±0.581)	
US*(Std) Demo Target				0.586	
				(±0.220)	
US*(Std) Demo Sender*(Std) Demo Target				1.848	
				(±1.323)	
Security*(Std) Demo Sender					1.615
					(±0.615)
Security*(Std) Demo Target					0.729
					(±0.212)
Security*(Std) Demo Sender*(Std) Demo Target					0.595
					(±0.303)
US	0.698*	0.707	0.708	0.829	0.725
	(±0.151)	(±0.153)	(±0.153)	(±0.220)	(±0.160)
Security	1.419	1.390	1.421	1.391	0.957
	(±0.351)	(±0.345)	(0.353)	(±0.342)	(±0.284)
Past Commitment	0.961	0.971	0.965	0.971	0.960
	(±0.129)	(±0.130)	(±0.129)	(±0.131)	(±0.130)
Multilateral	**1.619****	**1.669****	**1.702****	**1.640****	**1.523***
	(±0.361)	(±0.375)	(±0.385)	(±0.371)	(±0.356)
(Ln) Total Exports Sender	0.994	0.986	0.984	0.994	0.963
	(±0.0551)	(±0.0557)	(±0.0558)	(±0.0566)	(±0.0552)
Trade	1.154	1.129	1.139	1.133	0.995
	(±0.240)	(±0.235)	(±0.236)	(±0.237)	(±0.211)
(Std) Dyad Democracy^2			0.640		
			(±0.222)		
Constant	1.065	1.365	1.440	1.063	3.192
	(±1.538)	(±2.006)	(±2.120)	(±1.574)	(±4.766)
Observations	715	715	715	715	715
Control variables	YES	YES	YES	YES	YES
Interaction term	NO	YES	YES	YES	YES
Three-way interaction	NO	NO	NO	YES	YES
Pseudo R2	0.0187	0.0222	0.0238	0.0250	0.0344
Log Lik	-485.4	-483.7	-482.9	-482.3	-477.7

Table A.2: Summary statistics.

Variables	N	Mean	SD	Min	Max
Start Year	1,412	1986	15.63	1945	2005
Threat	1,412	0.746	0.436	0	1
Imposition	1,412	0.598	0.490	0	1
Success	1,412	0.408	0.492	0	1
US	1,412	0.521	0.500	0	1
Trade	1,412	0.517	0.500	0	1
Security	1,412	0.305	0.461	0	1
Multilateral	1,412	0.262	0.440	0	1
Past Commitment	1,250	2.342	0.601	1	3
(Ln) Total Exports Sender	1,238	25.02	2.269	16.59	27.43
Democracy Score Sender	1,221	8.376	3.316	0	10
Democracy Score Target	1,249	6.272	4.093	0	10
(Std) Demo Sender	1,221	0	1.000	-2.526	0.490
(Std) Demo Target	1,249	0	1.000	-1.532	0.911
Dummy Demo Sender	1,221	0.835	0.372	0	1
Dummy Demo Target	1,249	0.622	0.485	0	1
Political Regime Demo Score Sender	1,239	0.829	0.377	0	1
Political Regime Demo Score Target	1,323	0.639	0.480	0	1

Table A.3: Democracy and economic sanctions — sample limited to years 1971-2000. Robust standard errors are displayed in parentheses: *** indicates $p < 0.01$, ** indicates $p < 0.05$ and * indicate $p < 0.1$.

Variables	Model (1) Odds ratio (Continuous)	Model (2) Odds ratio (Continuous)	Model (3) Odds ratio (Dummy)	Model (4) Odds ratio (Dummy)
Imposition				
(Std) Demo Sender	**1.505****	1.254		
	(±0.256)	(±0.266)		
(Std) Demo Target	1.104	0.930		
	(±0.112)	(±0.120)		
Dyad Democracy		**1.705*****		
		(±0.352)		
Dummy Demo Sender			**3.642*****	0.345
			(±1.685)	(±0.376)
Dummy Demo Target			1.191	**0.0779****
			(±0.244)	(±0.0873)
Dummy Demo Dyad				**17.61****
				(±20.02)
Past Commitment	**0.669****	**0.696***	**0.667****	**0.685****
	(±0.126)	(±0.132)	(±0.126)	(±0.129)
Multilateral	1.404	1.426	1.399	1.469
	(±0.377)	(±0.389)	(±0.374)	(±0.399)
(Ln) Total Exports Sender	0.926	0.900	0.934	0.915
	(±0.0846)	(±0.0872)	(±0.0797)	(±0.0791)
US	0.629*	**0.644***	**0.624***	**0.642***
	(0.160)	(±0.164)	(±0.157)	(±0.162)
Trade	1.112	1.065	1.110	1.055
	(±0.286)	(±0.275)	(±0.285)	(±0.272)
Security	1.280	1.263	1.298	1.243
	(±0.407)	(±0.407)	(±0.413)	(±0.400)
Constant	17.37	37.87	4.164	**66.89***
	(±41.47)	(±95.70)	(±8.739)	(±157.7)
Observations	522	522	522	522
Control variables	YES	YES	YES	YES
Interaction term	NO	YES	NO	YES
Years 1971-2000	YES	YES	YES	YES
Pseudo R2	0.0296	0.0430	0.0328	0.0437
Log Lik	-350.7	-345.9	-349.6	-345.6

Table A.4: Democracy and economic sanctions — Political Regimes data set. Robust standard errors are displayed in parentheses: *** indicates $p < 0.01$, ** indicates $p < 0.05$ and * indicate $p < 0.1$.

