Geopolitical Distance and High Seas Fishing*

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Abstract

To what extent is resource use in transboundary commons driven not only by economic incentives but also by geopolitical motives? We extend the Gordon-Schaefer fisheries model to include political payoffs and show that these can sustain resource use even under negative economic returns. We test the framework on the Chinese distant-water fishing fleet, the world's largest, by examining its activity on the high seas just outside foreign exclusive economic zones. Holding economic incentives constant, the likelihood of Chinese fleet presence or fishing rises with the UN General Assembly voting-based political distance between China and the coastal host country. These estimates are unlikely to reflect reverse causation or omitted confounders. The pattern is broadly consistent with surveillance as the main motive: the effect is concentrated in small fleets of vessels with untraceable ownership, no seasonal fishing pattern, and a tendency to cluster near submarine cables and NATO military installations.

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1 Introduction

Distant-water fishing (DWF) on the high seas, shared marine areas covering 65% of the global ocean, has increased markedly over recent decades. Between 1950 and 2014, major industrial fishing fleets expanded their average traveling distances by 2,000-4,000 km (Tickler et al., 2018). These fleets, yet, depend heavily on government subsidies and would often operate at a loss without them (Sala et al., 2018). Extensive state support in a weakly governed commons raises a fundamental question: is DWF driven solely by commercial incentives, or does it also respond to geopolitical interests? The answer to this question sheds light on a central assumption in theories of common-resource governance. Existing work proposes solutions ranging from community self-governance and tradable rights within jurisdiction, to cooperative agreements between jurisdictions (Munro, 1979; Ostrom, 1990; Costello et al., 2008). Across these settings, however, actors are mainly considered as seeking to maximize resource rents. The economic statecraft literature offers a different perspective, highlighting that state-supported commercial activities can also advance geopolitical objectives (Baldwin, 1985; Farrell and Newman, 2019). If this perspective applies to DWF, cooperation over marine commons may be more difficult to achieve than standard models predict, particularly where no authority exists to oversee international agreements (Stavins, 2011).

This paper examines if interstate geopolitical distance shapes resource use in transnational commons. Specifically, we ask whether ideological divergence between states influences DWF beyond economic considerations. To provide an answer, we study deployment of the Chinese DWF fleet near foreign exclusive economic zones (EEZs), a setting suited to this question. China operates the world's largest DWF fleet and one of the most heavily subsidized (Sala et al., 2018; Millage et al., 2021). Although the fleet is estimated to operate at a loss, sustained government support is justified on grounds of food security, employment, seafood export, and strategic objectives namely the "going out" policy and "Marine Power Strategy" (Mallory, 2013, 2016; Englander et al., 2025). Anecdotal evidence suggests that the fleet's role extends beyond commercial objectives. It has been characterized as an extension of China's maritime security apparatus and foreign policy (Office of Naval Intelligence, 2021; Macias and Jensen, 2025), a characterization driven in particular by the involvement of China's maritime militia which can be mobilized for security operations under a commercial guise (Luo and Panter, 2021; Martinson, 2025). Despite these claims, empirical evidence on whether geopolitical considerations shape the deployment of DWF fleets remains scarce.

We consider four political channels through which DWF deployment may be motivated. First is enforcement, in which the risk of coercion by the host state may deter the foreign fleet's activity near the host's waters. In contrast, fleet activity in these areas may generate political benefits for the vessel-sending state. The second and third channels hence capture potential political gains from power projection and surveillance, mirroring an ex-ante defense logic in which the sending state has greater incentive to signal operational capability or to increase monitoring as relationships worsen (Gibbons, 1997). The fourth channel is retaliation, whereby diplomatic transgressions are punished in a tit-for-tat fashion by increased vessel presence that pressures local fishing stocks (Axelrod, 1980). We incorporate these political costs and benefits into the Gordon-Schaefer fisheries model as additional determinants of optimal fishing effort and show that net political gains can sustain resource extraction even when economic returns are negative.

Our empirical analysis draws on Global Fishing Watch data, which records presence and fishing effort of DWF fleets. We observe Chinese fishing vessels in 50-km buffers just outside 71 EEZs of 21 countries at monthly frequency from 2012 to 2020.[1] To measure interstate political distance, we use the UN General Assembly voting-based ideal point introduced by Bailey et al. (2017). We calculate the absolute difference in ideal point between China and a given host state to quantify the time-varying divergence in their ideological and political alignment. To disentangle political motives, we further construct an accumulative interstate-conflict-severity index using the GDELT event database. This measure captures the intensity of realized negative events that the EEZ host country (as the subject) initiated toward China (as the object). We account for economic incentives of fishing using the concurrent fishing effort observed for all non-Chinese fleets in the buffer, together with marine productivity proxied by earlier abundance of phytoplankton.

Our results indicate that, conditional on EEZ fixed effects, time trends, and time-varying economic incentives for fishing, one point ($\sim$one SD) larger in China-host political distance two years prior is predicted to raise the likelihood of Chinese DWF fleet presence in the buffer by about 15 percentage points, roughly 40% of the sample mean. We document a similar pattern for the outcome indicating any active fishing. Our identifying assumption is that, conditional on the included controls, variation in UNGA vote-based political distance is unrelated to unobserved factors affecting DWF activity. This could be invalidated by reverse causality or omitted confounders. A distributed-lag specification rules out reverse causality: only the two year-lag of political distance returns a statistically significant positive coefficient, while leads and contemporaneous measure do not. We examine the sensitivity of our results to potential omitted confounders by (i) including additional controls for ecological conditions and China-host economic ties, (ii) conducting placebo tests using Taiwanese and

[1] The sample is restricted to 200-nautical-mile sovereign EEZs, excluding overlapping claims, and to EEZs with no or only marginal Chinese fleet presence *inside* the EEZ itself.

Japanese fleets, and (iii) employing alternative measures of political distance. Together, these tests suggest that the baseline relationship is specific to the Chinese fleet and is driven by ideological divergence rather than potential confounding economic considerations. As an independent identification strategy, we instrument the baseline political distance using China-host vote disagreement on specific UNGA issue domains. Across the six domains classified by Voeten (2013), disagreement on nuclear weapons and nuclear materials yields a strong first stage and a second-stage estimate consistent with the baseline. This finding provides additional evidence that the baseline relationship operates through an ideology-determined channel, rather than through endogenous economic factors that drive both UN votes and fishing fleet activity. A broad set of further robustness checks confirms that our results are not driven by outliers or data-construction choices.

We next assess whether political distance also predicts DWF deployment at the intensive margin. For total fleet presence and fishing hours, the relationships are imprecisely estimated in the raw sample. However, they become statistically significant after winsorizing these highly skewed outcomes at their 99th and 95th percentiles. The estimates suggest that a one-point increase in China-host political distance is predicted to raise presence (fishing) hours in the adjacent buffer by around 123% (126%). Similar patterns emerge when we instead *exclude* structural hosts—those that record the largest hours, either because they possess exceptionally productive fishing grounds or because they are neighbors upholding long-term bilateral fisheries agreements with China. Our third intensive-margin measure, the number of unique vessels present in a buffer-month, is significantly and positively associated with political distance even in the baseline specification using the raw outcome. Combined, these findings suggest that widening political distance between China and a host country is associated with both a greater likelihood and a greater intensity of Chinese DWF deployment immediately outside the host's EEZ.

To examine the political motivations underlying these results, we evaluate four candidate mechanisms: enforcement, power projection, retaliation, and surveillance. The evidence most consistently supports the surveillance channel. Enforcement would predict Chinese vessels to visit borders less when relationships worsen due to potential increased scrutiny from the host country, which is the opposite of what we find. This indicates that, at best, enforcement effects are outweighed by political payoffs. Fleet-level heterogeneity further rules out power projection and retaliation as the main political motives. The effects are concentrated in small, inconspicuous fleets operating near democratic states, rather than in the large, visible, and economically disruptive deployments one would expect if power projection or retaliation were the primary objective. Furthermore, we collect rich vessel-level data and show that vessels that are the most sensitive to political incentives stand out along several dimensions compared to the remaining fleet. These vessels tend to lack traceable ownership and are disproportionately equipped with trawler gear, consistent with purpose-built Maritime Militia platforms (Manthorpe, 2019). Critically, they spend significantly more time near submarine cables and NATO military installations. While economically motivated fishing vessels would move in seasonal patterns, we observe that the most politically responsive vessels also behave less seasonally. Together, these findings point to a subset of operationally focused vessels likely gathering intelligence on strategic infrastructure and military assets as the primary driver of the positive association between political distance and fleet presence.

Our work contributes to a number of literature strands. First, it adds to the established literature on the governance of common resources, particularly in transnational settings, by assessing geopolitical incentives as an additional determinant of resource use alongside economic considerations (Gordon, 1954; Schaefer, 1954, 1957; Hardin, 1968; Munro, 1979; Ostrom, 1990; Costello et al., 2008; Stavins, 2011). We also contribute to the emerging literature on the economic and political drivers of vessel deployment and fishing activity on the high seas (Zhang, 2016; Sala et al., 2018; Schuhbauer et al., 2020; Englander et al., 2025). Our findings further speak to the literature on economic statecraft (Baldwin, 1985; Farrell and Newman, 2019). The possibility that distant-water fishing serves both commercial and geopolitical functions suggests that state-supported economic activities may interact with international relations through channels beyond trade and finance. We thus also contribute to research on interstate relations, political preference divergence, and conflict (Gartzke, 1998; Oneal and Russett, 1999; Sweeney, 2003; Kastner, 2007; Dreher et al., 2008; Kilby, 2009; Dreher et al., 2009, 2018). While this literature has largely focused on diplomatic, military, and economic interactions, we highlight vessel deployment in transnational waters as a previously understudied manifestation of geopolitical competition. Finally, our paper relates to an interdisciplinary game theory literature on trust, monitoring, and surveillance (Gibbons, 1997; van Witteloostuijn, 2003; Kydd, 2005; Gundlach and Cannon, 2010; Brugger et al., 2013). A central insight of this literature is that trust reduces the need for verification. We examine this logic in an interstate context where ideological divergence may increase incentives to monitor, with which we provide systematic empirical evidence for a mechanism that has thus far been discussed primarily in theoretical and case-study accounts.

The paper continues as follows. Section 2 provides an institutional overview. In Section 3, we develop a theoretical framework for the possible political incentives of DWF activity. Section 4 describes our main data sources and variable construction, while Section 5 explains our empirical framework. Sections 6 and 7 discuss our empirical results. Section 8 concludes.

2 Background

Distant water fishing. Distant water fishing (DWF) refers to fishing conducted outside a country's jurisdictional waters, either on the high seas or within other countries' exclusive economic zones (EEZs).[2] As coastal stocks have declined in many regions, fishing fleets have moved farther offshore and onto the high seas (Norse et al., 2012). Between 1950 and 2014, major industrial fishing states such as Taiwan, South Korea, Spain, and China expanded their average distances to fishing grounds by 2,000–4,000 km (Tickler et al., 2018). This outward expansion has raised concerns about environmental degradation, resource depletion, and weak governance (McWhinnie, 2009; Norse et al., 2012), as well as socio-economic losses for coastal communities and broader risks to security and political stability (Bennett et al., 2018; Sumaila et al., 2015; Bailey, 1997; Sanjeet, 2013; Ewell et al., 2017).

China operates the world's largest DWF fleet with 4,615 vessels, followed by the European Union (964) and Taiwan (634) (Millage et al., 2021). China's DWF industry emerged in 1985, after key domestic commercial stocks declined during the 1970s and 1980s (Mallory, 2013, 2016), and has seen substantial expansion over time (see Appendix Figure B.1). The literature points to three main motives for its expansion. First, the fleet serves food security: with overfished domestic waters and rising seafood demand, China's EEZ alone can no longer meet consumption needs (Mallory, 2013, 2016). Second, it sustains the domestic fishing industry, employment, and seafood exports (Mallory, 2013). Third, DWF aligns with broader state objectives, including the "going out" policy encouraging Chinese firms to expand abroad and the "Marine Power Strategy" aimed at establishing China as a major maritime power (Mallory, 2016; Englander et al., 2025).

DWF fleets depend crucially on government subsidies. Sumaila et al. (2016) estimate global fisheries subsidies at around 35 billion USD (2009 prices), with fuel taking up the largest part, followed by management and port building. For DWF on the high seas, China provides the largest subsidy volume worldwide—around 1.7 billion USD (2018 prices)—followed by Japan at 695 million USD (Millage et al., 2021). The ecological consequences and economic inefficiency of these subsidies are well documented (Sumaila et al., 2016; Sala et al., 2018; Costello et al., 2021; Englander et al., 2025). Sala et al. (2018) estimate that 2014 global high-seas fishing profits ranged from 3.8 to 5.6 billion USD with subsidies, but from -364

[2] The high seas are the internationally shared marine areas beyond national jurisdictions and account for around 65% of the global ocean surface (Sala et al., 2018). By contrast, exclusive economic zones (EEZs), established under the United Nations Convention on the Law of the Sea, extend up to 200 nautical miles from the coastlines of states and their islands. Within EEZs, coastal states hold exclusive rights over the protection and management of marine resources, whereas the high seas remain largely unregulated and are accessible to vessels from all countries.

million to 1.4 billion USD without. The pattern is starker for China: 2014 high-seas profits ranged from 1 to 479 million USD with subsidies and from -418 to 60 million USD when they are netted out (Sala et al., 2018). Despite their limited market profitability, why do states support DWF fleets? Explanations include potential under-reported catches that mask actual profits, labor and regulatory cost advantages, and seasonal markups (Sala et al., 2018), alongside justifications grounded in food security, employment, and strategic considerations (Mallory, 2013, 2016; Englander et al., 2025).

Maritime militia. Building on the economic and developmental purposes of DWF discussed earlier, a growing body of work argues that Chinese fishing vessels may also serve foreign policy and security functions. Central to this debate is China's Maritime Militia, a force of civilians who receive military training from the People's Liberation Army (PLA) Navy and the Chinese Coast Guard and who can be mobilized for maritime missions (Luo and Panter, 2021; Martinson, 2025). By relying on civilian fishing vessels, the militia engages in so-called gray-zone operations that advance security objectives while reducing the risk of overt military escalation (Luo and Panter, 2021). Importantly, these vessels do not cease to be commercially motivated, but continue to retain economic incentives to fish alongside their security-related functions (Luo and Panter, 2021). Despite their poor combat ability, these units are strategically relevant because they can support reconnaissance and the safeguarding of China's maritime claims well beyond China's immediate coastline (Luo and Panter, 2021; Martinson, 2025). Fishing vessels are particularly useful in this regard because they can maintain a persistent presence in strategically relevant waters while operating under civilian cover and plausibly justifying that presence on economic grounds (Protzer and Stein, 2023; Martinson, 2025).

The use of fishing vessels in this way has some sources to describe parts of China's maritime fishing presence as an extension of its foreign policy and maritime security apparatus (Office of Naval Intelligence, 2021; Macias and Jensen, 2025). More recent work from the US Naval War College's China Maritime Report details not only how the maritime militia is likely to be embedded in the distant-water fleet, but also the extent and structure of its intelligence-gathering functions (Martinson, 2025). These "maritime reconnaissance" units employ cadres that are trained to conduct intelligence, surveillance, and reconnaissance (ISR) missions under directions of the military. Fishing vessels' surveillance capabilities range from confirming unusual activity and filling observational gaps regarding foreign operations (e.g., ship identities or movements) to using advanced sonar and navigation radar equipment to detect submarines (Martinson, 2025).

Submarine cables, which carry 97% of internet traffic, are of special espionage concern as despite their critical intelligence value, tapping cables in the high seas is not prohibited under current international law (Burdette, 2021). Moreover, fishing trawlers are the most common cause of cable breaks (Drew and Hopper, 2009),[3] with the aforementioned gray-zone accusations also being levied against China for cable sabotage under the plausible deniability of a fishing accident (Hale, 2025).

Additionally, anecdotal accounts describe fishing vessels as carrying military equipment (Davidson, 2024) and as being involved in skirmishes with foreign ships (Goodman, 2022). Combined with the sudden appearance of large numbers of fishing vessels near the maritime boundaries of other states, China's DWF presence has been documented to jeopardize the livelihoods of local fishermen while also causing ecological damage (Collyns, 2020; Dubé, 2024; Macias and Jensen, 2025). Under the guise of distant-water fishing, the Maritime Militia could therefore plausibly be employed to intimidate foreign vessels, project Chinese power into strategically relevant maritime areas, or respond to diplomatic tensions without overt military escalation.

3 Theoretical framework

3.1 Possible political motivations

In light of the factual background in Section 2, we derive our hypotheses from a game-theoretic perspective. The starting point is that fishing vessels are civilian actors with economic motives, but that their presence can also generate strategic value. In particular, the same vessel can produce information, demonstrate presence, or impose costs on other states while keeping fishing incentives and operating under a commercial guise.

We consider enforcement by EEZ host states, as well as power projection, surveillance, and retaliation on the Chinese side as plausible political motivations. Changing bilateral relations driven by ideology alignment between China and the relevant coastal state are leveraged as the main explanatory variable shaping political incentives. If political motivations matter, different mechanisms should yield different empirical predictions for vessel behavior as bilateral relations between China and host states deteriorate.[4] These are not mutually exclusive, and any observed empirical pattern may be explained by a combination of the channels discussed below. Later sections assess which of these mechanisms are most consistent with the

[3] Cables are especially vulnerable in the high seas as they are less likely to be buried or armored there (Drew and Hopper, 2009).

[4] Worsening relations are used to illustrate our mechanisms. Apart from the retaliation channel, we expect effects to be symmetric when relations improve.

observed empirical patterns.

Enforcement. One possible mechanism is enforcement. Here, the relevant agency lies with host states rather than China: they may reduce leniency and enforce maritime rules more aggressively against Chinese vessels. There are numerous examples of this, with measures ranging from increased monitoring to detention and even the sinking of Chinese fishing vessels (Costa and Blanchard, 2016; Reuters, 2016, 2017). In that case, the expected costs of operating in relevant maritime areas rise because enforcement increases both the economic and safety risks faced by fishing vessels. If this mechanism dominates, one would expect both vessel presence and fishing effort to decline as political relations deteriorate. The enforcement channel therefore predicts the opposite empirical pattern from the China-driven channels discussed below.

Power projection. A second possible mechanism is the use of fishing vessels for global power projection. The plausibility stems from China's broader strategic ambition to operate as a global maritime power (Mallory, 2016; Englander et al., 2025). Under this logic, Chinese vessel activity serves not only commercial purposes but also the broader political objective of demonstrating China's capacity to maintain a persistent presence in strategically relevant maritime areas. Incentives for power projection should be higher for states with which China has tense or adversarial relations. The value of operating in these waters lies in signaling reach, resolve, and operational capability to coastal states. A striking illustration is the recent formation of an over 300 km long sea barrier by Chinese fishing vessels in the East China Sea (Buckley et al., 2026). In a more coercive form, large-scale deployments of fishing vessels have been described as overwhelming smaller host countries (Collyns, 2020; Dubé, 2024), thus plausibly becoming instruments of intimidation. We therefore expect vessel presence to increase as relations worsen, with the signal value of the power-projecting operations depending on the deployment scale and visibility. Fishing effort may rise coincidentally as even the maritime militia retains economic incentives, but it may also conceal the intention and thus reduce the visibility of supposedly overt displays of power projection.

