Selective responses to the climate crisis: International financial institutions, strategic ignorance, and leader speeches

Timon Forster*

Draft January 2025. Please do not cite or circulate.

Abstract

All major international financial institutions (IFIs) have recognized the need for their involvement in financing low-carbon development—and consequently have taken steps to align their work with the Paris Agreement. How do these institutions respond, literally, to global warming? I examine the official, outward-facing communication of their leaders as a form of agenda-setting that complements coercive instruments such as lending and conditionality. Drawing on political economy, political communication, and ignorance studies, I argue that leaders strategically vary both the salience and framing of climate change across host-country contexts. I hypothesize that IFIs are less likely to mention climate change in speeches delivered in fossil-fuel dependent countries; when they do, I expect greater emphasis on opportunities over risks and more ambiguous, non-specific language. Empirically, I leverage text-analytic methods to measure climate coverage and narrative type in 1,744 speeches delivered by the leaders of the International Monetary Fund (IMF), the World Bank, the African Development Bank, and the Asian Development Bank between 2010 and 2025. Regression results indicate that leaders adapt to their audience on climate salience: in countries with high fossil-fuel rents, leaders are less likely to discuss climate change. Conditional on discussing climate change, however, IFIs do not systematically shift the balance of risk versus opportunity frames, nor do they consistently reduce commitment and specificity. The findings contribute to debates on IFIs as agenda-setters and on the strategic communication of international organizations under political constraint.

Keywords: international financial institutions; climate change; political communication; leaders

*Institut Barcelona d'Estudis Internacionals (IBEI) & University of St Gallen. timon.forster@unisg.ch.
I would like to thank participants of the European Consortium for Political Research (ECPR) Joint Sessions, workshops and seminars at UT-Austin, St Gallen, and the Norwegian Institute of International Affairs (NUPI) for feedback on earlier versions of this manuscript. Funding from the Great Minds Fellowship of the University of St Gallen is gratefully acknowledged.

1 Introduction

Emerging Market and Developing Countries need to mobilize more than US$3 trillion on an annual basis between now and 2030 to fulfill the Sustainable Development Goals and meet the nationally-determined targets set out under the Paris Agreement on climate change (G20-IEG, 2023). To close this funding gap, international financial institutions (IFIs) like the International Monetary Fund (IMF), the World Bank, and regional development banks need to step up their efforts (Gallagher, Bhandary, Ray and Ramos, 2023; Kentikelenis and Stubbs, 2025). Indeed, IFIs have been upgrading their toolkits to better support their member-states in achieving national climate goals. For example, the World Bank embarked upon an 'evolution roadmap' process through which it upgraded its vision and mission, operations, and financing model (World Bank, 2023). Or consider the IMF, which has established the Resilience and Sustainability Trust to help member-states build resilience in the face of the climate crisis (IMF, 2022).

Yet mainstreaming climate considerations across IFI mandates, staff practices, and lending portfolios remains uneven, and at times contradictory (Goes, 2023; Kaya and Leblebicioglu, 2025; Kentikelenis and Stubbs, 2025; Peterson and Skovgaard, 2019; Skovgaard, 2021; Soener, 2024). For one, staff exposure to specific country contexts and learning shape whether (and how) IFIs integrate climate issues into surveillance (Clark and Zucker, 2024). But the bureaucracies also operate in a politically constrained environment in which member-states vary widely in their climate preferences, their ability to advance their priorities in the governance of these institutions, and in their dependence on fossil rents (Arias, Clark and Kaya, 2025; Merling and Forster, 2024). This combination creates scope for variation not only in what IFIs *do*, but also in how they publicly *say* what they do. IMF Managing Director Kristalina Georgieva has been widely lauded as a climate leader. By contrast, World Bank President David Malpass left his position early following a fallout in which he was seen to deny anthropogenic climate change. How do IFIs respond, literally, to the climate crisis?

Answering this question matters because IFIs are global agenda-setters not only when

they exercise coercive influence through lending and conditionality, but also when they wield discursive power (Babb and Kentikelenis, 2018). These organizations define which problems are salient in development, which solutions are 'responsible,' and which trade-offs are treated as unavoidable (Barnett and Finnemore, 2004; Simmons, Dobbin and Garrett, 2008).

One important way through which such discursive power manifests is in public leader speeches: compared to slow and potentially costly reforms of IFIs' core functions (such as finance) (Kaya and Leblebicioglu, 2025), leaders can use their public appearances to respond to external demands without much delay. They can target multiple audiences, signal priorities to markets and governments, and strengthen organizational legitimacy. In so doing, they mirror national executive heads (e.g., Baturo, Dasandi and Mikhaylov, 2017; Eckhard, Patz, Schönfeld and van Meegdenburg, 2021; Kentikelenis and Voeten, 2021; Rauh, 2022). Communication science emphasizes that such public messages are rarely neutral descriptions: they are designed, framed, and timed to influence interpretation and action (Hallahan, Holtzhausen, Van Ruler, Verčič and Sriramesh, 2007; Falkheimer and Heide, 2022). Further, the frames used in these speeches plausibly represent the organization's view—e.g., unlike policy reforms or decisions that are subject to member-state approval.

Theoretically, I combine insights from the political economy of international organizations (e.g., Clark and Dolan, 2021; Dreher, Sturm and Vreeland, 2009; Stone, 2011) with scholarship on political communication and ignorance studies (Bedford, 2024; Best, 2022; Gross and McGoey, 2022; McGoey, 2019). The former indicates that IFIs adapt their operations to the needs of their member-states; the latter conceptualizes the communication of public organizations as purposive and audience-oriented (Hallahan et al., 2007; Falkheimer and Heide, 2022).

In particular, I argue that fossil-fuel dependent economies create a predictable communicative constraint: climate mitigation can be construed as threatening core revenue streams. IFIs, and their leaders, thus risk potentially antagonizing these member-states when they foreground climate change in these countries. Due to these audience costs, I hypothesize

that leaders are less likely to discuss climate change in speeches delivered in countries with high fossil-fuel rents; I also expect them to emphasize the opportunities of addressing climate change (as opposed to the risks of global warming) and to use imprecise language in these countries. Theoretically, such communication combines 'strategic ignorance', part of political actors' efforts 'to determine where the boundary between knowledge and ignorance lies' (McGoey, 2019, 16) with what communication scholars refer to as *strategic ambiguity*—the purposeful use of vague language to accommodate multiple audiences and sustain their support (Eisenberg, 1984).

