

The termination of international sanctions: explaining target compliance and sender capitulation

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A B S T R A C T

With the proliferation of sanctions after the end of the Cold War, the termination of these punitive measures has become a ubiquitous phenomenon in international politics. Yet, research has hitherto almost exclusively focused on sanctions' implementation and effectiveness, whereas their termination has received little attention. In this paper, we draw on studies analyzing the varying duration of sanctions to examine under which conditions they end. In contrast to prior research that has mostly treated the end of sanctions as a single category, our analysis disaggregates sanctions termination by target compliance and sender capitulation. We run a competing risks model using novel dyadic sanctions data and show that the determinants of both outcomes significantly diverge. While poor economic health and high political volatility in the target country make it significantly more likely to comply, political alignment between the sender and target and leadership changes in the sender country lead to a higher probability of sender capitulation.

Keywords:

Sanctions
Sanctions termination
Target compliance
Sender capitulation

1. Introduction

With the proliferation of sanctions after the end of the Cold War, sanctions *termination* has also become a common phenomenon. Of the 287 sanctions cases since 1989, imposed by the European Union, United Nations, or United States, more than 80 percent had been lifted by the end of 2016 (Weber and Schneider, 2019). The United States, for example, terminated its sanctions imposed on Kenya in 1990 after three years, in response to widespread economic and political reforms in the country. In contrast, the European Union sanctions against Sudan ended without significant behavioral changes by the Sudanese government. In 2002, the EU resumed development aid to Khartoum, which had been suspended after Omar al-Bashir's coup in 1989, even though the regime remained notorious for its human rights violations and infringement on political liberties. The controversy about whether the purportedly unsuccessful Western sanctions against Russia should be lifted (Smale and Hakim, 2014) exemplifies the persistent contested nature of policy debates about the termination of sanctions.

Yet despite the issue's policy relevance and the fundamentally different trajectories of ending sanctions, research has hitherto focused overwhelmingly on their effectiveness whereas the difference between sanctions termination amid target compliance and sender capitulation has received little scholarly attention. A few studies that look into the varying duration of sanctions implicitly also address their removal. This research examines both sender- and target-related factors that help explain *when* sanctions are lifted. On the one hand, it has been shown that sanctions against targets with less centralized

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political systems and those that experience a leadership turnover end faster (Bolks and Al-Sowayel, 2000; Dorussen and Mo, 2001; McGillivray and Stam, 2004). On the other hand, sanctions against senders that show resolve through different commitment strategies last longer, whereas new incumbents are associated with shorter sanctions cases (Allen, 2005; Dorussen and Mo, 2001; McGillivray and Stam, 2004).

The fundamental problem is that most existing works lump together different types of sanctions termination (for a notable exception, see Krustev and Morgan, 2011). Senders regularly lift sanctions when targets comply with their demands.¹ However, only approximately half of the imposed sanctions end with at least some degree of target compliance (Weber and Schneider, 2019). Hence policymakers in the EU and the US, as the main Western sanction senders, must regularly decide if they want to hold on to unsuccessful measures or capitulate and lift them.

We build upon the distinction between sender and target capitulation introduced by Krustev and Morgan (2011), and argue that the determinants of both types of sanctions termination should fundamentally differ. For example, a target's political volatility or economic vulnerability could explain why this country eventually gives in to senders' demands. However, it tells us little about senders' incentives to maintain or remove sanctions if a target fails to make concessions. Existing research treating sanctions termination as single outcomes thus masks important differences. To systematically compare the divergent determinants of sanctions termination, we ask the question: What factors affect the likelihood that the EU and the US remove sanctions in response to target compliance or capitulate despite a lack thereof? To account for the most important determinants, we develop a heuristic framework that accounts for both static and dynamic factors on the sender and on the target side. In other words, we systematically account for key political and economic characteristics and changes therein during the sanctions case in order to identify which determinants drive sender capitulation and target compliance.

We run a competing risks model using a multinomial logistic regression to examine the determinants of the different types of sanctions termination. For capturing the two different termination outcomes, we use novel data on EU and US sanctions provided by the EUSANCT project (Weber and Schneider, 2019), which builds on but contains more recent and comprehensive data on the timing and nature of the sanctions' removal than any of the other widely used datasets. Our analysis shows that a target's economic vulnerability and political volatility is significantly related to sanctions termination as a result of target state compliance. In contrast, close political alignment between the sender and target increases the likelihood of sender capitulation, as it should be costly for the sender to maintain—unsuccessful—sanctions against political allies. Moreover, leadership changes in the sender increase the probability of sender capitulation.

This paper makes three important contributions to the literature. First, new data enables us to study the marginalized issue of sanctions termination for almost the entire post-Cold War period, when the imposition of sanctions *and* their termination have become ubiquitous phenomena in foreign policy-making. Second, we systematically disaggregate the contrasting paths of sanctions termination: namely target compliance and sender capitulation. Third, we develop a heuristic model of sender- and target-related determinants to provide a systematic analysis of key factors that account for these two distinct outcomes.

The paper proceeds as follows: We first present our theoretical framework, in which we draw on the literature on the varying duration of sanctions to develop our target- and sender-related hypotheses. We then lay out our empirical approach using novel dyadic sanctions data. Our analysis shows that target compliance and sender capitulation are shaped by fundamentally different factors, and are not mirror images of one another. Finally, we conclude and present avenues for further research on the emerging topic of sanctions termination.

2. The determinants of sanctions termination

Research that explicitly addresses the termination of sanctions remains scarce. However, several studies explore why some sanctions cases last longer than others. These works seeking to understand the varying *duration* of sanctions implicitly address the question of how and why such measures end. They have—broadly speaking—examined sender- and target-related factors.

On the one hand, target state characteristics and its response to sanctions appear to affect their duration. Bolks and Al-Sowayel (2000) examine the target's institutional structure and political stability, as well as its economic health. Focusing on the number of months from the imposition of sanctions until their removal as the dependent variable, these authors show that sanctions against targets with lower democracy scores last significantly longer—a finding that they attribute to the ability of more centralized political regimes to develop effective countermeasures, such as campaigns to increase domestic cohesion (Galtung 1967) or economic diversification and insulation (Green, 1983; Haggard and Noland, 2017). In contrast, the opening up of a target's political system and poor economic health decrease the duration of sanctions (Bolks and Al-Sowayel 2000). This finding is corroborated by Dorussen and Mo (2001), who demonstrate that sanctions end faster if the target is a democracy. Further zooming in on the domestic politics of sender states, McGillivray and Stam (2004) hypothesize that leadership turnover in the target (and the sender) can lead to the removal of sanctions—but only if the new incumbent relies on a different support base. Their finding that leadership changes in nondemocratic target states are strongly related to the duration of sanctions supports this argument.

¹ According to the EUSANCT dataset (Weber and Schneider, 2019), only five percent of sanctions cases continue despite target compliance.

On the other hand, the nature of the sender state and its political choices also affect the duration of sanctions. Sender governments try to tie their hands to strengthen their bargaining position, which can make resolving sanctions disputes more difficult and thus prolong their duration. [Dorussen and Mo \(2001\)](#) theoretically distinguish between two kinds of commitment strategies: senders can, first, give their domestic constituencies a voice over the termination of sanctions, meaning increase domestic audience costs, and, second, they can engage in rent-seeking strategies that create benefits related to the continuation of sanctions for certain groups, which would then oppose their removal. However, they do not find consistent support for these sender strategies empirically mattering for the end of sanctions. While democratic senders are less likely to lift sanctions because they are subject to audience costs (see also, [Hart, 2000](#)), rent-seeking strategies do not appear to influence the length of sanctions cases. Findings are more consistent for sender leadership changes, which reduce the duration of sanctions ([McGillivray and Stam, 2004](#); see also, [Allen, 2005](#)).

