WORKING paper

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Aid Sanctions and Hybrid Regimes[1]

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ABSTRACT

Recent advances combining sanctions scholarship and the study of authoritarianism relate sanctions effectiveness to regime type. These studies generally conclude that economic sanctions tend to be more effective on democracies than on autocracies, but also on weakly institutionalised autocracies rather than on other authoritarian types. This literature at the intersection between international relations and comparative politics focuses on the democracy-autocracy dichotomy, or the categorization of autocratic types, to the detriment of the exploration of 'hybrid' regime types. Equally importantly, it has neglected examining the impact of aid suspensions as a subcategory of sanctions. We address these deficits by investigating whether (i) the autocratic type or the level of democratic openness of the target better predicts sanctions effectiveness, (ii) whether hybrid regimes behave like closed autocracies or like democracies under sanctions, and (iii) whether aid suspensions perform similarly than other sanctions in terms of effectiveness. The hypotheses are tested on an original dataset rich in aid sanctions.

Keywords: Foreign Aid; Aid Suspensions; Hybrid Regimes; Regime Types; Sanctions Economic; Autocracy

JEL classification: F51, O19, F53, Z18, O55, F13

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NON-TECHNICAL SUMMARY

Research on sanctions has traditionally found that sanctions are less likely to succeed against dictatorships than against democracies. More recent research on authoritarian regimes allows us to move beyond the simple distinction between democracy and dictatorship. Some forms of dictatorship appear particularly resilient to sanctions pressure. But what about "hybrid" regimes, which combine characteristics of democracies and dictatorships? There are nearly twice as many hybrid regimes in the world as dictatorships.

This paper examines whether hybrid regimes respond differently to sanctions. Dictatorships typically maintain power through a combination of repression and rewards granted to loyal elites. Because sanctions reduce government resources, they may weaken both mechanisms. We assume that hybrid regimes operate in a similar way. However, because they also contain some democratic features that may facilitate political change, we expect them to be more vulnerable to sanctions than fully authoritarian regimes.

We also examine whether suspensions of foreign aid affect hybrid regimes differently from economic sanctions. Foreign aid can strengthen governments by providing resources that may be used to support security forces or reinforce political control. When donors suspend aid or redirect it towards civil society organisations, governments may find it harder to remain in power. We therefore expect aid suspensions to be as effective as economic sanctions in increasing pressure on hybrid regimes.

A further question is whether sanctions effectiveness is better explained by the type of dictatorship or by the degree of political openness of the regime. Hybrid regimes are usually defined according to their position on a continuum between democracy and authoritarianism. We therefore assess whether political openness provides a better predictor of sanctions vulnerability than traditional classifications of authoritarian regimes.

Finally, we investigate whether economic development protects hybrid regimes from the impact of sanctions and aid suspensions. Previous research has shown that wealthier countries are often better able to withstand sanctions. However, foreign aid may be more difficult to replace than trade or financial flows. We therefore expect economic development to reduce the impact of economic sanctions more strongly than the impact of aid suspensions.

Frequencies of hybrid regimes and dictatorships among target countries

Regime type	Nr of episodes	Percent
Dictatorships	106	34.75
Hybrid regimes	199	65.25
Total	305	100.00

Source: Portela and Mora-Sanguinetti (2025).

Using an original dataset covering 309 sanctions episodes between 1990 and 2018, we test these expectations. The dataset includes sanctions imposed by major sending countries and international organisations, including the European Union.

Our findings show that hybrid regimes are significantly more vulnerable to sanctions than fully authoritarian regimes. We also find that aid suspensions are at least as effective as conventional economic sanctions in generating pressure on hybrid regimes. In addition, vulnerability to sanctions tends to increase with political openness. Finally, while higher levels of wealth reduce the effectiveness of economic sanctions, they do not appear to weaken the impact of aid suspensions.

Overall, the results suggest that hybrid regimes should not be analysed in the same way as closed autocracies. The degree of political openness helps explain their vulnerability to external pressure, and aid suspensions emerge as a particularly effective policy tool. These findings highlight the importance of taking regime hybridity into account when assessing the effectiveness of sanctions.

Sanctions liées à l'aide et régimes hybrides

RÉSUMÉ

Les avancées récentes qui combinent l'analyse des sanctions internationales et l'étude de l'autoritarisme relient l'efficacité des sanctions au type de régime politique. Ces travaux concluent généralement que les sanctions économiques tendent à être plus efficaces contre les démocraties que contre les autocraties, mais aussi davantage contre les autocraties faiblement institutionnalisées que contre d'autres types de régimes autoritaires. Cette littérature, située à l'intersection des relations internationales et de la politique comparée, se concentre principalement sur la dichotomie démocratie-autocratie ou sur la catégorisation des types d'autocraties, au détriment de l'analyse des régimes dits « hybrides ». De plus, elle a largement négligé l'examen de l'impact des suspensions de l'aide en tant que sous-catégorie spécifique de sanctions (Nielsen, 2013). Nous comblons ces lacunes en étudiant si : (i) le type d'autocratie ou le degré d'ouverture démocratique du pays ciblé permet de mieux prédire l'efficacité des sanctions ; (ii) les régimes hybrides se comportent, face aux sanctions, comme des autocraties fermées ou comme des démocraties ; (iii) les suspensions de l'aide présentent une efficacité comparable à celle des autres types de sanctions. Ces hypothèses sont testées à partir d'un jeu de données original, riche en observations sur les sanctions liées à l'aide.

Mots-clés : aide étrangère ; suspensions de l'aide ; régimes hybrides ; types de régimes ; sanctions économiques ; autocratie

Codes JEL : F51, O19, F53, Z18, O55, F13

1. Introduction

Since its inception, sanctions scholarship has been concerned with the question as to when and why sanctions are effective in only some, but not all, of the cases in which they are applied. In the indefatigable search for the determinants of sanctions effectiveness, scholars have been paying increasing attention to the influence of regime type on the prospects of the coercive attempt. The type of political regime in power both in the sender (Hart, 2000) and in the target (Bader & Faust, 2014; van Bergeijk, 2009) is held to affect the operation and impact of sanctions. Insights of this research agenda gained in concretion in recent years. Departing from the original understanding that democracies are more amenable to sanctions pressures than non-democracies (Allen, 2008; Hufbauer et al., 2007), the acknowledgement of the diversity of non-democracies has contributed new attempts to explain why sanctions succeed in fostering reforms in some cases but not in others. Most accounts seek to establish a relationship of proportionality between the level of political openness of the target regime and its vulnerability to sanctions. Some of them relate sanctions effectiveness to autocratic type, arguing that certain types of autocracies are more vulnerable to sanctions pressure than others (Bader & Faust, 2014; Escribà-Folch & Wright, 2010; Peksen, 2017). Others attribute vulnerability to sanctions to the timing of imposition in the autocratic cycle (Major, 2012), the positioning of opposition forces in the target state (Onder, 2020), or sanctions design (Brooks, 2002). However, none of these studies has yet explored hybrid regimes as a distinct type of political regime. Defined as regimes that combine characteristics of democracies with autocratic features, hybrid regimes were originally conceptualised as undergoing transformation; as systems 'in transition' from autocracy to democracy, or vice versa (Karl, 1995). Yet, hybrid regimes are no longer seen as temporary or transitional in nature. Rather, they are increasingly regarded as a type of political regime on its own right. Considering hybrid regimes as one type separate from autocracies and democracies implies that the impact of sanctions on the power balance within this type of regime ought to be explored as it may diverge from that observed in fully autocratic states.