Empirically, I build a new text corpus of leader speeches from the International Monetary Fund (IMF), the World Bank, the African Development Bank (AFDB), and the Asian Development Bank (ASDB). The former two are among the most powerful international organizations in global governance (Babb and Kentikelenis, 2018; Woods, 2006), the AFDB and ASDB are the leading development banks in their respective regions (Ray, 2021). The sample of organizations therefore allows for comparisons across mandates, geographic focus, and shareholder composition. My text corpus includes the transcripts of 1,744 speeches collected from the official websites of the four IFIs, all delivered by their leaders between 2010 and 2025 in 246 cities, ranging from Abidjan to Beijing, and from Canberra to Zurich.

To identify the extent and type of climate change communication, I utilize a series of quantitative text-analytic methods (e.g., Eckhard et al., 2021; Parizek, 2023; Rauh, 2022). First, I use keyword search to identify climate change sentences (Clark and Zucker, 2025; Ramos, Gallagher, Stephenson and Monasterolo, 2022)—sentences that mention terms related to climate change at least once. According to this measure, 3.3% (4,466 sentences) cover climate change, representing 4.1% of all words spoken (ca. 128,800 tokens). But this coverage of climate change is not distributed randomly. Not surprisingly, the number of sentences related to global warming has increased markedly over time. More importantly, and consistent with my argument, I find that leader speeches are significantly less likely to refer to climate change in host countries heavily reliant on fossil fuels. Regression analyses indicate that a

one–percentage-point increase in fossil fuel rents is associated with about a 3.7% decrease in climate-related tokens, holding all else constant.

Second, I use novel large language models (LLMs) trained on climate change texts (Bingler, Kraus, Leippold and Webersinke, 2024; Webersinke, Kraus, Bingler and Leippold, 2022) to measure the extent to which speeches emphasize risks of climate change relative to the opportunities, their level of commitment and specificity. Contrary to my hypotheses, however, speeches delivered in fossil-fuel dependent countries do not significantly vary along these three dimensions, relative to speeches delivered in other host-countries.

Taken together, my findings show that IFIs respond to the climate crisis in selective and structured ways. IFI leaders adapt to audiences by modulating whether climate change is raised, not by altering how it is discussed once on the agenda. These results advance our understanding of international politics by highlighting an underappreciated actor in the literature (Dreher and Lang, 2019) and a crucial substantive issue: the role of IFI leadership in climate politics (Gallagher et al., 2023). Second, the findings extend the literature on political communication—hitherto largely focused on national executives (Baturo, Dasandi and Mikhaylov, 2017; Rauh, 2022; Schumacher, Schoonvelde, Traber, Dahiya and De Vries, 2016)—by demonstrating how international organizations engage in strategic communication under heterogeneous political constraints. Third, the study contributes methodologically by applying state-of-the-art text-analytic methods to a new corpus of leader speeches, enabling fine-grained analysis of high-level agenda-setting and framing in global economic governance.

2 International organizations, strategic ignorance, and climate change narratives

2.1 Theorizing strategic ignorance and leader speeches

International organizations can disseminate norms and policies by coercive means, such as the diffusion of neoliberal, market-oriented policy reforms attached to lending programs (Kentikelenis and Stubbs, 2023). But IFIs also spread policy norms through normative channels, e.g., by defining what policy ideas are 'appropriate' (Simmons, Dobbin and Garrett, 2008, 31-40). Simply put: international organizations, including international financial institutions, are global agenda-setters. Analyses of such coercive or normative diffusion focus on the production of knowledge within international organizations. For instance, IMF bureaucrats exposed to climate-vulnerable countries incorporate such concerns in their subsequent work (Clark and Zucker, 2024), the design of lending programs is shaped by their educational training (Lang, Wellner and Kentikelenis, 2024), and staff treat representatives of borrowing governments favorably if they share their training in neoclassical economics (Nelson, 2017). However, IFIs do not always engage in emerging policy problems; they are careful in how they demarcate their jurisdiction and how they cooperate with other organizations (Clark, 2021; Kranke, 2020): both IMF management and its member-states have repeatedly gone to great lengths to convince outsiders that the IMF's approach to climate change complements the World Bank; that the Fund is not trying to compete with the Bank on this issue. In all of these activities, international organizations are sensitive to the needs and demands of their member-states—this is certainly true for the most powerful shareholders (e.g., Clark and Dolan, 2021; Forster, Honig and Kentikelenis, 2025; Stone, 2011; Vreeland, 2019), but weaker states are also able to communicate their preferences at times (Arias, Clark and Kaya, 2025; Forster, 2024).

Communication science provides a complementary vocabulary for how this unfolds in a discursive space: organizations shape political outcomes not only through material instruments,

but also by influencing what publics and elites perceive as important (agenda-setting) and how they interpret issues (framing) (McCombs and Shaw, 1972; Entman, 1993). Scholarship on strategic communication treats public messages as designed interventions: organizations select channels, audiences, timing, and frames to advance goals under constraint (Hallahan et al., 2007; Falkheimer and Heide, 2022). Two implications are especially relevant here. First, leaders may adjust *issue salience* by choosing whether to mention a topic—say, climate change—at all (McCombs and Shaw, 1972). Second, if they opt to cover a certain issue, leaders may select among frames that differentially activate considerations and emotions (e.g., risk, opportunity, responsibility) (e.g., for prominent frames, see Bernauer and McGrath, 2016; Fløttum and Gjerstad, 2017), thereby shaping which policy trade-offs appear natural or necessary (Entman, 1993; Scheufele, 1999; Chong and Druckman, 2007). Where audiences are heterogeneous or politically sensitive, leaders can also rely on *strategic ambiguity* (vagueness, non-commitment) to maintain flexibility and to avoid alienating key constituencies (Eisenberg, 1984).