These studies have yielded important insights about the characteristics and strategies of sender and target states that influence the duration of sanctions. However, they mask important differences by focusing on the duration rather than the type of sanctions termination. It is well established that not all sanctions are lifted because they are successful. Instead, the termination of sanctions is a mixed bag. Most fundamentally, sanctions can end either because targets concede to (some of) the senders' demands or because they successfully resist this external pressure and senders eventually capitulate and lift sanctions. According to the most recent cross-national data on sanctions, 53 percent of all cases end with complete or partial goal attainment and only in around 28 percent of these did the targeted state completely concede to the senders' demands ([Weber and Schneider, 2019](#)). In addition to their analysis of duration, [Dorussen and Mo \(2001\)](#) were the first to also examine these termination types; they differentiate between target compliance, sender capitulation, and negotiated settlements. However, their results were mixed at best. Accordingly, Dorussen and Mo highlight that "it is difficult to explain how sanctions end" (2001, 416). Instead, they find "more consistent support [...] if look[ing] at the duration of sanction" ([Dorussen and Mo, 2001](#), 398). Hence, the question of what determines different types of sanctions termination remains an unaddressed puzzle.

[Krustev and Morgan \(2011\)](#) systematically distinguish between sanctions termination according to target or sender capitulation. Theoretically, they argue that a bargaining perspective cannot explain the eventual end of long-lasting cases, whereas ruling-coalition changes fail to account for very short cases that already end prior to such a fundamental change occurring in the sender or target. Empirically, they find support for audience costs delaying sender capitulation, while a winning coalition change in the sender positively affects the probability of target capitulation. Paralleling this finding for the target, winning coalition changes have a positive effect on the hazard that the target gives in. More recently, [Jeong \(2019\)](#) found that aid sanctions accelerate target capitulation. However, this study solely focuses on target capitulation as the outcome of interest. As sender capitulation and ongoing sanctions jointly constitute the category of reference here, the analysis does not advance our understanding of sender capitulations.

We build upon [Krustev and Morgan's \(2011\)](#) distinction between the two fundamental types of sanctions termination in our analysis. At the same time, we extend their approach in three major respects. First, they model sanctions duration and outcomes jointly, whereas we explicitly focus on the types of termination.² Second, we cast a wide net to account for the potential determinants of the different types of termination. In contrast, Krustev and Morgan tightly focus their explanatory factors on international negotiations versus winning coalition changes arguments. Yet, they do not account for other key factors that may explain the different types of termination—such as the costs of sanctions or the target's economic and political vulnerability. Finally, we provide the first study that captures sanctions termination in the twenty-first century.³ As sanctioning policies have constantly evolved in the past, it seems pertinent to examine whether this has also affected the determinants of different types of sanctions termination in recent times.

We argue below that both dynamic factors (such as leadership changes) and more static ones (such as institutional structure) of senders and targets should affect the different types of sanctions termination that we observe. Hence, we propose a heuristic framework that allows us to systematically assess the impact of both time-varying and time-invariant factors on sanctions termination via sender capitulation or target compliance.

2.1. Target-related factors

Target-related explanations in sanctions research revolve around the question of whether as a consequence of the pressure from sanctions becoming so high the target acquiesces to the sender's demands ([Dashti-Gibson et al., 1997](#); [Drury, 1998](#); [Hart, 2000](#)). Whether sanctions force targets into compliance—and thus facilitate termination—crucially depends on the target's susceptibility to external pressure. This involves both the characteristics of the target and changes therein over time.

Most fundamentally, it is a well-established research finding that economically weak targets are more likely to react to economic sanction costs while stronger ones have more leeway to resist ([Barber, 1979](#); [Hufbauer et al., 2007](#); [Jing et al., 2003](#)). Thus, poor countries with low economic health and high poverty levels should be more prone to succumbing to

² In doing so, we do not neglect the time dimension of sanctions termination—as we outline in our "Research Design" section below.

³ [Krustev and Morgan \(2011\)](#) draw their sanctions data from the first version of the TIES dataset, which only runs until the year 2000. In contrast, we cover the period between 1989 and 2015.

international sanctions (Drury, 1998). In addition, economic crises can undermine the legitimation strategies of targeted governments and, in turn, create divisions within the ruling elite (Teorell, 2010).

In addition to these economic costs for the target, the political characteristics of and dynamics within the target state affect its propensity to comply with sanction demands. Sanction research has addressed the question of how the characteristics of target states shape sanctions dynamics (inter alia, Escribà-Folch and Wright, 2010; Grauvogel and von Soest, 2014; Jones, 2015; Peksen, 2019). More than three decades ago already, Doxey (1980) convincingly argued that the target's polity shapes its vulnerability. Confirming these findings, recent research has shown that democratic regimes are more likely to be destabilized by sanctions than nondemocracies are (Allen, 2008; Marinov, 2005). Regimes that show increasing levels of democracy should therefore be more inclined to concede to sanctions pressure than countries with continuingly low levels of democracy.

Moreover, political volatility over the course of the sanctions period plays an important role too. The political leadership in the target state can change, and the new government may decide to change course and to give in to sanctions (Bolks and Al-Sowayel, 2000; McGillivray and Stam, 2004). A new government usually has greater leverage to change objectionable policies without this being interpreted as a sign of weakness (Dorussen and Mo, 2001, 402). Related to that, increasing political vulnerability should influence the target's propensity to give in to sanctions pressure. The most immediate development increasing the vulnerability of the targeted regime is the occurrence of mass protests (Chenoweth and Stephan, 2013; Clark and Regan, 2015). In these cases, sanctions contribute to the further destabilizing of the target (Major, 2012) and thus protest should increase the likelihood that it complies.

In sum, these considerations on the effect of economic issues, political target characteristics, and political volatility lead to the following target-related hypotheses:

H1a: High sanctions costs to the target increase the likelihood of sanctions termination by target compliance.

H1b: Lower levels of economic health in the target increase the likelihood of sanctions termination by target compliance.

H1c: Higher democracy levels in the target increase the likelihood of sanctions termination by target compliance.

H1d: Political volatility in the form of leadership changes or mass protest increases the likelihood of termination by target compliance.

2.2. Sender-related factors

Sender-related accounts in sanctions research rest on the fundamental assumption that sanctions are costly for senders, and that they therefore carefully weigh up the benefits against the costs of such measures (Baldwin, 1999; Nooruddin, 2002). Researchers have found that senders are more likely to impose sanctions if their own anticipated economic costs are low (von Soest and Wahman, 2015). Relatedly, high costs to the sender decrease the effectiveness of sanctions (Hufbauer et al., 2007; Morgan and Schwebach, 1997). A similar balancing of interests should apply to the termination of sanctions *after* the decision was made to impose them, particularly in cases where the target resists. Economic costs to the sender should drive down its preparedness to hold onto unsuccessful sanctions.