Meanwhile, scholarly interest in the effectiveness of suspensions of foreign aid is renascent. Long confined to the preserve of development studies (Stokke, 1995; Crawford, 2001), a growing number of scholars are analysing aid suspensions through the disciplinary lenses of International Relations (Early & Jadoon, 2019; Jeong, 2019). This strand of research has sought to confirm aid suspensions' quality as a subtype of sanctions, while highlighting those features that set their operation apart from standard economic sanctions. Moreover, such distinctive traits are sometimes assumed to improve their effectiveness in promoting the attainment of their goals (Early, 2015; Mertens, 2024).

The present article explores the impacts of aid suspensions on hybrid regimes as a singular type of regime. This endeavour is justified on several grounds. Firstly, a vast majority of sanctions are imposed on non-democratic regimes (Major, 2012), most of which are, in turn, hybrid types. Similarly, a considerable portion of imposed sanctions consists of aid suspensions, either in isolation or in combination with other restrictions (Mertens, 2024). Given that both categories have long remained scarcely visible due to their subsumption into larger categories, the expectation is that their differentiated treatment may render novel insights into the field of sanctions effectiveness. This is particularly intriguing given that most countries at the receiving end of sanctions are simultaneously aid recipients (Mertens, 2024). The present study combines scholarly advances into the vulnerability of hybrid regimes to sanctions pressure with insights into the effectiveness of aid suspensions. This is worthwhile not only because of its scientific value in closing a longstanding research gap, which remains, concurrently, part of an unsettled debate. It also carries important implications for policy practice. Since the end of the cold war, most international sanctions purport to advance democratisation goals, often by seeking to reverse democratic recessions (Oechslin, 2014). In view of this persistent agenda, understanding the impact of sanctions on non-democratic - or backsliding - regimes remains key.

The reminder of this article proceeds as follows: A first section reviews how the literature approaches the relationship between sanctions and regime type, identifying the modest attention to aid suspension in mainstream sanctions scholarship as a shortcoming. A second section introduces our hypotheses and data, followed by an econometric analysis. After presenting the findings, a discussion of their implications follows. By delving into an enduring scholarly debate that remains unsettled, we contribute some insights on whether and how target regime type affects the effectiveness of both foreign policy sanctions and aid withdrawals.

2. Sanctions, aid suspensions and autocratic regimes

Political regime types have been of interest to sanctions scholarship from different angles. Intent in extending Immanuel Kant's democratic peace theory (1795) to the sanctions field, some explored sender regime type as a determinant of sanctions imposition (Hart, 2000). One of the key insights rendered by this strand is that while democracies impose sanctions more often than others due to the influence of domestic interest groups, they primarily target non-democracies (Cox & Drury, 2006; Lektzian & Souva, 2003). Thus, most sanctions scholars focus on the regime type of the target country as a predictor of sanctions effectiveness. Extant knowledge is that sanctions are most effective when applied against democracies rather than non-democracies, given that democratic leaders are more accommodating as they depend on popular support for re-election. In contrast, autocrats rely on the support of a small selectorate that insulates them from popular approval (Allen,

2008). However, this largely consensual argument yields insufficient guidance. Since institutional incentives predict that democratic states tend to enact sanctions on non-democratic regimes (Lektzian & Souva, 2003), the insight that this type of target is unlikely to comply with sender demands does not help us understand why some autocratic senders yield to sanctions pressure while others hold back.

The point of departure is the early insight that autocratic rulers under sanctions are more likely to be destabilised than those who are not (Marinov, 2007).[1] Advances into the research of authoritarianism produced different classifications of non-democratic regimes, which are recognised as a more diverse family than originally thought. In her seminal article, Barbara Geddes famously determined that autocratic types differ among themselves as much as they differ from democracies (1999). Their classification according to various authoritarian traits enabled a series of analyses that explored the relationship between different autocratic types and sanctions effectiveness. Theoretically, scholarship contends that being more institutionalised and less reliant on repression to maintain power increases a regime's resilience to sanctions pressure (Geddes, 1999). A strand of scholarship centres on the effects of the loss of revenue emanating from sanctions. It assumes that, albeit less vulnerable to popular discontent, autocrats are sensitive to the loss of funds, given that their permanence in office relies on the distribution of rents among loyal elites as well as repression (Escribà-Folch, 2012), widely recognised as cost-intensive sources of regime stability (Gerschewski, 2013; Schneider & Maerz, 2017). As sanctions reduce the availability of funds to the government, they diminish the ability of autocracies to fund both activities (Bueno de Mesquita et al., 2003; Ginzburg, 2021; Lowenberg et al., 2004). Hence, different outcomes of the coercive exercise can be expected depending on the type of autocratic regime at its receiving end. Personalist regimes and monarchies can be easily destabilised because they are more sensitive to the loss of external revenue to fund patronage. By contrast, single-party and military regimes are comparatively resistant because they can increase tax revenue to step up co-optation and repression (Escribà-Folch & Wright, 2010; Peksen, 2017).

Less attention has been devoted to another dimension of non-democracies: the degree of political openness of the regime. This is an intriguing aspect in two respects. Firstly, political openness varies vastly within the family of non-democracies, ranging from regimes approximating democracy-ripe levels to close autocracies where civil liberties are not guaranteed, and party competition is absent. Such variation is reflected in various international indexes (Vaccaro, 2021; Wahman et al., 2013). Secondly, recent research has highlighted the singular nature of hybrid regimes as a type combining autocratic with democratic features. The novelty of this approach is that the hybrid category, originally conceptualised as a stage in which countries found themselves provisionally while transitioning between autocracy and democracy - or vice versa -, is now considered a durable condition (Carothers, 2002). The phenomenon of hybridisation is associated with Huntington's third wave of democratisation (1999), which unleashed numerous transitions from autocracy to democracy which were never fully completed neither relapsed to authoritarianism, leaving political regimes "stuck in the murky middle ground between democracy and autocracy where multiparty political competition coexists with severe deficits in democratic government" (Giebler et al., 2018). As non-democratic, non-authoritarian regimes occupying a space where competitive multiparty elections occur despite an uneven political playing field, they have come to be conceptualised as a distinct type (Diamond, 2002; Gilbert & Mohseni, 2011). Considering hybrid regimes as a separate category in and of itself raises the question as to whether they react to sanctions differently from those neatly fitting the classical dichotomy of democracy versus autocracy.

3. Foreign aid suspensions as sanctions tools

While research into political regimes has deepened its exploration of hybrid regimes, sanctions scholarship has experienced a renewed interest in the effectiveness of suspensions of foreign aid. Building on the pioneering works from the early days of the post-cold war (Stokke, 1995; Crawford, 2001; Hazelzet, 2001), development studies produced a body of work that considers both the determinants of aid suspension (Crawford & Kacarska, 2019; Del Biondo, 2015; Nielsen, 2013) and, to a much lesser extent, their impact in compelling reform in the recipient countries (Zimelis, 2011). Although the nature of the questions investigated largely overlaps with those explored in economic sanctions research, both bodies of literature displayed little interconnection (Koch, 2015). In recent years, scholars increasingly analyse aid suspensions through the lenses of the International Relations discipline (Cheeseman et al., 2024).