To better understand when IFIs do *not* cover certain issues (or dimensions of issues), the field of ignorance studies (Burke, 2024; Gross and McGoey, 2022; McGoey, 2019) suggests that a single focus on knowledge production is inadequate. Accordingly, actors engage in 'strategic ignorance' (McGoey, 2012, 2019) when they 'mobilize, manufacture or exploit unknowns in a wider environment' (McGoey, 2019).[1] Strategic ignorance thus defined is an 'institutional power' where effects are diffuse and mediated by institutions (Barnett and Duvall, 2005). This power is 'agential ... It's not solely structural—or infrastructural. Rather, it represents a type of power-based agency that isn't always a *stratagem*, in the sense of a deliberate plot, but it does involve strategy' (McGoey, 2021, 369).[2] For example, while it has

[1]The original definition by McGoey (2019) also emphasizes that strategic ignorance is exercised 'to avoid liability for earlier actions'. I open this definition, developed for domestic policy- and rule-making to a broader set of motivations. IFIs can seek to exercise strategic ignorance not only to avoid liability, but to expand their mandate, to manage their legitimacy, or to give in to pressures by powerful member-states.

[2]Strategic ignorance also relates to 'third-dimensional power' (Lukes, 2005) because it shapes how other actors develop their preferences with regard to a policy area. Relatedly, strategic communication scholarship emphasizes that influence often operates indirectly, by shaping interpretive schemas rather than by issuing explicit commands (Hallahan et al., 2007).

long been recognized that the World Bank's research activities are crucial for its longevity, questions about biases in its knowledge production are not uncommon (Bedford, 2024; Broad, 2006; Mehta, 2001; Wade, 1996). Such criticisms range from engaging with a narrow literature to unrepresentative samples, and from unhealthy co-production with corporate actors to promoting recommendations that do not follow from the research—as was the case in some World Development Reports (Mehta, 2001), or, more recently, in research papers on gender and ride-hailing (Bedford, 2024).

Strategic ignorance can be manifest at different levels—it shapes the organizational culture that impacts individual bureaucrats' actions on the ground, but it can also enter the boardroom where state representatives and management engage in everyday decision-making. At its most granular, the handling of ignorance is evident in the stories that international organizations tell, about each other, about themselves, about policy issues. I argue that the public appearances of IFI leaders are ideally suited to uncovering such narratives—the chief executives of these organizations speak frequently, at regular events like their annual meetings, the World Economic Forum in Davos, or the China Development Forum, but they can also respond ad hoc when needed. This aligns with communication-science accounts of leadership communication as 'sense-giving' and 'issue ownership' work: leaders define what the organization stands for, how it interprets problems, and what actions are presented as feasible (Heath, 2013; Zerfass, Verčič, Nothhaft and Werder, 2018).

In short, I argue that IFI leaders respond to the climate crisis through *strategic communication* in their public appearances. Within this broader communicative practice, leaders may deploy *strategic ignorance*—by limiting whether certain issues are raised at all—and *strategic ambiguity*—by using vague or non-committal language when addressing politically sensitive topics. This perspective is particularly helpful for understanding IFIs' reorientation toward climate change, given that the complexity of the problem (discussed next) invites political actors to continuously draw and redraw the boundary between what is known, emphasized, and left unspecified in climate policy debates. The growing expectation that IFIs mobilize

climate finance gives their leaders a distinctive entry point into this contested discursive space.

2.2 Climate change and observable implications

Climate change is a 'wicked problem' (Termeer, Dewulf and Breeman, 2013) because 'the formulation of the problem is the problem' (Rittel and Webber, 1973, 161), with distinct features as a public policy issue (Fröhlich and Knieling, 2013). Global warming demands *boundary-, level-, and sector-comprehensive* policy responses, yet organizational expertise is often not tailored to these needs. The multi-level, cross-sectoral nature of climate change further requires the involvement of *multiple stakeholders* with diverse perspectives, resources, and interests in governance—as is evident in the proliferation of actors in global climate governance (Abbott, Green and Keohane, 2016; Keohane and Victor, 2011). Climate change is also a *long-term problem* that cuts across generations, while the formulation and implementation of mitigation and adaptation strategies are challenged by considerable *uncertainty* regarding both climate impacts and policy effectiveness (Fröhlich and Knieling, 2013). Due to these characteristics—especially competing interests, institutional lag, and long time horizons—climate change has also been described as a 'long problem' (Hale, 2024).

The complexity and multidimensionality of climate change provide fertile ground for a wide range of narratives in public discourse (Fløttum and Gjerstad, 2017). For example, narratives emphasizing *climate risk* highlight the association between global warming and extreme weather events such as droughts, floods, heat waves, or wildfires. From this perspective, reducing carbon dioxide emissions slows global warming and thereby lowers the likelihood of such disasters. By contrast, narratives focused on economic co-benefits portray climate reform as an *opportunity*: investment in clean energy technologies and carbon capture is framed as a way to curb emissions while promoting innovation and creating employment. This line of argument presents climate action as compatible with economic growth. Such narratives matter for public support, as demonstrated by research drawing on media discourse

(Fløttum and Gjerstad, 2017) and survey experiments on climate policy preferences (e.g., Bain, Milfont, Kashima, Bilewicz, Doron, Gararsdóttir, Gouveia, Guan, Johansson, Pasquali et al., 2016; Bernauer and McGrath, 2016; Myers, Nisbet, Maibach and Leiserowitz, 2012; Petrovic, Madrigano and Zaval, 2014).

When acting as agenda-setters in their outward-facing communication, IFIs thus face two core choices. First, they must decide whether to speak about climate change at all. Second, conditional on addressing climate change, they must choose which aspects to emphasize, necessarily privileging some narratives while downplaying others. In what follows, I focus on whether leaders frame climate change primarily as a risk or as an opportunity, and on the extent to which their communication is committed and specific.

Regarding the decision of whether to raise climate change in a speech (which I refer to as *climate change coverage*), I hypothesize:

> **H1:** IFI leaders are less likely to speak about climate change in countries that are heavily reliant on fossil-fuel rents.

Simply put, leaders are expected to be more cautious about discussing ambitious climate policies in natural-resource-rich economies than in countries with little reliance on such resources.

I then turn to the *type* of climate change communication. Drawing on the distinction between risk- and opportunity-oriented narratives, as well as on variation in commitment and specificity, I advance three additional hypotheses. First, I expect leaders to emphasize opportunities rather than risks in natural-resource-rich countries. Second, I hypothesize that leaders express weaker commitments to climate action in these contexts. Third, I expect their communication to be less specific.