Variables	Model (1) Odds ratio	Model (2) Odds ratio
Imposition		
Democracy Score Sender	**2.772*****	0.909
	(±0.987)	(±0.627)
Democracy Score Target	0.959	**0.270***
	(±0.163)	(±0.189)
Dyad Democracy Score		**3.842***
		(±2.776)
Past Commitment	1.062	1.064
	(±0.136)	(±0.137)
Multilateral	**1.669****	**1.738****
	(±0.361)	(±0.380)
(Ln) Total Exports Sender	1.046	1.039
	(±0.0510)	(±0.0513)
US	0.709	0.723
	(±0.151)	(±0.154)
Trade	1.212	1.192
	(±0.239)	(±0.235)
Security	**1.708****	**1.670****
	(±0.410)	(±0.403)
Constant	**0.0918****	0.307
	(±0.108)	(±0.415)
Observations	762	762
Control variables	YES	YES
Interaction term	NO	YES
PR Data	YES	YES
Pseudo R2	0.0240	0.0272
Log Lik	-514.2	-512.5

Table A.5: TIES sample with absent threats coded as failed threats. Robust standard errors are displayed in parentheses: *** indicates $p < 0.01$, ** indicates $p < 0.05$ and * indicate $p < 0.1$.

Variables	Model (1) Odds ratio	Model (2) Odds ratio
Imposition		
(Std) Demo Sender	**1.302****	1.212
	(±0.138)	(±0.144)
(Std) Demo Target	0.975	0.934
	(±0.0750)	(±0.0761)
Dyad Democracy		**1.236****
		(±0.125)
Past Commitment	1.003	1.004
	(±0.118)	(±0.118)
Multilateral	1.212	1.244
	(±0.249)	(±0.256)
(Ln) Total Exports Sender	0.986	0.985
	(±0.0503)	(±0.0507)
US	**0.552*****	**0.557*****
	(±0.110)	(±0.111)
Trade	1.226	1.207
	(±0.235)	(±0.231)
Security	**1.540****	**1.545****
	(±0.339)	(±0.340)
Constant	2.407	2.508
	(±3.188)	(±3.343)
Observations	942	942
Control variables	YES	YES
Interaction term	NO	YES
Pseudo R2	0.0160	0.0200
Log Lik	-623.5	-621

Table A.6: TIES sample with a trade three-way interaction. Robust standard errors are displayed in parentheses: *** indicates $p < 0.01$, ** indicates $p < 0.05$ and * indicate $p < 0.1$.

Variables	Model (1) Odds ratio	Model (2) Odds ratio	Model (3) Odds ratio
Imposition			
(Std) Demo Sender	**1.452*****	**1.349****	**1.503*****
	(±0.195)	(±0.190)	(±0.229)
(Std) Demo Target	1.016	0.957	0.884
	(±0.0857)	(±0.0856)	(±0.101)
Trade*(Std) Demo Sender			0.606
			(±0.228)
Trade*(Std) Demo Target			1.151
			(±0.301)
(Std) Dyad Democracy		**1.248***	1.196
		(±0.148)	(±0.152)
Trade*(Std) Demo Sender*(Std) Demo Target			1.282
			(0.611)
Past Commitment	0.961	0.971	0.996
	(±0.129)	(±0.130)	(±0.134)
Multilateral	**1.619****	**1.669****	**1.632****
	(±0.361)	(±0.375)	(±0.371)
(Ln) Total Exports Sender	0.994	0.986	0.973
	(±0.0551)	(±0.0557)	(±0.0548)
US	**0.698***	0.707	0.716
	(±0.151)	(±0.153)	(±0.157)
Trade	1.154	1.129	0.511
	(±0.240)	(±0.235)	(±0.879)
Security	1.419	1.390	1.449
	(±0.351)	(±0.345)	(±0.363)
Constant	1.065	1.341	1.617
	(±1.538)	(±1.969)	(±2.381)
Observations	715	715	715
Control variables	YES	YES	YES
Interaction term	NO	YES	YES
Three-way interaction	NO	NO	YES
Pseudo R2	0.0187	0.0222	0.0281
Log Lik	-485.4	-483.7	-480.7