Recent contributions take an interest in foreign aid suspension as a sanctions type, attempting to theorise how their characteristics affect their operation and effectiveness compared to standard economic bans (Early & Jadoon, 2019; Jeong, 2019). This promising strand identified several distinctive traits likely to affect the effectiveness of aid suspensions and withdrawals in attaining their political goals. Due to the revenue-generating character of trade, its restriction via sanctions imposition is costly for both senders and targets (Early & Jadoon, 2019). Contrary to the imposition of economic sanctions, the interruption of aid does not entail financial loss to the sender; rather, it reduces its expenses. Moreover, due to its government-to-government nature, it spares the private sector altogether, which makes it difficult for public opposition to

[1] The effect is slight, and must be nuanced as leader exit was not always due to mass protest, loss or confidence within the party, or threat of a coup (Licht, 2017).

sanctions to form in either the sender or target society (Mertens, 2024). Evasion of economic sanctions is likely as third actors seize the lucrative opportunities it entails, thereby undermining the effectiveness of the measures. By contrast, aid suspensions can only be offset by direct aid provided by alternative donors, which are less easily available than sanctions busters (Early, 2015; Portela & Mora-Sanguinetti, 2023). Taken together, these circumstances suggest that aid suspensions and the threat thereof (Mertens, 2024; Powell et al., 2016) are both more credible and more likely to alter the calculations of target leaderships. Although both types of sanctions are sometimes examined jointly (Del Biondo, 2015; Hazelzet, 2001), the undifferentiated treatment of aid suspensions as a sanctions subtype in mainstream scholarship and common databases (Jeong, 2019; Portela & Charron, 2023) may have obscured a possibly above-average performance relative to other measures.

These insights are significant because, firstly, they suggest that the effectiveness of aid suspensions may be superior to those of the economic sanctions that typically attract public attention, especially since they involve great powers (Drezner, 2024). Secondly, they connect the analysis of aid sanctions in the field of development studies with sanctions scholarship, an interaction that has traditionally remained limited (Koch, 2015). Most centrally, their combination with the exploration of hybrid regimes discussed above promises to advance the study of sanctions effectiveness. Since most international sanctions typically target countries ruled by hybrid regimes (Schedler, 2006) that concurrently receive development aid (Mertens, 2024), our results are bound to yield fruitful insights for both fields.

4. Hybrid regimes as targets

The term 'hybrid regime' refers to a state that contains both democratic and authoritarian forms of rule (Karl, 1995). A fundamental controversy surrounding hybrid regimes refers to the very definition of the concept. While initial definitional attempts highlighted their quality as diminished forms of democracy, the emphasis shifted later to their autocratic characteristics, yielding labels such as 'electoral' (Schedler, 2006) or 'competitive' authoritarianism (Levitsky & Way, 2002). Although the coverage of the multiple terms coined to classify hybrid regimes and their subtypes diverge (Gilbert & Mohseni, 2011), the institutional attributes of hybrid regimes can be meaningfully reduced to a small selection. At its core, it consists of (i) institutionalised periodic elections and (ii) an elected multi-party legislature with representation of the opposition, offset by (iii) recurrent violations of civil rights (Cassani, 2014) and (iv) scarce limits to the arbitrary power of the chief executive or lack of institutional checks and balances (Wigell, 2008). The identification of a core contents, however reductionist, confirms hybrid regimes' nature as a fully-fledged regime type rather than a mere residual category.

Hybrid regimes originally attracted the attention of democratisation scholars, whose main concern was whether these regimes were transitioning towards democracies, in line with the third wave of democratisation defined by Huntington (1999) in the post-cold war period, or otherwise (Morlino, 2009). Debates around hybrid regimes typically centre on whether they are particularly predisposed to breakdown and likely to democratise (Cassani, 2014), in other words, their durability and the direction of their replacement. The initial belief that hybrid regimes are the most fragile form of non-democracy (Levitsky & Way, 2002; Hadenius & Teorell, 2007) does not appear to hold as they are negatively associated with regime breakdown (Cassani, 2014). Moreover, hybrid regimes are at lesser risk of a breakdown than military regimes and one-party regimes (Brownlee, 2009), the latter being among the most resilient autocratic types. Dictators achieve consolidation via the institutionalisation of hybrid regimes: by adopting democratic procedures, they counterbalance the threats posed by political opponents (Ezrow & Frantz, 2011; Gandhi & Przeworski, 2007). On the other hand, in the event of collapse, hybrid regimes are more likely to experience democratisation than closed autocracies (Brownlee, 2009). This is, in turn, consistent with the argument that the continued practice of democratic procedures – however distorted - triggers a learning path that increases the probability of democratic replacement (Cassani, 2014). Thus, although hybrid regimes are not inherently fragile, the presence of democratic – or pseudo-democratic - elements in their set up results in a proclivity towards a democratic transition should destabilisation occur. Sensitivity to sanctions pressure is accentuated by characteristics of hybrid leaderships, as they are less insulated from the adverse economic impact of sanctions than autocracies. Moreover, since political power is more diffuse and its control over the economy is incomplete, hybrid leaderships face more challenges in extracting rents for distribution among an often-larger selectorate (Zarpli, 2023).

5. Hypotheses

Our task now is to ascertain how hybrid regimes behave when they come under sanctions. Political leaders succumb to external pressure only when they or the elite groups upon which they depend suffer severe disutility (Dashti-Gibson et al., 1997). This holds particularly true for dictatorships: Since survival relies on both repression and the distribution of rents among loyal elites, sanctions can reduce the availability of funds to the government, thus diminishing the ability of target regimes to sustain both activities (Bueno de Mesquita et al., 2003; Lowenberg et al., 2004). By analogy, we assume that hybrid regimes operate through identical means. A reduction in the availability of funds will hamper the nurturing of patronage networks as well as repression. Although hybrid regimes are not inherently fragile, contrary to previous beliefs, we expect this type of regime to be more easily destabilised by sanctions pressure because of the presence of certain democratic elements

that act as channels to promote political change. In tune with extant knowledge, a presumption of inherent fragility is excluded in the absence of foreign economic pressure. Fragility only comes to the fore once the leadership comes under sanctions.

Hypothesis 1.: Because of their partially democratic traits, hybrid regimes are more vulnerable to sanctions pressure than closed autocracies.

We now bring development aid suspensions into the equation, a focus of this study due to their scarce presence in sanctions scholarship (Cheeseman et al., 2024). We thus interrogate if aid suspensions affect hybrid types differently from economic sanctions. Identified mechanisms for the operation of sanctions incline us to answer in the negative: Autocracies ensure their survival by devoting their wealth to nurture patronage networks and fund repression, irrespective of whether funds originate from trade exchange or foreign aid. Exploring whether foreign aid supports autocrats, development scholars confirm that, in the long run, aid promotes the survival of authoritarian leaders via the diversion of funds to strengthen patronage networks (Kono & Montinola, 2009; Licht, 2010). Through foreign aid, autocrats can increase their survival rate by augmenting resources for political repression by enlarging and better equipping the policy and military, cooping the opposition, lowering incentives to tax the population or simply taking credit for the expansion of the infrastructure and public services (Nieto-Matiz & Schenoni, 2018). Funds susceptible of diversion include aid flows, especially in the form of budget support (Nielsen, 2013); hence, when donors redirect aid from recipient governments to civil society actors, leaders face difficulties to retain power (Allen et al., 2023). The life-prolonging effect of foreign aid on autocracies is mediated by the leverage exerted by democratic donors that have the capability to impose costs on the authoritarian coalition in case of defection (Nieto-Matiz & Schenoni, 2018). From this vantage point, we expect aid sanctions to behave similarly to other sanctions. This gives rise to a second hypothesis:

Hypothesis 2.: Hybrid types are as vulnerable to aid suspensions only as to all sanctions.