In addition, earlier research has emphasized the importance of trade links (Early, 2011a; McLean and Whang, 2010). Sanctions come with high economic costs for the sender if they concern targets that have strong linkages with the sender. In these cases, domestic businesses regularly make the case for early termination (Kaempfer and Lowenberg, 1992; Smale and Hakim, 2014). As a result of these lobbying efforts, senders can experience "sanctions fatigue" (Elliott and Hufbauer, 1999, 407) when the domestic costs of maintaining sanctions attract more attention while the willingness to compromise economic opportunities for political reasons decreases (similarly, Eaton and Engers, 1999). Senders should therefore be more prepared to lift sanctions against trade partners, even if they do not yield the intended political results.

Similarly, if the targeted regime maintains close political ties to Western powers and supports their international political agenda, the political repercussions of sanctioning are potentially high—punitive measures may antagonize a political ally (Nooruddin, 2002). For example, Western powers have been hesitant to sanction highly autocratic countries such as Egypt (under Hosni Mubarak) or Saudi Arabia that have been important allies in pursuing Western geostrategic interests in the Middle East (Brownlee, 2012). Prior cordial political relations should therefore put senders' insistence on sanctions goals to a thorough test. Accordingly, we expect that senders are more inclined to terminate sanctions against political allies, even in cases where the target resists sanction demands. In addition to these stable factors, senders' considerations may change over the course of a sanctions case due to evolving conditions. Most fundamentally, a new leadership may devise fresh policies and change course regarding sanctions as compared to the previous government, and lift the measures irrespective of whether the target has conceded or not (Dorussen and Mo, 2001; McGillivray and Stam, 2004, albeit for the duration of sanctions).

Taken together, this work on economic and political costs to the sender as well as potential changes therein over time hints at key incentives for senders to eventually remove sanctions in the absence of target compliance. We test the following sender-related hypotheses:

H2a: High sanctions costs to the sender increase the likelihood of sanctions termination by sender capitulation.

H2b: Strong trade linkages increase the likelihood of sanctions termination by sender capitulation.

H2c: Strong political ties increase the likelihood of sanctions termination by sender capitulation.

H2d: Political leadership changes in the sender increase the likelihood of termination by sender capitulation.

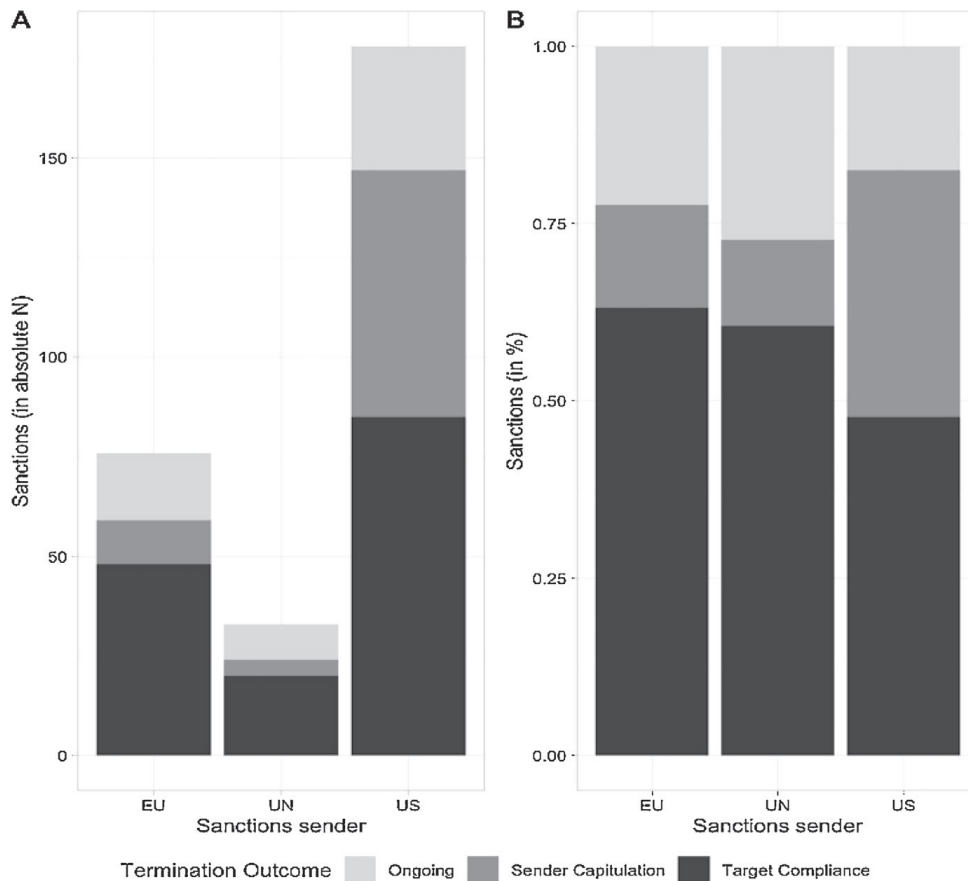


Fig. 1. Descriptive statistics of the EUSANCT dataset.

3. Research design

Sanctions are coercive measures accompanied by policy demands. A sanctions case starts when a sender formally imposes sanctions against a target to address a specific issue, and ends when the sender lifts *all* coercive measures imposed against the target over the same issue. The imposed measures can take varying forms, ranging from individual visa bans to comprehensive economic embargoes. In contrast to existing research on sanctions termination, we distinguish between the two specific ways in which sanctions can end: namely termination by target compliance and termination by sender capitulation. If the sender does not lift the restrictive measures, then sanctions remain ongoing.

To test our competing explanations for how sanctions end, our method of analysis needs to be able to account for categorical dependent variables. Our approach must also capture how variations in our explanatory variables affect the termination outcomes over time. Thus, we use a competing risks model in order to investigate the comparative likelihoods of sanctions ending by target compliance or sender capitulation. Ongoing-sanction years serve as our baseline category (Box-Steffensmeier and Jones 1997, 2004). Such a model can be estimated using standard methods for categorical dependent data, such as the multinomial logit regression.⁴ In this section, we introduce our data sources and explain the structure of the data for the analysis. We then present the operationalization of the independent variables and introduce our controls.

To capture the different ways in which a sanctions case can end, we use the aforementioned EUSANCT dataset (Weber and Schneider, 2019) for information on our dependent variable *sanctions termination*. This dataset provides information on all 287 sanctions imposed in the post-Cold War era by the most active senders: the EU, the United Nations, and the US (see Fig. 1 below). EUSANCT updates and merges existing sanctions data sources that have been developed in recent years, such as the Threat and Imposition of Economic Sanctions (TIES) dataset (Morgan et al., 2014), the Hufbauer, Schott, and Elliott (HSE) dataset (Hufbauer et al., 2007), the GIGA Sanctions Dataset (Portela and von Soest, 2012), as well as further additional material.⁵

As our hypotheses investigate sanctions between a single sender and a single target as well as their political and economic relations, our analysis only evaluates bilateral sanctions cases (see also, Krustev and Morgan, 2011). After eliminating

⁴ For another study that runs a competing risks model using a multinomial logit to investigate sanctions outcomes, see Early (2011b).

⁵ EUSANCT does not capture sanctions that have been imposed in the context of trade disputes, as these measures follow a different rationale (Hufbauer et al., 1990; Krustev and Morgan, 2011; Pape, 1997; Weber and Schneider, 2019).

sanctions imposed by the UN, our sample consists of 254 cases.⁶ We find that the US—known as the world’s most frequent sanctioner—imposed 178 cases against 99 different target countries from 1989 to 2016, while the EU imposed 76 cases against 56 different targets within the same time period (see Fig. 1 above). The imposed US sanctions targeted 45 countries more than once, the EU’s 15.