Surveillance. Another possible mechanism is reconnaissance or surveillance. In repeated strategic interactions, trust and verification can act as substitutes: when trust declines, actors have stronger incentives to monitor the behavior and intentions of others (Gibbons, 1997; van Witteloostuijn, 2003; Gundlach and Cannon, 2010). Applied to the maritime domain, deteriorating interstate relations lower trust, thus increasing the value of monitoring the behavior, capabilities, and intentions of other states. Fishing vessels offer a potentially attractive tool for such monitoring because they can maintain persistent presence in strategically relevant maritime spaces while retaining a civilian appearance. Their commercial guise is especially useful because overt surveillance can itself signal distrust (Gundlach and Cannon, 2010), and, as inspection-game theory shows, a target who knows it is being observed will adopt strategies that conceal the very information the observer seeks (Avenhaus et al., 2002). As detailed above, the qualitative maritime militia literature reinforces the plausibility of this mechanism by emphasizing the reconnaissance and intelligence-gathering functions of Chinese fishing vessels (Luo and Panter, 2021; Protzer and Stein, 2023; Martinson, 2025). What distinguishes the surveillance channel from the other strategic motivations is that worsening bilateral relations should increase the likelihood of small-scale vessel deployments, rather than the appearance of large fleets. Fishing effort may also rise to the extent that it helps legitimize, finance, and, most importantly, disguise surveillance missions. Moreover, actionable intelligence typically benefits from persistent surveillance, which implies that vessels would be expected to remain near maritime borders for extended periods. Beyond persistent border proximity, we also expect surveillance vessels to concentrate near strategic locations such as military bases and submarine cables, where intelligence collection yields the highest returns, e.g. through movement monitoring, mapping vulnerabilities and intercepting communications.

Retaliation. The last mechanism examined is retaliation. In repeated games, reciprocal responses such as tit-for-tat can emerge as effective strategies in the face of hostile actions (Axelrod, 1980). For retaliation to be effective, the response must be observable, reasonably prompt, and attributable to the retaliating party, so that the target updates its behavior in the future. In the maritime setting, political disputes may induce China to use its fishing fleet in ways that impose economic costs on rival states. One possible channel is intensified fishing activity close to foreign EEZs, thereby reducing fish stocks available to local fleets, increasing congestion, or putting pressure on coastal ecosystems and livelihoods. Under this mechanism, worsening interstate relations should be associated with higher vessel presence as well as greater fishing effort. The major distinguishing factor for retaliation is the time-frame of the response and the nature of the interstate relations shifts. Tit-for-tat requires quick and observable responses that the opposing party can causally link to an individual action that the retaliating party wants to disincentivize. Thus, the response should be within months of a politically salient dispute. By contrast, surveillance and power projection are more likely to arise in response to broader and more gradual ideological divergence. Retaliation is likely to involve large fleets that are able to inflict meaningful economic damages.

3.2 Modeling political motivations

To formally assess how political motivations could affect the optimal level of DWF fleet's effort, we incorporate the potential political constraints or payoffs in the Gordon-Schaefer bioeconomic model (Gordon, 1954; Schaefer, 1954, 1957). We start with the benchmark model where DWF vessel i chooses effort E_i to maximize its profit. Let $V_i(.)$ denote the vessel's objective function and $\Pi_i(E_i, X)$ its profit, with X being the available fish stock.[5] In the purely economic benchmark,

$$V_i(E_i, X) = \Pi_i(E_i, X) = \underbrace{p_i\, q_i\, X\, E_i}_{\text{total revenue}} \;-\; \underbrace{(c_i\, E_i + 0.5\,\gamma_i\, E_i^2)}_{\text{total cost}}. \tag{1}$$

q_i is the catchability coefficient that determines total harvest and p_i is the unit price of harvest. c_i is the baseline marginal cost, and $\gamma_i > 0$ captures increasing marginal costs from travel distance, congestion, and operational complexity. The quadratic cost term deviates from standard Gordon-Schaefer linear cost function to ensure an interior optimum when X is treated as given. As the vessel chooses effort to maximize profit, solving the first-order condition yields the optimal effort level:

$$E_i^* = \frac{p_i q_i X - c_i}{\gamma_i}. \tag{2}$$

When effort generates not only economic but political payoffs, the vessel's objective becomes:

$$V_i(E_i, X) = \Pi_i(E_i, X) + \Phi_i(E_i), \tag{3}$$

in which the political payoff is defined as $\Phi_i(E_i) = \alpha_i^{psr} E_i - \alpha_i^e E_i$, with $\alpha_i^{psr}, \alpha_i^e \geq 0$. Consistent with the potential political motives discussed in Section 3.1, α_i^e captures any deterrence induced by enforcement from the host country, while α_i^{psr} captures potential power projection, surveillance, or retaliation motives as gains.[6] The net political payoff is $\Delta_i \equiv \alpha_i^{psr} - \alpha_i^e$. As the vessel maximizes its aggregate objective, we solve the F.O.C and

[5] In this setup, each individual vessel takes X as parametric, consistent with the framework of Gordon (1954). A single vessel's harvest does not change aggregate stock meaningfully, and over the monthly horizon of our empirical analysis stock dynamics are slow relative to within-month variation in effort. We thus do not close the model with the stock-dynamic equation and simply derive optimal-effort change under additional political motivations while treating X as given.

[6] We assume Φ is linear in effort for tractability. This allows the empirical analysis to focus on the sign and heterogeneity of the net political payoff rather than its functional form.

show that the optimal level of effort under the augmented scenario become:

$$E_i^{**} = \frac{p_i q_i X - c_i + \Delta_i}{\gamma_i}. \tag{4}$$

This yields three empirically relevant scenarios to test how optimal level of vessel's effort changes when political payoffs enter the objective function.

1. Neutral political incentives. If $\alpha_i^{psr} = \alpha_i^e$, then $\Delta_i = 0$ and $E_i^{**} = E_i^*$. This implies that political incentives cancel out, and effort is determined only by economic returns.

2. Negative net political incentives. If $\alpha_i^{psr} < \alpha_i^e$, then $\Delta_i < 0$. Political deterrence from host country lowers the marginal payoff from the vessel's effort and the optimal effort level is lower than in the purely economic benchmark: $E_i^{**} < E_i^*$. In this case, fishing may cease even when the economic marginal return is still positive, as long as the total marginal payoff is non-positive:

$$\frac{\partial \Pi_i}{\partial E_i} > 0 \quad \text{and} \quad \frac{\partial \Pi_i}{\partial E_i} + \Delta_i \leq 0. \tag{5}$$

Thus, enforcement can deter fishing before the vessel reaches its profit-maximizing capacity.

3. Positive net political incentives. If $\alpha_i^{psr} > \alpha_i^e$, then $\Delta_i > 0$. Political motives increase the marginal payoff from effort and optimal effort is higher than in the purely economic benchmark: $E_i^{**} > E_i^*$. In this case, fishing may continue even when the economic marginal return is negative, as long as the total marginal payoff remains positive:

$$\frac{\partial \Pi_i}{\partial E_i} < 0 \quad \text{and} \quad \frac{\partial \Pi_i}{\partial E_i} + \Delta_i > 0. \tag{6}$$

Thus, politically motivated effort can persist even under economic losses. Appendix A provides detailed model derivations. In the next sections, we test these hypotheses empirically.

4 Data

Study area. Our empirical analysis focuses on the high-seas area covering the 50-km buffers just outside exclusive economic zones. These include only 200-nautical-mile sovereign EEZs and exclude overlapping claims. Because many countries grant foreign fleets the right to fish within their EEZs for financial compensation (see e.g., Belhabib et al., 2015, 2020), we restrict the sample to host countries with negligible Chinese fishing activity inside their EEZs.[7] The resulting sample comprises 71 EEZs belonging to 21 countries. Figure 1 maps

[7] To our knowledge, no public database tracks bilateral fisheries access agreements. Thus, we implement a transparent sample restriction based on observed fishing intensity. We retain only countries where total

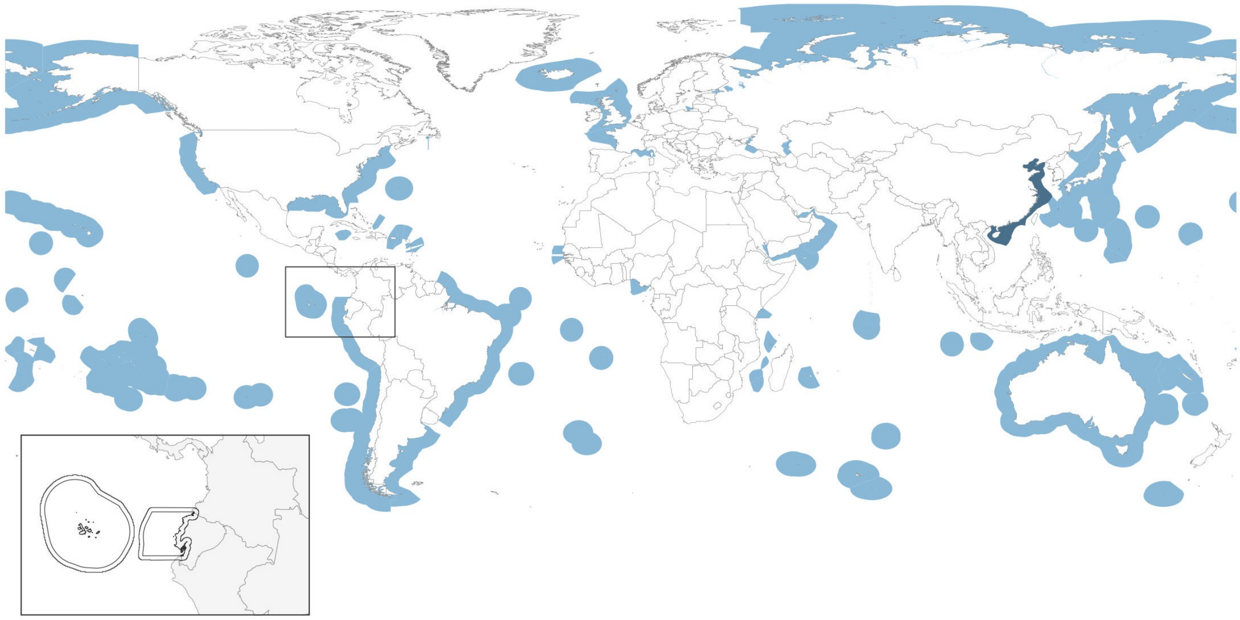

Figure 1: Study area
Figure shows the exclusive economic zones in our sample (lighter shading) and, for reference, China's exclusive economic zone (darker shading). The inset illustrates the 50 km buffer construction using Ecuador's two EEZs as an example: one adjacent to the mainland coast and another surrounding the Galápagos Islands. For each EEZ, the area between the two outermost polylines represents the 50 km buffer used in our analysis.

the EEZs in our sample and illustrates the 50-km buffer construction. Appendix Table B.1 provides the list of EEZs in our sample.

Fleet presence and fishing efforts. We employ data from Global Fishing Watch (GFW), which provides global vessel activity information at the daily frequency since 2012 (Kroodsma et al., 2018; Global Fishing Watch, 2024). Activity is binned to equal grid cells of 0.1° x 0.1° (about 11km x 11km at the equator). For each cell-day, GFW reports each detected vessel's unique Maritime Mobile Service Identifier (MMSI), presence hours, and fishing hours. We use vessel MMSI to link activity data with vessel characteristics such as flag state and gear type. For our main outcomes, we aggregate the total number of presence and fishing hours of all Chinese-flagged vessels across all grid cells within the 50-km buffer outside an EEZ in a given month-year. Appendix Figure B.2 shows the temporal evolution of presence and fishing hours for all vessels and for Chinese vessels recorded in the buffers outside the analyzed EEZs. The observed upward trends reflect both genuine increases in high-seas distant-water fishing and possibly also growth in the volume of data collected by GFW. For the extensive

Chinese fishing hours in buffers are at least twice as large as fishing hours inside the EEZ. Countries with less than 1,000 Chinese fishing hours recorded in its buffers across the entire period are also excluded. These regions are largely inaccessible from China and very low non-zero fishing activity is likely driven by noise rather than deliberate positioning.

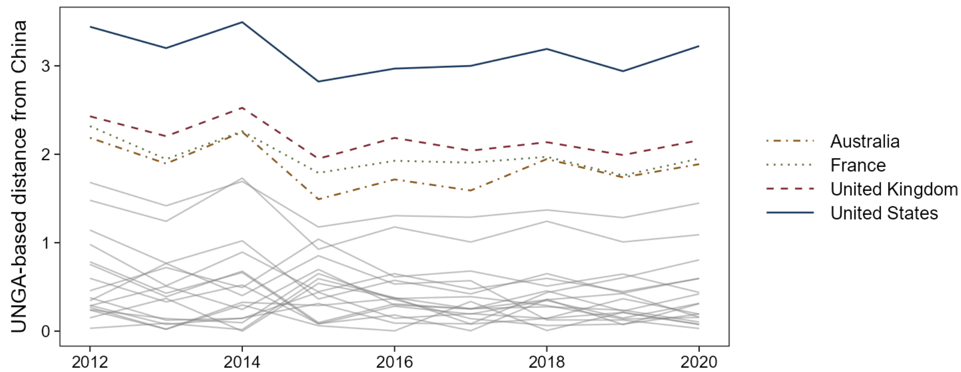

Figure 2: Ideal point political distance
Figure shows absolute difference in annual UN General Assembling voting-derived ideal points between host countries and China from 2012 to 2020.

margin, we construct binary outcomes indicating if any presence or fishing hour is recorded for Chinese vessels in the buffer in a given month-year. On the intensive margin, we use the aggregated measures of vessel presence and fishing hours, together with the number of unique vessels present. We are careful to note that these intensive-margin outcomes may be subject to downward bias from measurement error, wherever a vessel disables its automatic identification system (AIS) transponder mid-way.[8] Nevertheless, extensive-margin outcomes are less vulnerable to this bias, since they capture only whether any hours are recorded rather than the precise count.

Geopolitical distance. Our main measure is the ideal point distance introduced by Bailey et al. (2017). This yearly measure is derived from voting patterns in the UN General Assembly and has become the standard measure of geopolitical distance between countries in both economics and political sciences (e.g., Kersting and Kilby, 2016; Clark and Dolan, 2021; Aiyar et al., 2024; Voeten, 2026). Its key methodological contribution is to hold the UN agenda constant, so that movement in a country's estimated position reflects changing alignment rather than shifts in topics at the UNGA. In essence, the ideal points locate each state relative to the US-led liberal international order. We define the political distance between each EEZ host country and China to be the absolute difference between their ideal

[8]To infer vessels' characteristics and activities, GFW applies convolution neural networks on signal data transmitted from vessels' automatic identification system (AIS) and recorded by satellite or land-based receivers. AIS is mandated by the International Maritime Organization to avoid collision among vessels and is increasingly adopted by vessels operating on the high seas (Kroodsma et al., 2018). This reliance creates two caveats about GFW data: (1) not all vessels have AIS and (2) AIS can be deliberately disabled by vessels. The first caveat is mitigated by Kroodsma et al. (2018) who argue that because AIS captures almost all fishing activities on the high seas, the bias in the data is unlikely to be substantial. The second caveat is discussed extensively by e.g., Welch et al. (2022) and can downward bias our estimated association between political distance and fleet activity, i.e., when vessels have (political) incentives to conceal their movement.

points in a given year. This captures time-varying divergence between the host state and China over how global issues should be resolved.[9] The resulting measure depicted in Figure 2 shows that, on average, the US exhibits the largest distance from China, followed by its allies France, the UK, and Australia.

We also follow Davis et al. (2019) by constructing an event severity measure that utilizes incidents between governments from the GDELT data set (Leetaru and Schrodt, 2013). Each event is weighted by its severity, e.g., a border clash is weighted more heavily than a diplomatic denunciation. Moreover, we only consider negative events to capture diplomatic transgressions. The major difference between the index of Davis et al. (2019) and ours is that our measure is monthly instead of yearly. In the Appendix B.2, we detail how this measure is constructed and how it relates to the more established political distance measure.

Economic incentives. To control for the economic incentives driving distant-water fishing, we use two measures. First, we include the total fishing effort of all non-Chinese fleets in a given buffer-month. Second, we draw on phytoplankton abundance to proxy for marine life. We use MODIS satellite data (NASA), which measure ocean color reflectance and filter for the wavelength emitted by phytoplankton, yielding a measure of biological productivity at 9 km $\times$ 9 km resolution. This approach is similar to that of Flückiger and Ludwig (2015), with the key difference that our buffers are farther offshore and hence likely less productive than the continental-shelf areas studied in their setting.

Our main estimation sample covers 71 EEZs over the period January 2012 to December 2020, yielding a panel of 7,668 EEZ buffer-month observations. Summary statistics are reported in Appendix Table B.2. In Appendix B.3, we also provide detailed description of the complementary data sources used throughout the paper, including boundary shapefiles, additional ecological and economic controls, alternative political-distance measures, and data employed in the mechanism analysis.

Descriptive evidence. As a preliminary step, we visualize the correlation between political distance from China and Chinese DWF fleet presence just outside host EEZs. The binned scatter plot of the raw data in Panel (a) of Figure 3 shows a negative correlation. This likely reflects the substantial cross-country variation in political distance from China illustrated in Figure 2: politically distant countries (e.g., the US or the UK) tend to lie far from China geographically and possess stronger fisheries enforcement, both of which independently correlate with lower Chinese fleet presence. In Panel (b), we partial out EEZ and time fixed

[9] As shown in Appendix C.4, our main results are robust when using simple UN (dis)agreement scores and, in some specifications, when using a severity score for diplomatic transgressions, indicating that our results are driven by a broader concept of geopolitical relations.

effects, and the correlation turns positive. This indicates that when the EEZ's time-invariant characteristics are held constant and global trends accounted for, the probability of observing the Chinese fleet just outside the EEZ's boundary increases when its host country's political divergence from China rises. In the next sections, we provide the econometric estimates of this within-EEZ relationship.

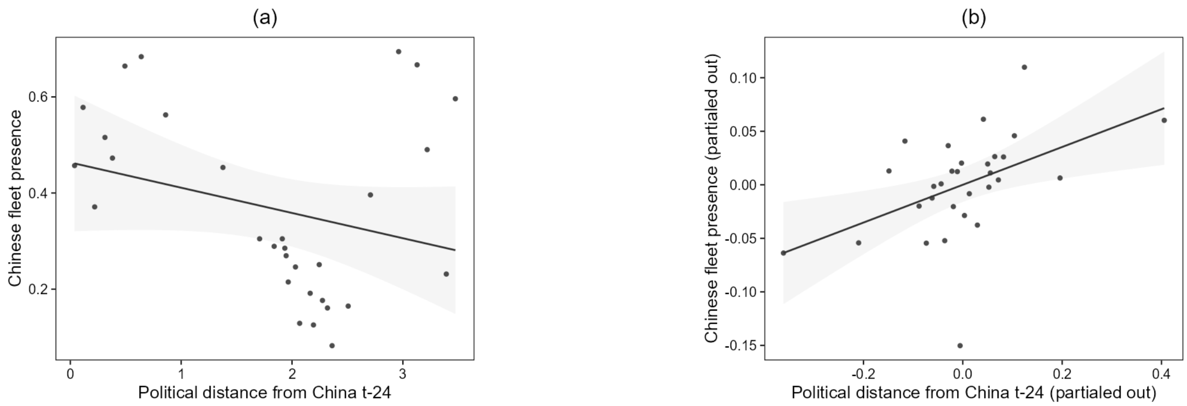

Figure 3: Correlation between political distance and Chinese fleet presence
Figure presents binned scatter plots of the probability of Chinese DWF fleet presence in the 50 km buffer outside a host country's EEZ against political distance from China, measured by the absolute difference in UN General Assembly ideal points. Panel (a) shows the raw data. Panel (b) plots residuals after partialling out EEZ and year-month fixed effects. Both panels include a fitted regression line and the corresponding 95% confidence interval.