Next, we consider autocratic types as a main competitor to the category of hybrid regimes. The category of hybrid regimes is defined by its degree of political openness, and typically measured on a single continuum spanning from liberal democracy to closed authoritarianism (Gilbert & Mohseni, 2011). Because autocratic types were originally developed to classify regimes lacking any significant degree of political competition or civil liberties, they have limited applicability to hybrid regimes. Nevertheless, as dictatorships increasingly embrace the adoption of nominally democratic institution (Gandhi & Przeworski, 2007), the universe of non-democratic systems is replete with regimes characterised by the presence of elections, multiple parties and legislatures (Cassani, 2018). Between both competing classifications, we anticipate that the level of openness characterising a hybrid regime target predicts its vulnerability to sanctions pressure – be it aid suspensions or economic restrictions – better than its autocratic type.

Hypothesis 3.: The level of political openness in a hybrid regime is a better predictor of sanctions effectiveness than autocratic regime type.

Lastly, we interrogate the extent to which the level of development shields hybrid regimes from the impact of sanctions and aid suspensions. At first sight, it seems counterintuitive to consider the level of affluence of aid recipients, a group of countries that is, by definition, economically underdeveloped. However, the level of development among aid recipients differs vastly, ranging from Least Developed Countries (LDCs) to upper middle-income countries. This includes three out of the four income level categories defined by the World Bank, which lists as many as 170 countries and territories as net recipients of official development aid over the past three decades.2 Mayor donors like the US or the EU spread their aid widely, reaching some of the wealthiest countries of the developing world among their recipients. Indeed, the group of upper middle-income countries receiving official development aid is larger than that of lower income recipients.3 This results in significant disparities in the relative level of affluence of suspended recipients, as well as a large overlap between states that receive aid and targets of economic sanctions (Mertens, 2024).

That prosperity cushions the effects of sanctions is a classical insight in sanctions research (Dashti-Gibson et al., 1997). For the purposes of our study, the issue of interest is whether the prosperity of the target affects the effectiveness of economic sanctions and aid suspensions differently when applied to hybrid regimes. The theory predicts that both international trade and foreign aid generate revenue that autocracies can use to distribute among the selectorate and promote their survival. However, it has been posited that trade restrictions are less likely to disproportionately hurt elites supporting targets (Jeong,

[2] Income is measured using gross national income (GNI) per capita in US$. Categories include lower income, lower-middle income, upper-middle income and high income. See https://blogs.worldbank.org/en/opendata/world-bank-country-classifications-by-income-level-for-2024-2025 (accessed 8 November 2024).

[3] See OECD Development Assistance Committee list of official development aid recipients 2024-2025 –including states and non-sovereign territories - at https://webfs.oecd.org/oda/DAClists/DAC%20List%20of%20Aid%20Recipients%20-%202024-25%20flows.pdf (accessed 8 November 2024).

2019). Moreover, extant research contends that aid suspensions are more difficult to circumvent than economic sanctions and withdrawing donors are harder to replace with alternative donors as these can only be recruited among highly ideologically motivated partners (Early, 2015; Portela & Mora-Sanguinetti, 2023). Because foreign aid is more difficult to substitute and circumvent, targets find the suspension of aid more difficult to weather than economic sanctions, which facilitates their compliance with sender goals. Although extant studies did not consider the specificities of hybrid regimes, we expect that affluence decreases the vulnerably of hybrid targets to economic sanctions more than to suspensions of foreign aid.

Hypothesis 4.: The prosperity of a hybrid target reduces the effectiveness of sanctions to a lesser extent in the case of aid suspensions than of economic sanctions.

To ascertain these questions, we conduct several tests on the vulnerability to aid sanctions and determine whether the result is altered when all sanctions (i.e., economic restrictions and aid suspensions) are considered. Lastly, we apply several controls to test the robustness of our results. Following the convention in the field, we combine standard economic with political variables (Bapat et al., 2013; Hufbauer et al., 2007).

6. Data and methodology

We built a purpose-made, original dataset comprising 309 episodes spanning from 1990 to 2018, including episodes initiated before 1990 that remained active after that year. Our dataset encompasses sanctions imposed by the main senders and donors, including the US, the UN, Canada, the EU and other international organisations. The dataset features entries confirmed by a minimum of two sources to ensure the veracity of all episodes as aid interruptions conditioned on political demands rather than freezes caused by other reasons. Data on aid sanctions are sourced from Crawford (2001), Del Biondo (2015), Hazelzet (2001) and Molenaers, Gagiano and Smets (2016), and updated until 2018 with official documents and news reports. Entries on economic sanctions from Hufbauer et al. (2007) combine with data from UN Targeted Sanctions Consortium (Graduate Institute, 2018) for UN sanctions, and Borzyskowski and Portela (2023) for sanctions by regional arrangements, such as the African Union (AU) and the Economic Community of West African States (ECOWAS), in recognition of their growing importance (Powell et al., 2016). Our data cover aid suspensions and EU-imposed measures as comprehensively as possible.

The use of a tailored dataset helps obviate the difficulties associated with ready-made compilations. Aid sanctions are scarcely represented in standard sanctions databases (Jeong, 2019). The most comprehensive and updated database, the Global Sanctions Database (Syropoulos et al., 2024) excludes aid sanctions, which renders it inadequate for our inquiry. Data by Morgan, Bapat and Kobayashi (2014) treat the termination of foreign aid as a sanctions category; however, data finish in 2005. In our dataset, aid sanctions feature as a stand-alone sanction category rather than as part of larger categories. Uniquely, our data include sanctions by regional organisations, a sender type of growing importance, not least due to the abundant activity of the EU in suspending aid (Del Biondo, 2015; Koch, 2015; Portela, 2007). Only imposed - rather than merely threatened - sanctions (Morgan et al., 2014) are considered. The unit of analysis is the episode, in line with recent scholarly convention (Biersteker et al., 2016; Borzyskowski & Portela, 2023). A sanctions episode is defined as the set of measures imposed by a single sender against a target for the same violation. A new episode is created if the goals of the sanctions regime change. Two sanctions regimes imposed against the same target for different reasons feature as separate episodes. An episode closes when sanctions are terminated, or when the goals change substantially. Where two senders impose sanctions simultaneously against the same target, our dataset features two episodes rather than one, which allows us to separate measures by various senders that are dissimilar in nature and scope. Thanks to this definition of the sanctions episode, the outcomes of individual sanctions regimes imposed on a target by different senders are treated separately even if they occur simultaneously. Lastly, because our dataset encompasses economic restrictions, it allows for the comparative analysis of aid suspensions with the entire sanctions universe. The category 'all sanctions' subsumes every sanctions type, including the suspension of development aid. Table 1 displays the number of episodes by sender or donor, while Table 2 records the episodes by target, whereby certain countries experienced multiple episodes.

Table 1
Frequency of episodes by sender/ donor (1990-2018)

Sender	Frequency of sanctions episodes issued
US	91
EU	89
UN	35
AU	17
ECOWAS	10
Others (less than 10 episodes each)	68

Source: own elaboration.

