



Are authoritative international organizations challenged more? A recurrent event analysis of member state criticisms and withdrawals

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Abstract

Member states' challenges to international organizations (IOs) are at the heart of the supposed crisis of our multilateral order – from the “African bias” debate surrounding the International Criminal Court, to the United Kingdom’s “Brexit” from the European Union, to Trump’s attacks on the World Health Organization during the COVID-19 pandemic. IOs are regularly challenged by their member states in different ways, ranging from verbal criticisms to withdrawals. But why are some IOs challenged more than others? An important – but so far largely theoretical – academic debate relates to the authority of IOs as an explanatory factor for why some face more challenges: Authoritative IOs may invite more challenges (for example, due to domestic contestation) or fewer challenges (due, in part, to the investment of member states and their greater capacity to resolve conflicts internally). Our article assesses these explanations using the Andersen-Gill approach for analyzing recurrent events of member states’ public criticisms and withdrawals. We do not find strong and consistent evidence that more authoritative IOs are more regularly challenged by their own member states. There is some evidence that authoritative IOs experience *fewer* withdrawals, but we find stronger evidence for alternative factors such as preference heterogeneity between members, the existence of alternative IOs, and the democratic composition of an IO’s membership. Our study is significant for scholarly debates and real-world politics, as it implies that granting IOs more authority does not make them more prone to member state challenges.

Keywords International order · Multilateralism · Global governance · Authority · Legitimacy · Repeated events · Quantitative

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1 Introduction

International organizations (IOs) are regularly challenged by their own member states. Donald Trump withdrew the United States from the United Nations Educational, Scientific and Cultural Organization (UNESCO), cut funding from the World Health Organization (WHO), and blocked the appointment of judges to the Appellate Body of the World Trade Organization (WTO). China has demanded more representation in the International Monetary Fund (IMF) and World Bank, set up the Asian Infrastructure Investment Bank (AIIB), and challenged the United Nations (UN) human rights institutions. The United Kingdom (UK) has left the European Union (EU), Japan the International Whaling Commission, and Burundi the International Criminal Court (ICC). Such challenges by member states have become a regular feature in the lifecycle of IOs.

Member state challenges to IOs, and the crisis of liberal international order more generally, have attracted considerable academic attention (Ikenberry, 2018; Lake et al., 2021). Much of this literature takes states and the domestic politics within them as the main unit of analysis, since the causes of such challenges are presumed to be found at the state-level. Von Borzyskowski and Vabulas (2019) explain states' withdrawal from IOs in terms of geopolitics and democracy, qualified by Choi (2022) who finds that nationalism is an important driver of withdrawals. Relatedly, De Vries et al. (2021) analyze how political entrepreneurs within states politicize international cooperation, building on Hooghe and Marks (2009, p. 5) who note that public opinion and political parties constitute a "constraining dissensus" for IOs (cf. Dellmuth et al., 2022b). Similarly, Voeten (2020) argues that backlashes against international courts are often initiated by governments relying on the support of populist movements. While advancing the literature in important ways, such analyses tend to treat IOs as black boxes, despite significant variation between them.

Several empirical studies show that some IOs are regularly challenged by their members while others are not. Sommerer et al. (2022, p. 73) show, for instance, that IO legitimacy crises driven by state actors' discontent occurred in about half of their sample of IOs. They find a considerable amount of state criticism of the UN, EU, the North Atlantic Treaty Organization (NATO), the Organization of American States (OAS), as well as the Organization for Security and Co-operation in Europe (OSCE). At the same time, the WHO, International Labour Organization (ILO), and Association of Southeast Asian Nations (ASEAN) are less frequently criticized (see our Appendix 1b).¹ There is similar variation between IOs with regard to state withdrawals – another type of challenge by member states. The UK's withdrawal from the EU – a first for this IO – has received much public and scholarly attention (Koller et al., 2019). The World Tourism Organization and the International Whaling Commission, on the other hand, are the two IOs that have experienced most exits by states since 1945 (von Borzyskowski & Vabulas, 2019, p. 343). Conversely, no state has ever withdrawn from the Benelux, UN, or WTO. Such variation in state

¹ Our online appendix is available on the website of *The Review of International Organizations*.

challenges at the level of IOs raises the question why some IOs are more frequently challenged by their own member states than others.

To answer this research question, many scholars suggest considering the institutional design and features of IOs themselves. In this context, academics have theorized that the current crisis of the liberal international order is rooted in the increasing delegation of authority to IOs since the 1990s (Hooghe & Marks, 2009; Kreuder-Sonnen & Rittberger, 2022; Mearsheimer, 2019; Zürn, 2018). They argue that, like all institutions with authority, IOs have been challenged more as their power increased. Based on this line of argumentation, we should therefore expect that IOs with more authority are more prone to member state challenges (see Hypothesis 1 below). While this authority-contestation logic has almost become conventional wisdom in the study of IOs, other scholars suggest that authority makes IOs *less* subject to and more robust to challenges. The liberal-institutionalist perspective, for instance, holds that authority results from investments of members in the IO and thus implies a higher degree of buy-in (Keohane, 1984; Wallander, 2000), which should reduce member state challenges (see Hypothesis 2 below). Furthermore, IOs with more authority are more able to adjust to a changing environment and re-legitimize their rule, as well as prevent and resist external pressures (Chorev, 2012; Debre & Dijkstra, 2021; Ecker-Ehrhardt, 2018a; Gronau & Schmidtke, 2016; Hirschmann, 2021; Lenz & Söderbaum, 2023).

Building on this theoretical debate, our study provides an innovative empirical test of the different logics by analyzing which IOs most experience public criticism and withdrawals by their member states. While members may, of course, contest IOs in many other ways, public criticism and withdrawals are two important yet distinct types of contestation to help us understand why some IOs are more challenged than others. For our dependent variables of member state criticism and withdrawal, we rely on the data of Sommerer and colleagues (Sommerer, 2022; Sommerer et al., 2022) as well as Pevehouse et al. (2020) respectively. In terms of independent variables, we consider different conceptions of IO authority and use recent data from Debre and Dijkstra (2021), Hooghe et al. 2017, 2019a, 2021), as well as Zürn et al. (2021). Because IOs may experience criticism by member states and withdrawals at multiple points in their lifecycle, we employ Andersen and Gill's (1982) method to assess the explanatory power of authority and other variables for the likelihood of these different kinds of recurrent member-state-based challenges to IOs.

We find no strong and consistent evidence for Hypothesis 1 of a positive association between IO authority and member states' challenges. Moreover, there is only mixed and weak evidence for Hypothesis 2 of a negative relationship between IO authority and member state withdrawals. These are surprising findings, challenging much recent domestic politics and International Relations (IR) research which attributes the supposed crisis of IOs to their increased authority. Overall, the authority of IOs does not seem to explain why some IOs are challenged significantly more frequently than others by their member states. Going against the grain, our article shows that there are better explanations for member state challenges. We find that preference heterogeneity within the membership is associated with more criticism and withdrawals. We also find that the presence of competing IOs is associated with

less member state criticism. Finally, while IOs with a more democratic membership tend to face fewer withdrawals, greater power divides are associated with more withdrawals.

Our article makes three contributions: Theoretically, we advance the vibrant debate on the contestation of IOs through our innovative focus on IO-level drivers of member-state-based challenges. We concentrate on one of the most salient theorized factors – IO authority – and deduce two contrasting hypotheses in this respect to study IO-level variation. Methodologically, our application of recurrent event analysis – a well-developed, but under-utilized approach – demonstrates the usefulness of this method for many pertinent questions in Political Science. Empirically, our results demonstrate that a widespread assumption about a positive association between IO authority and contestation needs qualification. We show that IOs with greater authority are not significantly more (and in some ways perhaps even less) challenged by member states through public criticisms or withdrawals. This bears crucial lessons for policymakers faced with immense transnational challenges: Giving IOs more authority generally does not expose them to more challenges by member states.