5 Empirical framework

We estimate the following regression model to examine the role of political incentives in driving distant water fishing:

$$y_{i,c,t} = \beta PoliticalDistance_{c,t-24} + \varphi' \mathbf{X}_{i,t} + \alpha_i + \alpha_t + \alpha_{i,m(t)} + \varepsilon_{i,c,t}. \tag{7}$$

The main outcome of interest, $y_{i,c,t}$, is an indicator for the presence of any Chinese fleet vessel in the 50 km buffer just outside the exclusive economic zone i of host country c in month-year t. As presence may also reflect vessels in transit, we distinguish between presence and active fishing with a separate indicator for whether the Chinese fleet engages in fishing within the buffer. To capture the intensive margin, we estimate specifications with three count outcomes: total fleet presence hours, total fleet fishing hours, and the number of unique Chinese vessels present in a given buffer-month. We estimate the extensive-margin specifications using OLS, resulting in the linear probability model for the binary outcomes. For the intensive margin, we present two estimators side by side. Our primary estimator is the Poisson pseudo-maximum-likelihood (PPML), which accommodates count outcomes with many zeros (Santos Silva and Tenreyro, 2006).[10] As a robustness check, we additionally estimate the model with OLS using the log of the outcome, restricting the sample to buffer-months with positive observations.

$PoliticalDistance_{c,t-24}$ measures the absolute difference in the ideal point of the host country and China, derived from their UN General Assembly voting patterns (Bailey et al., 2017). We lag this variable by 24 months to match the temporal structure of the voting process and to mitigate reverse-causality concern.[11] To account for the economic incentives driving Chinese fleet activity, we control for (i) the concurrent fishing effort of all non-Chinese fleets and (ii) the stock of marine life, proxied by phytoplankton abundance in the buffer 12 months prior.[12] These time-varying buffer characteristics are subsumed in the control vector $\mathbf{X}$. EEZ fixed effects α_i absorbs time-fixed characteristics of the EEZ that affect the presence of the Chinese fleet in its buffer, including geographic location, climate, as well as the host country's time-invariant enforcement capacity and historical diplomatic relationship with China.[13] Month-year fixed effects α_t capture global time trends, such as increases in fleet subsidies, advances in marine technology, and upgrades in GFW data collection. The EEZ-month fixed effects $\alpha_{i,m(t)}$ account for the seasonality of fishing. Throughout, we cluster standard errors at the EEZ level.

The coefficient β from Eq. 7 captures the change in Chinese DWF fleet activity associated with a one-point increase in UNGA voting-based political distance between the host country and China. This corresponds to roughly one standard deviation of political distance in our sample (see Appendix Table B.2), and is equivalent to moving from a typical European (France, UK) voting position to that of the United States (see Figure 2). Our identifying assumption is that, conditional on the controls for economic incentives, location fixed effects, and time trends, political distance is uncorrelated with unobserved determinants of DWF fleet activity absorbed in the error term. Two primary threats could violate this as-

[10] The PPML model takes the form:

$$y_{i,c,t} = \exp(\beta^P PoliticalDistance_{c,t-24} + \vartheta' \mathbf{X}_{i,t} + \alpha_i^P + \alpha_t^P + \alpha_{i,m(t)}^P)\, v_{i,c,t},$$

where outcome y is the intensive-margin measures. The independent variable, fixed effects, and control variables are similarly defined as in the main linear probability model in Eq. 7.

[11] Because UNGA votes are typically held by the end of each year and may continue into the following year, we use a 24-month lag to ensure that political distance is measured before the outcome and avoid reverse causality from vessel presence leading to diplomatic deterioration and consequently to greater disagreement in UN votes. We address potential reverse causality in Section 6.2 and Appendix C.1.

[12] The 12-month lag captures the maturation of the food chain into harvestable fish stock, since the process from phytoplankton feeding to zooplankton growth to fish becoming fry or juvenile varies across species but generally takes months (see e.g., Schmidt, 2005; Michigan Sea Grant).

[13] Because EEZs are assigned to a single host country, EEZ fixed effects factor in time-invariant country-level controls.

sumption. The first is reverse causality: intense Chinese fleet activity just outside an EEZ border could itself contribute to deteriorating bilateral relations and thus shape future UN voting. Although our use of lagged political distance mitigates this concern, we estimate a distributed-lag model to directly assess it. The second is omitted variable bias: unobserved factors that affect both political distance and fleet activity could confound our estimates. We address this through a series of tests that progressively layer in controls for ecological conditions and bilateral economic ties. To jointly mitigate these endogeneity concerns, we further implement a 2SLS approach exploiting the issue structure of the UNGA votes. Finally, we examine the sensitivity of our estimates to alternative choices in data construction. Section 6.2 provides a detailed discussion and presents the results of these validity and robustness checks.

6 Political distance and fleet activity

In this section, we first present results on the extensive-margin relationship between political distance and the likelihood of fleet presence and fishing activity. We then address concerns regarding the validity of the estimates through a range of complementary specifications and robustness checks. Finally, we turn to the intensive margin and examine how political distance is associated with the scale of fishing effort and vessel deployment.

6.1 Extensive margin

We begin with the extensive-margin results in Table 1. In columns (1)-(3), the dependent variable is an indicator for whether Chinese DWF presence is recorded within the 50-km buffer just outside a given EEZ in a given month. Column (1) reports a parsimonious specification that controls only for the sea-route distance between China's EEZ and the host EEZ, which accounts for the average travel costs. Consistent with the descriptive evidence in Figure 3 (Panel a), a one-point increase in political distance between the host country and China is associated with a 9 percentage-point decrease in the probability of observing Chinese fleet presence. In addition, a 10 percent increase in sea-route distance is associated with a 3 percentage-point decrease. These baseline results, however, are estimated without accounting for location or time fixed effects and hence captures the between-country(EEZ) association rather than within. The negative coefficient on political distance partly reflects that host countries with greater political distance from China on average tend to be both geographically farther and higher-income, thus likely possess stronger enforcement capacity.

Column (2) adds EEZ and time fixed effects, and the coefficient on political distance becomes

Table 1: Political distance and extensive margin of fleet presence and fishing

	1(CHN fleet presence)			1(CHN fleet fishing)		
	(1)	(2)	(3)	(4)	(5)	(6)
Political distance $_{t-24}$	-0.090**	0.177**	0.153**	-0.103***	0.191**	0.170*
	(0.035)	(0.069)	(0.068)	(0.030)	(0.086)	(0.087)
Log sea-route distance	-0.327***			-0.157**		
	(0.064)			(0.062)		
Log non-CHN fishing hours			0.026***			0.024***
			(0.005)			(0.005)
Log phytoplankton $_{t-12}$			2.27			0.132
			(2.10)			(1.84)
EEZ FE	–	✓	✓	–	✓	✓
Month-year FE	–	✓	✓	–	✓	✓
EEZ-month FE	–	–	✓	–	–	✓
Mean dependent variable	0.368	0.368	0.368	0.238	0.238	0.238
Observations	7,668	7,668	7,668	7,668	7,668	7,668

Notes: 'CHN fleet presence' is an indicator variable equal to one if any presence hour is recorded for the Chinese fleet in the buffer, and zero otherwise. 'CHN fishing presence' is an indicator variable equal to one if any fishing hour is recorded for the Chinese fleet in the buffer, and zero otherwise. 'Political distance' is the absolute difference in UNGA voting-based ideal point between China and the EEZ's host country two years prior. 'Log sea-route distance' is the logarithmized sea-route distance from the centroid of China's EEZ to the centroid of the host EEZ. 'Log non-CHN fishing hours' is the logarithmized number of fishing hours recorded for all non-Chinese fleets in the buffer. 'Log phytoplankton' is the logarithmized amount of phytoplankton abundance measured for the buffer one year prior. Robust standard errors, clustered at the EEZ level, are reported in the parentheses. *p<0.1; **p<0.05; ***p<0.01.

positive. The estimate implies that, holding time-invariant EEZ characteristics fixed and absorbing global time-varying shocks, a one-point increase in political distance between the host country and China is predicted to raise the probability of Chinese fleet being present in the buffer by 17.7 percentage points. This approximates nearly half of the outcome mean. In column (3), we include time-varying controls and EEZ $\times$ calendar-month fixed effects to absorb seasonality in fishing activity. The coefficients on the controls are consistent with economic incentives shaping fleet presence: Chinese DWF presence is more likely in buffers where non-Chinese fleets are also fishing and where marine productivity is higher.[14] Importantly, the coefficient on political distance is only modestly attenuated and remains positive and statistically significant, indicating that the within-EEZ association is robust to controlling for time-varying economic drivers of fishing effort.

Columns (4)-(6) repeat these specifications using an indicator for whether the Chinese DWF fleet is actively *fishing* in the buffer, rather than merely present. This outcome speaks more

[14]The coefficient on phytoplankton abundance is positive yet not statistically significant at conventional levels. This could be due to phytoplankton concentration being measured with greater noise farther offshore where the 50-km buffers are located. In Appendix Table C.2, we include sea-surface temperature anomalies as an additional control for marine productivity. This specification produces statistically significant positive coefficient on the ecological control. Beyond, the main estimate on political distance is comparable with the baseline.

directly to the political-economy mechanism in our framework, since presence measure could also capture vessels in transit. The pattern of estimates mirrors columns (1)-(3): the cross-sectional association between political distance and the probability of fishing is negative, but turns positive once time-invariant EEZ characteristics and global time trends are absorbed. The within-EEZ effect is also proportionally larger for this outcome. In the full specification of column (6), a one-point increase in political distance is predicted to raise the probability of Chinese DWF fishing in the buffer by 17 percentage points, equivalent to two thirds of the sample mean.[15]

6.2 Validity and robustness

Our identification relies on the assumption that, conditional on EEZ, time fixed effects, and time-varying controls, UNGA voting-based political distance is uncorrelated with unobserved determinants of DWF activity. Two main threats could violate this assumption. First, our baseline estimates could be biased in the presence of reverse causality, as stronger Chinese fleet activity just outside an EEZ border may itself worsen bilateral relations and thus affect future voting. Second, omitted variables affecting both political distance and DWF activity could invalidate the baseline results. This section presents the complementary approaches we take to address these threats, followed by robustness checks probing the sensitivity of our estimates to alternative data construction choices.

Reverse causality. A natural question is whether stark presence of a foreign DWF just outside an EEZ also deteriorates bilateral relations. If so, the baseline specification (Eq. 7) and the estimates in Table 1 would partly reflect reverse causality rather than the effect of political distance on DWF presence. To assuage this concern, we estimate a distributed-lag specification (Appendix Eq. C.1) that includes one-year and two-year leads and lags of political distance, alongside its contemporaneous value. The results reported in Appendix Figure C.1 are *in*consistent with a reverse-causality interpretation. Only the two-year lag of political distance loads positively and significantly on DWF presence and fishing probability, in line with the baseline results. In contrast, the coefficients on neither the leads nor the contemporaneous measure yield positive estimates as reverse causality would predict.

[15] Following the convention in the literature, our baseline specification uses political distance in levels (the absolute difference in ideal points). To compare the relative magnitudes of political and economic incentives on a common scale, Appendix Table C.1 re-estimates the main specifications using the natural log of political distance (the absolute difference is strictly positive in our sample). The semi-elasticities are strikingly similar: a one percent increase in political distance is associated with approximately the same increase in the probability of Chinese fleet presence (and active fishing) as a one percent increase in total fishing hours by non-Chinese fleets.

Addressing potential confounders. The second primary threat to identification is that factors jointly affecting political distance and DWF activity may be omitted from our estimation. We address this concern in four steps. In the first step, we successively add relevant ecological and economic controls to the baseline specification: (i) anomalies of sea-surface temperature, which regulates the growth of marine species populations (Wang et al., 2020; van der Sleen et al., 2022), and the occurrence of cyclones, which can interfere with DWF activity; and (ii) economic ties between the host country and China, proxied by bilateral trade volume and the existence of a trade agreement, together with host country's income as a measure of enforcement capacity. Results in Appendix Table C.2 show that the coefficient on political distance is qualitatively and quantitatively stable as additional controls are layered in, suggesting that the baseline estimates are unlikely to be driven by these omitted factors. Second, we conduct a placebo test using the two foreign DWF fleets most comparable to China's in scope and economic incentives—the Taiwanese and Japanese fleets (see Appendix Figure C.2). If our baseline reflects general economic or regulatory determinants of DWF, China-host political distance should also predict the presence and fishing of these fleets. It does not: the coefficients reported in Appendix Table C.3 are negligible in magnitude and statistically insignificant, indicating that the baseline captures a China-specific relationship rather than common DWF dynamics.

Third, we address the concern that the results may be driven by idiosyncrasies of the ideological-distance measure rather than actual variation in interstate relations. To this end, we re-estimate the baseline using alternative measures of political distance from the literature: vote agreement scores, two measures constructed from the UNGA DM dataset by Fjelstul et al. (2023, 2025), together with our GDELT event-based severity measure. Appendix Table C.4 shows that the coefficient on political distance remains positive and statistically significant under nearly all alternatives. Finally, a related concern is potential vote-buying at the UNGA, in which donors such as China reward favorable votes with aid and trade concessions (e.g., Kuziemko and Werker, 2006; Dreher et al., 2008, 2009, 2018). If present, this would generate a spurious association determined by host country's dependence on China, i.e., dependent states cast fewer disagreeing votes and may simultaneously be more tolerant of Chinese vessels. We first note that vote buying would predict the *opposite* of our finding, since friendlier votes should accompany more, not less, Chinese presence. As a direct check, Appendix Table C.5 shows that our results are in fact driven by host countries with least reliance on China in both trade and aid, hence most immune to vote buying. Taken together, these exercises support the interpretation that our baseline estimates reflect ideology-driven political divergence rather than confounding economic, diplomatic, or regulatory factors that might directly affect DWF outcomes.

Two-stage least squares estimations. To jointly address endogeneity from reverse causation or omitted confounders, we further implement a two-stage least squares strategy that exploits the issue structure of UNGA roll calls—the basis of the ideal points underlying our baseline political distance. The roll calls span six issues: nuclear weapons and nuclear materials, arms control and disarmament, the Palestinian conflict, economic development, human rights, and colonialism based on Voeten (2013). While our baseline measure captures the overall ideological dimension spanning all six, we construct six issue-specific IVs measuring the share of session-year vote disagreement between the host country and China along each issue dimension.[16] The identifying logic is twofold: (i) disagreement on any issue plausibly contributes to overall ideological distance (relevance), and (ii) disagreement on issues such as nuclear weapons and arms control is sufficiently removed from the determinants of DWF to influence Chinese fleet only through aggregate political alignment (exclusion). Appendix C.3 details the IV construction. The results in Appendix Tables C.6 and C.7 show that, while most disagreement instruments significantly predict the baseline political distance in the first stage, only the nuclear-weapons and arms-control IVs yield F-statistics above conventional weak-instrument threshold. The second-stage estimate using the nuclear-weapons IV is positive and statistically significant, consistent with the OLS baseline.[17] For comparison, the economic-development IV is weak in the first stage and yields imprecise estimates in the second, suggesting that this component of the baseline distance is unlikely to drive our main results. Together, these patterns reinforce the interpretation that our baseline captures political distance driven by ideological divergence rather than confounding economic misalignment between China and host countries.

Robustness checks. We complement the validity tests with three robustness checks. We first examine whether the estimates are driven by influential observations by sequentially excluding one host country or EEZ at a time and re-estimating the baseline specification. The resulting coefficients presented in Appendix Figure C.3 are stable throughout, indicating that no single host country or EEZ disproportionately influence the results in Table 1. Second, we show that our results are not sensitive to the 50-km buffer used to define the sample. In Appendix Figure C.4, varying the buffer distance from 10 to 100 km yields estimates that remain qualitatively and quantitatively similar to the baseline. Finally, we conduct a permutation test in which political distance is randomly reassigned across host countries within each month-year and re-estimate the baseline specification on each permuted sample.

[16]The instruments use exact vote mismatches on roll calls in specific issue domains, following the agreement-score approach of Signorino and Ritter (1999); details are presented in Appendix C.3. By contrast, the baseline political-distance measure of Bailey et al. (2017) estimates a one-dimensional latent ideal point using a dynamic item-response model fitted to votes across the full set of UNGA roll calls.

[17]The second-stage estimate for the arms-control IV is positive yet not precisely estimated.

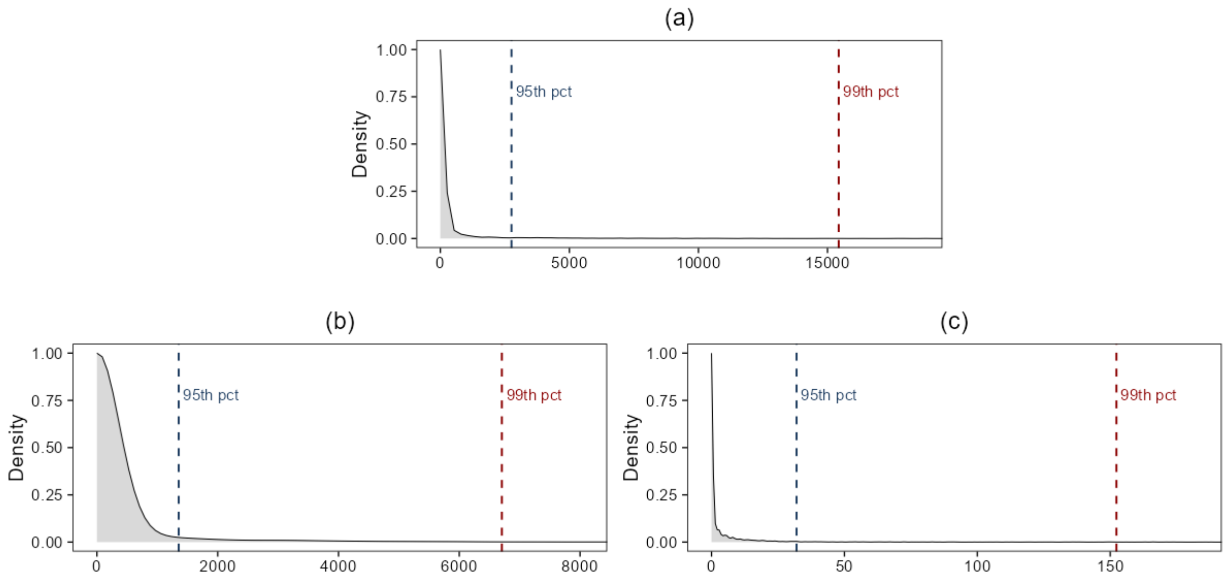

Figure 4: Distributions of intensive-margin outcomes
Figure plots the distributions of the main intensive-margin outcomes of the Chinese DWF fleet's total presence hours (Panel a), total fishing hours (Panel b), and number of unique vessels present (Panel c) across the EEZ buffer-months in the sample. In each panel, vertical dashed lines mark the 95th and 99th percentiles.

Appendix Figure C.5 shows that the coefficients across 5,000 permutations center on zero and much smaller than the actual estimates reported in Table 1, indicating that the baseline relationship is unlikely to arise from chance.