Table 2
Number of episodes by target country

Target country (or institution)	Frequency (number of episodes)	Percent
Fiji	12	3.88
Libya	10	3.24
FRY	9	2.91
Haiti	9	2.91
Liberia	9	2.91
Côte d'Ivoire	9	2.91
Guinea	8	2.59
Guinea-Bissau	8	2.59
Syria	8	2.59
CAR	7	2.27
Myanmar	7	2.27
Niger	7	2.27
Russia	7	2.27
Togo	7	2.27
Burundi	6	1.94
Iran	6	1.94
Madagascar	6	1.94
Mauritania	6	1.94
Mali	5	1.62
Nicaragua	5	1.62
Sudan	5	1.62
Belarus	4	1.29
DRC	4	1.29
Eritrea	4	1.29
Gambia	4	1.29
Iraq	4	1.29
North Korea	4	1.29
Paraguay	4	1.29
Rwanda	4	1.29
Thailand	4	1.29
Zimbabwe	4	1.29
Afghanistan	3	0.97
Armenia	3	0.97
Azerbaijan	3	0.97
Cambodia	3	0.97
Comoros	3	0.97
Egypt	3	0.97
Ethiopia	3	0.97
Honduras	3	0.97
Indonesia	3	0.97
Nigeria	3	0.97
North Macedonia	3	0.97
Pakistan	3	0.97
Peru	3	0.97
Sierra Leone	3	0.97
Turkey	3	0.97
USSR	3	0.97

Target country (or institution) (Cont.)	Frequency (number of episodes)	Percent
Uzbekistan	3	0.97
Venezuela	3	0.97
Yemen	3	0.97
Argentina	2	0.65
Bosnia and Herzegovina	2	0.65
China	2	0.65
Croatia	2	0.65
Cuba	2	0.65
Grenada	2	0.65
Guatemala	2	0.65
Kenya	2	0.65
Malawi	2	0.65
Qatar	2	0.65
Somalia	2	0.65
South Africa	2	0.65
South Sudan	2	0.65
Sri Lanka	2	0.65
Zambia	2	0.65
Albania	1	0.32
Algeria	1	0.32
Angola	1	0.32
Burkina Fasso	1	0.32
Cameroon	1	0.32
Colombia	1	0.32
Ecuador	1	0.32
El Salvador	1	0.32
Equatorial Guinea	1	0.32
Estonia	1	0.32
France	1	0.32
India	1	0.32
Jordan	1	0.32
Latvia	1	0.32
Lebanon	1	0.32
Lithuania	1	0.32
Maldives	1	0.32
Nepal	1	0.32
Panama	1	0.32
Poland	1	0.32
Saudi Arabia	1	0.32
Slovenia	1	0.32
Suriname	1	0.32
Turkmenistan	1	0.32
UAE	1	0.32
Vietnam	1	0.32
Total	**309**	**100**

Source: own elaboration.

Coding

A variable measuring sanctions effectiveness is coded as 1 when the target conceded to at least part of the sender demands, while the value 0 stands for lack of progress. Outcomes adopted from Hufbauer et al. (2007) are coded as positive when they receive the cut-off value of nine or above as their success score, following the authors' own recommendation. When cases are not recorded by Hufbauer, Schott, Elliott and Oegg (2007), values allocated to this variable originate from alternative sources.

Both the definition of the dependent variable and its dichotomous format diverge from the convention in sanctions databases (Biersteker et al., 2018; Portela & Charron, 2023). Our choice in favour of 'progress' instead of the habitual 'success' aims to obviate the determination of success, which suffers from a great deal of indeterminacy as the very qualification of what success constitutes is an enduring debate in sanctions scholarship charged with complexities. Moreover, scholars question the objectivity of such assessment (Wilson & Yao, 2018). In the absence of a unified methodology for determining the success of sanctions, and in order to minimize the scope for subjectivity, we label our dependent variable as progress rather than success and define it dichotomously to capture whether it had some effect, however modest, in eliciting compliance by the target. Our concern is to ascertain whether sanctions promoted some degree of compliance by the target at all, not the extent thereof. Thus, we refrain from assessing the extent of sanctions contribution to target compliance, which would necessitate the establishment of potentially questionable thresholds between 'modest' and 'mayor' contributions to the outcome of the coercive exercise (Pape, 1997).

For the coding of political openness, we use Polity IV's composite Indicator of Democracy and Autocracy (2018) and follow the convention for their classification into democracies, hybrid regimes and autocracies. Polity IV is employed for classifying regimes as democratic, hybrid or autocracies. According to Polity IV's own definition, regimes taking the value +5 and above are full democracies, those between - 5 and + 5 are considered hybrid regimes, and those taking the value -5 or inferior are considered closed autocracies. We concurrently use data from Regimes of the World (RoW) which presents the abovementioned classification as ready-made categories (Giebler et al., 2018) as an alternative measurement. RoW is issued from the prestigious Varieties of Democracy (V-Dem) data (Lührmann et al., 2018), widely considered to be the most reliable indicator of democracy (Boese, 2019; Munck & Verkuilen, 2002). For autocratic types, we use the data proposed by Geddes, Frantz and Wright applying the Geddesian typology (2014). Following her categories, we code autocratic regimes as single party, personalistic, military or monarchies. Since some regimes fall into two categories simultaneously, amalgams receive more than one code in our dataset. Post-2010 cases retain their 2010 code unless a change of regime occurred, in which case they do not receive any code. To identify significant transitions advising against the use of the 2010 code, we look out for increases in the country's Polity IV score of at least six points, which implies a change in the character of the regime (Szent-Ivanyi, 2015) and renders the 2010 coding obsolete; yet this procedure applies to very few events.[4] The combination of categorical with continuous typologies helps correcting their respective deficits: The former obscure dynamics of political liberalisation; the latter, changes occurring from one authoritarian regime to the next (Frantz, 2018).

Table 3 classifies our episodes according to Polity IV indicators of Democracy and Autocracy (2018), where non-democratic targets prevail (68.94 per cent). We excluded full democracies to focus on hybrid and autocratic types. 41 target countries which present an 'interregnum' or anarchy situation take neither positive nor negative values.[5]

Table 3
Frequencies of hybrid regimes and autocracies among target countries according to Polity IV

Regime type	Nr of episodes	Percent
Autocracies	98	43.17
Hybrid regimes	129	56.83
Total	227	100

Source: own elaboration based on Polity IV.
Note: Values are from POLITY2 Revised Combined Polity Score. Indicators reflect level of democracy (+) or autocracy (-) of the target countries, ranging (+10) to (-10). Interregnum cases do not receive any value.

[4] The same Polity IV indicator captures cases of anarchy, which are coded as such in a separate variable.
[5] 'Interregnum', defined as the 'complete collapse of central political authority' in the Polity Manual, is not discussed as it does not qualify as a regime type.

Table 4 displays similar frequencies, this time using RoW data.

Table 4
Frequencies of hybrid regimes and autocracies among target countries according to RoW

Regime type	Nr of episodes	Percent
Autocracies	106	34.75
Hybrid regimes	199	65.25
Total	305	100.00

Source: own elaboration based on RoW.

Lastly, table 5 identifies the episodes of our database with the autocratic regimes typified by Geddes et al. (2014), which lack data for 39 of our episodes.