> **H2:** In countries with high fossil-fuel rents, IFI leaders are more likely to frame climate change as an opportunity rather than as a risk.
>
> **H3:** In countries with high fossil-fuel rents, IFI leaders use less committed

language when discussing climate change.

H4: In countries with high fossil-fuel rents, IFI leaders use less specific language when discussing climate change.

The rationale underlying these hypotheses follows directly from the preceding discussion: where climate mitigation threatens core economic interests, leaders face higher audience costs and are therefore more likely to rely on selective agenda-setting, opportunity-oriented framing, and ambiguity in their public communication.

3 Research design

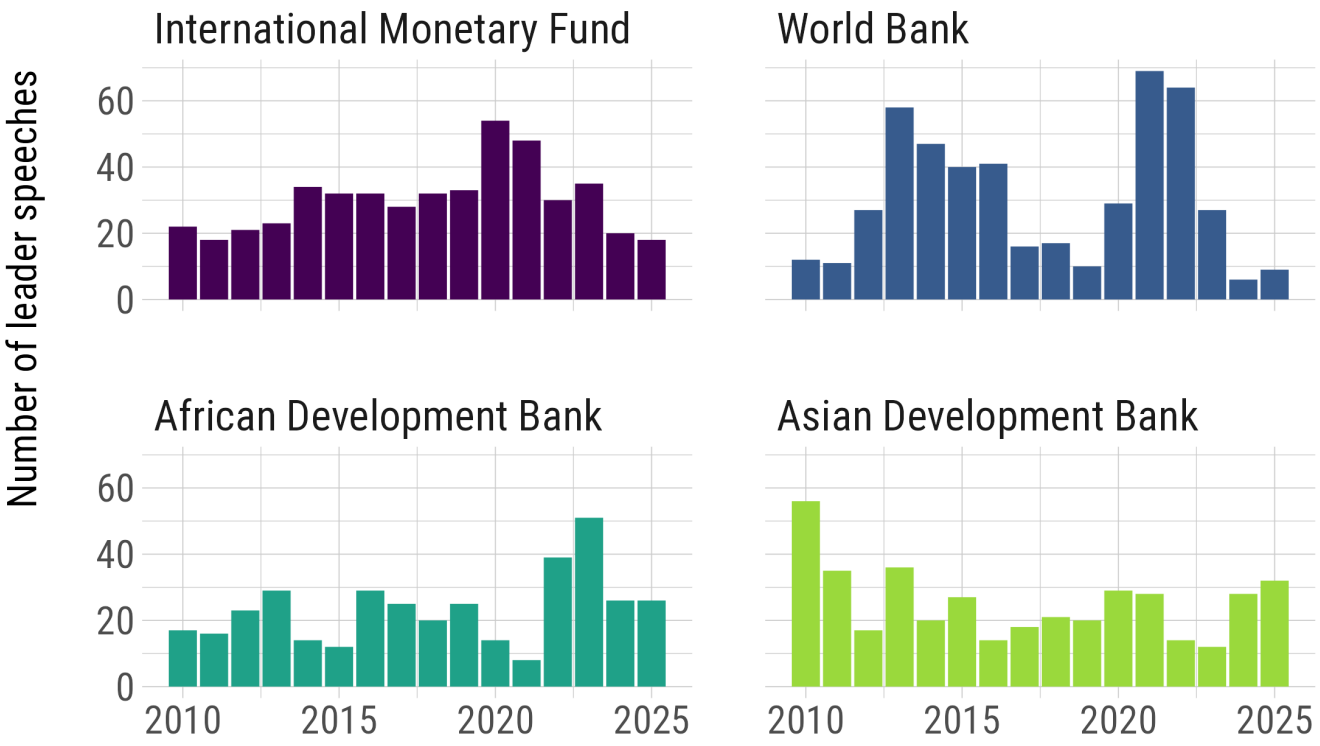
3.1 Speech data

To investigate the climate change communication of IFIs, I created a new text corpus of 1,744 speeches by the leaders of the IMF (480 speeches by the Managing Director), the World Bank (483 speeches by the President), the AFDB (374 speeches by the President), and the ASDB (407 speeches by the President), all delivered in English between 2010 and 2025. As mentioned above, the rationale for selecting leader speeches—as opposed to other outputs, such as annual reports or policy decisions—is that the public appearances of leaders leave a relatively extensive and timely footprint and given the relative absence of political influence by member-states, they are more amenable to studying agenda-setting. In Figure 1, I plot the distribution of speeches in my sample over time.[3]

The IMF is the only intergovernmental organization with the mandate to promote global macroeconomic and financial stability, whereas the MDBs were selected because they vary in membership, geographical orientation, size, and voting power afforded to borrowing countries (see Appendix Table A1) (Ray, 2021). My sample thus allows me to examine the climate change communication of IFIs more broadly, reflecting both global and regional interests.

[3]The text corpus represents a convenience sample—these are all speeches for which transcripts are freely available on the websites of the IFIs.

Figure 1: Number of speeches over time



Notes: Number of speeches delivered in English by the IMF Managing Director, the World Bank President, the AFDB President, and the ASDB President, all between 2010 and 2025.

3.2 Identifying climate sentences and climate narratives

To classify which of the leaders speeches pertain to climate change, I use a dictionary approach (Clark and Zucker, 2025; Forster, Honig and Kentikelenis, 2025; Kaya and Reay, 2019; Ramos et al., 2022). *Dictionary methods* draw on a list of words that approximate a given topic and use the absolute or relative frequency of texts mentioning these terms as measures of intensity (Grimmer and Stewart, 2013; Jurafsky and Martin, 2014). For example, the Washington Consensus can be captured by terms such as 'deregulation; privatization; fiscal discipline; trade liberalization; or structural adjustment' (Kaya and Reay, 2019) or the IMF's attention to climate change in surveillance activities can be captured by references to 'subsidy; carbon tax; or renewable energy' (Ramos et al., 2022). The more often a text mentions these terms, the more the text is about the Washington Consensus or climate surveillance, respectively. I classify any sentence as relating to climate change if the transcript mentions at least one of the following terms (case-insensitive), adapting the dictionaries used in Ramos et al. (2022) and Clark and Zucker (2025):

```
climate change; --crisis; --finance; --loan(s); --politics; --mitigation;
--adaptation; global warming; --heating; extreme weather; natural disaster(s);
hurricane(s); flood(s); heatwave(s); wildfire(s); IPCC; UNFCCC; Kyoto protocol;
Paris accord; --agreement; net zero; just transition; green transition;
renewable energ(y|ies); green energ(y|ies); solar energy; wind energy;
solar power; wind power; carbon emissions; carbon dioxide; methane;
greenhouse gas(es); GHG.
```