Compared to existing sources such as the widely used TIES dataset (Morgan et al., 2014), which does not contain information on the end date and outcome of approximately one-quarter of all cases,⁷ EUSANCT provides more comprehensive data on sanctions termination. Out of the 254 sanctions cases imposed by the EU and US, 206 had been terminated as of 2016. Of these 133 cases were lifted after the target (partially) acquiesced to the senders’ demands, while 73 were lifted by the sender despite not achieving any significant changes in the target’s behavior (see Fig. 1 above). The two senders do not seem to differ in the intensity of their imposed coercive measures, and generally have initiated sanctions that cost the sender an average of 3 on an ordered scale that ranges from a minimum of 1 to a maximum of 6—indicating heavy economic costs (see Fig. 3 in the online appendix). In contrast, costs to the target are higher, showing an average score of 4 out of 6.

We transform EUSANCT’s case-level dataset into a dyadic country-year dataset in order to investigate how target- and sender-related factors affect the likelihood of sanctions termination in a given year. This allows us to later merge the dyadic data with external data sources for information on time-varying economic and political explanatory variables. The dyadic country-year dataset consists of all sanction years between each respective sender and target from the first year of sanctions imposition until the year of termination. In doing so, we only code sanctions termination if *all* measures against a target have been lifted by the respective sender.⁸ We use EUSANCT’s “final outcome” variable to code our main dependent variable *sanctions termination* and distinguish between two different ways in which sanctions can end. First, sanctions can end by target acquiescence when the sender lifts the coercive measures after (partial) compliance with the sanctions demands (termination = 1). Second, sanctions can end by sender capitulation when the sanctions sender lifts all coercive measures despite not having achieved the desired outcome (termination = 2).

If EUSANCT reports that a sanctions case was terminated as a result of a negotiated settlement, stalemate, or it simply fading away, we use their so-called HSE score to determine the nature of a given case’s ending (Jeong, 2019; Morgan et al., 2014; Weber and Schneider, 2019). This score, which is based on the coding definition of Hufbauer et al. (2007), ranges from 1 to 16, and indicates the degree to which the sanctions case contributed to the sender’s goals. A score of 9 or higher stipulates that the sanctions made substantial contributions to the sender’s goals, which we code as (partial) target compliance (termination = 1). In contrast, an HSE score of lower than 9 implies that the sanctions did not result in any significant policy change and is coded as sender capitulation (termination = 2).⁹ Lastly, we create a reference category that consists of all country-years where sanctions are not terminated (termination = 0). Thus, the yearly observations are always assigned into one of the categorical outcomes: termination by target acquiescence, termination by sender capitulation or sanctions persistence. Our final dataset has the structure of a traditional events history model.

In order to investigate the formulated hypotheses, we rely on a set of variables that capture target- and sender-related factors. Starting off, we use EUSANCT’s variable *target sanctions cost* as an indicator for the economic effects of the imposed sanctions on the target. Following EUSANCT, the coding of the variable is based on the sanctions’ type and ranges from a minimum of 1 for travel bans to a maximum of 6 for comprehensive trade embargoes—as “comprehensive sanctions impose more significant costs on the target state” (Drezner, 2003, 109). Next, we use the Varieties of Democracy’s continuous measure of “civil democracy” (Coppedge et al., 2018) as a measure of the target’s *level of democracy*. To capture the target’s susceptibility to external pressure, we opt for various economic and political indicators. We use the target’s logged annual gross domestic product per capita in US dollars (United Nations Statistics Division, 2018)—a commonly used indicator—for a measure of the target country’s *economic health*. As for the political volatility in the target country, we opt for two different indicators. First, we capture political *leadership changes* in the target country by using data from the Archigos data project (Goemans et al., 2009).¹⁰ Second, we capture the annual number of *domestic protests* occurring in the target country by drawing on information from Clark and Regan’s (2015) Mass Mobilization Protest Dataset.

Moving on to sender-related factors, we use EUSANCT’s variable for the *sender sanctions cost* as an indicator for the economic costs that sanctions inflict on the sender’s economy. The operationalization follows the one for target sanctions costs described above. We use two indicators to investigate whether close sender-target relations increase the sender’s propensity to capitulate. First, we capture *economic linkages* by relying on the commonly used logged bilateral annual trade between the sender and target (Eurostat, 2019; United States Census Bureau, 2019). Second, we use Voeten et al.’s (2009) UN General

⁶ As EU sanctions decisions are taken collectively by all members through the adoption of a common foreign policy position, we treat the EU as a bilateral sender and retain all EU cases in our sample (Krustev and Morgan, 2011; Morgan et al., 2014).

⁷ Only a minority of these outcomes are missing because the sanctions cases are still ongoing.

⁸ We undertake a minor recoding of EUSANCT, and only understand cases as terminated if the start date of a case between the same sanctions sender and target does not exactly match the end date of the previous case. We consider matching dates to merely indicate that the goals or measures of the sanctions case have changed, which does not mean that the entire case is over. The recoding only affected the following six targets: Democratic Republic of Congo, Egypt, Iraq, Pakistan, Syria, and Yugoslavia. Sanctions that are still in place by the end of 2016—the last year of analysis—are coded as ongoing.

⁹ This established aggregation method and threshold for target compliance, which was introduced by Hufbauer et al. (2007) in 1990, is contested in the literature (for example, Pape, 1997). Yet in our analysis, the overwhelming majority of sanction terminations can be clearly categorized as cases of sender capitulation or target compliance. Only the categorization of four cases would be affected by lowering the HSE scale threshold of 9.

¹⁰ As Archigos covers leadership changes up to 2015, we conducted further research and complemented the data for sanctions cases that go until 2016.

Assembly roll-call data to capture *political ties* between the sender and target. We thus understand political ties as the annual vote alignment of the target to the respective sender in the UNGA.¹¹ Lastly, we include a dummy variable for *leadership change* in the sender by using information from Archigos (Goemans et al., 2009).

Finally, we identify a list of potential confounding factors that may serve as alternative explanations for the onset of sanctions termination. We include a dummy that controls for the sender's resolve, as *sender commitment* has been identified as an explanatory factor for the termination of sanctions (Krustev and Morgan, 2011). The dummy takes the value of 1 if sanctions were threatened prior to imposition and 0 otherwise (Weber and Schneider, 2019). We also control for the sanctions' *issue salience*, which should increase the willingness of senders to maintain sanctions and targets to withstand them respectively. We follow Bapat and Morgan (2009) and create a binary variable that takes the value of 1 if sanctions were imposed to contain the target's political and military behavior, destabilize its regime, deny strategic materials and prevent the proliferation of weapons, retaliate against the target's alliance and alignment choices, solve territorial disputes, or coerce the target into withdrawing its support for non-state actors. We also control for prior sanctions by the sender against the target, as countries may learn from sanctioning or being sanctioned repeatedly. Following Peksen (2011) and others, we include a dummy for US sanctions to control for the potential unique effects of this most active of international sanctions senders. Additionally we control for the logged distance in kilometers between the respective capital cities (Mayer and Zignago, 2011), as geographic distance is also a known indicator for the closeness between countries.¹² Lastly, our analysis accounts for the duration of sanctions by the inclusion of cubic polynomials (t , t^2 , t^3).