Table 5
Target regime type as classified by Geddes et al. (2014)

Regime type following the classification of Geddes *et al*. (2014)	**Frequency (number of episodes)**	**Percent**
Personalistic regime	110	35.60
Democracy	55	17.80
Party regime	27	8.74
Military	22	7.12
PP (party + personalistic)	19	6.15
Military + Personal	11	3.56
PPM (party + personalistic + military)	10	3.24
Monarchy	6	1.94
Party + Military	4	1.29
Party + Personal	4	1.29
Oligarchy	2	0.65
Not classified	39	12.62
Total	**309**	**100**

Source: own elaboration and Geddes et al. (2014). Missing episodes appear as 'not classified'.

To analyse the interrelation between sanctions effectiveness and the macroeconomic stance of the target, we include standard economic information on the target country, as shown on Table 6.6

[6] Sadly, data on oil production and oil exports is unavailable for many observations.

Table 6
Overview of economic indicators

Variable	Definition	Units	Source	Comments
Aid (constant prices)	Official Development Assistance Disbursements: flows to developing countries and multilateral institutions provided by official agencies, including state and local governments, or by their executive agencies, each transaction of which meets the following tests: i) it is administered with the promotion of the economic development and welfare of developing countries as its main objective; and ii) it is concessional in character and conveys a grant element of at least 25 per cent.	US Dollar, Millions, 2020, constant prices	Organisation for Economic Co-operation and Development's (OECD). Development Assistance Committee (DAC)	Variable divided by (1000) in the estimations.
GDP (PPP) (Constant prices)	Gross domestic product converted to international dollars using purchasing power parity rates.	Constant 2017 international dollars	World Bank. World Development Indicators	Variable divided by (100000000000) in the estimations
GDP pc (PPP) (Constant prices)	GDP per capita based on purchasing power parity (PPP)	Constant 2017 international dollars	World Bank. World Development Indicators	Variable divided by (100000000) in the estimations
Current account balance	Sum of net exports of goods and services, net primary income, and net secondary income.	Balance of payments, Current U.S. dollars.	World Bank. World Development Indicators	The balance of payments (BoP) is a double-entry accounting system that shows all flows of goods and services into and out of an economy. Variable divided by (1000000000) in the estimations

Source: own elaboration

7. Results

We conduct a series of tests including all sanctions on the one hand, and alternative estimates analysing only aid suspensions on the other, applying the abovementioned robustness checks. Table 7 explores the relationship between sanctions efficacy and hybrid regimes according to the classifications of Polity VI (2018) and RoW (2018), following linear OLS regressions.

The dependent variable 'progress' is a dummy, with a value of either 0 or 1. Given the dichotomous nature of this variable, all the estimates presented were performed using an alternative estimation method, Probit. Linear estimates (OLS) tables report the adjusted R2. All tables containing estimates with the Probit estimation method include cases correctly classified by the Probit models as well as the sensitivity of the Probit models. Results of Wald (chi2) and prob > Chi2 are included. The outcomes do not vary from those presented here. An example of these alternative results features in the appendix.[7]

[7] All estimates are available on request.

Table 7
Sanctions effectiveness on hybrid regimes according to Polity IV and RoW

	ALL sanctions	ALL sanctions
	Linear regression (OLS)	Linear regression (OLS)
	Progress	Progress
Hybrid regimes according to Polity IV	0.286***	
	(0.0642)	
Hybrid regimes according to RoW		0.282***
		(0.0573)
Constant	0.327***	0.321***
	(0.0476)	(0.0455)
Observations	227	305
R-squared	0.080	0.072
Adjusted R-squared	0.076	0.069

Note: Robust standard errors are in parentheses (*** p<0.01, ** p<0.05, * p<0.1).

Our initial hypothesis concerns whether hybrid regime types are significantly more vulnerable to sanctions pressure than full autocracies. This intuition is fully confirmed. Hybrid regimes display statistically significant (at the 1% level) vulnerability to sanctions pressure. This suggest that, despite their overall stability, these regimes are worse equipped to weather the economic hardship that materialises under sanctions than their fully autocratic counterparts.

This leads to our next hypothesis, which interrogates whether hybrid regimes are affected similarly by aid suspensions and other sanctions. In order to facilitate comparison, the table follows an identical structure to the previous one. The results for aid suspensions are similar to those obtained for all sanctions: hybrid regimes are considerably more likely to be destabilised by aid suspensions than autocracies. Our hypothesis is thereby confirmed: the type of sanction does not influence effectiveness. Aid suspensions are comparable to standard economic restrictions in terms of their destabilising impact on hybrid regimes.

Table 8
Aid suspensions effectiveness on hybrid regimes according to Polity IV and RoW

	Linear regression (OLS)	Linear regression (OLS)
	Progress	Progress
Hybrid regimes according to Polity IV	0.343***	
	(0.105)	
Hybrid regimes according to RoW		0.289***
		(0.107)
Constant	0.382***	0.414***
	(0.0843)	(0.0924)
Observations	85	103
R-squared	0.117	0.072
Adjusted R-squared	0.106	0.0626

Note: Robust standard errors are in parentheses (*** p<0.01, ** p<0.05, * p<0.1).

Having obtained strong evidence in response to our initial hypotheses, we now turn to examine how the degree of political openness influences effectiveness in relation to standard autocratic types. We first look at whether higher levels of openness correspondingly increase the likelihood of sanctions effectiveness. Indeed, a test with Polity IV values along the democracy versus autocracy continuum, displayed in table 9, indicates that vulnerability to sanctions pressure increases with the level of political openness, although this effect holds for all sanctions but disappears with aid suspensions. An additional test using an alternative indicator, Vanhanen's Index of Democracy (2000), yields similar results albeit with weaker statistical significance (see appendix). Yet, the tenuous statistical significance of these results can be attributable to specificities of this index, in particular the limited sensitivity and variability of the data, which diminishes its ability to capture hybridity (Munck & Verkuilen, 2002; Vaccaro, 2021) rather than to shortcomings in findings obtained using Polity IV data.

Table 9
Sanctions effectiveness along the continuum of political openness according to Polity IV

	Linear regression (OLS)	**Linear regression (OLS)**
	ALL sanctions	**AID sanctions**
	Progress	Progress
Polity IV	0.0147**	0.0183
	(0.00605)	(0.0114)
Constant	0.602***	0.577***
	(0.0379)	(0.0839)
Observations	227	85
R-squared	**0.067**	**0.093**
Adjusted R-squared	**0.059**	**0.071**

Note: Robust standard errors in parentheses (*** p<0.01, ** p<0.05, * p<0.1).

For our next hypothesis, we examine whether the autocratic types identified by Geddes retain the power as predictors of sanctions effectiveness that they displayed when applied to autocracies (Escribà-Folch & Wright, 2010; Peksen, 2017). Table 10 confirms the exceptional resilience to sanctions of single-party regimes, the most conspicuous trait observed in previous research. This holds true for hybrid regimes as identified by Polity IV and RoW.