Next, we outline different theories on how IO authority may relate to public critique and withdrawals by member states. We then present our research design, introducing the different variables, the Andersen-Gill method, as well as our data setup. Following that, we show and discuss the results of our empirical analyses. In our concluding section, we reflect on our study's implications for research on IOs and international policymaking.

2 Concepts and theory

Challenges to international cooperation, norms, and IOs by states and other actors come in different forms (e.g. Börzel & Zürn, 2021; Deitelhoff & Zimmermann, 2020; Hurd, 2019; Wiener, 2018). In this article, we limit ourselves to *member states'* challenges to IOs that are *publicly observable*. We focus on member states because they are the core stakeholders, as per the standard definitions of IOs (e.g. Pevehouse et al., 2020), and since their challenges may put IOs under serious pressure. We focus on publicly observable challenges by member states rather than, for instance, insider lobbying, diplomatic strategies, internal dissent, or sabotage. Such challenges, where states go public and challenge their own IOs, take place outside of regular diplomatic dialogue within IOs (but see Stimmer & Wisken, 2019). There are many publicly observable member state challenges, including public criticism, the reduction of (voluntary) funding, strategic non-participation, non-compliance with rules or decisions, and withdrawal. While acknowledging that states may challenge IOs in many other ways, we focus on two distinct and important types of challenges: *public criticism* and *withdrawal*. Concentrating on these two phenomena allows us to obtain better insights into why some institutions are more frequently challenged by their own member states than other IOs.

Before delving further into our theory on these challenges, let us acknowledge that neither action is *necessarily* negative for IOs. Constructive criticism by member states can increase public attention. It can also create windows of opportunity for IO bureaucracies, for instance, to rally support for reforms which may lead to less contestation in the long run. Similarly, member state withdrawals can have positive long-term effects on IOs as well. For instance, if a member state that frequently clashes with other members decides to withdraw from the IO, that action may improve the institutions' ability to act and thus ultimately strengthen it. Withdrawals or the threat of withdrawals may also result in overdue IO reform (von Borzyskowski & Vabulas, 2023). Nevertheless, both public criticisms and withdrawals are – on the face of it – challenges to IOs and also treated as such by the media and IOs doing their part to defend themselves. Public criticism by member states may reduce the legitimacy of IOs and harden negotiation positions, thus making it more difficult for IOs to perform productive functions. State withdrawals can undermine the IO mandate, when the IO requires universal buy-in (for example, for issues such as climate action or arms control), result in a withdrawal cascade, and/or leave IOs with fewer resources. The rest of our study thus treats these two types of actions as challenges to IOs.

When dissatisfied with the status quo, member states may use an escalation ladder in which they voice their discontent internally, then publicly criticize the IO, and eventually withdraw from the organization altogether. Public criticism by member states is, in this respect, normally seen as a lesser challenge to IOs than withdrawal. Yet, public criticism is not necessarily a precursor to withdrawal. In his standard work, Hirschman (1970) argues that “voice” and “exit” are different types of strategies for dissatisfied actors. There is a complex interaction between both: More opportunities for voice may, for instance, reduce risks of exit. Clearly, this is also relevant for IOs. While the same factors may often be presumed to drive public criticisms and withdrawals, this is not necessarily so. Indeed, the same factors can have different effects on criticisms and withdrawals. To provide an illustration, states may feel compelled to publicly criticize an IO but refrain from withdrawal as they may be dependent on that IO. For instance, the Greek government during the Euro crisis may not have liked IMF conditionality, and publicly said so, but still took IMF loans (Featherstone, 2016). Therefore, in this article, we do not link both challenges a priori, or assume that they can be explained by the same variables; instead, we study them separately.

To identify possible explanations for member state challenges, we focus on IOs' level of authority as one of the central characteristics and main factors in the literature. We define authority as the power and capacity of IOs to take and enforce decisions that are binding for their members. Authority of IOs normally includes the delegation of tasks by states to IO agents and the pooling of decision-making in collective IO bodies (Hooghe & Marks, 2015). IOs with authority have substantial administrative capacity, such as staff and budgetary resources, to carry out their functions. Over past decades, IOs have gained more and more authority (Hooghe et al., 2017, 2019a; Zürn, 2018; Zürn et al., 2021).

2.1 Hypothesis 1: Positive association between IO authority and member state challenges

The link between IO authority and member state contestation is especially prominent in the scholarship of Zürn, who argues that, due to the global governance system that emerged in the 1990s, “world politics is now embedded in a normative and institutional structure that contains hierarchies and power inequalities and thus *endogenously* produces contestation, resistance, and distributional struggles” (Zürn, 2018, p. 3, emphasis in the original). The assumed link between IO authority and state contestation is also heavily informed by and promoted in the work of EU scholars (De Vries et al., 2021; Hooghe & Marks, 2009; Zürn, 2018). Similar to Zürn, Hooghe and Marks (2009) argue that politicization in Europe started when the 1993 Maastricht Treaty significantly increased the EU’s authority (see also Hooghe et al., 2019a, pp. 89–90). Even prominent Realist scholars such as Mearsheimer note that “problems arose because a liberal order calls for states to delegate substantial decision-making authority to international institutions” (Mearsheimer, 2019, p. 7). For him, democracy promotion and “hyperglobalization” pursued by international institutions have undermined sovereignty, ultimately resulting in Brexit and Trump’s election (Mearsheimer, 2019, pp. 34–43). Not unlike Zürn, he states that “[t]he intensity of this problem will depend on how much power and influence the relevant institutions wield over their member states” (Mearsheimer, 2019, p. 35).

There are many examples of member state contestation of IOs. Major powers have prominently objected to IOs affecting their sovereignty. Russia has long challenged the liberal dimension of the OSCE, which includes human rights and election monitoring (Kropatcheva, 2015; Schuette & Dijkstra, 2023). The United States has challenged the powers of the WTO and particularly its Appellate Body (Hopewell, 2021; Pollack, 2023; Shaffer et al., 2016; Zaccaria, 2022). Moreover, various member states have challenged the authority of international courts (Alter et al., 2016; Madsen et al., 2018; Voeten, 2020).

The variation and overall rise in IO authority over time are thus important as they are often argued to be the main endogenous cause for member states’ challenges. If IOs have authority, they may get individual states to do things they would not do otherwise (cf. Dahl, 1957). As a result, the argument goes, states will likely resist and challenge IOs that push them in such a direction. Conversely, if an IO is powerless because its decisions are non-binding, the argument goes, states may not care what that particular IO wants them to do; and may also not care enough to challenge it. In other words, IO authority may invite challenges, while low-authority IOs are challenged less.

Scholars suggest that increased IO authority does not just bind member states and push them around, but that its intrusiveness triggers domestic political backlash against IOs. To legitimate their “right to rule,” IOs often disguise their policies in technical language (Louis & Maertens, 2021; Steffek, 2021; Zürn, 2018) which results in a “democracy gap” (Goddard et al., 2024; Kreuder-Sonnen & Rittberger, 2022). IO policies may also have distributive consequences producing “losers” of globalization (Broz et al., 2021; Rodrik, 2021; Walter, 2021). IO authority does not automatically trigger contestation, but domestic political entrepreneurs including

populist parties may take advantage of such a democracy gap and the adverse impact on parts of society (De Vries et al., 2021). Even if such populist parties are not represented in government, they may affect the positions of more established parties through domestic politicization strategies. Ultimately, governments may feel compelled to act on these domestic pressures, triggering member state challenges of IOs (Voeten, 2020). This leads to our first hypothesis that more authoritative IOs face more challenges by member states in the form of criticisms and/or withdrawals (*Hypothesis 1*).