6.3 Intensive margin

In Section 6.1 and 6.2, we document that more ideology-driven political distance between China and a host country is predicted to raise the likelihood of the Chinese DWF fleet being present or fishing just outside the host's EEZ. We turn to explore the dynamics on the intensive margin, that is whether the amounts of time the fleet being active and its deployment also vary with diverging stances. Table 2 presents the results. We look into three outcomes: the total number of presence hours recorded for the Chinese fleet (i.e., summed across all vessels carrying the Chinese flag), an analogous measure for active fishing, and the total number of unique Chinese vessels present. We start with the first outcome in Panel A. As illustrated in Figure 4 (Panel a), the count outcome of presence hours contains many zeros and is highly right-skewed. We thus employ the Poisson pseudo-maximum-likelihood (PPML) estimator in the baseline (see e.g, Santos Silva and Tenreyro, 2006).[18] The coefficient in column (1) is negative, suggesting that increasing political distance between

[18]Because singleton observations within fixed-effect groups whose outcomes contain only zeros are dropped from the estimation, the sample size is smaller than in the extensive-margin analysis.

China and host is associated with a *decrease* in the total number of Chinese fleet presence hours in the 50-km buffer. The estimate is yet not statistically significant. The imprecision likely reflects the high variance and right skew of the outcome, whereby a small number of observations with extremely large presence hours could disproportionately influence the estimate. We probe this along several margins. We first winsorize the outcome at its 99th and 95th-percentile values in columns (2) and (3). Column (2) shows a positive and statistically significant coefficient: a one-point increase in the China-host political distance is predicted to *increase* the number of the Chinese fleet being present in the buffer by about 123%.[19] The pattern is similar in column (3).[20]

The contrast between column (1) and columns (2)-(3) suggests that the extremely large outcome observations may be concentrated in hosts where Chinese fleet activity at the border is motivated by structural factors other than political distance. The six hosts with outlier presence hours are Ecuador, Peru, Chile, Argentina, Russia, and Japan. The Southern American coastal nations host highly productive marine ecosystems and are favored fishing grounds for many DWF fleets including China's, whereas Russia and Japan are the neighbor countries with whom China shares long-term fisheries agreements.[21] For these reasons, the Chinese DWF activity next to waters of these hosts is probably less responsive to political distance, which may introduce noise in the full sample estimation. To test this, column (4) drops the six structural hosts and retains the outcome in its raw form. The coefficient on political distance is positive and statistically significant, implying that for a *non*-structural host, a one-point increase in political distance from China is associated with 88% higher Chinese fleet presence hours in the buffer adjacent to its EEZ. In column (5), we employ OLS on the natural log of presence hours, essentially restricting the sample to buffer-months with positive presence. The point estimate is comparable to those in columns (2)-(4), albeit less precisely estimated, indicating that among buffer-months with any Chinese fleet presence, greater political distance is associated with more intensive activity.[22] Combined, the results suggest that the imprecise estimate in column (1) reflects influence from a few extreme observations in structural-host EEZs. For the bulk of the remaining observations, increasing China-host political divergence is robustly associated with more Chinese fleet presence hours just outside the host's EEZ.

[19] $100 \times (\exp(0.802) - 1) = 123.00$.

[20] Truncating the sample at these tail values—rather than winsorizing—yields very similar point estimates.

[21] The Sino-Japanese Fisheries Agreement, originally signed in 1975, governs cooperative management in the East China Sea (see e.g., Keyuan, 2003). China and the Soviet Union signed a bilateral Agreement on Cooperation in Fisheries in 1988 (see Ministry of Foreign Affairs of the People's Republic of China, 1988).

[22] The convergence of the estimates across columns is consistent with the influence of extreme outcomes being attenuated through different approaches: capping the right tail (winsorizing in columns 2-3), excluding structural observations in column 4, and compressing the outcome scale via log transformation in column 5.

Table 2: Political distance and intensive margin of fleet presence and fishing

	(1)	(2)	(3)	(4)	(5)
Estimator	PPML	PPML	PPML	PPML	OLS
Outcome	Raw	Wins. 99%	Wins. 95%	Raw	log(y)
Sample	Full	Full	Full	Excluding struct. hosts	Positives only
	Panel A. Outcome is total number of CHN fleet presence hours				
Political distance $_{t-24}$	-0.231	0.802***	0.955***	0.629***	0.652*
	(0.407)	(0.209)	(0.189)	(0.188)	(0.370)
Log non-CHN fishing hours	0.415***	0.278***	0.205***	0.026	0.103***
	(0.142)	(0.103)	(0.051)	(0.090)	(0.035)
Log phytoplankton $_{t-12}$	20.2**	0.549	1.34	17.4***	6.81
	(8.27)	(4.25)	(3.10)	(4.73)	(10.0)
Mean dependent variable	1,403.7	804.7	389.4	283.3	5.21
Observations	4,770	4,770	4,770	3,879	2,819
	Panel B. Outcome is total number of CHN fleet fishing hours				
Political distance $_{t-24}$	0.109	0.822***	0.898***	0.527**	0.797
	(0.391)	(0.272)	(0.245)	(0.245)	(0.487)
Log non-CHN fishing hours	0.460***	0.347***	0.314***	0.127	0.310***
	(0.150)	(0.124)	(0.069)	(0.113)	(0.068)
Log phytoplankton $_{t-12}$	7.09	-2.67	3.01	21.2***	-6.46
	(8.11)	(4.09)	(5.28)	(6.26)	(10.7)
Mean dependent variable	710.6	456.2	221.2	235.7	5.02
Observations	3,879	3,879	3,879	2,993	1,824
	Panel C. Outcome is total number of CHN vessels present				
Political distance $_{t-24}$	0.327***	0.502***	0.769***	0.372***	0.259**
	(0.105)	(0.112)	(0.139)	(0.091)	(0.117)
Log non-CHN fishing hours	0.126***	0.107***	0.098***	0.026	0.053**
	(0.042)	(0.036)	(0.026)	(0.038)	(0.022)
Log phytoplankton $_{t-12}$	17.0**	15.5**	2.95	7.12	4.31
	(8.44)	(6.77)	(3.53)	(4.85)	(5.20)
Mean dependent variable	12.0	11.0	6.46	4.83	1.92
Observations	4,770	4,770	4,770	3,879	2,819
EEZ FE	✓	✓	✓	✓	✓
Month-year FE	✓	✓	✓	✓	✓
EEZ-month FE	✓	✓	✓	✓	✓

Notes: Col. (1) reports Poisson pseudo-maximum-likelihood (PPML) estimates on the full sample. Cols. (2)-(3) winsorize the outcome at the 99th and 95th percentiles, respectively. Col. (4) excludes structural-host EEZs (Argentina, Chile, Ecuador, Peru, Russia, and Japan), defined as those with established Chinese fishing grounds or long-term bilateral fisheries agreements with China. Col. (5) uses OLS with the outcome in logs, restricting the sample to EEZ buffer-months with positive outcomes. The PPML estimator (Cols. 1-4) drops singleton observations within fixed-effect groups whose outcomes are always zero, reducing the sample below the 7,668 buffer-months in the extensive-margin analysis. Outcomes in Panels A-C are the total number of presence hours, fishing hours, and unique vessels recorded for the Chinese fleet in a given EEZ buffer-month. 'Political distance' is the absolute difference in UNGA voting-based ideal point between China and the EEZ's host country two years prior. 'Log non-CHN fishing hours' is the logarithmized number of fishing hours recorded for non-Chinese fleets in the buffer. 'Log phytoplankton' is the logarithmized amount of phytoplankton abundance measured for the buffer one year prior. Robust standard errors, clustered at the EEZ level, are reported in the parentheses. *p<0.1; **p<0.05; ***p<0.01.

In Panel B, we repeat the exercise with the fleet's fishing hours. The pattern is qualitatively and quantitatively similar to Panel A: the estimate on political distance is not statistically significant on the raw full sample in column (1), but turns positive and significant once large observations in structural hosts are winsorized (columns 2-3) or excluded (column 4). Panel C (Table 2) looks into a third dimension of activity intensity: the number of unique vessels in the Chinese fleet present in a given buffer-month. Two features distinguish this outcome from the hours-based measures. First, the vessel count is bounded by the size of the Chinese DWF fleet (Figure 4, Panel C), so the outlier-influence problem driving the imprecise estimates in Panels A-B could be attenuated. Second, vessel counts are more robust to measurement error: hours are reduced whenever a vessel temporarily switches off its AIS transponder mid-trip, but the same vessel still typically appears in the buffer at some other point and remains in the count. In line with these advantages, column (1) yields a positive and statistically significant coefficient even on the raw outcome and full sample. It reveals that a one-point increase in China-host political distance is predicted to raise the number of Chinese vessels present in the host EEZ's buffer by about 39%. Winsorizing the outcome at extreme values, dropping structural hosts, or estimating OLS on log outcome likewise produces statistically significant positive coefficients on political distance.

Together, the results presented in Table 2 provide evidence suggesting that Chinese DWF fleet's deployment just outside a host's EEZ intensifies as China-host political distance widens. This finding complements the extensive-margin results in Section 6.1, showing that not only is the fleet more likely to be present outside the EEZs of more politically distant hosts, but it also registers more activity hours and has more vessels there. This signals that political incentives shape deployment beyond economic considerations. Specifically within our theoretical framework in Section 3, the empirical pattern aligns with political payoffs outweighing deterrence from the host state (net political gains), which potentially sustains presence and fishing effort even when economic returns are negative. We shed light on the specific political mechanisms underlying this pattern in Section 7.

7 Mechanisms

In Section 6, we document that the positioning and fishing activity of the Chinese DWF fleet appear to yield strategic value that outweighs any potential drawback of increased enforcement and scrutiny of host countries' coast guards and navies. This section investigates the nature of these strategic payoffs. The empirical investigations draw on the theoretic considerations of Section 3.1, which presupposes power projection, surveillance, and retal-

Table 3: Heterogeneity at the fleet level

	1(CHN fleet presence)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Political distance $_{t-24}$	0.202***	0.182**	0.132*	0.233***	0.102	-0.128	
	(0.071)	(0.073)	(0.079)	(0.073)	(0.068)	(0.128)	
Political distance $_{t-24}$ × Far capital	-0.350***						
	(0.078)						
Political distance $_{t-24}$ × Large EEZ		-0.108					
		(0.089)					
Political distance $_{t-24}$ × Strong navy			0.055				
			(0.088)				
Political distance $_{t-24}$ × Near China				-0.339***			
				(0.078)			
Political distance $_{t-24}$ × Small fleets					0.170**		
					(0.083)		
Political distance $_{t-24}$ × Democratic						0.450***	
						(0.157)	
Neg. event severity $_{t-5,\ldots,t-1}$ (std.)							0.012
							(0.010)
Observations	7,668	7,668	7,668	7,668	7,668	7,668	7,668
Controls	✓	✓	✓	✓	✓	✓	✓
EEZ FE	✓	✓	✓	✓	✓	✓	✓
Month-year FE	✓	✓	✓	✓	✓	✓	✓
EEZ-month FE	✓	✓	✓	✓	✓	✓	✓

Notes: 'CHN fleet presence' is an indicator variable equal to one if any presence hour is recorded for the Chinese fleet in the buffer, and zero otherwise. 'Political distance' is the absolute difference in UNGA voting-based ideal point between China and the EEZ's host country two years prior. 'Far capital' equals one if the marine distance to the host country's capital exceeds the 75th percentile. 'Large EEZ' equals one if EEZ area exceeds the 75th percentile. 'Strong navy' equals one if the host country's naval tonnage exceeds the 75th percentile. 'Near China' equals one if the marine distance to China is below the 25th percentile. 'Small fleets' equals one if the average Chinese fleet size conditional on presence is below the median. 'Democratic' equals one if the host country scores above 5 on the Polity IV index. 'Neg. event severity' is the cumulative sum of the Goldstein severity of all of negative events GDELT events between the host country (subject) and China (object) over the preceding five months. All specifications control for time-varying economic incentives of fishing proxied by log number of fishing hours recorded for non-Chinese fleets in the buffer and log amount of phytoplankton abundance measured for the buffer one year prior. Robust standard errors, clustered at the EEZ level, are reported in the parentheses. *p<0.1; **p<0.05; ***p<0.01.

iation as strategic motivations. Because the aggregate effects are consistent with multiple mechanisms, we proceed by systematically evaluating each channel separately. Alongside these China-driven channels, we also revisit the enforcement channel from the host country side. First, we examine broad heterogeneity at the fleet level, which points towards the surveillance channel as one with strongest empirical support. Afterwards, we leverage a rich set of vessel-level information to lend further credibility to the surveillance channel, as well as to examine what type of intelligence these vessels may be gathering.

7.1 Fleet-level heterogeneity

Enforcement. We first consider the enforcement channel, which operates through host country behavior. Specifically, deteriorating relations may induce coastal states to increase monitoring intensity and enforcement actions against foreign vessels. Overall, our baseline results suggest that strategic payoffs exceed a potential increase in enforcement intensity when relationships worsen. Columns (1)-(3) of Table 3 further disentangles this average effect based on characteristics that determine enforcement capacities of host countries. In the first column, if enforcement plays an important role, EEZs far from the host country's seat of power should possess less policing capacity and therefore may allow Chinese vessels greater freedom to operate undetected. The interaction term, however, points to the opposite being the case. The estimates implies that the main effect comes from EEZs that are nearer to the capital. This weakens the case for enforcement and, as elaborated upon later, strengthens the case for surveillance. Further supporting this notion, we do not find stronger effects for larger EEZs (column 2), which may be more difficult for the host to monitor, or weaker effects for EEZs belonging to hosts with stronger navies (column 3).

While we do not find evidence in favor of enforcement here, it does not mean that this channel is an irrelevant predictor of Chinese vessel movement. Within the time span of our sample, it is unlikely that enforcement capacity changes significantly for any country, thus making within-country variation less useful to capture this mechanism. The between-country results in Table 1 (column 1) suggest that EEZs of the most politically distant countries, i.e., the US and its allies, have fewer Chinese vessels at their borders, even after controlling for distance. These countries are more developed and hence likely have higher baseline enforcement capacity.

Power projection. We next examine whether presence of the Chinese DWF fleet is motivated by power projection. If this were the primary motive, we would expect stronger effects in EEZs closer to China, where security stakes are higher and strategic interests are most salient, notably the South China Sea and Taiwan. Evidence from Table 3 instead does not suggest this is the case. Column (4) shows that the baseline political-distance effect, in fact, attenuates in closer EEZs. We are careful to note that the sample excludes overlapping claims and thus coastal countries in the South China Sea. Therefore, while power projection is unlikely to act as the major motivating mechanism within our scope, this may not hold externally. Importantly, column (5) indicates that the effect is driven by EEZs where average size of the visiting Chinese DWF fleet is smaller. This pattern is inconsistent with power projection, which would typically involve a large, visible fleet presence rather than small-scale deployments. Figure 5 reinforces this notion. Panel (a) illustrates that our political distance effect makes it more likely for small fleets to appear. The coefficient is strongest and statistically significant for very low vessel-count thresholds and turns negative once fleet size exceeds 40. Finally, Panel C of Table 2 indicates that the magnitude of this effect is modest: a one-standard-deviation increase in political distance is predicted to bring only about five additional vessels to the buffer on average.

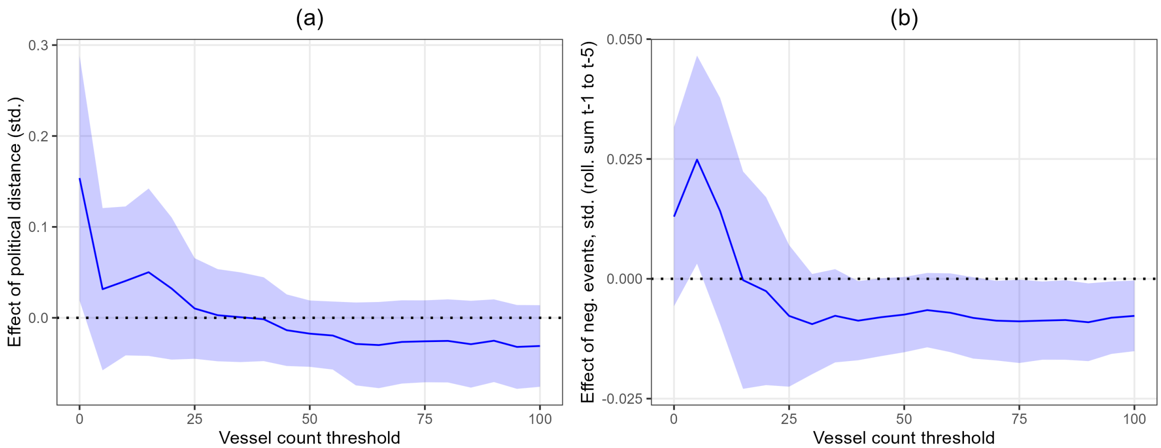

Figure 5: Effect of political distance and negative events by fleet size
Figure presents the probability of Chinese DWF presence with fleets above ship count thresholds between 0 and 100. Every fifth threshold is estimated via an independent regression. Panel (a) shows the effect of our main political distance variable on the chance of a fleet above each threshhold appearing, panel (b) shows the effect of the severity-weighted rolling sum of negative events in $t-1$ until $t-5$ based on our GDELT measure. Only events in which China is the object of an action are considered in (b). Both panels show effect estimates and the corresponding 95% confidence interval and with controlls similar to the main regressions.

Surveillance. The surveillance channel conjectures that deteriorating interstate relations increase incentives to monitor the foreign countries, particularly through inconspicuous, smaller fleets that provide just enough cover and support without drawing too much attention. The heterogeneity patterns in Table 3 are consistent with this interpretation. As aforementioned, column (5) shows that the baseline estimate is driven by fleets of small sizes, aligning with low-visibility monitoring rather than large-scale signaling. Moreover, column (6) demonstrates that effects are concentrated in EEZs belonging to democratic host countries, which are more likely to be embedded in Western security networks and therefore present higher intelligence value. A further argument for surveillance rather than power projection is that fishing activity itself, not only presence, rises with political distance (Tables 1 and 2). Overt power projection would not require fishing as cover. Surveillance, by contrast, plausibly does, since fishing provides a commercial rationale for sustained vessel presence just outside a foreign EEZ.[23] Lastly, as seen in column (1), EEZs that are far from the host country's capital have significantly weaker effects on vessel presence. In other words, our results are not driven by overseas territories and instead stem from EEZs close to countries' seats of political and military power, where intelligence value is plausibly the highest.

[23] A prominent example of overt projection is the coordinated massing of Chinese fishing vessels documented in Buckley et al. (2026), in which the operation appears intended to demonstrate the capability and coordination of the fleet to neighboring states rather than to fish.

Retaliation. Finally, we consider retaliation. This mechanism requires that responses be timely, observable, and attributable to specific diplomatic transgressions. It therefore predicts short-run increases in vessel activity following salient disputes, potentially accompanied by economically costly fishing pressure. To probe this possibility, we utilize our GDELT event-based measure of diplomatic transgressions in order to test the effect of the cumulative severity of bilateral disputes within the preceding 5 months, excluding the current one. The last column in Table 3 reveals a positive estimate, which however is not statistically significant at conventional levels.[24]

Figure 5, Panel (b), further shows that negative diplomatic events are associated with an increase in small fleets and a decline in large fleets. This is a similar pattern to our canonical political distance measure in Panel (a) and inconsistent with coercive retaliation as smaller fleets will only have limited punitive economic impact. While this is suggestive of some responsiveness to diplomatic shocks, the overall pattern is more consistent with heightened monitoring following diplomatic tension rather than punitive escalation. The negative and statistically significant effects on larger fleet sizes can be interpreted as reflecting either increased host country enforcement or deliberate restraint by China to avoid escalation. We thus reject retaliation as the main strategic motive and document the opposite effect, with larger fleets becoming less common shortly after interstate conflicts.