Table 10
Interaction between sanctions effectiveness and hybrid regimes

	hybrids Polity IV	hybrids Polity IV	hybrids Polity IV	hybrids Polity IV	hybrids RoW	hybrids RoW	hybrids RoW
	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions
	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)
	Progress	Progress	Progress	Progress	Progress	Progress	Progress
Party regime	-0.224*				-0.199**		
	(0.123)				(0.0915)		
Personalistic regime		-0.0473				0.0441	
		(0.0992)				(0.0759)	
Military regime			-0.169				-0.0813
			(0.136)				(0.108)
Monarchy				-0.0825			
				(0.360)			
Constant	0.624***	0.610***	0.607***	0.583***	0.631***	0.563***	0.601***
	(0.0531)	(0.0769)	(0.0523)	(0.0491)	(0.0409)	(0.0592)	(0.0398)
Observations	105	105	105	105	178	178	178
R-squared	0.032	0.002	0.015	0.001	0.027	0.002	0.003
Adjusted R-squared	0.022	-0.008	0.006	-0.009	0.021	-0.004	-0.002

Note: Robust standard errors in parentheses (*** p<0.01, ** p<0.05, * p<0.1).

No further evidence emerges from the interaction. The monarchical type, equally resistant to sanctions pressure, is absent from the interaction as this category has not embraced hybridisation in empirical reality. Overall, it appears that hybridisation tends to dilute the specific traits of autocratic types, with the exception of single-party regimes, which retain their resilience.

Next, we examine how the relative level of wealth of hybrid targets affects the prospects of sanctions effectiveness, displayed in table 11. Even taking into account targets' wealth, the findings presented so far continue to hold. While per capita wealth reduces sanctions effectiveness, it does not have a significant impact if we analyse aid sanctions exclusively. This result dovetails with our argument about the unavailability of evasion and the difficulty of acquiring substitute donors.

Table 11

Effects of wealth on effectiveness of sanctions

	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)
	ALL sanctions	ALL sanctions	AID sanctions	AID sanctions
	Progress	Progress	Progress	Progress
Hybrids in Polity IV	0.337***		0.323***	
	(0.0695)		(0.117)	
Hybrids in RoW		0.267***		0.286**
		(0.0620)		(0.115)
GDPppp (constant prices)	-0.0147***	-0.0156***	0.00648	-0.00236
	(0.00428)	(0.00396)	(0.00419)	(0.00928)
Constant	0.347***	0.391***	0.400***	0.443***
	(0.0565)	(0.0522)	(0.0976)	(0.101)
Observations	191	266	76	94
R-squared	0.142	0.098	0.108	0.070
Adjusted R-squared	0.133	0.091	0.084	0.050

Note: Robust standard errors in parentheses (*** p<0.01, ** p<0.05, * p<0.1).

Lastly, we conduct a final test with multiple economic controls, featured in table 12. We consider exports, aid and current account balance following the definitions and methodology summarised in table 6, as well as income per capita. Other than generally validating the insights gained from previous tests, it most centrally confirms that hybrid regimes display a higher vulnerability to sanctions than autocracies but that this vulnerability decreases with higher levels of prosperity, similar to autocracies.

Table 12
Sanctions effectiveness, hybrid regimes and the macro environment

	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)
	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions	ALL sanctions
	Progress	Progress	Progress	Progress	Progress	Progress	Progress	Progress	Progress	Progress
GDPppp (constant prices)	-0.0251***	-0.0216**	-0.0214**	-0.0287***	-0.0217***					
	(0.00782)	(0.00872)	(0.0107)	(0.00961)	(0.00736)					
GDPppp per capita (constant prices)						-1,613***	-1,282**	-1,142**	-1,728***	-1,069**
						(508.2)	(506.9)	(524.3)	(519.0)	(513.8)
Aid (constant prices)	-0.0907**	-0.0871**	-0.110**	-0.0895**	-0.0858**	-0.153**	-0.140**	-0.149**	-0.151**	-0.136**
	(0.0408)	(0.0363)	(0.0357)	(0.0419)	(0.0408)	(0.0480)	(0.0467)	(0.0416)	(0.0478)	(0.0510)
Current account balance	-0.00396**	-0.00219	-0.00123	-0.00310	-0.00259	0.00692	0.00626	0.00626	0.00828	0.00406
	(0.00200)	(0.00184)	(0.00204)	(0.00234)	(0.00185)	(0.00528)	(0.00481)	(0.00519)	(0.00552)	(0.00501)
Vanhanen_continuum	-0.00177					-0.00178				
	(0.00454)					(0.00444)				
Electoral democracy V-Dem		0.0103***					0.0100***			
		(0.00254)					(0.00257)			
Polity IV			0.306***					0.310***		
			(0.0753)					(0.0745)		
Vanhanen dichotomy				-0.0731					-0.0736	
				(0.0804)					(0.0789)	
RoW					0.240***					0.222***
					(0.0665)					(0.0693)
Constant	0.639***	0.324***	0.414***	0.654***	0.460***	0.695***	0.376***	0.440***	0.709***	0.505***
	(0.0434)	(0.0812)	(0.0663)	(0.0411)	(0.0614)	(0.0489)	(0.0913)	(0.0717)	(0.0464)	(0.0718)
Observations	251	251	180	240	250	251	251	180	240	250
R-squared	0.058	0.138	0.156	0.061	0.108	0.069	0.142	0.157	0.074	0.105
Adjusted R-squared	0.043	0.124	0.136	0.045	0.094	0.054	0.128	0.138	0.058	0.090

Note: Robust standard errors in parentheses (*** p<0.01, ** p<0.05, * p<0.1).

8. Discussion

Our analysis explored the vulnerability to aid suspensions and sanctions by hybrid regimes as compared to fully autocratic types, testing them on an original dataset featuring aid sanctions obscured elsewhere. Our findings help refine our theoretical understanding of hybrid regimes and their vulnerability to economic pressure. Although they are not intrinsically fragile, they are easily destabilised by sanctions - economic restrictions or aid suspensions indistinctively -, certainly by comparison with closed autocracies. Our tests confirm earlier assumptions that hybrid regimes are more vulnerable to sanctions pressure than autocracies (Zarpli, 2023), and that sanctions effectiveness increase with the level of political openness in the target (van Bergeijk, 2009). Thus, the further a hybrid regime moves up the democracy scale, the more vulnerable it becomes to sanctions pressure, and vice versa. Yet, our most innovative finding is that this relationship ceases to be linear when the boundary between hybrid types and autocracy is crossed. The often fuzzy and sometimes disputed boundary between hybrid regimes and autocracies introduces a break: politically closed regimes lose the propensity to destabilisation by sanctions evidenced by hybrid regimes. Altogether, no differences are discernible anymore after the minimal threshold of political openness that sets close autocracies from hybrid regimes has been crossed. This finding unequivocally associates some degree of political openness with vulnerability to sanctions pressure, evidencing an intriguing paradox: while hybrid leaderships embrace limited democratic institutions to stabilise their rule (Ezrow & Frantz, 2011), the democratic traits acquired render them more vulnerable to sanctions in the event that they come under foreign economic pressure. The very moves meant to prolong regime longevity – such as establishing legislatures or incorporating some level of power sharing - bear the seeds of their vulnerability to foreign economic pressure. Interestingly, the conditioning of foreign aid on steps towards political liberalisation by authoritarian leaderships accounts for much of this trend (Frantz, 2018).

In addition, our exploration has helped us paint a fuller picture of hybrid regimes under sanctions than was available so far. Their marked sensitivity to sanctions pressure subsides when hybrid targets adopt the institutional form of single-party regimes, widely recognised to be among the most resilient autocratic types. In turn, and importantly for the purposes of this article, hybrid targets are as vulnerable to aid suspensions than to economic sanctions. While a high level of wealth and resort to evasion practices can alleviate the impact of economic sanctions, aid suspensions cannot be easily offset save for the acquisition of scarcely available new donors.