Various facets of IO authority may relate differently to criticisms and withdrawals. In IOs with more pooling (for example, when majority voting is the rule in an IO), there will be member states that find themselves more frequently outvoted than in IOs where decisions are made by consensus (Daßler & Heinkelmann-Wild, 2022). Given that majority voting leaves less space for internally voicing dissent, member states may challenge IOs through other means when they are repeatedly outvoted and less able to protect their domestic political interests. The delegation of authority implies, by definition, that decisions are taken or implemented elsewhere, leaving states with fewer opportunities to influence decisions that they are subject to. Thus, in IOs with more delegation (for instance, when the IO secretariat has strong agenda-setting powers or an IO court has adjudication powers), some states will more frequently be confronted with policies that are at odds with their preferences, or face the risk of overruling by adjudication bodies in case of disputes. Moreover, if IOs have significant administrative capacity, they may pursue their own interests at the expense of some member states. In other words, in IOs with high levels of authority, we may more frequently expect to see member states that are dissatisfied with IO policies, which would likely lead to more challenges by such states. As this discussion shows, manifold aspects of IO authority may have different associations with member state challenges. Yet, not least for conceptual parsimony and empirical robustness, we treat IO authority as a continuous and uniform variable, much like the existing literature.

Although scholars often implicitly assume that IO authority endogenously leads to different types of challenges by member states and thereby problems for IOs, Zürn (2018) and others focus mostly on politicization and public criticism rather than withdrawal. While it is relatively easy for member state representatives to publicly criticize an IO after being outvoted during a meeting or subjected to stringent conditionality, withdrawing from the IO is much more consequential. As noted above, an escalation ladder is not automatic. Voice and exit can be different types of strategies subject to different cost–benefit calculations (Hirschman, 1970). Moreover, IOs may be responsive to public criticism – or even withdrawal threats – from member states, and take action to avoid exit (von Borzyskowski & Vabulas, 2023). We will therefore test Hypothesis 1 for both public criticism and withdrawal, as the literature suggests it is relevant for both types of member states challenges, but may expect a stronger positive association between IO authority and public criticism by member states.

2.2 Hypothesis 2: Negative association between IO authority and member state challenges

While IO authority is widely seen as the endogenous cause in the recent politicization and contestation literature, and increasingly considered conventional wisdom, it is – at least implicitly – at odds with a long-standing liberal-institutionalist argument in IO research. Although liberal-institutionalist scholars have not presented us with a similarly clear logic of IO contestation, we can deduce that IOs are authoritative because member states have invested in them through complex negotiations and often tiresome ratification procedures (Abbott & Snidal, 1998; Koremenos et al., 2001). As a consequence, states may be less likely to challenge such IOs, as they put so much effort into creating them, express their buy-in, and might well benefit from increasing returns, positive feedback, as well as lower transaction costs (Pierson, 2000; Wallander, 2000). Challenging an authoritative IO might also be futile for individual member states. They have to spend a lot of political capital and would probably not get a better deal. In this vein, Ikenberry notes that IOs and the American-led international order are “easy to join” and “hard to overturn” (2018, p. 25). In sum, the alternative argument is that stronger IOs face fewer challenges by member states in the form of criticisms and/or withdrawals (*Hypothesis 2*).

Apart from the arguments around member states investment and buy-in, as well as the futility of confronting authoritative IOs, there are two complementary logics why authoritative IOs may be challenged less by their member states. Once again, different aspects of IO authority may relate in diverse ways to criticisms and withdrawals. First, authoritative IOs with high levels of pooling and delegation may be more capable of absorbing and mitigating member states’ demands and concerns through regular diplomatic channels. After all, on some accounts, the very point of IOs is that they reduce the transaction costs – or friction – between states (Abbott & Snidal, 1998; Keohane, 1984). If the political system of IOs can absorb divergent inputs, there is a lower chance of “gridlock” (Hale et al., 2013) and no need for member states to publicly contest IOs, let alone withdraw. Scholars have found that authoritative IOs tend to perform better (Lall, 2017; Sommerer et al., 2022), which is important as almost half of member states threatening withdrawal cite dissatisfaction with IO performance (von Borzyskowski & Vabulas, 2023, Fig. 4).

Second, authoritative IOs may also be politically responsive and able to preemptively adapt to external pressures. Scholars have shown how IOs are contracted “around uncertainty” (Koremenos, 2005) and may include flexibility and escape clauses to absorb exogenous shocks (Koremenos et al., 2001; Rosendorff & Milner, 2001; Thompson, 2010). Some IOs have sufficient administrative capacity and a qualified staff to act as honest brokers between dissatisfied member states (Beach, 2004; Daßler & Heinkelmann-Wild, 2022; Ecker-Ehrhardt, 2018a; Gronau & Schmidtke, 2016; Hirschmann, 2021; Lenz & Söderbaum, 2023). Indeed, these studies point at the considerable agency of IOs to prevent and respond to state challenges, among others, through the re-legitimation of their rule. On the other hand, IOs with little authority may be rigid, easily captured by minority concerns, and relatively inefficient, attracting more member-state-based challenges overall.

Several examples help to illustrate Hypothesis 2. In the EU context, Pierson (1996, p. 47) stated that “[w]hile the governments of ‘sovereign’ member-states remain free to tear up [the EU] treaties and walk away at any time, the constantly increasing costs of exit in the densely integrated European polity have rendered this option virtually unthinkable.” Two decades later, the UK’s exit from the EU arguably served as a case in point of a withdrawal that resulted in high costs and low benefits for the challenging state. The UN Secretary-General’s “good offices” are an example of IO powers that can help deescalate conflicts between member states (Goodrich, 1974; Ravndal, 2020), while the NATO Secretary-General Stoltenberg was instrumental in managing relations with a hostile US President Trump (Schuette, 2021). Various authoritative IOs have been able to adapt to a changing international environment, including the World Bank which has reinvented itself several times over the decades (Bridgeman, 2000).

Hypothesis 2 therefore builds on liberal-institutionalist IO theory, focusing on cooperation logics (Abbott & Snidal, 1998). This theoretical approach is thus closer to questions of membership and withdrawal than contestation. More authoritative IOs may well be more frequently criticized by member states, but also better at avoiding further escalation such as state withdrawal. Indeed, IOs with quality staff and substantial resources are more vital and survive longer (Debre & Dijkstra, 2021; Dijkstra & Debre, 2022; Gray, 2018). Perhaps as a result of public pressure by member states, IOs may strategically deal with challenges, engage in self-legitimation behavior including dedicated public relations offices (Ecker-Ehrhardt, 2018b), or reform themselves (von Borzyskowski & Vabulas, 2023). We thus test Hypothesis 2 for both public criticism and withdrawal, but may expect a stronger negative association between IO authority and withdrawal by member states.

Hypotheses 1 and 2 provide alternative logics, but they are not necessarily mutually exclusive. Authoritative IOs may well be more likely to face more criticisms but not more withdrawals, and vice-versa. Moreover, different kinds of authority may have divergent effects on criticisms and withdrawals. Our hypotheses are thus intended to provide broad expectations on how IO authority relates to member states challenges, but require empirical testing with regard to specific types of challenges and facets of IO authority.

2.3 Alternative explanations

In addition to the authority of IOs, we consider several alternative explanations. In the international context, much of IR theory has placed the causes of state-based contestation outside IOs themselves (see Eilstrup-Sangiovanni, 2021 for a review). Hegemonic stability and power transition theories, for instance, point out that cooperation is most stable when there is a (regional) hegemon (Gilpin, 1981; Mearsheimer, 2019, pp. 44–48). We may therefore expect that member-state-based challenges are less likely in IOs where there is a strong asymmetric distribution of capabilities among members. Similarly, since IOs are products and drivers of international cooperation, we may expect that diverging preferences between member states could lead to challenges. Indeed, von Borzyskowski and Vabulas (2019) find

that if states are outliers in IOs, they are more likely to withdraw. Finally, we consider the presence of competing IOs which may give states more credible outside alternatives. This may reduce the need to publicly criticize and increase opportunities to withdraw as governance can be supplied through other IOs (Abbott et al., 2016; Morse & Keohane, 2014; Urpelainen and Van de Graaf 2015).