To test my hypothesis on the *salience* of climate change in IFI leader speeches (**H1**), I run the following model with OLS:

$$ClimateCoverage_{ijt} = \beta_0 + \beta_1 \text{Fossil fuel rents}_j + \beta_2' X + \text{Fixed Effects} + \epsilon_{ijt} \quad (1)$$

where $ClimateCoverage$ denotes the (log of) the total number of climate-related tokens

in a speech by leader i delivered in host country j at time t. In robustness checks, I employ alternative measures of climate change salience, including the share of climate change sentences relative to the total number of sentences per speech, the share of climate-related tokens relative to total speech length, and the absolute number of climate-related tokens. In additional robustness checks, I winsorize each dependent variable at the 95% level to account for outliers.

The independent variable of interest is fossil fuel rents (in % of GDP) in host country j at time t (WDI, 2025), a continuous and time-varying measure capturing countries' dependence on fossil fuel extraction. In robustness checks, I also take the logarithm of this variable and replace it with the more expansive natural-resource rents (in % of GDP) (WDI, 2025).

X is a vector of control variables that includes total speech length (log tokens), the host country's vote share in the respective IFI, GDP per capita (WDI, 2025), the liberal democracy index (Coppedge, Gerring, Knutsen, Lindberg, Teorell, Altman and Bernhard, 2020), and a dummy variable indicating whether the speech was delivered in the city hosting the organization's headquarters. In additional models, I include further controls capturing recent exposure to climate-related disasters in host country j (measured as the number of disasters in the three months prior to the speech) (Delforge, Wathelet, Below, Lanfredi Sofia, Tonnelier, van Loenhout and Speybroeck, 2025), as well as characteristics of the speech audience, distinguishing between political-institutional audiences (e.g., governmental or intergovernmental) and private-sector or civil-society audiences, and between global and more narrowly defined audiences.

Throughout, I include fixed effects for the speaker and for the year–month of the speech. Speaker fixed effects absorb time-invariant characteristics of individual leaders and, by extension, time-invariant organizational features, while year–month fixed effects account for common temporal shocks and trends in climate-related discourse. I report two-way clustered standard errors by host country and speaker to account for correlated shocks within host-country contexts and serial correlation in leaders' rhetoric across speeches.

Second, to test the hypotheses on the *type* of the climate change communication (**H2**, **H3**, **H4**), I rely on a large language model (LLM) pre-trained on texts pertaining to climate change, ClimateBERT (Bingler et al., 2024; Webersinke et al., 2022). Like all LLMs, ClimateBERT uses a mixture of word embeddings and sub-word information to represent documents (and words) as multi-dimensional vectors. The underlying 'distributional hypothesis' (Firth, 1957) stipulates that a word's meaning can be inferred from the meaning of the words in its context. Word embeddings use this assumption such that 'distances between such vectors are informative about the semantic similarity of the underlying concepts they connote for the corpus on which they were built' (Rodriguez and Spirling, 2022, 101). In a prominent example of word analogy reasoning, embeddings have succeeded in 'understanding' that Paris is to France, as Berlin is to Germany (Mikolov, Sutskever, Chen, Corrado and Dean, 2013): that is, given the frequent co-occurrences of Paris and France, and of Berlin and Germany, respectively, the two pairs occupy a similar position in a multi-dimensional semantic space. Beyond solving such tasks, word embeddings are suited to quantitative analyses of political texts because of their contextual and dynamic advantages (Rodriguez and Spirling, 2022).

To implement ClimateBERT, i.e., to classify whether documents emphasize risks of climate change relative to opportunities, and the extent of their specificity and commitment, I first segment each speech into textual units at the paragraph level.[4] For each climate-relevant paragraph, I apply three LLMs to capture different dimensions of climate discourse (Bingler et al., 2024). First, a sentiment classifier labels paragraphs according to whether climate change is framed primarily as an opportunity or as a risk. Second, a commitment classifier detects whether the paragraph contains concrete pledges, targets, or actions, as opposed to general statements. Third, a specificity classifier distinguishes between paragraphs that are precise (e.g., numerical targets, specific plans) and those that are non-specific. The resulting paragraph-level annotations are then aggregated to the level of individual speeches by taking the mean probability for classifying opportunity, commitment, and specificity.

[4]Paragraphs are operationally defined as five-sentence blocks: one focal sentence including a climate-change keyword, as per my dictionary, and a window of two sentences either side.