Policy implications are consequential. Senders should pay attention to the level of openness of potential targets and expect lower levels of effectiveness when closed autocracies are targeted, particularly those ruled by single parties. However, the most important policy advice is to integrate carefully aid suspensions in their coercive strategies, threatening and applying them in combination with, or in anticipation of, economic sanctions. Their encouraging record promises to yield positive results before the blunter and more drastic measure of economic sanctions is activated. For (potential) targets in the developing world, the policy advice can hardly be to refrain from increasing political openness, given that autocratic leaderships are compelled to introduce such moves to preserve domestic stability and prolong their survival in the first place (Ezrow & Frantz, 2011; Gandhi & Przeworski, 2007). Foregoing such reforms could imperil their rule more than their implementation, even if they likely increase their vulnerability to prospective sanctions. However, in order to shield themselves from the prospect of foreign economic pressure, rulers of developing countries they are advised to limit their reliance on external aid and to endeavour instead to maximise the percentage of wealth emanating from trade flows. Prosperity decreases vulnerability to sanctions, and in the event of pressure, trade flows are considerably more difficult to destroy than foreign aid.

9. Conclusion

Until recently, the importance rightly ascribed to the political structure of a sanctions target relied on the dichotomy of democracy versus autocracy and assumed that sanctions against 'dictatorships and other autocratically-ruled targets' had a 'substantially lower probability' of succeeding (van Bergeijk, 2009, 135). While this assumption remains valid, efforts at unpacking the effects of sanctions on the universe of non-democratic targets have yielded more nuanced insights, not least the identification of certain autocratic types as particularly resilient (Escribà-Folch, 2012; Peksen, 2017; Portela & Mora-Sanguinetti, 2023). Our exploration adds several novelties. Firstly, it confirms hybrid regimes as a fully separate type of non-democracy that behaves distinctively differently from closed autocracies when it comes under sanctions pressure. Indeed, its level of vulnerability to sanctions is striking. Our findings also demonstrate the need to consider continuous typologies in the study of the vulnerability to sanctions of non-democracies, complementing the picture yielded by those focusing on categorical typologies à la Geddes. Continuous typologies may mask changes occurring within countries from one equally authoritarian regime to the next (Frantz, 2018), but categorical typologies cannot shed light on the political liberalization trends characterising what Giebler, Ruth and Tanneberg (2018) coin the 'era of hybridisation'. Thus, equal attention ought to be paid to both classifications. Secondly, and equally central to the purpose of this study, the suspension of aid is no less effective in extracting political concession from hybrid regimes than the imposition of economic sanctions. This long-overlooked circumstance invites further research on both the use of aid suspensions as tools of foreign policy and their operation when applied on different forms of hybrid regimes.

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Annex: Additional tables

A. Tables using Probit

Table 13
Sanctions and aid suspensions effectiveness on hybrid regimes according to POLITY IV and RoW using Probit (corresponds to tables 7 and 8)

	ALL sanctions	ALL sanctions	AID SANCTIONS	AID SANCTIONS
	Probit	Probit	Probit	Probit
	Progress	Progress	Progress	Progress
hybrid regimes according to POLITY IV	0.735***		0.899***	
	(0.173)		(0.290)	
hybrid regimes according to ROW		0.727***		0.750***
		(0.156)		(0.282)
Constant	-0.450***	-0.466***	-0.299	-0.218
	(0.132)	(0.127)	(0.220)	(0.236)
Observations	227	305	85	103

Note: Robust standard errors in parentheses (*** p<0.01, ** p<0.05, * p<0.1).

Table 14
Effects of wealth on effectiveness of sanctions according to POLITY IV and RoW using Probit (corresponds to table 11)

	Probit	Probit	Probit	Probit
	ALL sanctions	ALL sanctions	AID sanctions	AID sanctions
	Progress	Progress	Progress	Progress
hybrid regimes according to POLITY	0.882***		0.855***	
	(0.197)		(0.314)	
hybrid regimes according to ROW		0.690***		0.754**
		(0.168)		(0.301)
GDPppp (constant prices)	-0.0422***	-0.0452***	0.0294	-0.00716
	(0.0163)	(0.0161)	(0.0226)	(0.0257)
Constant	-0.397**	-0.278*	-0.266	-0.143
	(0.161)	(0.142)	(0.250)	(0.255)
Observations	191	266	76	94

Note: Robust standard errors in parentheses (*** p<0.01, ** p<0.05, * p<0.1).

Table 15
Sanctions effectiveness, hybrid regimes and the macro environment (corresponds to table 12)

	Probit	Probit	Probit	Probit
	ALL sanctions	LL sanction	LL sanction	LL sanction
	Progress	Progress	Progress	Progress
POLITY IV	0.818***		0.806***	
	(0.210)		(0.209)	
RoW		0.645***		0.586***
		(0.179)		(0.184)
GDPppp (constant prices)	-0.0680*	-0.0637**		
	(0.0395)	(0.0293)		
GDP_per capita (constant prices)			-3,962**	-3,701**
			-1,976	-1,69
aid (constant prices)	-0.426*	-0.309	-0.621**	-0.544**
	(0.259)	(0.214)	(0.314)	(0.230)
current account balance	-0.00392	-0.00869	0.0144	0.00630
	(0.00767)	(0.00769)	(0.0159)	(0.0151)
Constant	-0.188	-0.0869	-0.0481	0.109
	(0.183)	(0.162)	(0.219)	(0.201)
Observations	180	250	180	250

Note: Robust standard errors in parentheses (*** p<0.01, ** p<0.05, * p<0.1).

B. Table on Interaction -additional controls

Table 14
Interaction between sanctions effectiveness and hybrid regimes (corresponds to table 10)

	POLITY IV	POLITY IV	POLITY IV	POLITY IV	RoW	RoW	RoW
	ALL sanction	LL sanction	LL sanction	LL sanction	LL sanction	LL sanction	LL sanction
	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)	Linear regression (OLS)
	Progress	Progress	Progress	Progress	Progress	Progress	Progress
geddparty	-0.203				-0.331***		
	(0.137)				(0.119)		
geddper		0.0685				0.0815	
		(0.104)				(0.0811)	
geddmil			-0.239				-0.0617
			(0.161)				(0.124)
geddmon				-0.129			
				(0.356)			
GDPppp (constant prices)	-0.0292	-0.0286	-0.0108	-0.0318	-0.0237*	-0.0178	-0.0157
	(0.0252)	(0.0273)	(0.0293)	(0.0265)	(0.0125)	(0.0127)	(0.0131)
Aid (constant prices)	-0.105***	-0.117***	-0.127***	-0.114***	-0.00853	-0.0957	-0.123
	(0.0298)	(0.0334)	(0.0358)	(0.0324)	(0.126)	(0.125)	(0.120)
Current account balance	0.0120	0.0148	0.0126	0.0149	-0.00289	0.00319	0.00355
	(0.0131)	(0.0135)	(0.0142)	(0.0132)	(0.0112)	(0.0105)	(0.0110)
Constant	0.727***	0.652***	0.721***	0.696***	0.717***	0.637***	0.697***
	(0.0621)	(0.0866)	(0.0594)	(0.0595)	(0.0525)	(0.0770)	(0.0541)
Observations	90	90	90	90	148	148	148
R-squared	0.083	0.062	0.085	0.059	0.085	0.037	0.032

Note: Robust standard errors in parentheses (*** p<0.01, ** p<0.05, * p<0.1).