We also consider a set of challenges arising from domestic politics. We may expect that economic crises lead to more challenges. Declining GDP can put pressure on public spending, including expenditure on IOs, potentially resulting in member states' withdrawal. Furthermore, IOs can serve as scapegoats in times of economic crisis and therefore attract criticism. At the same time, Haftel et al. (2020) find that IOs may benefit from economic crises (if only in the medium-term). Finally, we examine possible associations between the average democracy level of members and their challenges to IOs. This is based on the finding of von Borzyskowski and Vabulas (2019) that states are less likely to withdraw from IOs composed of democratic members. At the same time, IOs with a more democratic membership may face more public contestation resulting from their members' domestic politics.

Lastly, aside from IO authority, we consider two alternative institutional explanations for increased member state challenges. For one, general purpose IOs may be perceived as more encompassing and intrusive than functionally specific IOs, thus provoking more challenges from member states (Hooghe et al., 2019b, p. 739). Conversely, it has been argued that general-purpose IOs are sustained by a stabilizing force of community (Hooghe et al., 2019a), which makes member states more loyal (Hirschman, 1970) and thus less likely to express public criticism or withdraw. The final explanation we account for is that more challenges may simply be the result of a larger membership. That is, assuming that every member state has some likelihood of challenging an IO, more member states may increase the overall likelihood of criticisms and withdrawals merely as a result of their greater number.

3 Research design

To test our hypotheses on member-state-based challenges of IOs, we draw on different data and methods, which we will present in turn in the subsections below. As noted, our events of interest are member state criticisms and withdrawals. The available data on these dependent variables vary significantly in terms of included IOs and time horizons. Moreover, we use three different operationalizations of our independent variable of IO authority. After discussing our variables, we present our methodology for the analysis of recurrent events, namely the Andersen-Gill method, and introduce our datasets at the time-to-event-level.

3.1 Dependent variables

This article seeks to explain the occurrence and recurrence of two dependent variables. The first is public criticism of IOs by their member states. For this dependent variable we rely on the dataset by Sommerer (2022) who has identified 6,622 cases

of newswire articles reporting criticisms of IOs by various actors – elites and masses, state and non-state, constituent and non-constituent (Sommerer et al., 2022, pp. 53–54). Sommerer and colleagues conducted automated searches and manual coding of English word strings in reports from various international news agencies, for example, the Associated Press, the Russian News Agency, and the Japan Economic Newswire. They searched for phrases indicating instances of contestation by member state representatives “accusing”, “blaming”, or “criticizing” certain IOs. Their search focused on 30 IOs (see Appendix 1a), plus the Group of Twenty (G20) and the United Nations Framework Convention on Climate Change (UNFCCC), during the period 1985 to 2020 (Sommerer et al., 2022). While this is by no means a comprehensive sample of IOs and not an excessively long time period, it is the best source available. The 30 IOs were selected after stratified random sampling and “to provide representativeness and generalizability regarding both policy and geographical scope” (Sommerer et al., 2022, p. 48). The same sample is widely used in the literature (Sommerer & Tallberg, 2017; Zürn et al., 2021). For the purpose of our study, the selection of IOs is broad enough and the observation period goes sufficiently far back.

Since we are interested in member state criticisms, we only use such instances from Sommerer et al. (2022) and not IO criticism expressed by non-state actors or non-member states. Our dependent variable thus indicates if an IO in a given year was criticized by any member state representative, namely, members or heads of government, spokespersons, parliamentarians of the governing party, or representatives of the governing coalition, dynasty, or military junta (Sommerer et al., 2022, p. 54). The data of Sommerer (2022) contains 2,897 cases of public IO criticisms related to IO member states, that is, state-based challenges from insiders – or constituencies (Sommerer et al., 2022, p. 54) – of the IO in question. Since the Sommerer (2022) data is annual, and given that Andersen-Gill analyses require dependent variables to be binary (namely, occurrence of an event of interest in a given time period or not), our final dataset of member state criticisms contains 259 observations (see Appendix 1b). By dichotomizing member states criticism to an IO-year variable we lose qualitative information on the arguments made and the intensity of the criticism. While that is clearly a limitation of our analysis, this study aims to provide a novel evaluation of contrasting hypotheses about associations between IO authority and member state challenges. Despite requiring such a dichotomization, the Andersen-Gill approach is the most suitable method for our purpose of analyzing repeated events such as criticisms by IO member states (see below).

For the second dependent variable, member state withdrawal, we use the dataset by Pevehouse et al. (2020) which captures IO membership data between 1816 and 2014. We record a withdrawal event if any member state withdraws from the IO in question in an observation year. This data contains 534 IOs from this dataset (see Appendix 2a) and 1,292 observations for our Andersen-Gill analysis (see Appendix 2b), significantly reduced in our analyses due to limitations of the other datasets we use – specifically, their much lower numbers of IOs and the more restricted timeframes that they cover. While the discrepancies in terms of IOs and time make it difficult to directly compare the frequency of member state criticism and withdrawal in IOs overall, intuitively member state criticism is a more frequent and less serious event than withdrawal (as discussed in the previous section). Both variables are summarized in Table 1.

Table 1 Dependent variables

Variable	Operationalization	Time-variance	Source
Member state withdrawal	Any member state withdrawal from the IO (1) or no such event (0)	Annual	Pevehouse et al. (2020)
Member state critique	Critique of the IO by any member state (1) or no such event (0)	Annual	Sommerer (2022)

3.2 Independent variables

Our main independent variable of interest is IO authority. Different measures are available that capture this concept. The data vary in their coverage of IOs, as well as the breadth and depth of their indicators. We conduct our analyses on three different operationalizations of IO authority. While possibly allowing us to identify the divergent effects of different kinds of IO authority on the two types of challenges we focus on (as theorized in the previous section), our design mainly serves to ensure robustness between the findings on our two conceptions of the dependent variable, since their base datasets diverge significantly in terms of the number of IOs and years included.

Our first operationalization of IO authority (*Authority 1*) is based on Debre and Dijkstra (2021) who have provided an IO-level analysis explaining how institutional features affect the survival of a sample of 150 IOs from Pevehouse et al.'s (2020) dataset. Their data include three aspects of IO authority. First, they use a measure of IO institutionalization adopted from Karreth and Tir (2013, p. 101) which distinguishes between IOs' bureaucratic infrastructures and their ability to adjudicate, mediate, and coerce member states. Second, they hand-coded certain authority-related characteristics of IOs based on their foundational treaties (Debre & Dijkstra, 2021, pp. 320–1), including majority voting in IO decision-making, how precisely cooperation objectives are defined, the presence of amendment clauses to change IO treaties, and the existence of clauses whereby states may withdraw from the IO. Finally, they included secretariat staff data based on the Yearbook of International Organizations (Union of International Associations, 2022). Together these variables adequately capture the powers and capacities of IOs, that is, their authority. The advantage of these data is that they cover a relatively large and random sample of IOs, while a drawback is that the data points are constant as IOs rarely fundamentally change their treaties and seldom expand a small secretariat into a large one (Debre & Dijkstra, 2021).