4. Empirical results and discussion

We run a competing risks model using a multinomial logit estimator and compare the findings to the results of a simple logistic regression that pools the two termination outcomes together. We use robust standard errors for all models, and cluster them by the sanctions target. All models include cubic polynomials to account for potential time-dependency in the sanctions outcomes (see online appendix for more on the multinomial model specification).¹³ Seeing as EUSANCT primarily covers sanctions cases imposed from 1989 to 2016, we drop all left censored sanctions cases that start before—yet are still in place by—1989, as we do not observe these cases over the entire timeframe of our analysis.¹⁴ The first column in Table 1 below displays the results of Model 1, which estimates the likelihood of (pooled) sanctions termination in a given year. Columns 2 and 3 present the results of the competing risks model, which reveals the comparative relationships between the likelihood of sanctions ending by target compliance and sender capitulation versus sanctions that have not ended in a given year (Model 2).

4.1. Simple logistic analysis: the likelihood of sanctions termination

We start by looking at the results of the simple logistic regression, which does not differentiate between target compliance and sender capitulation (Model 1). Our findings show that target- and sender-related factors affect the termination of sanctions (pooled outcome). Both the economic and political vulnerability of the target country significantly affect the likelihood of sanctions termination. More precisely, an increase in the economic health of the target is associated with a decrease in the likelihood of observing sanctions termination relative to no termination. At the same time, we find that an increase in the democracy levels of the target country is associated with an increased likelihood of sanctions termination. As for the political volatility of the target, a change of leadership makes the lifting of sanctions significantly more likely whereas mass protests have a positive, but insignificant effect.

Turning to the sender-related factors, we find that higher sender sanctions costs reduce the likelihood of sanctions termination. The results point to a potential lock-in effect for the sender that can be explained by their already invested “sunk costs” (Bonetti, 1994). Political leadership changes in the sender, similar to changes in the target, and stronger political ties between the sender and target also make the lifting of sanctions in a given year more likely. As for the controls, we find that if the target was subject to prior sanctions by the sender then the likelihood of sanctions termination for succeeding sanctions cases increases. We also only find weak evidence for time-dependency in our outcome variable: Sanctions are significantly more likely to end in the first years after their imposition. Later, the effect of time decreases or simply ceases to significantly affect the lifting of these measures.

4.2. Competing risks analysis: distinguishing between sanctions termination outcomes

The main focus of our paper is on how the explanatory factors influence the respective likelihood of the two *different* types of sanctions termination. Our main argument is that only looking at the general termination of sanctions (see Model 1)

¹¹ As Voeten et al.'s (2009) data only goes until 2014, we use Voeten's (2013) raw dataset to calculate the alignment score for cases that go up to 2016. We follow Voeten et al.'s (2009) operationalization: we add the number of votes where both vote “yes” and the number of votes where both vote “no” and divide them through the total number of joint votes.

¹² The indicator takes the logged distance of the target's capital city from Brussels if the EU is the sanctions sender.

¹³ Cubic polynomials deal with the problem of quasi-complete separation, and model nonproportional hazards in an easy and straightforward way (Carter and Signorino, 2010).

¹⁴ This reduces our number of cases by 20.

Table 1

Regression output: looking into the likelihood of sanctions termination.

VARIABLES	(1)	(2)	
	Logit Model sanctions termination (pooled outcome)	Multinomial Logit termination: target compliance	termination: sender capitulation
Target-related factors			
target sanctions costs	-0.057 (0.185)	-0.001 (0.227)	-0.088 (0.316)
target GDP per capita	-0.311** (0.123)	-0.413*** (0.148)	-0.177 (0.208)
target democracy levels	2.060*** (0.699)	1.809* (0.925)	2.281** (1.133)
target leadership change	0.708*** (0.227)	0.766*** (0.263)	0.623 (0.392)
target political stability	0.017 (0.014)	0.026 (0.016)	-0.005 (0.020)
Sender-related factors			
sender sanctions costs	-0.645*** (0.191)	-0.801*** (0.219)	-0.383 (0.273)
bilateral economic ties	0.032 (0.064)	-0.025 (0.066)	0.140* (0.082)
bilateral political ties	2.639*** (0.679)	1.925*** (0.718)	4.261*** (1.331)
sender leadership change	0.745** (0.305)	-0.106 (0.325)	1.937*** (0.492)
Controls			
sender commitment	0.265 (0.221)	0.029 (0.271)	0.865* (0.456)
issue salience	0.463* (0.269)	0.722** (0.300)	-0.014 (0.471)
prior sanctions	0.416** (0.168)	0.188 (0.219)	0.763*** (0.280)
US sanctions	2.173* (1.148)	0.351 (1.154)	5.747*** (1.811)
geographic distance	0.067 (0.215)	-0.247 (0.247)	0.534* (0.315)
t	0.259* (0.135)	0.342* (0.185)	0.062 (0.214)
t ²	-0.024 (0.015)	-0.035 (0.022)	-0.001 (0.024)
t ³	0.625 (0.446)	0.844 (0.621)	0.052 (0.702)
constant	-3.252 (2.624)	2.296 (2.790)	-14.816*** (3.765)
Observations	1,117	1,117	1,117

Notes: Coefficients are displayed first, followed by robust standard errors in parentheses. The number of observations is reduced from 1,201 observations to 1,117 due to missing observations.

*** p<0.01,

** p<0.05,

* p<0.1

masks important differences. A first glance at the results of Model 2 underlines significant differences between the likelihood of sanctions termination by target compliance (Column 2) and sender capitulation (Column 3) relative to the likelihood of observing no termination as the baseline category.

We first observe that the target's economic vulnerability and political volatility influence the likelihood of sanctions termination by target compliance, while they do not significantly alter the likelihood of sender capitulation. Decreases in the target's economic health significantly increase the likelihood of target compliance. Hence, we find substantive empirical support for H1b that economically stronger targets have more leeway to resist coercive measures (see Fig. 2 below for the marginal effect).¹⁵ In contrast, sanctions costs to the target do not affect the likelihood that such measures end because a target gives in, providing no support for H1a.

Political changes in the target country, namely leadership turnover in a given year, make sanctions termination by target acquiescence more likely. This underlines that political volatility in the target country over the course of a sanctions case plays an important role in termination, increasing the probability of target compliance by 6 percentage points (H1d). For instance, after taking office in January 2005, President Viktor Yushchenko of Ukraine was eager to improve bilateral ties with the US and engaged in efforts to improve democratic and free-market principles in his country. In response to the

¹⁵ Marginal effects are calculated using Stata (version 13.1) margins, and marginsplot command.