7.2 Vessel-level heterogeneity

In the previous section, we find that heterogeneity patterns at the fleet level are consistent with surveillance as the primary underlying motive. Nevertheless, the analysis still masks which vessels conduct the activity or what kind of information they may collect. We therefore turn to vessel-level characteristics, both to further test the surveillance interpretation and to characterize the behavior consistent with it.

Our method in this section is guided by the idea that if the vessels behind our results position themselves at the border for surveillance, their characteristics and behavior should differ from the rest of the distant-water fleet in ways consistent with such motive. We do not assume that every vessel in the fleet engages in surveillance and therefore separate vessels by how strongly each one's presence responds to political distance. For every vessel v, we re-estimate

[24] GDELT relies on automated text processing of news reports rather than manually curated diplomatic records, which makes the data inherently noisy (Hammond and Weidmann, 2014; Hong et al., 2025). Estimates based on this measure are therefore expected to be relatively imprecise.

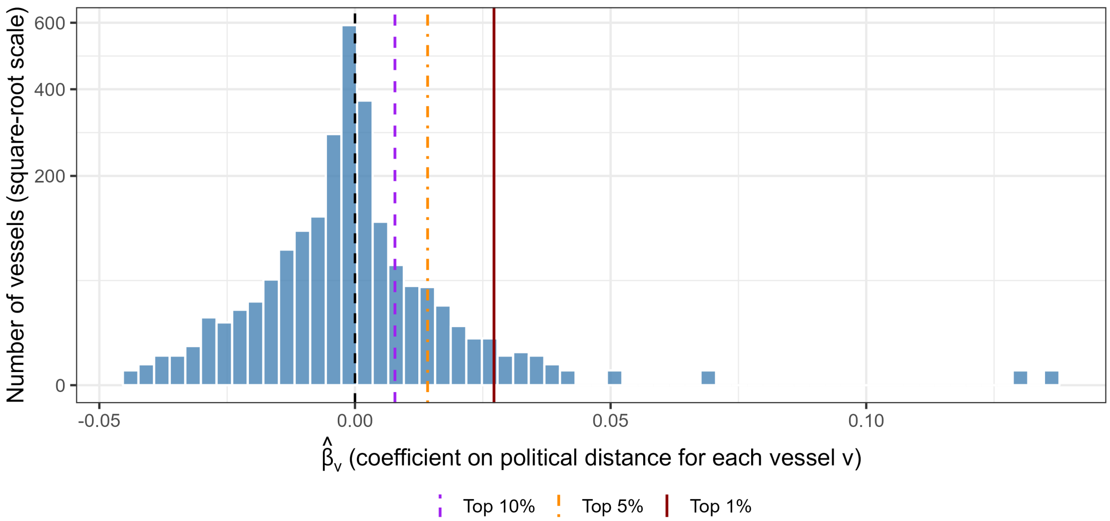

Figure 6: Distribution of the political distance effect across vessels
The figure shows the distribution of 2101 vessel-level OLS coefficients on political distance $\hat{\beta}_v$ from separate regressions of vessel presence on political distance with similar controls as the main regression. Each regression is estimated for one vessel across all EEZ-months in the sample. Vertical lines mark the 90th, 95th, and 99th percentiles of the coefficient distribution. The y-axis is on a square-root scale. The black dashed line indicates a coefficient of zero.

the extensive-margin regression in Eq. 7, yielding 2,101 vessel-specific coefficients $\hat{\beta}_v$:[25]

$$Presence_{v,i,c,t} \;=\; \beta_v \, PoliticalDistance_{c,t-24} + \varphi' \mathbf{X}_{i,t} + \alpha_i + \alpha_t + \alpha_{i,m(t)} + \varepsilon_{v,i,c,t}, \qquad \forall\, v. \quad (8)$$

Figure 6 plots the resulting distribution of vessel-specific coefficients $\hat{\beta}_v$. The distribution has two notable features. First, the majority of vessels have a negative coefficient, consistent with the enforcement channel as these merely fishing vessels appear to be deterred from operating near the EEZs of more politically distant hosts. Second and interestingly, the coefficient distribution is right skewed, with a long tail of vessels whose deployment increases sharply with political distance. This is precisely the pattern we would expect under the surveillance hypothesis if a subset of the fleet conducts intelligence-gathering activity targeted at politically distant hosts.

Vessel characteristics. We proceed to examine whether the observable characteristics of vessels with positive $\hat{\beta}_v$ of largest magnitudes are consistent with surveillance activity. Table 4 compares the top 10%, 5%, and 1% of vessels (ranked by $\hat{\beta}_v$) against the bottom 90% on a set of ownership, identity, and gear attributes. For a given characteristic, we test for mean differences between each top group and the bottom 90% (1,890 vessels). Three patterns emerge. First, among the top 1% (22 vessels), none have vessel registries that

[25]Vessels that are exclusively found in Japanese buffers are discarded as they are likely to be domestic nearshore fishing boats.

connect them to state-owned firms. While this at first glance might weaken the surveillance hypothesis, the picture becomes clearer when considering that over 90% of them cannot be connected to any company at all. Nonetheless, the second pattern shows that nearly all of them broadcast information with their AIS that self-identifies as fishing vessels. These first two patterns are consistent with what we would expect from surveillance vessels. While the former makes them opaque enough to not be connected to the government, the latter makes them seem inconspicuous so as to minimize the risk of coast guard inspections.

Third, when it comes to vessel gear, trawlers are vastly overrepresented in top 1%. Additionally, the top vessels' gear type is more often flagged as ambiguous, and the GFW neural-network classifier (which assigns gear type from vessel characteristics and behavior) is significantly less confident in its assignments for these vessels. Together, these features of untraceable ownership, fishing-vessel identification, and disproportionately trawler-type gear with ambiguous classification align with descriptions of the Chinese Maritime Militia in the security literature, which document purpose-built trawlers with reinforced hulls and communications equipment deployed for intelligence-gathering (Manthorpe, 2019).

Behavioral patterns. In addition to the discussed characteristics, we also find anomalies in the behavior of suspected surveillance vessels. Perhaps the most surprising difference is that they disable their automatic identification system (AIS) less. Instead of trying to conceal, it might be possible that that these ships disguise themselves so as to stay as inconspicuous as possible. It is usually vessels that are engaged in illegal fishing in foreign EEZs that turn off AIS as it reveals their location to local coast guards (e.g., Welch et al., 2022). Therefore, legal compliance by clearly revealing one's location to be in international waters could help minimize the risk of boarding inspections. In addition, consistent with previous results on small fleet sizes, vessels that drive our results share border visits with significantly fewer other Chinese vessels on average. We next look into seasonal patterns of vessel behaviors. If border visits were economically motivated, we would expect them to cluster in fishing seasons. The pattern in the data goes the other way: vessels with stronger political-distance responses show *less* seasonal concentration, i.e., their visits are spread more evenly across calendar months than those of vessels in the bottom 90%.[26] Lastly, we observe that the more politically motivated vessels also spend significantly more of their time in buffer zones right next to the foreign EEZs.

[26]For each vessel, we compute the circular standard deviation of the calendar months in which its border visits occur. Strongly seasonal visits concentrate in a narrow set of months and yield a low circular SD; year-round visits yield a high circular SD.

Table 4: Vessel-level evidence for the surveillance interpretation

	Bottom 90%	Top 10%	Top 5%	Top 1%
Coefficient on political distance	−0.004	0.017***	0.024***	0.044***
	(0.008)	(0.014)	(0.017)	(0.030)
Sample size	1,890	211	106	22
Vessel characteristics				
State-owned (SOE)	0.133	0.149	0.217	0.000***
	(0.340)	(0.357)	(0.417)	(0.000)
Unknown ownership	0.622	0.521***	0.566	0.909***
	(0.485)	(0.501)	(0.498)	(0.294)
Self-reported fishing vessel	0.844	0.864	0.856	0.955**
	(0.363)	(0.344)	(0.353)	(0.213)
Trawler	0.159	0.165	0.212	0.409**
	(0.366)	(0.372)	(0.410)	(0.503)
Ambiguous gear	0.159	0.272***	0.260**	0.273
	(0.366)	(0.446)	(0.441)	(0.456)
Gear-type confidence score	0.799	0.757***	0.778	0.691***
	(0.154)	(0.145)	(0.148)	(0.135)
Behavioral patterns				
Log AIS disabling hours	2.934	2.602*	2.674	1.466***
	(3.091)	(2.729)	(2.800)	(2.339)
Average co-present Chinese vessels	86.682	59.718***	52.721***	33.086***
	(61.993)	(45.032)	(41.585)	(35.298)
Visit-month dispersion	0.750	0.985***	1.031***	1.346***
	(0.706)	(0.908)	(0.945)	(0.663)
Share of hours in EEZ buffer	0.174	0.257***	0.313***	0.571***
	(0.198)	(0.238)	(0.288)	(0.432)
Strategic locations				
Share near submarine cable	0.318	0.512***	0.566***	0.781***
	(0.252)	(0.280)	(0.286)	(0.231)
Share near NATO military base	0.179	0.218*	0.273***	0.560***
	(0.294)	(0.295)	(0.339)	(0.359)
Share near non-NATO, non-Chinese base	0.006	0.014***	0.018***	0.008
	(0.031)	(0.034)	(0.039)	(0.014)
Share near offshore oil platform	0.213	0.145***	0.174	0.376**
	(0.300)	(0.196)	(0.230)	(0.297)

Notes: The sample consists of 2,101 Chinese DWF vessels for which a vessel-specific political-distance coefficient $\hat{\beta}_v$ is estimated via equation 8. Vessels are ranked by $\hat{\beta}_v$ and grouped into the top 10%, 5%, and 1%; the remaining bottom 90% serves as the reference group. Each cell reports the group mean (a share for binary variables) with the standard deviation in parentheses. Stars indicate the significance of a two-sample t-test of equality of means between the top group and the bottom 90%. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.10$. *Variable definitions:* 'State-owned' is the share of vessels linked to state-owned companies; 'unknown ownership' is the share of vessels for which no publicly available ownership information could be identified. 'Self-reported fishing vessel' is the share of vessels that publicly broadcast themselves as fishing vessels. 'Trawler' is the share of vessels identified as having trawler gear based on a neural network by GFW, while 'ambiguous gear' indicates cases in which the algorithm could not determine gear type from vessel behavior. 'Gear-type confidence' is a score from 0 to 1, where 1 indicates complete certainty of gear assignment by the neural network. 'Log AIS disabling hours' is the logarithm of hours during which the vessel's AIS transponder is off while at sea. 'Average co-present Chinese vessels' is the mean number of other Chinese-flagged vessels observed during border visits. 'Visit-month dispersion' measures how evenly a vessel's activity is spread across calendar months, where low values indicate seasonal concentration and high values indicate year-round operation. 'Share of hours in EEZ buffer' is the fraction of a vessel's observed hours spent within the 50 km buffer immediately outside foreign EEZs. For strategic locations, all measures describe the fraction of a vessel's observed hours spent within proximity of these locations. Submarine cable proximity is defined as within 50 km, while for all other locations proximity is defined as within 500 km to account for their positions lying within EEZs.

Strategic locations. To finish the case for the surveillance channel, we examine if these potential surveillance ships target strategically relevant locations. Figure 7 shows a map submarine cables, overseas military bases and offshore oil rigs. This approach also gives us insight into what type of intelligence is being gathered. In the last rows of Table 4, we find stark differences in the amount of time spent near submarine cables and near NATO military bases. The more we filter based on the magnitude of the political distance-presence association, the more of the vessel's time is allocated to being in proximity to these strategic locations. The NATO bases that are most relevant for this finding are operated by the UK and France. The interpretation on surveillance is supported by the observation that valuable military intelligence can be gathered from on-sight observation, submarine spotting, and electronic eavesdropping (Martinson, 2025). For offshore oil rigs, behavior is more inconsistent, although we observe the top 1% spending more time in their proximity.

Overall, vessels most responsive to political incentives spend nearly 80% of their time near submarine cable routes, compared with 32% for the remaining fleet. This coincides with a sharp over-representation of bottom trawlers among this top group, with trawlers being the vessel type commonly associated with both accidental cable damage and operations that exploit fishing as cover (Drew and Hopper, 2009; Hale, 2025). The combination of disproportionate cable-route presence and trawler-heavy gear composition is consistent with deliberate proximity to cable infrastructure rather than incidental overlap with fishing grounds.

Taken together, the vessel-level evidence paints a coherent picture. Suspected surveillance vessels (i) tend to have untraceable ownership while self-identify as fishing vessels, (ii) are disproportionately equipped with trawler gear consistent with possibly purpose-built Maritime Militia platforms, (iii) do not move in accordance with seasonal fishing patterns, and (iv) concentrate their time near submarine cables and NATO military installations. These characteristics are not individually decisive but jointly consistent with a single underlying profile: inconspicuous, opaque, and likely operationally focused vessels gathering intelligence on critical infrastructure and military assets under commercial cover. This reinforces surveillance as the primary mechanism behind the political drivers of high seas fishing documented in our study.

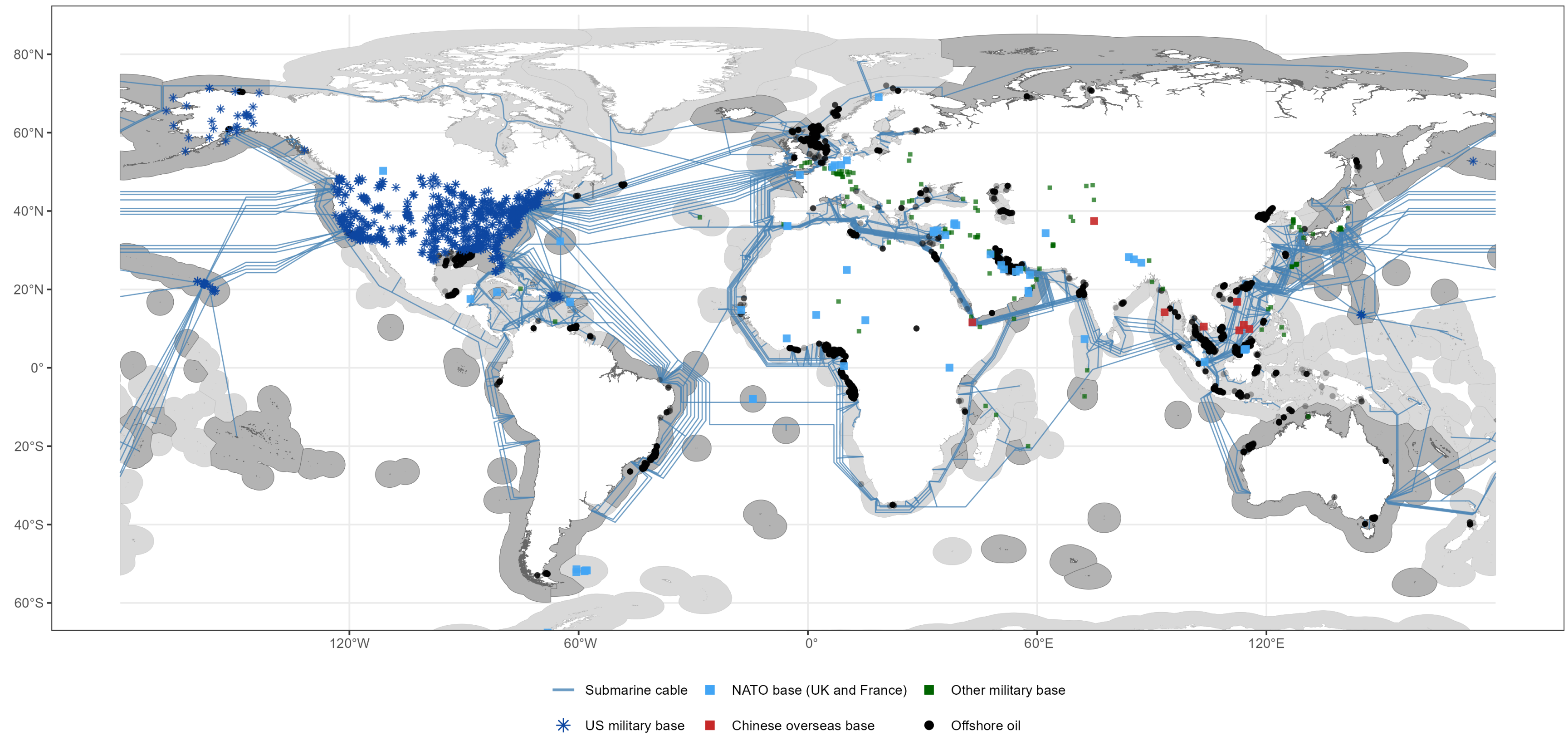

Figure 7: Strategic infrastructure map
The map displays the locations of strategic infrastructure overlaid on EEZs, with sample EEZs shown in a darker shade of grey. Military bases are distinguished by operator. US military bases are shown by dark blue asterisks. NATO bases, shown in light blue squares, are operated mostly by the UK and France along with a few Italian bases. Chinese overseas bases are shown in red squares, while overseas bases of other countries are shown in dark green. Submarine cable routes are shown by blue lines and show those active in 2014. Offshore oil platforms are depicted by black dots.

8 Conclusion

Distant-water fishing on the largely unregulated high seas represents an exemplar case on the challenging resource-management in transboundary commons. Because the operation of long-range fishing fleets depends heavily on government support, we ask whether these fleets are driven solely by commercial objectives or whether their activities in transnational waters also respond to geopolitical interests. Our paper focuses on the deployment on the Chinese fishing fleet just outside other countries' exclusive economic zones. By leveraging variation within states on their ideology captured by UNGA votes, we find that greater ideological divergence between China and a coastal host state predicts increased Chinese fleet presence and fishing activity in waters adjacent to the host's EEZ, at both the extensive and intensive margins. To interpret these patterns, we evaluate candidate underlying mechanisms involving political costs from host-state enforcement and political gains from power projection, surveillance, and retaliation. The evidence points to net political benefits from operating near foreign maritime boundaries, most consistently through a surveillance or information-gathering channel. These findings carry two implications for policy design. First, the governance of high-seas fisheries and other transboundary commons may need to account for geopolitical incentives in addition to economic ones. Second, greater transparency and information sharing may reduce incentives for monitoring and verification, thereby facilitating future cooperation agreements.

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Appendices

Appendix A Modeling political motivations

We begin with a standard Gordon-Schaefer profit-maximization benchmark built in the work of Gordon (1954); Schaefer (1954, 1957), in which a vessel or sub-fleet i chooses distant-water fishing effort E_i to maximize its economic profit. Let $V_i(\cdot)$ denote the vessel's objective function and let $\Pi_i(E_i, X)$ denote economic profit, where X is the available fish stock.[27] In the purely economic benchmark,

$$V_i(E_i, X) = \Pi_i(E_i, X). \tag{A.1}$$

Following the standard Schaefer harvest specification, harvest is given by

$$H_i = q_i E_i X, \tag{A.2}$$

where q_i is the catchability coefficient. Economic profit is therefore

$$\Pi_i(E_i, X) = \underbrace{p_i\, q_i\, X\, E_i}_{\text{total revenue of fishing}} - \underbrace{(c_i E_i + 0.5\, \gamma_i\, E_i^2)}_{\text{total cost of fishing}}, \tag{A.3}$$

where p_i is the unit price of harvest, c_i is the baseline marginal cost of distant-water fishing effort, and $\gamma_i > 0$ captures increasing marginal costs of effort. The convex cost term reflects the idea that additional effort becomes progressively more costly due to travel distance, congestion, or operational complexity.