Our second operationalization of IO authority (*Authority 2*) is based on Hooghe et al. (2021) who measure pooling and delegation in 76 IOs between 1950 and 2019. Hooghe and colleagues have more restrictive inclusion criteria than Pevehouse et al. (2020). They require IOs to have “at least thirty permanent staff, a written constitution or convention, and a decision body that meets at least once a year” (Hooghe et al., 2021, p. 16). Thus, in their conception and operationalization, IOs need to have at least some formal powers and staff capacity. For each IO, their pooling measure constitutes an annual estimate of member states' authority-sharing through collective decision-making. Meanwhile, their delegation measure estimates the

Table 2 Independent variables

Variable	Operationalization	Time-variance	Source	
Authority 1	Majority voting	Majority voting (1) or consensus (0)	Constant	Debre and Dijkstra (2021); own coding
	Withdrawal clauses	Withdrawal clause (1) or not (0)	Constant	Debre and Dijkstra (2021); own coding
	Amendment clauses	Amendment procedure (1) or not (0)	Constant	Debre and Dijkstra (2021); own coding
	Contract precision	Precise (1) or imprecise (0)	Constant	Debre and Dijkstra (2021); own coding
	Institutionalization	High (1) or low (0)	Constant	Karreth and Tir (2013); own coding
	Staff size	Low (1): 0–49 staff; medium (2): 50–249 staff; high (3): 250+ staff	Constant	Yearbook of International Organizations
Authority 2	Pooling	Estimate of member states' authority-sharing through collective decision-making in the given IO (0–1)	Annual	Hooghe et al., (2017, 2019a, 2021)
	Delegation	Estimate of the authority of non-state bodies in an IO's decision-making process (0–1)	Annual	Hooghe et al., (2017, 2019a, 2021)
Authority 3	Authority score	Normalized sum of 7 function-level authority scores per IO and year: agenda setting, rule-making, monitoring, norm interpretation, enforcement, evaluation, and knowledge generation (0–1)	Annual	Zürn et al. (2021)

authority of non-state bodies in an IO's decision-making process on a yearly basis. Hooghe et al. (2021) therefore provide a useful dataset capturing valuable qualitative information of relevance; but their IO sample is not random, includes fewer IOs than Debre and Dijkstra (2021), and is restricted to the post-1945 timeframe.

Our final operationalization of IO authority (*Authority 3*) is based on Zürn et al. (2021). This dataset draws on a stratified random sample based on a region-issue combination and includes 34 IOs for the years 1919 through 2013 (Zürn et al., 2021, pp. 434–435).² We use the normalized sum of seven function-level authority scores per IO and year: agenda setting, rule-making, monitoring, norm interpretation, enforcement, evaluation, and knowledge generation. As such, our final operationalization of authority includes a wide range of indicators on the “autonomy and bindingness of rules and decisions” (Zürn et al., 2021, p. 432). While Zürn et al. (2021) provide high-quality data, their number of IOs is smaller than for our *Authority 1* and *2* variables. To conclude, these three operationalizations of authority are all concerned with formal powers and capacity, while differing in terms of their indicators and sampling.

Because of variation in the coverage of these datasets, there were some discrepancies in the availability of data on our dependent and independent variables. While the 30 IOs in the dataset on state criticism (Sommerer et al., 2022) are largely covered in the datasets of Zürn et al. (2021) and Hooghe et al. (2017), they are not fully

² We impute the 2013 data for 2014 to match the data range of our two dependent variables.

covered in Debre and Dijkstra (2021). We therefore hand-coded data on the flexibility scores for 16 out of 30 IOs of Sommerer et al. (2022) ourselves, following the coding approach of Debre and Dijkstra (2021) to ensure consistency. We did the same for all IOs included in Zürn et al. (2021) and Hooghe et al. (2017) but not included in Debre and Dijkstra (2021). By coding such missing data ourselves, we made the different datasets more compatible. All our independent variables are summarized in Table 2.

3.3 Alternative factors

With regard to factors external to IOs, we include three variables. For hegemonic stability, we focus on the distribution of capabilities among member states (*power divide*). For each IO-year, we calculate the standard deviation of member states' capabilities based on the National Material Capabilities data, specifically the Composite Index of National Capability (CINC) scores (Singer, 1988). For preference heterogeneity, we use the measure suggested by Bailey et al. (2017), which is based on ideal points of annual voting behavior in the UN General Assembly. *Preference divide* captures the standard deviation between the ideal points of all member states of an IO per year. To capture the extent of competition between IOs (*competing IOs*), we compute for each IO and year the number of IOs in the same policy domain (political-security, economic, social-environmental, technical-legal, or general purpose) and region (Africa, Americas, Asia-Pacific, Europe, or global).

With regard to challenges arising from domestic politics, we include two variables. We account for the annual change in the total GDP (*GDP change*) of all IO

Table 3 Alternative factors

Variable	Operationalization	Time-variance	Source
Power divide	Standard deviation of the CINC scores of all IO member states	Annual	Singer (1988); own calculations
Preference divide	Standard deviation in ideal preference points of all IO member states based on votes in the UN General Assembly	Annual	Bailey et al. (2017); own calculations
Competing IOs	Number of IOs in the same policy field and region of the given IO	Annual	Debre and Dijkstra (2021); own coding and calculations
GDP change	Annual change in GDP divided by number of member states (natural logarithm of the absolute value of the change to the previous year, maintaining the sign of change)	Annual	Inkelaar et al. (2018); own calculations
Democracy	Average Polity5 scores of all IO member states, ranging from very autocratic (-10) to very democratic (10)	Annual	Marshall and Gurr (2020); own calculations
Purpose	General purpose (1) or task-specific (0) IO	Constant	Hooghe et al. (2017); own coding
IO members	Natural logarithm of the number of member states of the given IO	Annual	Pevehouse et al. (2020); own calculations

members divided by the number of IO member states (natural logarithm of the absolute value, maintaining the sign of change). GDP data is taken from the updated Maddison dataset (Inklaar et al., 2018). Moreover, we account for the average democracy level of member states (*democracy*) which we compute as the mean Polity5 scores (Marshall & Gurr, 2020) of all IO member states in a given year.

Finally, we include two variables relating to IO characteristics other than their authority. First, we draw on and augment Hooghe et al. (2017) measure of the functional focus of IOs, distinguishing between issue-specific and general-purpose IOs. Furthermore, we include the logged number of IO member states per year (*IO members*). All remaining independent variables are summarized in Table 3.

3.4 Methodology

This article contributes to exploring new methodological ground in Political Science by using an approach adopted from the natural sciences: the Andersen-Gill method to analyze recurrent events (Andersen & Gill, 1982). Scholars in diverse fields – ranging from epidemiology to psychiatry – are interested in uncovering the correlates and causes of recurring events such as outbreaks of diseases in a population or mental breakdowns in individuals (Amorim & Cai, 2015; Donaldson et al., 2009; Ullah et al., 2014; Yadav et al., 2020). Despite significant advances to promote the use of recurrent event analysis approaches in Political Science (Box–Steffensmeier & Zorn, 2002), we have yet to witness a widespread application of these models to manifold issues in the study of international relations.

Survival analysis is by now relatively well-established in Political Science (Box–Steffensmeier & Jones, 2004; Box–Steffensmeier & Zorn, 2001). Yet, this approach is not appropriate for the present purpose, since it only focuses on the occurrence of *one* event per subject, for instance, the death of an IO (Debre & Dijkstra, 2021). In the present study, we are interested in explaining *repeated* events per subject, that is, member state criticisms of and withdrawals from IOs. Dropping all observations beyond the first occurrence of events (as other studies have done) leads to an unnecessary loss of data and a biased sample (Box–Steffensmeier & Jones, 2004, p. 158). However, given that observations relating to the same IO are not independent from one another, we require an analytical approach that accounts for this non-independence and adjusts the standard errors of estimates accordingly. Variance-correction models offer exactly that (Box–Steffensmeier & Zorn, 2002, p. 1073).

Accounting for the non-independence of recurrent events is important, as it reflects our data generation process better than standard multivariate regression models do. As with natural phenomena such as mental breakdowns in individuals or disease outbreaks in populations, the reoccurrence of our events of interest – namely, member state critiques of and withdrawals from IOs – is not independent from their initial occurrence. In other words, an IO which member states have criticized or exited before may be more likely to be affected by critique or withdrawals again, for example, during periods of media polarization or mass exodus. Variance-correction models are thus suitable for identifying factors that are associated with the first occurrence and reoccurrence of a certain kind of event among a sample of

subjects, while refraining from treating observations of a single subject as independent from one another (as standard multivariate regression models do).