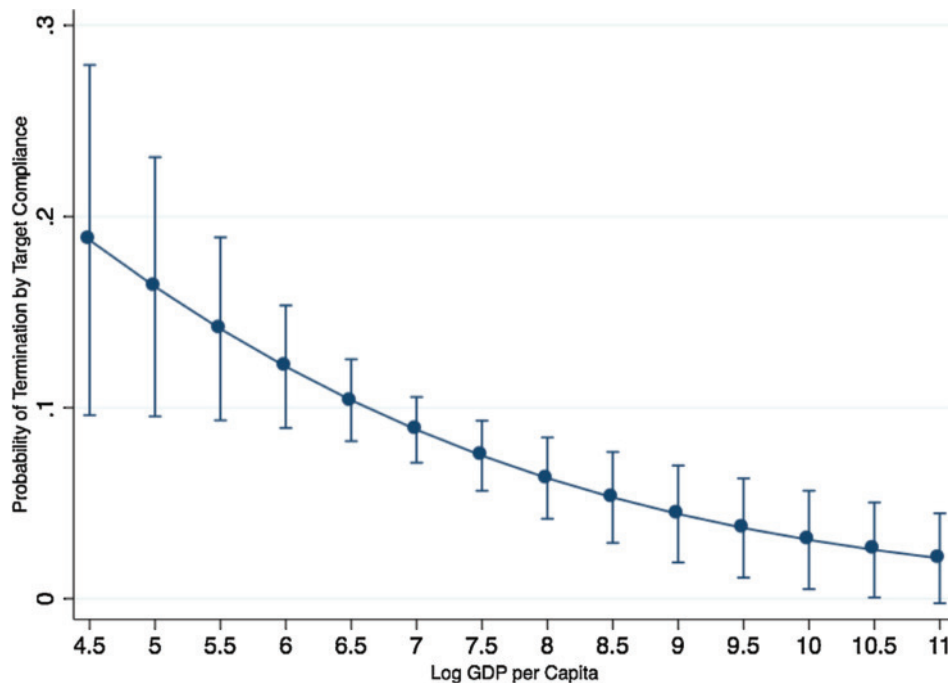


Fig. 2. Marginal Effect of economic health on termination by target compliance.
 Note: Whiskers around the predicted marginal effect are at 95 percent confidence intervals.
 Values range from the minimum to the maximum observed value of log GDP per capita.

improved democratic conditions, the US lifted its sanctions on the country over human rights—originally imposed in 2002—in November 2005.

These findings support earlier research on the duration of sanctions, which hinted at the greater ability of new leaders to change disputed policies with comparatively little consequence. We also find that increases in the target's level of democracy increase the likelihood of target acquiescence to the sender's demands with an average marginal effect of 12 percentage points. This should be interpreted with caution as it is only significant at the 10 percent level, thus providing modest support for the expectation that democratic targets are more likely to succumb to sanctions demands (H1c). As for the controls, our results show that higher sender costs significantly decrease the likelihood of target acquiescence. This may be due to the target's awareness that the sender is suffering with the imposed sanctions. As a consequence, the target could be motivated to persist and wait for the eventual removal of these measures. Moreover, our results show that salient issues significantly increase the likelihood of termination by target acquiescence by 5 percent—presumably because targets cannot expect senders to lift measures that were imposed over highly relevant issues without some degree of compliance. Furthermore, we find that stronger political ties between the sender and target influence the latter's decision to comply with an ally's demands. Lastly, we only find a weak link between the duration of sanctions and termination by target acquiescence. The effect of time is shown to increase the likelihood of target compliance in the first years after imposition and then to decrease or simply fade away (see Fig. 4 in the online appendix). Yet this finding should be interpreted with caution, as it does not reach statistical significance at the 5 percent level.

Turning to the likelihood of termination by sender capitulation, we find that our *sender*-related indicators primarily explain the sender's willingness to lift sanctions prior to achieving the desired outcome. We find no support for a positive effect of the economic sanctions costs on the likelihood of sender capitulation (H2a). In contrast, both economic and political linkages to the target are positively associated with the sender's willingness to roll back sanctions. The effect of trade linkages is, however, only weakly significant at the 10 percent level, which provides modest support for H2b. Increases in the political alignment of the target with the sender, on the other hand, significantly affect the probability of sanctions termination by sender capitulation with an average marginal effect of 17 percent (H2c). Political leadership changes in the sender country increase the predicted probability of sender capitulation by an average of 12 percentage points, which provides support for H2d.

Lastly, several control variables also show significant correlation with the likelihood of sender capitulation. The identity of the sender plays a crucial role herein. The probability of US sanctions ending in defeat for the sender is by an average of 29 percentage points higher compared to EU sanctions. For example, the Barack Obama administration removed sanctions against 24 targets in 2009 despite not successfully coercing them into bilateral nonsurrender agreements that would grant US soldiers immunity from prosecution by the International Criminal Court (Weber and Schneider, 2019). Prior sanctions by the sender against the target are shown to increase the probability of the former removing succeeding sanctions despite no success by 3 percentage points—presumably because they learned that it can be costly to maintain sanctions. Increases in

the target's democracy levels significantly affect the probability of senders rolling back sanctions, with an average marginal effect of 9 percent. It is important to note that in comparison to the larger effect of democracy levels on the likelihood of termination by target compliance, here democracy levels are significant at the 5 percent level.

Our results underline that the two termination outcomes are clearly affected by different explanatory factors. We show that relying on the simple logistic regression that pools all termination outcomes together masks important differences. The overall fit of the multinomial model is good, and allows us to reject the null hypothesis that the coefficients included in the model are jointly 0. The multinomial model performs better than the simple logistic regression in explaining the termination outcome, with a pseudo R-squared of approximately 17 percent.

5. Robustness of the results

The reported regression outputs and marginal-effect calculations account for heteroskedasticity across the sanctions targets by clustering the robust standard errors by target country. As a further robustness check, we rerun the analysis including additional factors that could characterize the target. We rerun our multinomial logit model, and include two additional dummies that account for a shared language and for former colonial ties between the target and sender (Mayer and Zignago, 2011).¹⁶ The results (Table 2 in the online appendix) underline that our main findings are robust. The effect and statistical significance of our main explanatory variables of interest hold, showing target-related factors to primarily affect termination by target compliance and sender-related factors to affect the lifting of sanctions by sender capitulation. We observe only two minor changes in the (control) variables in the model estimating the comparative likelihood of termination by sender capitulation and target compliance. First, in comparison to the main model (model 2) above, we find stronger results for the effect of the target's level of democracy on the likelihood of termination by target compliance, which now reaches statistical significance at the 5 percent level. This reiterates our previous finding that democracies are more vulnerable to sanctions demands and provides stronger support for H1c. Second, the threat of sanctions prior to the imposition of these measures now reaches statistical significance at the 5 percent level.

Second, we reestimate the results of the multinomial logit by running a multinomial probit regression to test the independence of irrelevant alternatives (IIA) assumption and demonstrate the robustness of our findings.¹⁷ Looking at the regression output of the probit regression (see Table 3 in the online appendix), we find that our results hold and yield very similar findings. We focus the discussion on the multinomial logit, as these results can be more intuitively interpreted.

Research on sanctions imposition underlines that senders closely observe economic and political developments in the potential target country prior to imposing coercive measures (Murdie and Peksen, 2013; Peksen et al., 2014; von Soest and Wahman, 2015). In order to account for similar behavior informing termination, meaning that senders monitor targets during the course of a sanctions case, we rerun the model lagging our indicators for economic health (GDP per capita) and political stability (mass protests) in the target country, as well as for bilateral political and economic ties. The results in Table 4 in the online appendix are very similar to those of the main model.