The vessel chooses effort to solve

$$\max_{E_i \geq 0} V_i(E_i, X). \tag{A.4}$$

The first-order condition for an interior optimum is

$$\frac{\partial V_i}{\partial E_i} = \frac{\partial \Pi_i}{\partial E_i} = p_i q_i X - c_i - \gamma_i E_i = 0. \tag{A.5}$$

[27] Whereas the canonical Gordon-Schaefer framework treats X as endogenous to aggregate harvest through stock dynamics, we take X as given to the individual vessel's static effort decision. In our setting, a single vessel's harvest is negligible to the total resource available and the empirical analysis examines high-frequency monthly variation.

The second-order condition is satisfied because

$$\frac{\partial^2 V_i}{\partial E_i^2} = -\gamma_i < 0. \tag{A.6}$$

The optimal level of effort under economic profit as the sole objective is

$$E_i^* = \frac{p_i q_i X - c_i}{\gamma_i}. \tag{A.7}$$

We then augment the economic benchmark by allowing effort to generate political payoffs. The vessel's objective becomes

$$V_i(E_i, X) = \Pi_i(E_i, X) + \Phi_i(E_i), \tag{A.8}$$

where $\Phi_i(E_i)$ captures the political payoff from presence and fishing. Based on the possible political constraints or motives discussed in Section 3.1, we model the vessel's decision problem taking α_i^{psr} and α_i^e as parameters reflecting the Chinese state's policy and subsidy environment for its DWF vessels and the host country's enforcement intensity, respectively. A fully structural model would derive these from the underlying interaction between the Chinese state, the vessel operator, and the host state. We treat them as exogenous primitives to generate testable comparative statistics, letting the empirical estimates speak to which factors shape them. We adopt a linear specification for the political payoff:

$$\Phi_i(E_i) = \alpha_i^{psr} E_i - \alpha_i^e E_i, \quad \alpha_i^{psr}, \alpha_i^e \geq 0. \tag{A.9}$$

α_i^{psr} captures power projection, surveillance, or retaliation motives, while α_i^e captures deterrence generated by enforcement from the host country or region. We adopt the linear case to keep the optimal-effort expression interpretable and to focus the empirical analysis on the sign and heterogeneity of net political payoff rather than on identifying the form of Φ.

Define the net political incentive, or political wedge, as

$$\Delta_i \equiv \alpha_i^{psr} - \alpha_i^e. \tag{A.10}$$

The vessel's objective can then be written compactly as

$$V_i(E_i, X) = p_i q_i X E_i - \left(c_i E_i + \frac{\gamma_i}{2} E_i^2\right) + \Delta_i E_i. \tag{A.11}$$

The vessel chooses effort to solve

$$\max_{E_i \geq 0} V_i(E_i, X). \tag{A.12}$$

The first-order condition for an interior optimum is

$$\frac{\partial V_i}{\partial E_i} = p_i q_i X - c_i - \gamma_i E_i + \Delta_i = 0. \tag{A.13}$$

The second-order condition is satisfied because

$$\frac{\partial^2 V_i}{\partial E_i^2} = -\gamma_i < 0. \tag{A.14}$$

Thus, the optimal level of effort under additional political payoff is

$$E_i^{**} = \frac{p_i q_i X - c_i + \Delta_i}{\gamma_i}. \tag{A.15}$$

This yields three empirically relevant scenarios to test how optimal level of vessel's effort changes.

Scenario 1: Neutral political incentives.

If $\alpha_i^{psr} = \alpha_i^e$, then $\Delta_i = 0$ and $E_i^{**} = E_i^*$. This implies that political incentives cancel out, and effort is determined only by economic returns.

Scenario 2: Negative net political incentives.

If $\alpha_i^{psr} < \alpha_i^e$, then $\Delta_i < 0$. Political deterrence from host country lowers the marginal payoff from the vessel's effort:

$$\frac{\partial V_i}{\partial E_i} < \frac{\partial \Pi_i}{\partial E_i}. \tag{A.16}$$

Hence, optimal effort is lower than in the purely economic benchmark:

$$E_i^{**} < E_i^*. \tag{A.17}$$

In this case, fishing may cease even when the economic marginal return is still positive, as long as the total marginal payoff is non-positive:

$$\frac{\partial \Pi_i}{\partial E_i} > 0 \quad \text{and} \quad \frac{\partial \Pi_i}{\partial E_i} + \Delta_i \leq 0. \tag{A.18}$$

Thus, enforcement can deter fishing before the vessel reaches its profit-maximizing capacity.

Scenario 3: Positive net political incentives.

If $\alpha_i^{psr} > \alpha_i^e$, then $\Delta_i > 0$. Political motives increase the marginal payoff from effort:

$$\frac{\partial V_i}{\partial E_i} > \frac{\partial \Pi_i}{\partial E_i}. \tag{A.19}$$

Hence, optimal effort is higher than in the purely economic benchmark:

$$E_i^{**} > E_i^*. \tag{A.20}$$

In this case, fishing may continue even when the economic marginal return is negative, as long as the total marginal payoff remains positive:

$$\frac{\partial \Pi_i}{\partial E_i} < 0 \quad \text{and} \quad \frac{\partial \Pi_i}{\partial E_i} + \Delta_i > 0. \tag{A.21}$$

Thus, politically motivated effort can persist even under economic losses.

In Sections 4 to 7, we test the hypotheses depicted in these three scenarios empirically.

Appendix B Data

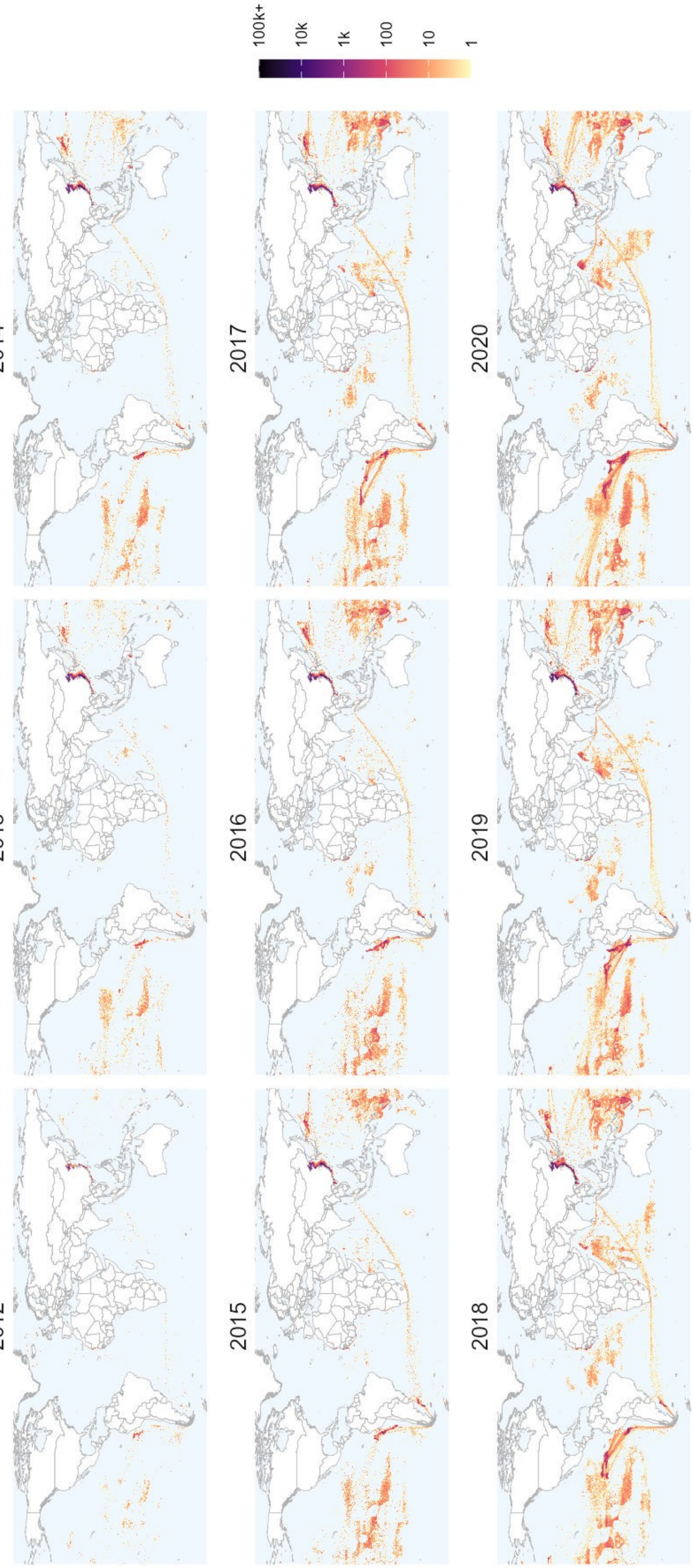

Figure B.1: Extent of the Chinese DWF fleet presence over time
Figure plots the annual total presence hours of the Chinese DWF fleet at the 0.1° grid-cell level across the global ocean from 2012 to 2020. Presence hours are shown on a log scale, ranging from 1 hour (lightest) to over 100,000 hours (darkest). The map shows an expansion of the Chinese DWF fleet's spatial reach over the sample period, with concentrated activity in the Southeast Pacific (off Argentina, Chile, Peru, and Ecuador), Northwest Pacific (around Japan and Russia), and West African coast. Vessel position data are obtained from Global Fishing Watch.

Appendix B.1 Summary statistics of the main data

Table B.1: List of exclusive economic zones

	Host country	EEZ name
1	Argentina	Argentinean Exclusive Economic Zone
2	Australia	Australian Exclusive Economic Zone
3	Australia	Australian Exclusive Economic Zone (Macquarie Island)
4	Australia	Christmas Island Exclusive Economic Zone
5	Australia	Cocos Islands Exclusive Economic Zone
6	Australia	Heard and McDonald Islands Exclusive Economic Zone
7	Australia	Norfolk Island Exclusive Economic Zone
8	Brazil	Brazilian Exclusive Economic Zone
9	Brazil	Brazilian Exclusive Economic Zone (Trindade)
10	Chile	Chilean Exclusive Economic Zone
11	Chile	Chilean Exclusive Economic Zone (Easter Island)
12	Chile	Chilean Exclusive Economic Zone (San Felix and San Ambrosio islands)
13	Comores	Comoran Exclusive Economic Zone
14	Ecuador	Ecuadorian Exclusive Economic Zone
15	Ecuador	Ecuadorian Exclusive Economic Zone (Galapagos)
16	France	Amsterdam Island & St. Paul Island Exclusive Economic Zone
17	France	Bassas da India Exclusive Economic Zone
18	France	Clipperton Exclusive Economic Zone
19	France	Crozet Islands Exclusive Economic Zone
20	France	French Exclusive Economic Zone
21	France	French Guiana Exclusive Economic Zone
22	France	French Polynesian Exclusive Economic Zone
23	France	Guadeloupean Exclusive Economic Zone
24	France	Ile Europa Exclusive Economic Zone
25	France	Juan de Nova Exclusive Economic Zone
26	France	Kerguelen Exclusive Economic Zone
27	France	Martinican Exclusive Economic Zone
28	France	New Caledonian Exclusive Economic Zone
29	France	Réunion Exclusive Economic Zone
30	France	Saint-Barthélemy Exclusive Economic Zone
31	France	Saint-Martin Exclusive Economic Zone
32	France	Saint-Pierre and Miquelon Exclusive Economic Zone
33	France	Wallis and Futuna Exclusive Economic Zone
34	Iceland	Icelandic Exclusive Economic Zone

35	Japan	Japanese Exclusive Economic Zone
36	Kenya	Kenyan Exclusive Economic Zone
37	Mauritius	Chagos Archipelago Exclusive Economic Zone
38	Nigeria	Nigerian Exclusive Economic Zone
39	Oman	Omani Exclusive Economic Zone
40	Peru	Peruvian Exclusive Economic Zone
41	Russia	Russian Exclusive economic Zone
42	Senegal	Senegalese Exclusive Economic Zone
43	Tonga	Tongan Exclusive Economic Zone
44	United Arab Emirates	United Arab Emirates Exclusive Economic Zone
45	United Kingdom	Anguilla Exclusive Economic Zone
46	United Kingdom	Ascension Exclusive Economic Zone
47	United Kingdom	Bermudian Exclusive Economic Zone
48	United Kingdom	British Virgin Islands Exclusive Economic Zone
49	United Kingdom	Cayman Islands Exclusive Economic Zone
50	United Kingdom	Guernsey Exclusive Economic Zone
51	United Kingdom	Jersey Exclusive Economic Zone
52	United Kingdom	Montserrat Exclusive Economic Zone
53	United Kingdom	Pitcairn Islands Exclusive Economic Zone
54	United Kingdom	St. Helena Exclusive Economic Zone
55	United Kingdom	Tristan Da Cunha Exclusive Economic Zone
56	United Kingdom	Turks and Caicos Exclusive Economic Zone
57	United Kingdom	United Kingdom Exclusive Economic Zone
58	United States	American Samoa Exclusive Economic Zone
59	United States	Guam Exclusive Economic Zone
60	United States	Howland and Baker Islands Exclusive Economic Zone
61	United States	Jarvis Island Exclusive Economic Zone
62	United States	Johnston Atoll Exclusive Economic Zone
63	United States	Northern Mariana Exclusive Economic Zone
64	United States	Palmyra Atoll Exclusive Economic Zone
65	United States	Puerto Rican Exclusive Economic Zone
66	United States	United States Exclusive Economic Zone
67	United States	United States Exclusive Economic Zone (Alaska)
68	United States	United States Exclusive Economic Zone (Hawaii)
69	United States	Virgin Islander Exclusive Economic Zone
70	United States	Wake Island Exclusive Economic Zone
71	Yemen	Yemeni Exclusive Economic Zone

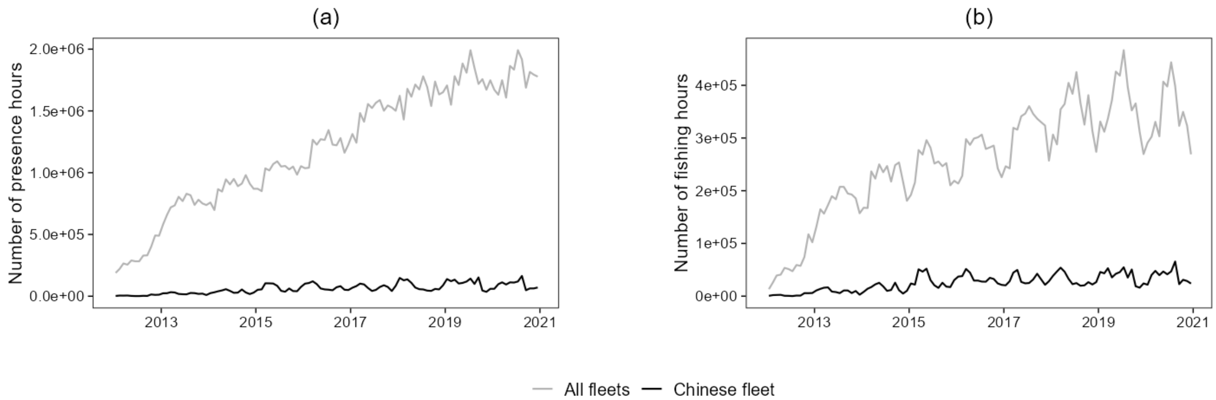

Figure B.2: DWF fleet presence and fishing effort over time
Panel (a) shows the monthly total number of vessel presence days for all fleets (gray line) and for Chinese fleet (black line) recorded for the 50 km buffers of analyzed EEZs from 2012 to 2021. Panel (b) shows the monthly total number of vessel fishing hours as inferred by Global Fishing Watch for all fleets (gray line) and for Chinese fleet (black line) recorded for the 50 km buffers of analyzed EEZ's from 2012 to 2021.

Table B.2: Summary statistics

Variable	Observations	Mean	Std. Dev.	Min.	Max.
Chinese fleet presence	7,668	0.368	0.482	0	1
Chinese fleet fishing	7,668	0.238	0.426	0	1
# presence hours Chinese fleet	7,668	873	6,250	0	137,174
# presence hours all fleets	7,668	16,960	50,068	0	479,548
# fishing hours Chinese fleet	7,668	359	2,322	0	45,051
# fishing hours all fleets	7,668	3,669	12,215	0	128,026
# unique vessels Chinese fleet	7,668	7.471	27.213	0	369
Political distance (Δ ideal-point)	7,668	1.825	1.003	0	3.494
Phytoplankton index	7,668	2.017	0.015	2.000	2.144
Sea-route distance (km)	7,668	13,764	5,443	2,132	25,522

Appendix B.2 GDELT event-based conflict severity measure

The Global Database of Events, Language, and Tone (GDELT) monitors news media worldwide and automatically codes reported interactions between countries into discrete, geolocated, and time-stamped events (Leetaru and Schrodt, 2013). Following Davis et al. (2019), we construct a measure of the cumulative severity of negative events between China and host countries, restricting the sample to events in which both actors are governments or militaries. Each event carries a Goldstein score ranging from -10 to 10 that quantifies its hypothesized impact on bilateral relations: cooperative acts such as extending military or economic aid score near the top of the scale, whereas hostile acts such as armed attacks score near the bottom.

$$\text{DailySeverity}_{c,d} = \max\Big(\big\{ -G_e : e \in \mathcal{E}_{c,d},\ G_e < 0\big\} \cup \{0\}\Big) \tag{B.1}$$

$$\text{Severity}^{(k)}_{c,t} = \sum_{\tau=t-k}^{t-1} \sum_{d\in\mathcal{D}(\tau)} \text{DailySeverity}_{c,d}, \qquad k \in \{4, 12\} \tag{B.2}$$

where $\mathcal{E}_{c,d}$ denotes the set of GDELT events between host country c and China on day d, $G_e \in [-10, 10]$ is the Goldstein score of event e, and $\mathcal{D}(\tau)$ is the set of days in month τ. Equation (B.1) retains only the most severe negative event per country-day, avoiding double-counting of events reported by multiple media outlets (Hong et al., 2025); days without negative events contribute zero. We focus on conflictual interactions by retaining only events with negative scores and multiplying them by -1, so that larger values reflect greater severity. Equation (B.2) aggregates daily severities into a rolling sum over the k months preceding month t. The short-term measure ($k = 4$) is designed to examine potential retaliatory reactions by China; we therefore restrict $\mathcal{E}_{c,d}$ to events in which the host country is the subject and China the object. The 12-months rolling sum, on the other hand, is a broader, slower moving indicator that aims to serve as an alternative main independent variable.

As GDELT codes events automatically from news reports, it offers far broader and more timely coverage than manually curated event datasets, at the cost of noise: validation studies document miscoded event fields and duplicate records (Hong et al., 2025), as well as weaker correspondence with hand-coded data in fine-grained subnational applications (Hammond and Weidmann, 2014). We mitigate these issues by retaining only the most severe event per country-day and aggregating to the country level. Nevertheless, we expect estimates based on this measure to be less precise due to remaining measurement error.