Different methods have been developed for the analysis of recurrent events (Clayton, 1994; Ozga et al., 2018). Aspects to consider when deciding on the specific approach include the importance of timing, whether the research question is explanatory or predictive, whether hazards are event-specific or common, and the correlation of events with the units of analysis (Kaster et al., 2021, p. 7). Moreover, as outlined by Kaster et al. (2021, p. 9), the various methods differ on the basis of risk intervals (that is, calendar, gap, or total), their way of accounting for previous events (namely, conditional, marginal, or random effects), and their baseline hazard (that is, common or event-specific). Based on these criteria and using the decision tool provided by Kaster et al. (2021), we selected Andersen and Gill's (1982) approach as the most suitable time-to-recurrent event framework for our purposes. We formally introduce this method in Appendix 3.

One of the Andersen-Gill approach's advantages is that it preserves the sequence of events, allowing us to evaluate the risk for an event if previous events occurred (Box–Steffensmeier & Zorn, 2002, p. 1078; Fleming & Harrington, 2011; Oakes, 1992, p. 372). Moreover, compared to other modeling approaches, the Andersen-Gill method is relatively straightforward to implement and interpret. Conversely, the approach has been criticized for its restriction of baseline hazards across all events and its assumption of independence across events within a unit (Box–Steffensmeier & Zorn 2002, pp. 1073–1074). As suggested by Therneau and Hamilton (1997, p. 2034), we address the issue of assumed non-independence by using robust variance estimates (White, 1980). Given its significant advantages, the Andersen-Gill method has often been used for analyzing recurring events in various disciplines (Ozga et al., 2018, p. 4), and also serves our purpose of examining repeated events of IO criticisms and withdrawals by member states well.

3.5 Data

Our two datasets for the analysis of member state critique and withdrawals are set up at the IO-time-to-event-level. That is, the first observation for any IO in our dataset refers to the time from IO inception (or beginning of the observation period) to the occurrence of the first event in question (that is, the year in which the IO is criticized by member states or experienced any member's withdrawal). Subsequent observations refer to the time periods from event to event. The last observation for any IO is from the final event in question (namely, the last episode of member state critiques or withdrawals) until the death/replacement/integration of the IO or censorship from the dataset. In case an IO did not experience the event in question, it still features as one observation in our dataset, ranging from its inception (or beginning of the observation period) to its death (or censorship from the dataset). While pooling across time periods in which no events of interest occur leads to some loss of information among time-varying factors (posing a more general issue for recurrent event analysis methods), the approach nonetheless bears significant benefits for our purposes (see above). Figure 1 illustrates the data setup of Andersen-Gill

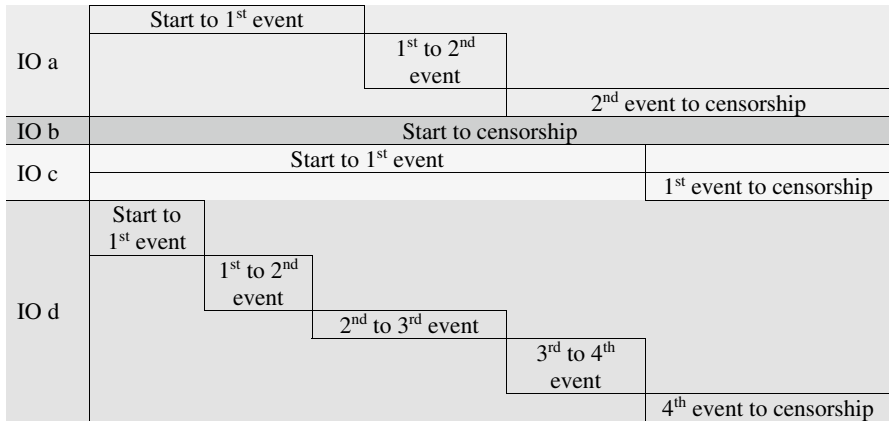


Fig. 1 Schematic illustration of Andersen-Gill data setup. This illustration refers to four hypothetical IOs (a, b, c, and d), all in different shades of gray. Every framed box illustrates one observation at the IO-time-to-event-level. Thus, this hypothetical dataset contains 11 observations

recurrent event analyses. Our dataset on member state criticisms ranges from 1985 to 2014. It contains 30 IOs and 259 observations (see Appendices 1a and 1b). Our state withdrawals dataset ranges from 1816 to 2014. It contains 534 IOs and 1,292 observations (see Appendices 2a and 2b).

4 Results and discussion

The results of our Andersen-Gill analyses do not support Hypothesis 1, while providing mixed evidence with regard to Hypothesis 2. We find that more authoritative IOs (along different dimensions) are *not* challenged significantly more frequently by member states in terms of criticisms and withdrawals. This null finding for Hypothesis 1 is surprising as many domestic politics and IR scholars attribute the supposed crisis of IOs to their increased authority. We do find some support for the competing Hypothesis 2 that more IO authority is associated with fewer state withdrawals. However, the most consistent predictor of challenges to IOs is the preference heterogeneity between member states. In addition, we find that the number of competing IOs is negatively associated with criticisms by member states. Meanwhile, a more democratic membership composition is negatively associated with withdrawals, whereas greater power divides are related to more withdrawals. Importantly, with the exception of preference heterogeneity (which is significant in all models), different variables are associated with public criticism and withdrawals, implying that these distinct types of member state challenges are indeed driven by different factors. Table 4 presents the underlying regression analyses which are further discussed below.

Table 4 Results of recurrent events analyses on member-state-based challenges to IOs

	Criticisms			Withdrawals		
	(1) <i>Authority 1</i>	(2) <i>Authority 2</i>	(3) <i>Authority 3</i>	(4) <i>Authority 1</i>	(5) <i>Authority 2</i>	(6) <i>Authority 3</i>
Contract precision	-1.239 (0.757)			-0.0568 (0.260)		
Majority voting	0.508 (1.563)			0.499 ⁺ (0.300)		
Amendment clauses	-0.622 (1.165)			-1.303 ^{***} (0.320)		
Withdrawal clauses	-0.822 (0.641)			0.551 ⁺ (0.307)		
Institutionalization	0.681 (0.540)			-0.441 (0.317)		
Staff size	0.191 (0.832)			-0.178 (0.156)		
Pooling		-2.016 (1.406)			0.144 (1.318)	
Delegation		3.432 ⁺ (2.003)			-3.635 ⁺ (2.166)	
Authority			2.119 (1.384)			-1.456 (2.013)
Power divide	-39.50 (32.39)	-25.88 (24.68)	-43.14 ⁺ (22.03)	18.58 ^{**} (6.388)	8.931 (11.57)	40.57 [*] (18.95)
Preference divide	2.368 [*] (0.984)	1.934 ^{**} (0.725)	1.710 ⁺ (0.954)	0.730 [*] (0.323)	2.135 [*] (0.881)	1.499 [*] (0.675)
Competing IOs	-1.871 ^{**} (0.593)	-2.084 ^{***} (0.571)	-2.287 ^{***} (0.606)	0.0442 (0.187)	-0.276 (0.518)	0.172 (0.429)
GDP change	0.631 (0.464)	0.685 ⁺ (0.353)	0.748 [*] (0.340)	-0.0167 (0.0186)	0.0287 (0.0320)	-0.494 [*] (0.203)
Democracy	0.0120 (0.0664)	-0.0304 (0.0400)	-0.00593 (0.0405)	-0.188 ^{***} (0.0285)	-0.187 ^{***} (0.0474)	-0.0864 (0.0648)
Purpose	-1.241 (0.759)	-0.741 (0.809)	-1.077 (0.988)	0.0387 (0.380)	-0.697 (0.672)	-0.342 (0.694)
IO members	0.416 (0.446)	0.830 ^{***} (0.214)	0.502 ^{**} (0.170)	0.461 ^{**} (0.165)	-0.0701 (0.229)	0.0698 (0.302)
N	259	259	254	327	140	111