The only significant variation observed concerns the likelihood of termination by sender capitulation. We find that bilateral ties between the sender and target in the year prior to sanctions termination do not have a significant effect on the likelihood of sanctions being terminated by sender capitulation. This underlines that senders react to developments in the target country, and lift sanctions following significant improvements in political relations with the target (Table 1 above). EU sanctions imposed against Syria in 1986 serve as a prominent example, as the European Community removed those against the Hafez al-Assad regime in November 1990 after the country aligned itself politically with the Western anti-Iraq Gulf War Coalition—even though Syria was clearly still sponsoring terrorism (Hufbauer et al., 2007). The higher R-squared of the main model provides further support for the notion that immediate developments in the sender and target countries do a better job of explaining the different termination outcomes as compared to the robustness check model with lagged variables.

6. Conclusion

This paper provides new insights into the determinants of two opposing paths toward sanctions termination, namely target compliance and sender capitulation—which existing research on the varying duration of sanctions has largely ignored so far. With the exception of the study by Krustev and Morgan (2011), on which we build, prior work tends to conceive of sanctions termination as a single category. By analyzing target- and sender-related factors—those that are stable and those that are more dynamic, and, consequently, which may change over the course of the sanctions case—the paper adds to our empirical and theoretical understanding of sanctions' microfoundations (Kirshner, 1997).

Our analysis yields three major empirical results. First, we show that a target's low economic health and high political volatility significantly increases the probability of sanctions termination by target compliance, while, generally, more autocratic regimes are more likely to withstand restrictive measures than more democratic ones are. Second, our analysis highlights the substantive implications of leadership changes in the sender country for the capitulation of sanctioners.

¹⁶ The femlogit command faces computational problems with the number of permutations in the dependent variables for observations of individuals (countries) as time T_i increases. We thank an anonymous reviewer for suggesting additional variables to control for.

¹⁷ Cheng and Long (2007) discuss the unreliability of IIA tests that yield conflicting findings.

Finally, senders are much more inclined to capitulate if they imposed the punitive measures on close political allies. In comparison, we find weak evidence that trade links play a role in sender's considerations about whether to capitulate in the face of target resistance.

Analytically, these results show the advantages of assessing the factors that lead to target compliance and sender capitulation within an integrated framework that looks at the target and the sender side of the sanctions equation simultaneously, therein taking into account both dynamic and more static factors. Explanations for the contrasting types of termination significantly diverge. There is no “mirror image” of the factors that are responsible for the termination in cases of target compliance and of sender capitulation. Our results also suggest that both targets and senders primarily take into account the sanctions' political and economic costs for their own constituencies in their termination decisions (on imposition, see [Baldwin, 1999](#)). Conceptually, the study shows that the intricate process surrounding how sanctions end, and not only how they are implemented and how effective they are, should constitute a key part of how both scholars and practitioners understand and analyze any sanctions case.

Our analysis can serve as a stepping-stone to giving more scholarly and policy attention to the political process of how external sanctions are terminated, and what the political ramifications of that are. To begin with, this includes the crucial question of whether sanctions termination stabilizes or destabilizes the formerly targeted regime. In order to address these issues in a theoretically and empirically sound manner, we need to account for the different ways in which sanctions end. One could imagine that sanctions ending with sender capitulation strengthen the target country's incumbent regime, which can claim to have successfully withstood external pressure. The reverse effect should occur in the case of sanctions termination through the target giving in to senders' demands. These questions warrant further analysis in future research. Moreover, studies examining sender's decision-making processes that lead to termination without goal accomplishment are key to learning more about how this affects the application and credibility of sanctions in the twenty-first century.

Lastly, sanctions' immanent features may also affect the different types of termination witnessed. For example, a sender may find it harder to sell capitulation to its domestic audience if the requirements for lifting sanctions are very specific and thus leave little room for interpretation—such as the reversal of the annexation of Crimea. While we have investigated how sanctions costs affect termination, more research on how these sanctions-related factors shape termination could be fruitful. Looking into these aspects ultimately means that sanctions termination will receive the attention it duly deserves, as not only the imposition but also the removal of external pressure have become regular phenomena in international politics – despite the fact that sanctions are often unsuccessful in achieving their desired results.

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References

- Allen, S.H., 2005. The determinants of economic sanctions success and failure. *Int. Interact.* 31 (2), 117–138.
- Allen, S.H., 2008. The domestic political cost of economic sanctions. *J. Conflict Resolution* 52 (6), 916–944.
- Baldwin, D.A., 1999. The sanctions debate and the logic of choice. *Int. Security* 24 (3), 80–107.
- Bapat, N.A., Morgan, T.C., 2009. Multilateral versus unilateral sanctions reconsidered: a test using new data. *Int. Stud. Q.* 53 (4), 1075–1094.
- Barber, J., 1979. Economic sanctions as a policy instrument. *Int. Affairs* 55 (3), 367–384.
- Bolks, S.M., Al-Sowayel, D., 2000. How long do economic sanctions last? Examining the sanctioning process through duration. *Polit. Res. Q.* 53 (2), 241–265.
- Bonetti, S., 1994. The persistence and frequency of economic sanctions. In: Chatterji, M., Jager, H., Rima, A. (Eds.), *Economics of International Security: Essays in Honour of Jan Tinbergen*. Macmillan, London, pp. 183–193.
- Box-Steffensmeier, J.M., Jones, B.S., 1997. Time is of the essence: event history models in political science. *Am. J. Polit. Sci.* 41 (4), 1414–1461.
- Box-Steffensmeier, J.M., Jones, B.S., 2004. *Event History Modeling: a Guide for Social Scientists*. Cambridge University Press, Cambridge.
- Brownlee, J., 2012. *Democracy Prevention: the Politics of the U.S.-Egyptian Alliance*. Cambridge University Press, New York, NY.
- Carter, D.B., Signorino, C.S., 2010. Back to the future: modeling time dependence in binary data. *Polit. Anal.* 18 (3), 271–292.
- Cheng, S., Scott Long, J., 2007. Testing for IIA in the multinomial logit model. *Sociol. Methods Res.* 35 (4), 583–600.
- Chenoweth, E., Stephan, M.J., 2013. *Why Civil Resistance Works: the Strategic Logic of Nonviolent Conflict*. Columbia University Press, New York, NY.
- Clark, D.H., Regan, P.M., 2015. *Mass Mobilization: New Data on Protests against Governments, 1990–2014*. Binghamton University.