4 Results

4.1 Climate change coverage

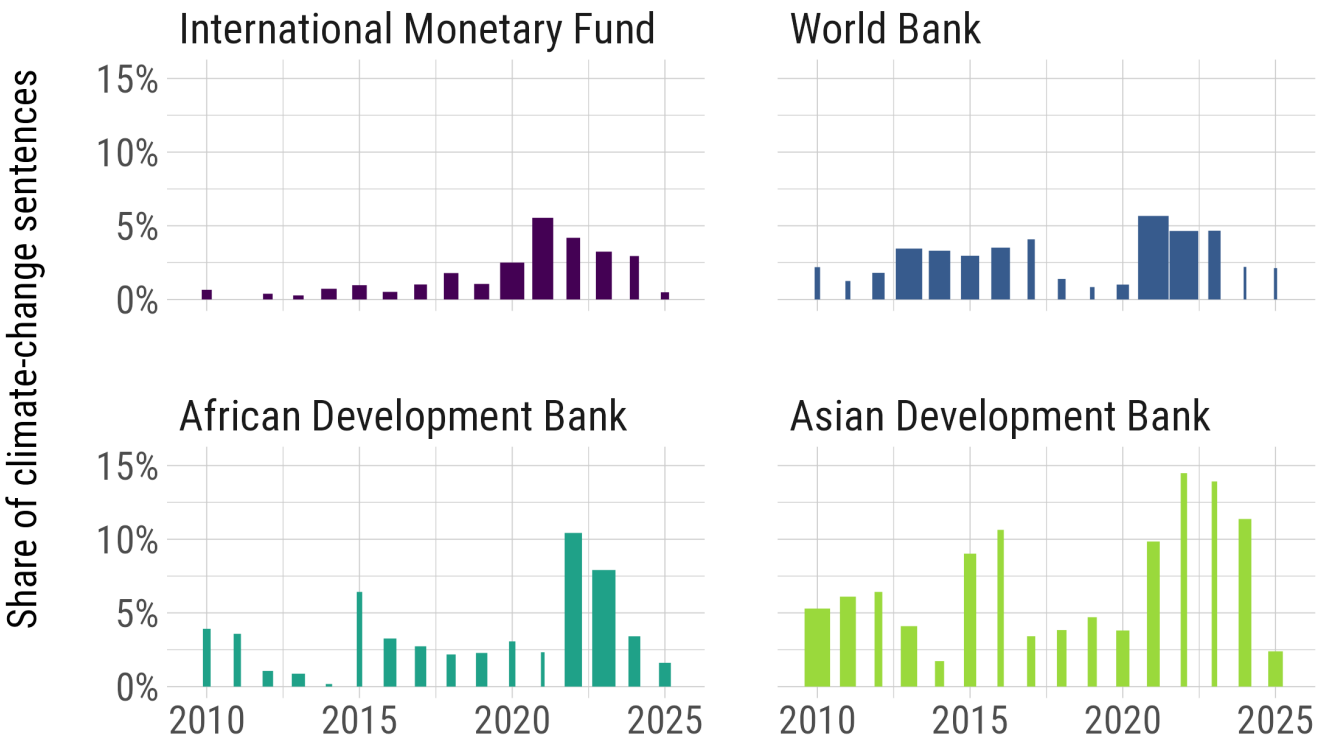
Figure 2 displays the proportion of 'climate change sentences'—sentences that mention terms related to climate change—over time. For all IFIs, we see a marked increase in the share of climate coverage in 2021—the year in which the IMF launched its Climate Strategy and the World Bank and AFDB incorporated climate concerns in their five-year plans.[5] Prior to 2021, the climate change coverage in IFI leader speeches peaked around 2015, on the eve of the Paris Agreement.

Next, Table 1 presents results from the regression analysis testing **H1**. Across all model specifications, fossil fuel rents are negatively and statistically significantly associated with the salience of climate change in IFI leader speeches. Substantively, the estimates indicate that leaders speak less about climate change in countries that are more dependent on fossil fuel extraction, consistent with my theoretical expectations.

In Model 1, the coefficient of -0.037 implies that a one–percentage-point increase in fossil fuel rents (as a share of GDP) is associated with approximately a 3.7% decrease in the number of climate-related tokens in a speech, holding all else constant. This effect is also substantively meaningful. For example, in 2015, Switzerland's fossil fuel rents were close to zero, whereas Azerbaijan's amounted to 14.4% of GDP (WDI, 2025). Moving from a context like Switzerland to one like Azerbaijan is therefore associated with roughly a 41% reduction in climate-related speech content ($1 - e^{0.037 \times 14.4} \approx 41\%$). Models 2 through 4 demonstrate that this relationship is robust to the inclusion of additional covariates, including recent disaster exposure and audience characteristics, with coefficient estimates remaining stable in magnitude and statistical significance.

[5] In fact, the African Development Bank already mainstreamed climate change in its 2013-2022 Ten-Year Strategy with the twin objectives of inclusive growth and facilitating the transition to green growth. Climate change was operationalized across the five priority intervention areas (known as the 'High 5s'). Yet in 2021, such action became more ambitious and the AFDB approved the Climate Change and Green Growth Strategic Framework, comprising of a Climate Change and Green Growth Policy, Climate Change and Green Growth Strategy (2021-2030), and the third Climate Change and Green Growth Action Plan (2021–2025).

Figure 2: Share of climate change sentences



Notes: The bar chart displays the number of climate change sentences (defined as such if a sentence mentions any of the keywords listed in text) as a share of all sentences per year. The bar width is proportional to the number of leader speeches per year.

Table 1: Climate change coverage in leader speeches

	Tokens (log)	Tokens (log)	Tokens (log)	Tokens (log)
Fossil fuel rents (% GDP)	−0.037***	−0.040***	−0.040***	−0.038***
	(0.011)	(0.011)	(0.012)	(0.011)
Formal vote share	−0.011	0.002	−0.011	−0.012
	(0.020)	(0.023)	(0.020)	(0.020)
GDP per capita (log)	0.021	0.035	0.032	0.024
	(0.070)	(0.074)	(0.071)	(0.071)
Liberal democracy index	−0.377	−0.501	−0.413	−0.381
	(0.414)	(0.409)	(0.403)	(0.408)
Speech length (tokens, log)	1.028***	1.027***	1.025***	1.032***
	(0.087)	(0.085)	(0.086)	(0.086)
HQ in host country (dummy)	0.287	0.320	0.281	0.287
	(0.232)	(0.219)	(0.225)	(0.233)
Disaster count (3 months prior)		−0.044		
		(0.039)		
Political–institutional audience			0.247	
			(0.142)	
Global audience				0.142
				(0.114)
Num.Obs.	1293	1293	1293	1293
R2	0.312	0.313	0.314	0.313
R2 Within	0.106	0.108	0.109	0.107
Speaker fixed effects	Yes	Yes	Yes	Yes
Month–year fixed effects	Yes	Yes	Yes	Yes

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: Dependent variable is the logarithm of climate-related tokens. Constant suppressed. All models include speaker and month–year fixed effects. Standard errors are two-way clustered by host country and speaker.

These findings are robust to a range of alternative specifications, reported in Appendix B. The results hold when using the logarithm of fossil fuel rents as the main explanatory variable (Appendix Table B1), when replacing fossil fuel rents with a broader measure of natural resource rents (Appendix Table B2), and when winsorizing the dependent variable at the 95th percentile (Appendix Table B3). Moreover, the negative association persists across alternative operationalizations of climate change salience, including sentence shares, token shares, and absolute token counts (Appendix Table B4). Across all robustness checks, the point estimates remain negative and statistically significant at conventional thresholds.