The dependent variables are member state criticisms and withdrawals. There are three models for each of these two dependent variables, including different (groups of) variables to measure IO authority. The independent variables in each model are listed in the first column. Our variables' coding is explained in Tables 1, 2 and 3. The coefficients can be interpreted as magnitudes of associations between the stated independent variable with the likelihood of occurrences of the event of interest for IOs in the sample across the observation period. Standard errors are provided in parentheses below the coefficients, while p-values are indicated by symbols after the coefficients (⁺= $p < 0.10$, ^{*}= $p < 0.05$, ^{**}= $p < 0.01$, ^{***}= $p < 0.001$)

4.1 IO authority

Overall, our results do not provide strong and consistent evidence that increased IO authority is associated with more or fewer member state criticisms or withdrawals. To start with member state criticisms along our different operationalizations of IO authority (Models 1–3), we find that only one of the variables across all three models – *delegation* in Model 2 – has a weak ($p < 0.1$) positive association with member state criticisms. While this points in the direction of Hypothesis 1, none of the other variables has a statistically significant association at conventional levels and the coefficients point in different directions. This leads us to conclude that there is no strong and consistent evidence that more authoritative IOs face more or less criticism by their member states.

With regard to member state withdrawals (Models 4–6), we find that amendment clauses and delegation are negatively associated with such events at conventional levels of statistical significance. That is, IOs that include formal amendment clauses in their treaties and those that have delegated more authority are less likely (at $p < 0.001$ and $p < 0.1$ respectively) to experience one of the arguably most serious challenges by states – their withdrawal. Amendment provisions and delegation of authority to IO bodies hence seem useful for dealing with the concerns of challenging member states and prevent withdrawals. There is thus some limited evidence for Hypothesis 2 with regard to withdrawals. Conversely, the coefficients on majority voting and withdrawal clauses are positive and weakly significant ($p < 0.1$). This indicates that IOs whose treaties include withdrawal clauses indeed experience more withdrawals, while IOs that use majority voting procedures are more likely to see member states withdraw – perhaps as a result of (the risk of) being outvoted – which provides some limited evidence in favor of Hypothesis 1. In sum, the evidence is mixed, but largely tending toward null findings again.

These results have serious implications. Most prominently, our findings challenge the thesis that authority endogenously causes “contestation, resistance, and distributional struggles” (Zürn, 2018, p. 3). Even though we use three different operationalizations of authority, varying in terms of conceptualization and coverage, we do not find substantially diverging results. This suggests the need to qualify and rethink the significance of IO authority in explaining the politicization and contestation of global governance. While Zürn finds higher levels of politicization, this does not appear to lead to more serious instances of member state criticism or withdrawal. Our findings also challenge Hooghe and Marks (2009) as well as other scholars who have focused on the politicization of international cooperation (De Vries et al., 2021; Ecker-Ehrhardt, 2012). While such studies are more indirect in their arguments about the effects of international authority, their explanation for politicization may need to be revised. Moreover, our results challenge the findings of Daßler and Heinkelmann-Wild (2022) who argue that pooled authority leads to more state withdrawals. These divergent findings can partly be explained by the fact that the literature on politicization is heavily informed by a limited number of major IOs, primarily the EU, which have in fact faced more critique than other less prominent IOs (see Appendix 1b). This underlines, once more, the need for IO-level analyses to complement existing state-level analyses, and provide a more comprehensive understanding

of variation between IOs. IO-level analyses may help us overcome biases in state-level analyses (for instance, a bias toward prominent states like the United States and major IOs like the EU), while providing more clarity on how variables such as IO authority relate to other factors.

4.2 Alternative explanations

The most consistent explanation we find for member-state-based challenges to IOs is preference heterogeneity. The coefficient of our *preference divide* variable is positive and statistically significant across all models in our main analyses at $p < 0.05$ to $p < 0.01$ (except Model 3 where the level of statistical significance is only $p < 0.1$). This provides consistent evidence indicating that a more diverse membership makes IOs more prone to different kinds of challenges by said members. It is also important to underline that preference heterogeneity may capture this point better than simply the number of IO members which does not produce consistent results across the different models, although the three significant coefficients in models 2, 3, and 4 are all positive. That is, we have some evidence that larger IOs are more likely to be criticized by their member states (models 2 and 3, at $p < 0.001$ and $p < 0.01$ respectively) and experience more withdrawals (model 4 at $p < 0.01$). Hence, the frequency and intensity whereby IOs are challenged appears to be determined both by the *quantity* of member states and especially their *quality*, specifically how divergent their preferences are. Our finding is consistent with von Borzyskowski and Vabulas's (2019) country-level analysis showing that member states which are further away from the IO average in terms of preferences are more likely to withdraw.

We find that the number of IOs in the same policy field and world region (*competing IOs*) is negatively associated (at $p < 0.01$ to $p < 0.001$) with member state critique, but not with withdrawals. This is surprising as a higher number of IOs is often equated with more competition and disputes (Morse & Keohane, 2014). Instead, it seems that competing IOs may give states the opportunity to pursue their preferences through the IO that best suits them, making them less reliant on any particular IO, and reducing the need to publicly criticize a specific IO. At the same time, the presence of competing IOs does not imply that states withdraw more easily to rely exclusively on outside alternatives (cf. Reinsberg, 2024).

The democratic composition of an IO (*democracy*) seems to work the other way around: IOs with a relatively democratic membership experience significantly fewer withdrawals, but are not prone to significantly more or less critique by member states. It seems plausible that states would be hesitant to leave IOs with mostly democratic members, as Gray (2013) shows that membership in largely democratic IOs is an important signaling device for investors seeking political stability. It may also well be that democratically composed IOs are better at deliberation and more sympathetic to concerns by challenger states, which might preempt withdrawals. At the same time, our results do not indicate that IOs with a more democratic membership are any less faced with member state criticism than less democratic IOs, all else equal.

Finally, with respect to the other alternative explanations that we tested in our models – captured by the variables *power divide*, *GDP change*, and *purpose* – our results turn out insignificant or different for member state criticisms and withdrawals, further supporting our conceptual and empirical separation of these two types of member state challenges. *Power divide* is positively associated with withdrawals in models 4 and 6 (at $p < 0.01$ and $p < 0.05$ respectively), while being weakly negatively associated with criticisms only in model 3 (at $p < 0.1$). Thus, there is some evidence that greater power divides in IOs lead to less critique but more withdrawals by member states, in contrast to what hegemonic stability theory would predict. *GDP change* is positively associated with member state critiques in Models 2 and 3 (at $p < 0.1$ and $p < 0.05$ respectively), and negatively associated (at $p < 0.05$) with withdrawals only in Model 6 (cf. Haftel & Nadel, 2024). Thus, our results suggest that while member state criticisms are somewhat more likely in times of economic growth, withdrawals may indeed be rather less likely in such times. Finally, we do not find any significant results for the variable *purpose*, indicating that the functional specialization or general nature of IOs are not associated with criticisms or withdrawals by member states when other factors are accounted for.

4.3 Robustness checks and multicollinearity analysis

One limitation of our analyses relates to sample sizes, given that the coverage and overlap of IOs in our different datasets, as well as the occurrence of events of interest in the observation timeframes of those datasets, are limited. We thus conduct robustness checks on a sample with fewer variables but more data points. Apart from the key authority variables that we do not want to drop due to our substantive focus here, the variable *preference divide* causes gaps in our data and thus reductions of our sample sizes in Models 4 and 6, given its relatively limited reach back to 1946. Moreover, based on the rather clear results of our main analyses with respect to preference heterogeneity, we conducted robustness checks on all six models in which we dropped the *preference divide* variable. The results are summarized in Models R1 to R6 in Appendix 4.