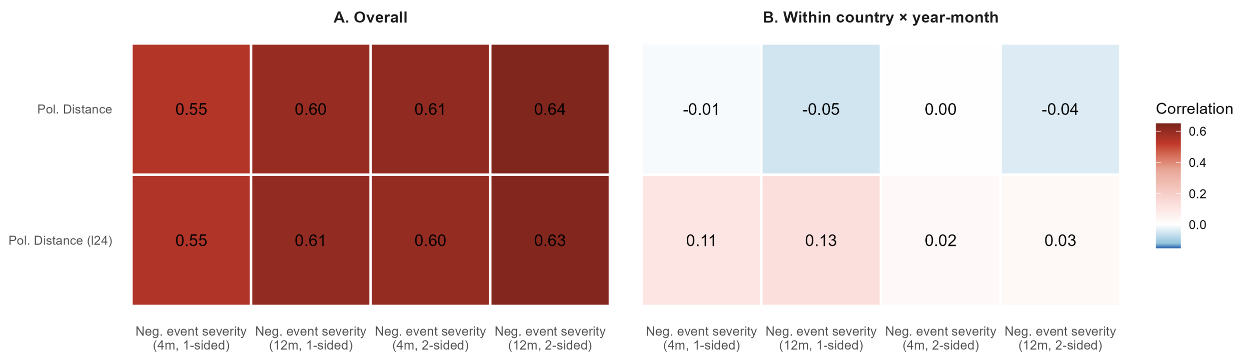

Figure B.3: Correlation between political distance and GDELT negative-event severity
Panel (A) shows the raw (overall) Pearson correlations between two measures of UN ideal-point political distance from China, contemporaneous (*Pol. Distance*) and 24-month lagged (*Pol. Distance (l24)*). The four GDELT-based negative-event severity measures are varying the rolling window (4 versus 12 months) and directionality (one-sided: events directed at China by the host country; two-sided: bilateral events in both directions). Panel (B) shows the same correlations after two-way demeaning by country and year-month fixed effects, isolating within-country temporal co-movement. The main sample is used to calculate the corelation matrices.

Figure B.3 validates the GDELT-based severity measures against the ideal-point distance used in the main analysis. Panel A shows large positive raw correlations between *Pol. Distance* and all four event-severity measures (0.55–0.64): countries at greater geopolitical distance from China indeed experience more negative bilateral events. Panel B isolates within-country temporal co-movement by demeaning both variables with country and year-month fixed effects. The correlations with lagged political distance, that takes the temporal structure into account, remain positive but drop considerably (0.02–0.13): a country moving away from China's UN voting position sees more negative bilateral events, yet most of the raw correlation reflects cross-country differences. This divergence is by design. Ideal-point distances capture slow-moving ideological alignment, whereas the GDELT measure captures discrete diplomatic transgressions; their limited within-country co-movement confirms that the severity measure provides variation distinct from political distance rather than merely proxying for it.

Appendix B.3 Additional data

Shapefiles and sea-route distance

EEZ boundaries. For buffer construction, we use the Exclusive Economic Zone boundary shapefiles from the World EEZ data version 11 provided by Flanders Marine Institute (2019).

Sea routes. To calculate sea-route distances between China's EEZ and other EEZs in the sample, we draw on the `searoute` Python package developed by Halili (2024).

Additional control variables

Sea surface temperature. For the additional controls reported in Appendix Table C.2, we use NOAA Optimum Interpolation Sea Surface Temperature (OISST) records developed by Huang et al. (2021). Raw daily OISST data at the 0.25° grid-cell level are aggregated to construct mean sea surface temperature and sea surface temperature anomalies relative to the long-run climatic average at the buffer-month level.

Storms. We calculate the number of cyclones passing through each buffer using data from the International Best Track Archive for Climate Stewardship (IBTrACS) Project version 4.01 developed by Knapp et al. (2010); Gahtan et al. (2024). We aggregate the raw 3-hour interval data at the 0.1° grid-cell level to count the number of unique storms observed within a given buffer-month.

Economic variables. We additionally incorporate total bilateral trade volume between China and the host country, as reported by the IMF, together with an indicator for the presence of a regional trade agreement documented by the WTO. We also control for host-country income using GDP per capita. All economic variables are drawn from the CEPII Gravity database developed by Conte et al. (2022).

Aid and trade dependency. Chinese aid is added from AidData (2021) and divided by GDP (World Bank, 2024) for the aid dependency measure. Trade dependence is calculated analogously with data from Conte et al. (2022) for both bilateral trade volume and GDP.

Alternative political distance measures

Vote disagreement. This measure is based on the complete vote from the same source as the main variable (Bailey et al., 2017). It is a linear transformation of commonly used agreement scores that flips the sign of the coefficient so that it is coherent with political distance.

UNGA DM. These are the ideal point distances calculated based on an extended UNGA voting data set created by Fjelstul et al. (2023, 2025). It contains a comprehensive database of all resolution-related decisions taken in UNGA plenary sessions from 1946 to the present, covering not only the roll-call votes on adopted resolutions captured by existing datasets but also votes on failed resolutions, amendments, motions, and separate votes, as well as consensus and non-recorded decisions. The measure for important votes calculates ideal point distances based exclusively on the votes the US State Department deemed as "important".

Instrumental variable construction

We apply the UNGA vote issues classified by Voeten (2013). The observed country votes with issue tags come from datasets `un_votes`, `un_roll_calls`, and `un_roll_call_issues` in the `unvotes` R package developed by Robinson (2021).

Data for mechanism analysis

Vessel ownership. Individual vessels where linked to companies by Carmine et al. (2020), who utilize public databases such as vessel registries. We then manually looked up Chinese companies at Qichacha (QCC) (2026), one of the most commonly used Chinese business registry to identify which firms are private and which are state-owned.

Vessel characteristics. All vessel characteristics are inferred from Global Fishing Watch (2024), with the methodology described in Kroodsma et al. (2018). Gear is estimated based on behavior.

AIS disabling. Welch et al. (2022) provide AIS disabling data that distinguishes between accidental disabling events from those likely done with intention.

Strategic locations. We adopt submarine cables from TeleGeography (2026); with the resulting data being cables that where active in 2014. For military bases, we use data from Man and Palmer (2022) for overseas bases of China, France, India, Japan, Italy, Russia, United Arab Emirates, United Kingdom and the US. We supplement US bases with data from U.S. Department of Transportation (2026) for completeness. Lastly, for offshore oil bases, we use satellite-based estimates from World Bank Global Flaring and Methane Reduction Partnership et al. (2025) and filter for offshore platforms.

Appendix C Validity and robustness tests

Table C.1: Log political distance and extensive margin of fleet presence and fishing

	1(CHN fleet presence)			1(CHN fleet fishing)		
	(1)	(2)	(3)	(4)	(5)	(6)
Log political distance $_{t-24}$	-0.074**	0.029***	0.026**	-0.068**	0.025**	0.021*
	(0.030)	(0.010)	(0.011)	(0.026)	(0.012)	(0.013)
Log sea-route distance	-0.310***			-0.132*		
	(0.064)			(0.070)		
Log non-CHN fishing hours			0.027***			0.025***
			(0.005)			(0.005)
Log phytoplankton $_{t-12}$			2.51			0.426
			(2.09)			(1.86)
EEZ FE	–	✓	✓	–	✓	✓
Month-year FE	–	✓	✓	–	✓	✓
EEZ-month FE	–	–	✓	–	–	✓
Mean dependent variable	0.368	0.368	0.368	0.238	0.238	0.238
Observations	7,668	7,668	7,668	7,668	7,668	7,668

Notes: 'CHN fleet presence' is an indicator variable equal to one if any presence hour is recorded for the Chinese fleet in the buffer, and zero otherwise. 'CHN fishing presence' is an indicator variable equal to one if any fishing hour is recorded for the Chinese fleet in the buffer, and zero otherwise. 'Log political distance' is the log of absolute difference in UNGA voting-based ideal point between China and the EEZ's host country two years prior. 'Log sea-route distance' is the logarithmized sea-route distance from the centroid of China's EEZ to the centroid of the host EEZ. 'Log non-CHN fishing hours' is the logarithmized number of fishing hours recorded for all non-Chinese fleets in the buffer. 'Log phytoplankton' is the logarithmized amount of phytoplankton abundance measured for the buffer one year prior. Robust standard errors, clustered at the EEZ level, are reported in the parentheses. *p<0.1; **p<0.05; ***p<0.01.

Appendix C.1 Examining reverse causality

To assess the presence of reverse causality between DWF fleet activity and interstate political distance, we estimate the following dynamic model:

$$y_{i,c,t} = \sum_{k \in \mathcal{K}} \beta_k, PoliticalDistance_{c,t-k} + \varphi' \mathbf{X}_{i,t} + \alpha_i + \alpha_t + \alpha_{i,m(t)} + \varepsilon_{i,c,t}, \tag{C.1}$$

where $\mathcal{K} = \{-24, -12, 0, 12, 24\}$. Positive values of k correspond to lags of political distance, allowing us to test whether past political distance affects current fleet activity—the causal direction. Negative values correspond to leads of political distance, allowing us to test whether current fleet activity predicts contemporaneous or future political distance—the reverse-causality direction. The outcome $y_{i,c,t}$ is the probability of the Chinese DWF fleet present or fishing in the 50 km buffer just outside a given EEZ. In analogy to the estimation in Eq. 7, we factor in the EEZ, time, and seasonality fixed effects and time-varying controls.

Figure C.1 plots the resulting coefficients. In both panels, the pattern is consistent with a causal interpretation. In Panel (a) for outcome measuring the probability of fleet presence: at positive lags (12 and 24 months), the coefficient on political distance is positive and statistically significant at the 24-month horizon, which matches our headline specification reported in Table 1. At lead horizons (-12 and -24 months), the coefficient is statistically indistinguishable from zero at the 12-month lead but turns *negative* at the 24-month lead, with the point estimate marginally significant. The negative sign is the opposite of what reverse causality would predict if Chinese fleet presence were aggravating bilateral relations—which would result in a positive lead coefficient. Nonetheless, the contemporaneous and 12-month-lead coefficients are null. Panel (b) shows the same pattern for the probability of fleet fishing, with significance yet concentrated only at the 24-month lag. Overall, we intepret the temporal asymmetry—significant positive coefficients at lags but not at leads—to be consistent with political distance driving fleet activity rather than the reverse.

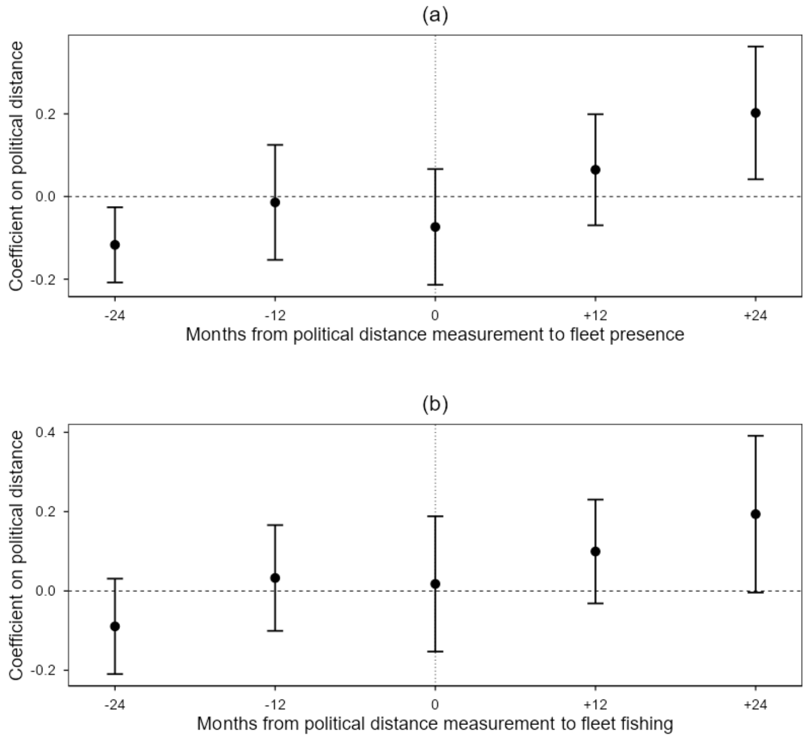

Figure C.1: Dynamic coefficients on political distance
Figure plots coefficients from an the specification regressing the probability of Chinese DWF fleet presence (Panel a) and fishing (Panel b) in the buffer just outside the host country's EEZ on leads and lags of political distance between China and the host country (Equation C.1). The x-axis represents months between political distance measurement and outcome. Positive values (lags) test whether past political distance affects current fleet activity (causal direction); negative values (leads) test whether current fleet activity predicts future political distance (reverse-causality direction). Vertical bars denote 95% confidence intervals based on standard errors clustered at the EEZ level.

Appendix C.2 Addressing omitted variable concerns

Table C.2: Inclusion of further ecological and economic control variables

	1(CHN fleet presence)					1(CHN fleet fishing)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Political distance $_{t-24}$	0.153**	0.151**	0.144**	0.149**	0.140**	0.170*	0.169*	0.162*	0.162**	0.156*
	(0.068)	(0.068)	(0.068)	(0.064)	(0.063)	(0.087)	(0.087)	(0.086)	(0.080)	(0.079)
Log non-CHN fishing hours	0.026***	0.026***	0.026***	0.026***	0.026***	0.024***	0.025***	0.025***	0.025***	0.025***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Log phytoplankton $_{t-12}$	2.27	2.68	2.54	2.13	2.71	0.132	0.419	0.338	-0.125	0.303
	(2.10)	(2.06)	(2.11)	(2.10)	(2.10)	(1.84)	(1.79)	(1.85)	(1.86)	(1.83)
Sea surface temp. anomaly $_{t-12}$		0.032**			0.031**		0.022			0.022
		(0.015)			(0.015)		(0.015)			(0.015)
Number of storms		0.020			0.020		0.015			0.015
		(0.017)			(0.017)		(0.011)			(0.010)
Log total trade $_{t-24}$			-0.014		0.038			-0.063*		0.010
			(0.047)		(0.050)			(0.038)		(0.042)
Has trade agreement $_{t-24}$			-0.087		-0.097*			-0.041		-0.060
			(0.054)		(0.050)			(0.059)		(0.055)
Log host GDP p.c. $_{t-24}$				-0.131	-0.186				-0.244*	-0.266*
				(0.124)	(0.133)				(0.123)	(0.141)
EEZ FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Month-year FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EEZ-month FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mean dependent variable	0.368	0.368	0.368	0.368	0.368	0.238	0.238	0.238	0.238	0.238
Observations	7,668	7,668	7,668	7,668	7,668	7,668	7,668	7,668	7,668	7,668

Notes: 'CHN fleet presence' is an indicator variable equal to one if any presence hour is recorded for the Chinese fleet in the buffer, and zero otherwise. 'CHN fishing presence' is an indicator variable equal to one if any fishing hour is recorded for the Chinese fleet in the buffer, and zero otherwise. 'Political distance' is the absolute difference in UNGA voting-based ideal point between China and the EEZ's host country two year prior. 'Log sea-route distance' is the logarithmized sea-route distance from the centroid of China's EEZ to the centroid of the host EEZ. 'Log non-CHN fishing hours' is the logarithmized number of fishing hours recorded for all non-Chinese fleets in the buffer. 'Log phytoplankton' is the logarithmized amount of phytoplankton abundance measured for the buffer one year prior. 'Sea temp. anomaly' is the deviation of average sea surface temperature in the buffer from its climatological mean one year prior, measured in degrees Celsius. 'Number of storms' is the count of tropical cyclones passing through the buffer in a given month. 'Log total trade' is the logarithmized total bilateral trade volume between China and the host country two years prior. 'Has trade agreement' is an indicator equal to one if China and the host country have any regional trade agreement in force two years prior, and zero otherwise. 'Log host GDP p.c.' is the logarithmized GDP per capita of the host country two years prior. Robust standard errors, clustered at the EEZ level, are reported in the parentheses. *p<0.1; **p<0.05; ***p<0.01.

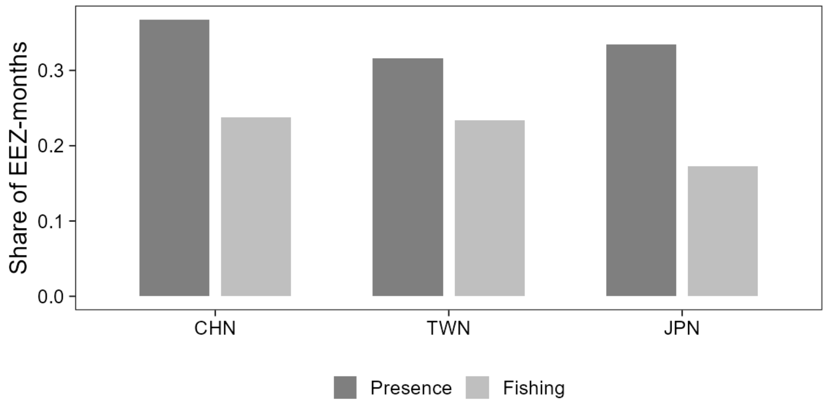

Figure C.2: Chinese, Taiwanese, and Japanese DWF fleet activity
Figure compares the probabilities of observing Chinese, Taiwanese, and Japanese distant-water fishing fleets being present or actively fishing within the 50km buffer outside the EEZs in our sample over the period 2012-2020.

Table C.3: Placebo tests with Taiwanese and Japanese DWF fleet activity as outcomes

	1(TWN presence)		1(TWN fishing)		1(JPN presence)		1(JPN fishing)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Political distance $_{t-24}$	0.030	0.016	0.017	-0.008	0.012	0.011	-0.015	-0.018
	(0.045)	(0.045)	(0.042)	(0.042)	(0.031)	(0.030)	(0.030)	(0.030)
Log (non-TWN fishing hours+1)		0.013***		0.023***				
		(0.005)		(0.005)				
Log (non-JPN fishing hours+1)						0.001		0.003
						(0.004)		(0.004)
Log phytoplankton $_{t-12}$		-0.306		0.771		-1.63		-2.15
		(1.49)		(2.46)		(1.44)		(2.00)
EEZ FE	✓	✓	✓	✓	✓	✓	✓	✓
Month-year FE	✓	✓	✓	✓	✓	✓	✓	✓
EEZ-month FE	–	✓	–	✓	–	✓	–	✓
Mean dependent variable	0.316	0.316	0.234	0.234	0.324	0.324	0.161	0.161
Observations	7,668	7,668	7,668	7,668	7,560	7,560	7,560	7,560

Notes: Tables presents estimates of the placebo tests examining the association between (i) the political distance between China and host country and (ii) activity of DWF fleets similar to China's in terms of economic incentives. 'TWN presence' is an indicator variable equal to one if any presence hour is recorded for the Taiwanese fleet in the buffer, and zero otherwise. 'TWN fishing presence' is an indicator variable equal to one if any fishing hour is recorded for the Taiwanese fleet in the buffer, and zero otherwise. 'JPN presence' is an indicator variable equal to one if any presence hour is recorded for the Japanese fleet in the buffer, and zero otherwise. 'JPN fishing presence' is an indicator variable equal to one if any fishing hour is recorded for the Japanese fleet in the buffer, and zero otherwise. 'Political distance' is the absolute difference in UNGA voting-based ideal point between *China* and the EEZ's host country two years prior. 'Log non-TWN fishing hours' and 'Log non-JPN fishing hours' are, respectively, the logarithmized number of fishing hours recorded for all non-Taiwanese and non-Japanese fleets in the buffer. 'Log phytoplankton' is the logarithmized amount of phytoplankton abundance measured for the buffer one year prior. Columns (5)-(6) excludes observations pertaining to the Japanese EEZs in the sample. Robust standard errors, clustered at the EEZ level, are reported in the parentheses. *p<0.1; **p<0.05; ***p<0.01.