4.2 Type of climate change communication

Moving to the question of the *type* of climate change communication, Figure 3 displays the mean predicted score of Opportunity (vs. Risk), Commitment (vs. Non-Commitment), and Specificity (vs. non-specific) for each of the four IFIs. The patterns provide face validity for the text classification. On average, the IMF places greater emphasis on climate risks, expresses lower levels of commitment, and uses less specific language than the development banks in the sample—consistent with its mandate and its framing of climate change primarily as a macroeconomic risk. The regional development banks, by contrast, score higher on all three dimensions than the World Bank, likely reflecting their stronger operational focus on climate finance and the more homogeneous climate preferences of their memberships.

While Figure 3 illustrates differences across organizations, it does not capture variation across host-country contexts and therefore does not constitute a test of the hypotheses. Table 2 presents regression estimates for the type of climate change communication, conditional on speeches that cover climate change. Model 1 examines opportunity-oriented framing (vs. risk), Model 2 commitment, and Model 3 specificity.

Contrary to my theoretical expectations, fossil fuel rents are not significantly associated with opportunity-oriented framing or with levels of commitment. Across Models 1 and 2, the point estimates are small and statistically indistinguishable from zero, providing no

Figure 3: Type of climate change communication

Notes: The bar chart displays the mean predicted score for the three dimensions (opportunity, commitment, and specificity) classified with ClimateBERT. The bar width is proportional to the number of leader speeches per year.

support for **H2** or **H3**. By contrast, Model 3 indicates a modest and marginally statistically significant negative association between fossil fuel rents and specificity ($p < 0.1$): conditional on addressing climate change, speeches delivered in more fossil-fuel-dependent countries tend to employ slightly less specific language. Although the magnitude of this effect is small, it is consistent with the idea that leaders retain some flexibility by avoiding detailed or concrete statements in more politically sensitive contexts. These findings are also robust to the inclusion of additional variables (Appendix Table C1) and the alternative measures of natural-resource dependence (Appendix Tables C2 and C3).

Table 2: Type of climate change communication in leader speeches

	Opportunity	Commitment	Specificity
Fossil fuel rents (% GDP)	−0.006	−0.002	−0.005*
	(0.006)	(0.006)	(0.002)
Formal vote share	−0.005**	−0.014***	−0.002
	(0.002)	(0.004)	(0.002)
GDP per capita (log)	0.005	0.015	0.005
	(0.018)	(0.034)	(0.018)
Liberal democracy index	−0.184*	−0.046	−0.097
	(0.093)	(0.111)	(0.063)
Speech length (tokens, log)	0.019	0.010	0.005**
	(0.013)	(0.014)	(0.002)
HQ in host country (dummy)	−0.007	0.068***	−0.004
	(0.021)	(0.021)	(0.025)
Num.Obs.	682	682	682
R2	0.311	0.361	0.447
R2 Within	0.031	0.025	0.013
Speaker fixed effects	Yes	Yes	Yes
Month–year fixed effects	Yes	Yes	Yes

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes: Subset of speeches that cover climate change. Dependent variables are the mean ClimateBERT-predicted scores for opportunity, commitment, and specificity. Constant suppressed. All models include speaker and month–year fixed effects. Standard errors are two-way clustered by host country and speaker.

Taken together, these findings suggest that IFI leaders adapt their communication primarily at the level of *salience*, rather than by systematically altering how climate change is framed once it is discussed. Conditional on speaking about climate change—a decision that is itself shaped by host-country fossil fuel dependence—leaders largely maintain consistent narratives

in terms of risk versus opportunity and expressed commitment. This pattern points to a form of communicative resilience: leaders selectively limit when climate change enters the agenda, but do not substantially recalibrate the substance of their message once it does.

5 Discussion and conclusions

International financial institutions have become pivotal actors in global efforts to finance climate mitigation and adaptation, while continuing to function as intergovernmental organizations that shape the development agenda more broadly. In light of these roles, much of the existing literature has—rightly—focused on the direct policy instruments through which IFIs exert influence, including lending and conditionality (Clark and Zucker, 2024; Goes, 2023; Kaya and Leblebicioglu, 2025; Skovgaard, 2021). This emphasis, however, has come at the expense of a systematic examination of how IFIs communicate publicly about climate change. The approach taken in this article complements prevailing perspectives by analyzing leaders' speeches as a distinct and consequential site of power. I argue that public communication by IFI leaders constitutes an underappreciated form of *strategic communication* (Hallahan et al., 2007; Falkheimer and Heide, 2022), through which these institutions engage in agenda-setting, framing, and selective silence (McGoey, 2019). By shaping which aspects of climate change are emphasized, deferred, or left unspoken, IFI leaders can signal priorities and influence how climate change is understood as a policy problem in global economic governance.

Drawing on theories of strategic communication, political economy, and ignorance studies, I conceptualized leader speeches as a site where IFIs exercise discursive power under heterogeneous political constraints. Empirically, I showed that this power is exercised selectively. Leaders are significantly less likely to speak about climate change when addressing audiences in countries with high fossil fuel rents, consistent with the idea that climate mitigation poses politically sensitive trade-offs in these contexts. At the same time, conditional on addressing climate change, leaders do not systematically alter how they frame the issue: risk versus

opportunity framing, expressed commitment, and—largely—specificity remain remarkably stable across host-country contexts. Taken together, the findings point to a pattern of *partial audience adaptation*: IFI leaders manage political sensitivity primarily by modulating whether climate change enters the agenda, rather than by recalibrating the substance of their message once it does.

These results contribute to several strands of scholarship. First, they extend research on international organizations by foregrounding leadership communication as a distinct channel of influence, complementing work that focuses on institutional design, bureaucratic expertise, or material leverage. Second, they speak to political communication scholarship by demonstrating that agenda-setting and framing dynamics—well documented in domestic politics—also operate in the context of global economic governance. Third, by integrating ignorance studies, the analysis highlights how non-communication and strategic restraint can be as consequential as explicit policy advocacy in shaping the boundaries of legitimate debate.

The study also has important limitations. Most notably, it relies on large-scale quantitative text analysis, which necessarily abstracts from context, tone, and interactional dynamics. While this approach is well suited to identifying systematic patterns across institutions, leaders, and countries, it cannot capture the full nuance of communicative moments that may have outsized political consequences. The widely discussed episode involving then-World Bank President David Malpass during Climate Week in New York in 2022 illustrates this limitation. In that setting, Malpass's repeated refusal to affirm the scientific consensus on anthropogenic climate change—culminating in the statement, "I'm not a scientist"—triggered immediate public backlash, calls for his resignation, and ultimately contributed to his early departure from office (Gelles and Rappeport, 2022; Volcovici and Abnett, 2022). Such moments hinge on tone, evasion, and real-time interaction in ways that are difficult to detect through aggregate measures of salience or framing. They underscore the need for complementary qualitative approaches, including close reading, discourse analysis, and interviews, to fully understand

how strategic ignorance and ambiguity operate in practice.