Our robustness checks largely confirm the results presented above. First, in terms of our main variables of interest, we still find relatively consistent null results. The coefficients of our authority variables across all six models turn out insignificant, except in Model R4 where – as in the main analysis above (see Table 4) – *amendment clauses* is negative and statistically significant at $p < 0.01$. Similarly, as in our main analysis above (see Table 4), withdrawal clauses are positively associated with actual member state withdrawals at $p < 0.05$. We can thus conclude that our findings about amendment clauses being associated with fewer member state withdrawals, while withdrawal clauses are associated with more withdrawals, are both robust. The weakly positive coefficients for *majority voting* and *delegation* in our main analyses are not confirmed by our robustness check. Although the *staff size* variable now

turns out negative and weakly significant, we do not interpret this finding as robust, since it is not reflected in our main analyses.

Our robustness checks also confirm our main analyses with regard to alternative explanations. The variable *competing IOs* is once again negative and significant (at $p < 0.01$ and $p < 0.001$) across all three models in our robustness checks on member state critiques. This corroborates our finding above. Similarly, our robustness checks in Models R4 to R6 confirm our finding regarding the association between member state withdrawals and democratic membership of an IO. *Democracy* is negative and statistically significant in all three withdrawal models (at $p < 0.01$ to $p < 0.001$) – see Appendix 4. Moreover, the coefficient of *GDP change* is again negative in Model R6 at $p < 0.01$, providing some more support for the finding above that states may be less likely to withdraw from IOs in times of economic growth, and more likely to do so in times of austerity. The coefficient for *IO members* is positive and highly significant ($p < 0.001$) in Model R4, albeit insignificant in R5 and R6, providing some more evidence for the finding above that member state withdrawals are associated with the size of an IO's membership. Lastly, our robustness checks confirm our main analysis on *power divide* above. While the coefficient in Model R3 is negative and weakly significant ($p < 0.1$) as in Model 3 above (see Table 4), it is positive and significant in all three robustness checks on member state withdrawals (at $p < 0.01$, $p < 0.1$, and $p < 0.05$ respectively). This provides some more evidence that the greater the spread of power between IO members, the less likely they are to criticize an IO, but the more likely they are to withdraw.

As a further quality check of our analyses, we examined our Andersen-Gill regression models for multicollinearity. The results are presented in Appendix 5. Following conventions, we interpret a variance inflation factor (VIF) above ten as cause for multicollinearity concerns. Indeed, several of our variables' VIFs cross this conventional threshold. Among our authority variables, Hooghe and colleagues' *delegation* variable, Zürn and colleagues' *authority* measure, as well as Debre and Dijkstra's *contract precision*, *withdrawal clauses*, and *institutionalization* variables are unproblematic. However, *majority voting*, *amendment clauses*, and *staff size* in model 1 as well as pooling in models 2 and 5 have VIFs larger than ten. It is noteworthy that none of our significant results above relate to authority variables that appear to be affected by multicollinearity issues. As for the remaining independent variables, *power divide*, *preference divide*, *democracy*, and *purpose* appear to be largely unaffected by multicollinearity issues, while the VIFs for *IO members*, *GDP change*, and *competing IOs* are mostly above the conventional threshold of 10. The most consistent factor of preference heterogeneity thus seems unaffected by multicollinearity issues, just like other significant results on *power divide* and *democracy*. Yet, our findings for *competing IOs*, *GDP change*, and *IO members* are potentially affected by multicollinearity issues. Overall, our main conclusions regarding the (null) findings on various authority measures, as well as preference heterogeneity as the most consistent explanatory factor for member states' criticisms and withdrawals, remain intact after checking for robustness and multicollinearity issues.

5 Conclusion

The contestation of IOs has taken center stage in academic discussions in recent years (Bexell et al., 2022; Dellmuth et al., 2022a; Tallberg et al., 2018; Zürn, 2018). This trend is underlined and reemphasized by political controversies at the highest levels. The UK's exit from the EU, the Trump administration's public dispute with the WHO during the coronavirus pandemic, and Israel's ongoing clashes with the UN over the war in Gaza at the time of writing are cases in point. Given the important role that member states play in IOs, much scholarly attention has focused on the agency of states in challenging IOs (von Borzyskowski & Vabulas, 2019). Less attention has been given to the role of IOs themselves. Turning to an IO-level of analysis, we investigated why some IOs are more frequently challenged by their own member states than other IOs. An IO-level of analysis not only allows us to study specific IO features such as the authority of IOs, preference heterogeneity, or membership composition; it can also complement studies that may be biased toward specific IO member states.

We focused on two types of member state challenges: public criticism and withdrawals. We theorized that greater IO authority may lead to more challenges because power might invite contestation (Zürn, 2018), or that greater IO authority may lead to fewer challenges, for example, due to IOs' ability to reduce transaction costs for states (Abbott & Snidal, 1998; Keohane, 1984). Our method to analyze the recurring events of member state criticisms and withdrawals (Andersen & Gill, 1982) accounts for the non-independence of events relating to the same IO by adjusting the standard errors of estimates accordingly, preserves the sequence of events, and is widely used in various disciplines (Amorim & Cai, 2015; Box-Steffensmeier & Zorn 2002; Kaster et al., 2021; Ullah et al., 2014). In order to conduct a robust test of the divergent hypotheses, we drew on different data sources, augmenting them with our own coding and calculations: data on member state criticisms from Sommerer et al. (2022), member state withdrawal data from Pevehouse et al. (2020), as well as authority data from Debre and Dijkstra (2021), Hooghe et al., (2017, 2019a, 2021), and Zürn et al. (2021).

Our results demonstrate that IO authority is generally *not* positively associated with member-state-based challenges, and to some extent even negatively associated with member state withdrawals. This leads us to reject Hypothesis 1, while there is some mixed and weak evidence for Hypothesis 2. Specifically, we find that amendment clauses are robustly negatively associated with member state withdrawals, while withdrawal clauses are positively associated with such events. We find more consistent support for several alternative explanations of member-state-based challenges to IOs. First, preference heterogeneity between IO member states is positively associated with member state criticism and withdrawals. Second, greater competition between IOs in a particular policy field and world region is associated with less public criticism by member states. Third, IOs with a more democratic member state composition experience fewer withdrawals. Importantly, with the exception of preference heterogeneity, the two types of member state challenges (criticism and withdrawals) are driven by separate explanations and are therefore justifiably considered distinct types of challenges.

Our study carries significant implications for the academic study of IOs and the practice of real-world politics. Much of the current literature on the contestation and politicization of IOs (Hooghe & Marks, 2009; Zürn, 2018) stresses the increasing authority of IOs as the cause for discontent. Our study and other research casts doubt on this widely held assumption. With regard to challenges by member states, we find that other factors explain public member state criticism and withdrawals. While proponents of the alleged authority-contestation link may want to limit their argument to the *public* politicization of IOs, recent research casts doubt on this assertion with regard to IO contestation by elites (Uhlin & Verhaegen 2023, p. 8) and shows that citizens worldwide tend to prefer more authoritative IOs (Ghassim et al., 2022; Ghassim & Markus, *forthcoming*). Thus, in contrast to Realist beliefs that the liberal international order is “bound to fail” (Mearsheimer, 2019, p. 7), we have shown that authoritative IOs, which provide the cornerstones for this order, are not more likely to confront more member state challenges and – if anything – less likely to face member state withdrawals than weaker IOs. This has important implications for policymakers with a view to the transnational challenges of the 21st century: Granting IOs more authority does not expose them to more challenges by member states, but may indeed make them less likely to fall apart.

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Data availability The datasets compiled for this article will be made publicly available upon publication.

Declarations

Competing interests The authors have no competing interests to declare.

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