Table C.4: Alternative political distance measures

	(1)	(2)	(3)	(4)	(5)
	Panel A. CHN fleet presence (LPM)				
Pol. Distance (baseline)	0.153**				
	(0.068)				
Vote disagreement		0.407**			
		(0.181)			
Pol. Distance (UNGA DM)			-0.047		
			(0.089)		
Pol. Distance (UNGA DM, imp. votes)				0.377***	
				(0.096)	
Neg. bilateral event severity (GDELT)					0.041
					(0.028)
Observations	7,668	7,668	7,668	7,668	7,668
	Panel B. CHN fleet presence hours, Wins. 95% (PPML)				
Pol. Distance (baseline)	0.955***				
	(0.189)				
Vote disagreement		1.30*			
		(0.664)			
Pol. Distance (UNGA DM)			-0.163		
			(0.461)		
Pol. Distance (UNGA DM, imp. votes)				1.18**	
				(0.555)	
Neg. bilateral events severity (GDELT)					0.245**
					(0.123)
Observations	4,770	4,770	4,770	4,770	4,770
Controls	✓	✓	✓	✓	✓
EEZ FE	✓	✓	✓	✓	✓
Month-year FE	✓	✓	✓	✓	✓
EEZ × month FE	✓	✓	✓	✓	✓

Notes: Robustness checks on the main LPM (Panel A) and PPML (Panel B) specifications. 'CHN fleet presence' is an indicator variable equal to one if any presence hour is recorded for the Chinese fleet in the buffer, and zero otherwise. The PPML estimator in the second panel examines total hours spent by the Chinese fishing fleet and drops singleton observations within fixed-effect groups whose outcomes are always zero, reducing the sample below the 7,668 buffer-months in the extensive-margin analysis. Columns vary the political distance or bilateral conflict measure. Vote disagreement is inverse of agreement (1 = no agreement, 0 = perfect alignment). UNGA-DM data set are ideal point distances from Fjelstul et al. (2023, 2025). Negative bilateral event severity is the cumulative severity of bilateral disputes between China and host countries of the past 12 months before the current one. Controls include log non-CHN fishing hours and log phytoplankton abundance (12-month lag). Robust standard errors clustered at the EEZ level in parentheses. *p<0.1; **p<0.05; ***p<0.01.

Table C.5: Vote buying and economic dependency on China

	1(CHN fleet presence)				
	(1)	(2)	(3)	(4)	(5)
Pol. Dist.$_{t-24}$	0.153**	0.150**	0.318***	0.348***	0.220**
	(0.068)	(0.071)	(0.111)	(0.084)	(0.095)
CHN Aid/GDP$_{t-24}$		1.32			
		(1.08)			
CHN Trade/GDP$_{t-24}$		0.352			
		(0.831)			
Controls	✓	✓	✓	✓	✓
EEZ FE	✓	✓	✓	✓	✓
Month-year FE	✓	✓	✓	✓	✓
EEZ × month FE	✓	✓	✓	✓	✓
Sample	Full	Full	Low aid+trade dep.	Least+low susc.	Least susc.
Observations	7,668	7,668	5,184	6,480	5,508

Notes: 'CHN fleet presence' is the outcome in all columns and an indicator variable equal to one if any presence hour is recorded for the Chinese fleet in the buffer, and zero otherwise. Col. (1): baseline specification. Col. (2): additionally controls for Aid/GDP and Trade/GDP, where Aid/GDP is the ratio of Chinese official finance commitments (AidData CLG 1.0) to host GDP (World Bank), and Trade/GDP is bilateral trade with China as a share of host GDP (CEPII Gravity/BACI), both lagged 24 months. Col. (3): sample restricted to countries with below-median average Aid/GDP and below-median average Trade/GDP (intersection). Col. (4): sample restricted to countries with low susceptibility to Chinese diplomatic pressure due to their status as regional power (US, UK, France, Japan, Australia, Brazil, Russia, Chile, Argentina, Peru, UAE). Col. (5): sample restricted to countries least susceptible to Chinese diplomatic pressure due to their status was major western-aligned power (US, UK, France, Japan, Australia). Controls include log non-CHN fishing hours and log phytoplankton abundance (12-month lag). Robust standard errors clustered at the EEZ level in parentheses. *p<0.1; **p<0.05; ***p<0.01.

Appendix C.3 Two-stage least squares estimation

The central threat to identification in Eq. 7 is that political distance between a host country and China may be endogenous to Chinese DWF fleet presence just outside the host's exclusive economic zone. We have already shown that our estimates are unlikely to be driven by reverse causality or by omitted ecological and economic confounders. To address this concern more rigorously, we implement in this section a two-stage least squares strategy that exploits the issue structure of UNGA voting, the basis of our main political-distance measure. We construct six instruments, one for each of the issue categories distinguished in Voeten (2013): nuclear weapons and nuclear materials, arms control and disarmament, the Palestinian conflict, economic development, human rights, and colonialism. For each issue, the instrument is the share of issue-specific roll calls on which the host country and China voted differently, following the agreement-score tradition of Signorino and Ritter (1999).[28] The IV is constructed as follows.

$$disagreement^{I}_{c,t} = \frac{1}{|R^{I}_{c,t}|} \sum_{r \in R^{I}_{c,t}} 1[v_{c,r} \neq v_{CHN,r}]. \tag{C.2}$$

$disagreement^{I}_{c,t}$ is the share of vote disagreement between host country c and China in a given year t on issue I. $R^{I}_{c,t}$ is the set of roll calls tagged with issue I, where vote outcomes of both host and China are observed. r denotes the single roll call and $v_{c,r}, v_{CHN,r} \in \{yes, no, abstain\}$. The identifying logic is: (i) disagreement on any of the six issues plausibly contributes to the overall ideological distance our political-distance measure captures, hence satisfying the relevance condition and (ii) some issues, notably nuclear weapons and arms control, are sufficiently removed from the economic and diplomatic determinants of fishing that they plausibly affect Chinese fleet presence only through aggregate political alignment, satisfying the exclusion restriction.

Tables C.6 and C.7 report 2SLS estimates using each issue as IV, alongside the baseline OLS estimate, for outcomes capturing DWF presence and fishing probabilities. Three patterns emerge. First, several issue-specific disagreement measures significantly predict aggregate political distance in the first stage. Yet, only the nuclear weapons and arms control IVs yield Kleibergen-Paap F-statistics above the conventional weak-instrument threshold of 10. Second, the second-stage estimate using the nuclear-weapons IV is positive and statistically significant—similar in sign with the OLS estimate. Its larger magnitude is consistent with

[28] We use the simpler exact-match scoring (1 for identical votes, 0 otherwise) rather than the three-category rule of Signorino and Ritter (1999), which assigns 0.5 to abstain–yes/no pairs. Results are robust to the alternative scoring.

a local average treatment effect interpretation, under which 2SLS identifies the effect on the subgroup of host countries whose overall political distance from China is most responsive to nuclear-issue disagreement. This is supported by the heterogeneity documented in Table 3, where the baseline OLS effect is concentrated among democratic hosts—states for whom disagreement with China on nuclear and arms-control resolutions is likely a salient marker of broader foreign-policy divergence. Third, the second-stage estimate using the economic-development instrument is imprecise, suggesting that confounding economic linkages between China and host countries are unlikely to drive our baseline result. Together, these patterns support the interpretation that our baseline estimates capture ideology-driven political divergence rather than confounding economic ties or fisheries-specific regulatory alignment.

Table C.6: Political distance and presence - 2SLS with issue-specific vote disagreements as IVs

	1(CHN fleet presence)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Political dist. $_{t-24}$	0.155**	0.317**	0.099	-1.25	-0.016	1.02	-0.434
	(0.068)	(0.134)	(0.128)	(5.86)	(0.146)	(1.00)	(0.433)
Estimator	OLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
		First stage Political distance $_{t-24}$					
Vote issue		Nuclear	Arms control	Palestine	Economic	Human rights	Colonialism
Vote disagree. $_{t-24}$		0.517***	1.064***	-0.043	0.479***	0.273	0.182***
		(0.088)	(0.206)	(0.091)	(0.092)	(0.210)	(0.039)
KP F-stat		12.872	12.997	0.016	8.973	0.883	1.227
Controls	✓	✓	✓	✓	✓	✓	✓
EEZ FE	✓	✓	✓	✓	✓	✓	✓
Month-year FE	✓	✓	✓	✓	✓	✓	✓
EEZ-month FE	✓	✓	✓	✓	✓	✓	✓
Mean dep. var.	0.368	0.368	0.368	0.368	0.368	0.368	0.368
Observations	7,656	7,656	7,656	7,656	7,656	7,656	7,656

Notes: Table compares OLS (column 1) and 2SLS estimates (column 2-7) of the relationship between political distance and Chinese fleet presence in an EEZ-month. 'CHN fleet presence' is an indicator variable equal to one if any presence hour is recorded for the Chinese fleet in the buffer, and zero otherwise. 'Political dist.' is the absolute difference in UNGA voting-based ideal point between China and the EEZ's host country two years prior. The second panel reports the first stage of each 2SLS specification, where the instrument is the share of UNGA roll calls on which China and the host country voted differently on issues of Nuclear weapons and nuclear materials, Arms control and disarmament, Palestinian conflict, Economic development, Human rights, and Colonialism (columns 2-7 respectively). Issues follow the UN six-issue classification distributed in `unvotes` dataset (Voeten, 2013; Robinson, 2021); see Equation C.2 for construction. 'KP F-stat' is the Kleibergen-Paap first stage F-stat. All specifications include EEZ, month-year, and seasonality fixed effects, together with time-varying controls for fishing incentives (log concurrent non-Chinese fishing hours in the buffer and log phytoplankton abundance one year prior). Sample drops observations with no overlapping issue-specific votes between China and host country; this affects Comoros in 2013 on Nuclear and Arms issues, where Comoros cast no recorded votes on either issue. Robust standard errors clustered at the EEZ level are reported in parentheses. $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$.

Table C.7: Political distance and fishing - 2SLS with issue-specific vote disagreements as IVs

	1(CHN fleet fishing)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Political dist. $_{t-24}$	0.171*	0.326**	0.208	-1.39	0.192	0.890	-0.209
	(0.086)	(0.161)	(0.149)	(6.67)	(0.159)	(0.915)	(0.442)
Estimator	OLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
		First stage Political distance $_{t-24}$					
Vote issue		Nuclear	Arms control	Palestine	Economic	Human rights	Colonialism
Vote disagree. $_{t-24}$		0.517***	1.064***	-0.043	0.479***	0.273	0.182***
		(0.088)	(0.206)	(0.091)	(0.092)	(0.210)	(0.039)
KP F-stat		12.872	12.997	0.016	8.973	0.883	1.227
Controls	✓	✓	✓	✓	✓	✓	✓
EEZ FE	✓	✓	✓	✓	✓	✓	✓
Month-year FE	✓	✓	✓	✓	✓	✓	✓
EEZ-month FE	✓	✓	✓	✓	✓	✓	✓
Mean dep. var.	0.238	0.238	0.238	0.238	0.238	0.238	0.238
Observations	7,656	7,656	7,656	7,656	7,656	7,656	7,656

Notes: Table compares OLS (column 1) and 2SLS estimates (column 2-7) of the relationship between political distance and Chinese fleet presence in an EEZ-month. 'CHN fleet fishing' is an indicator variable equal to one if any fishing hour is recorded for the Chinese fleet in the buffer, and zero otherwise. 'Political dist.' is the absolute difference in UNGA voting-based ideal point between China and the EEZ's host country two years prior. The second panel reports the first stage of each 2SLS specification, where the instrument is the share of UNGA roll calls on which China and the host country voted differently on issues of Nuclear weapons and nuclear materials, Arms control and disarmament, Palestinian conflict, Economic development, Human rights, and Colonialism (columns 2-7 respectively). Issues follow the UN six-issue classification distributed in `unvotes` dataset (Voeten, 2013; Robinson, 2021); see Equation C.2 for construction. 'KP F-stat' is the Kleibergen-Paap first stage F-stat. All specifications include EEZ, month-year, and seasonality fixed effects, together with time-varying controls for fishing incentives (log concurrent non-Chinese fishing hours in the buffer and log phytoplankton abundance one year prior). Sample drops observations with no overlapping issue-specific votes between China and host country; this affects Comoros in 2013 on Nuclear and Arms issues, where Comoros cast no recorded votes on either issue. Robust standard errors clustered at the EEZ level are reported in parentheses. $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$.

Appendix C.4 Robustness checks

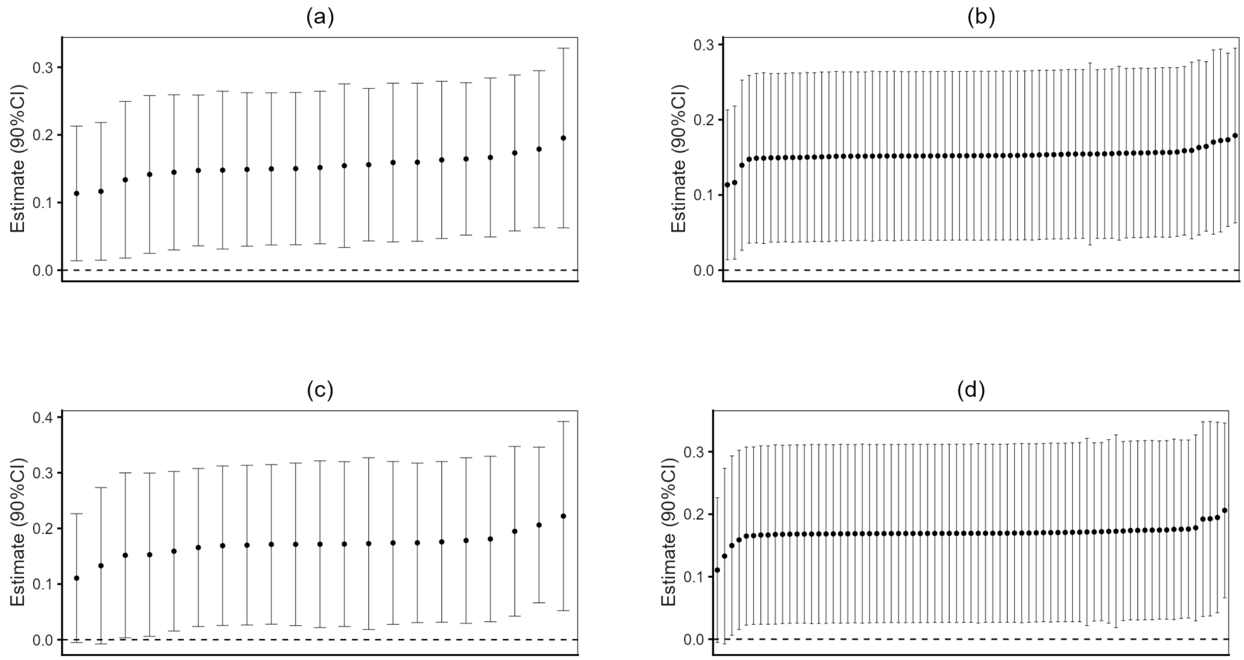

Figure C.3: Leave-one-out robustness checks
Figure plots coefficients from the main specification estimating the association between political distance from China and Chinese DWF fleet activity, with full controls as in Table 1, columns 3 and 6. Each point represents a separate regression that excludes one host country (Panels a-c) or one EEZ (Panels b-d) from the estimation sample. Outcomes are the probability of Chinese fleet presence in the buffer (Panels a-b) and the probability of active fishing (Panels c-d). Vertical bars denote 90% confidence intervals based on standard errors clustered at the EEZ level.

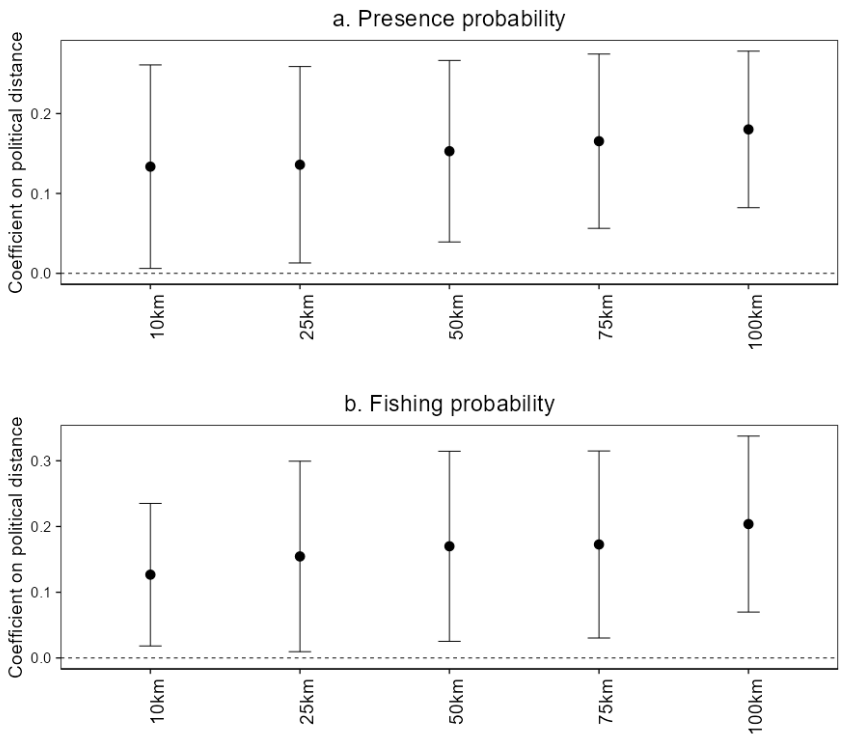

Figure C.4: Coefficients on political distance for outcomes at different buffer sizes
Figure plots coefficients on political distance obtained from the main specification (Eq. 7) regressing the probability of Chinese DWF fleet presence (Panel a) or fishing (Panel b) in the buffer just outside the host country's EEZ at various distances (x-axis). Vertical bars denote 90% confidence intervals based on standard errors clustered at the EEZ level.

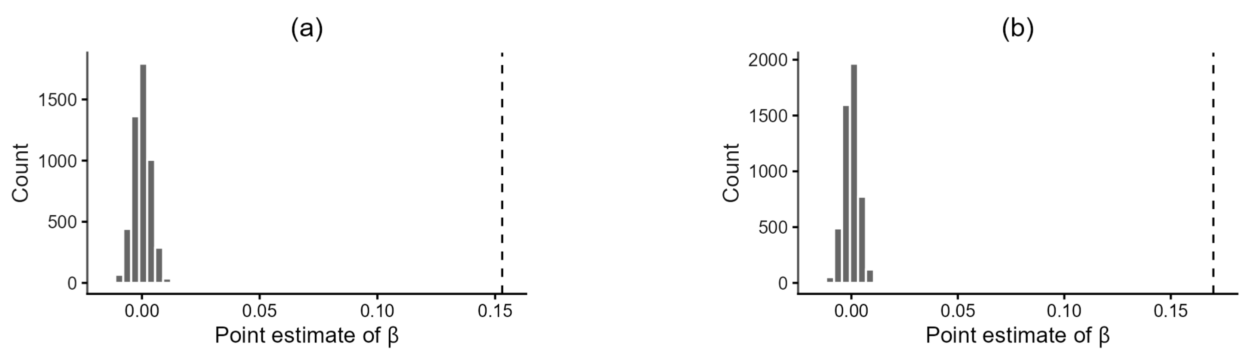

Figure C.5: Permutation inference
Figure plots the distribution of placebo coefficients on political distance under random permutation. In each iteration, we randomly reassign political distance values across host countries within a given month-year and re-estimate the main specification with full controls (Table 1, columns 3 and 6). The histogram displays the distribution of the placebo coefficients across 5,000 such permutations. The vertical line indicates the point estimate obtained from the actual data. Outcomes are the probability of Chinese fleet presence in the buffer (Panel a) and the probability of active fishing (Panel b).

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