- Coppedge, M., Gerring, J., Knutsen, C.H., Lindberg, S.I., Skaaning, S.-E., Teorell, J., Altman, D., et al., 2018. V-Dem [Country-Year/Country-Date] Dataset V9. Varieties of Democracy (V-Dem) Data, v9. Varieties of Democracy (V-Dem) project, Gothenburg <https://doi.org/10.23696/vdemcy18>.
- Dashti-Gibson, J., Davis, P., Radcliff, B., 1997. On the determinants of the success of economic sanctions: an empirical analysis. *Am. J. Polit. Sci.* 41 (2), 608–618.
- Dorussen, H., Mo, J., 2001. Ending economic sanctions audience costs and rent-seeking as commitment strategies. *J. Conflict Resolution* 45 (4), 395–426.
- Doxey, M.P., 1980. *Economic Sanctions and International Enforcement*. Macmillan, London.
- Drezner, D.W., 2003. How smart are smart sanctions? *Int. Stud. Rev.* 5 (1), 107–110.
- Drury, A.C., 1998. Revisiting economic sanctions reconsidered. *J. Peace Res.* 35 (4), 497–509.
- Early, B.R., 2011a. Alliances and trade with sanctioned states: a study of U.S. economic sanctions, 1950–2000. *J. Conflict Resolution* 56 (3), 547–572.
- Early, B.R., 2011b. Unmasking the black knights: sanctions busters and their effects on the success of economic sanctions. *Foreign Policy Anal.* 7 (4), 381–402.
- Eaton, J., Engers, M., 1999. Sanctions: some simple analytics. *Am. Econ. Rev.* 89 (2), 409–414.
- Elliott, K.A., Hufbauer, G.C., 1999. Same song, same refrain? Economic sanctions in the 1990's. *Am. Econ. Rev.* 89 (2), 403–408.
- Escribà-Folch, A., Wright, J., 2010. Dealing with tyranny: international sanctions and the survival of authoritarian rulers. *Int. Stud. Q.* 54 (2), 335–359.
- Eurostat, 2019. EU Trade since 1988 by SITC (DS-018995). Eurostat Data <https://ec.europa.eu/eurostat/web/international-trade-in-goods/data/database>.
- Galtung, J., 1967. On the effects of international economic sanctions: with examples from the case of Rhodesia. *World Polit.* 19 (3), 378–416.
- Goemans, H.E., Gleditsch, K.S., Chiozza, G., 2009. Introducing archigos: a data set of political leaders. *J. Peace Res.* 46 (2), 269–283.
- Grauvogel, J., von Soest, C., 2014. Claims to legitimacy count: why sanctions fail to instigate democratisation in authoritarian regimes. *Eur. J. Polit. Res.* 53 (4), 635–653.
- Green, J.D., 1983. Strategies for evading economic sanctions. In: Nincic, M., Wallensteen, P. (Eds.), *Dilemmas of Economic Coercion: Sanctions in World Politics*. Praeger, New York, pp. 61–83.
- Haggard, S., Noland, M., 2017. *Hard Target: Sanctions, Inducements, and the Case of North Korea*. Stanford University Press, Stanford, CA.
- Hart, R.A., 2000. Democracy and the successful use of economic sanctions. *Polit. Res. Q.* 53 (2), 267–284.
- Hufbauer, G.C., Schott, J.J., Elliott, K.A., 1990. *Economic Sanctions Reconsidered*, second ed. Peterson Institute of International Economics, Washington, DC.
- Hufbauer, G.C., Schott, J.J., Elliott, K.A., Oegg, B., 2007. *Economic Sanctions Reconsidered*, third ed. Peterson Institute of International Economics, Washington, DC.
- Jeong, J.M., 2019. Do sanction types affect the duration of economic sanctions? The case of foreign aid. *Int. Polit. Sci. Rev.* 40 (2), 231–245.
- Jing, C., Kaempfer, W.H., Lowenberg, A.D., 2003. Instrument choice and the effectiveness of international sanctions: a simultaneous equations approach. *J. Peace Res.* 40 (5), 519–535.
- Jones, L., 2015. *Societies under Siege: Exploring How International Economic Sanctions (Do Not) Work*. Oxford University Press, Oxford.
- Kaempfer, W.H., Lowenberg, A.D., 1992. *International Economic Sanctions. A Public Choice Perspective*. Westview, Boulder, CO.
- Kirshner, J., 1997. The microfoundations of economic sanctions. *Security Stud.* 6 (3), 32–60.
- Krustev, V.L., Morgan, T.C., 2011. Ending economic coercion: domestic politics and international bargaining. *Conflict Manage. Peace Sci.* 28 (4), 351–376.
- Major, S., 2012. Timing is everything: economic sanctions, regime type, and domestic instability. *Int. Interact.* 38 (1), 79–110.
- Marinov, N., 2005. Do economic sanctions destabilize country leaders? *Am. J. Polit. Sci.* 49 (3), 564–576.
- Mayer, T., Zignago, S., 2011. Notes on CEPII's Distances Measures: the GeoDist Database. Centre d'Etudes Prospectives et d'Informations Internationales (CEPII), Paris.
- McGillivray, F., Stam, A.C., 2004. Political institutions, coercive diplomacy, and the duration of economic sanctions. *J. Conflict Resolution* 48 (2), 154–172.
- McLean, E.V., Whang, T., 2010. Friends or foes? Major trading partners and the success of economic sanctions. *Int. Stud. Q.* 54 (2), 427–447.
- Morgan, T.C., Bapat, N., Kobayashi, Y., 2014. Threat and imposition of economic sanctions 1945–2005: updating the TIES dataset. *Conflict Manage. Peace Sci.* 31 (5), 541–558.
- Morgan, T.C., Schwabach, V.L., 1997. Fools suffer gladly: the use of economic sanctions in international crises. *Int. Stud. Q.* 41 (1), 27–50.
- Murdie, A., Peksen, D., 2013. The impact of human rights INGO activities on economic sanctions. *Rev. Int. Organ.* 8 (1), 33–53.
- Nooruddin, I., 2002. Modeling selection bias in studies of sanctions efficacy. *Int. Interact.* 28 (1), 59–75.
- Pape, R.A., 1997. Why economic sanctions do not work. *Int. Security* 22 (2), 90–136.
- Peksen, D., 2011. Economic sanctions and human security: the public health effect of economic sanctions. *Foreign Policy Anal.* 7 (3), 237–251.
- Peksen, D., 2019. Autocracies and economic sanctions: the divergent impact of authoritarian regime type on sanctions success. *Defence Peace Econ.* 30 (3), 253–268.
- Peksen, D., Peterson, T.M., Drury, A.C., 2014. Media-driven humanitarianism? News media coverage of human rights abuses and the use of economic sanctions. *Int. Stud. Q.* 58 (4), 855–866.
- Portela, C., von Soest, C., 2012. *GIGA Sanctions Dataset Codebook. Version 18 June 2012*. GIGA German Institute of Global and Area Studies, Hamburg.
- Smale, A., Hakim, D., 2014. European Firms Seek to Minimize Russia Sanctions. *The New York Times* April 25, 2014 <http://www.nytimes.com/2014/04/26/world/europe/european-firms-seek-to-minimize-russia-sanctions.html>.
- Teorell, 2010. *Determinants of Democratization: Explaining Regime Change in the World, 1972–2006*. Cambridge University Press, Cambridge.
- United Nations Statistics Division, 2018. Per Capita GDP at Current Prices - US Dollars. United Nations Data. United Nations, New York, NY <http://data.un.org/Data.aspx?q=GDP&d=SNAAMA&f=grID%3a101%3bcurrID%3aUSD%3bpcFlag%3a1>.
- United States Census Bureau, 2019. U.S. Trade in Goods by Country. Census Bureau Data, Washington, DC: United States <https://www.census.gov/foreign-trade/balance/index.html>.
- von Soest, C., Wahman, M., 2015. Not all dictators are equal: coups, fraudulent elections, and the selective targeting of democratic sanctions. *J. Peace Res.* 52 (1), 17–31.
- Voeten, E., 2013. *Data and Analyses of Voting in the UN General Assembly*. Routledge Handbook of International Organization.
- Voeten, E., Strezhnev, A., Bailey, M., 2009. United Nations General Assembly Voting Data. Harvard Dataverse v20 <https://dataverse.harvard.edu/dataset.xhtml?persistentId=hdl:1902.1/12379>.
- Weber, P.M., and Schneider, G., Forthcoming. Post-cold war sanctioning by the EU, the UN, and the US: introducing the EUSANCT dataset. *Conflict Manage. Peace Sci.* <https://doi.org/10.1177/0738894220948729>.