A second limitation concerns the downstream effects of leader communication. While this study documents how IFI leaders adapt their public discourse to political context, it does not assess whether and how such communication shapes organizational behavior and policy outcomes. Future research could explore whether patterns of selective agenda-setting in speeches are reflected in lending decisions (Goes, 2023; Kaya and Leblebicioglu, 2025), surveillance priorities (Clark and Zucker, 2024), or technical assistance, and whether leader rhetoric influences how climate finance commitments are interpreted by markets, governments, and civil society.

Beyond these academic considerations, the findings have broader implications for global climate governance. As IFIs are increasingly called upon to mobilize climate finance and support low-carbon transitions, their leaders' public communication plays a critical role in shaping expectations about ambition, responsibility, and feasibility (Clark and Zucker, 2024; Gallagher et al., 2023; Kaya and Leblebicioglu, 2025; Kentikelenis and Stubbs, 2025). Selective silence on climate change in politically sensitive contexts may reduce short-term friction (e.g., when the US government under Trump calls for the Bretton Woods Institutions to stick to their core mandate), but it also risks normalizing hesitation at a moment when coordinated and credible leadership is urgently needed. Recognizing strategic communication—and strategic ignorance—as instruments of power invites closer scrutiny of the narratives that accompany climate finance pledges. Greater transparency and consistency in IFI leaders' climate communication could strengthen institutional credibility and help align global financial governance with the scale and urgency of the climate crisis.

References

Abbott, Kenneth W, Jessica F Green and Robert O Keohane. 2016. "Organizational Ecology and Institutional Change in Global Governance." *International Organization* 70(2):247–277.

Arias, Sabrina B, Richard Clark and Ayse Kaya. 2025. "Power by Proxy: Participation as a Resource in Global Governance." *The Review of International Organizations* pp. 1–30.

Babb, Sarah L and Alexander E Kentikelenis. 2018. International Financial Institution as Agents of Neoliberalism. In *The SAGE Handbook of Neoliberalism*, ed. D Cahill, M Cooper, M Konings and D Primrose. Thousand Oaks: SAGE Publications pp. 16–27.

Bain, Paul G, Taciano L Milfont, Yoshihisa Kashima, Michał Bilewicz, Guy Doron, Ragna B Gararsdóttir, Valdiney V Gouveia, Yanjun Guan, Lars-Olof Johansson, Carlota Pasquali et al. 2016. "Co-benefits of addressing climate change can motivate action around the world." *Nature climate change* 6(2):154–157.

Barnett, Michael N and Martha Finnemore. 2004. *Rules for the World: International Organizations in Global Politics*. Ithaca, NY: Cornell University Press.

Barnett, Michael and Raymond Duvall. 2005. "Power in International Politics." *International Organization* 59(1):39–75.

Baturo, Alexander, Niheer Dasandi and Slava J Mikhaylov. 2017. "Understanding State Preferences with Text as Data: Introducing the UN General Debate Corpus." *Research & Politics* 4(2):1–9.

Bedford, Kate. 2024. "Taking Development for a Ride: the World Bank's Research with Ride-Hailing Companies." *Review of International Political Economy* pp. 1–24.

Bernauer, Thomas and Liam F McGrath. 2016. "Simple Reframing Unlikely to Boost Public Support for Climate Policy." *Nature Climate Change* 6(7):680–683.

Best, Jacqueline. 2022. "Varieties of Ignorance in Neoliberal Policy: or the Possibilities and Perils of Wishful Economic Thinking." *Review of International Political Economy* 29(4):1159–1182.

Bingler, Julia Anna, Mathias Kraus, Markus Leippold and Nicolas Webersinke. 2024. "How cheap talk in climate disclosures relates to climate initiatives, corporate emissions, and reputation risk." *Journal of Banking & Finance* 164:107191.

Broad, Robin. 2006. "Research, knowledge, and the art of 'paradigm maintenance': the World Bank's Development Economics Vice-Presidency (DEC)." *Review of International Political Economy* 13(3):387–419.

Burke, Peter. 2024. *Ignorance: A Global History*. New Haven, CT: Yale University Press.

Chong, Dennis and James N. Druckman. 2007. "Framing Theory." *Annual Review of Political Science* 10:103–126.

Clark, Richard. 2021. "Pool or duel? Cooperation and competition among international organizations." *International Organization* 75(4):1133–1153.

Clark, Richard and Lindsay R Dolan. 2021. "Pleasing the Principal: US Influence in World Bank Policymaking." *American Journal of Political Science* 65(1):36–51.

Clark, Richard and Noah Zucker. 2024. "Climate cascades: IOs and the prioritization of climate action." *American Journal of Political Science* 68(4):1299–1314.

Clark, Richard and Noah Zucker. 2025. "The Social Roots of Expertise: Evidence from the IMF." *Manuscript, presented at the Annual Conference on the Political Economy of International Organization* .

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I Lindberg, Jan Teorell, David Altman and Michael Bernhard. 2020. "V-Dem [Country–Year/Country–Date] Dataset v10.".
URL: *https://doi.org/10.23696/vdemds20*

Delforge, Damien, Vincent Wathelet, Regina Below, Chiara Lanfredi Sofia, Mathilde Tonnelier, Joris A. F. van Loenhout and Niko Speybroeck. 2025. "EM-DAT: The Emergency Events Database." *International Journal of Disaster Risk Reduction* p. 105509.
URL: *https://doi.org/10.1016/j.ijdrr.2025.105509*

Dreher, Axel, Jan-Egbert Sturm and James Raymond Vreeland. 2009. "Development Aid and International Politics: Does Membership on the UN Security Council Influence World Bank Decisions?" *Journal of Development Economics* 88(1):1–18.

Dreher, Axel and Valentin F Lang. 2019. The Political Economy of International Organizations. In *The Oxford Handbook of Public Choice, Volume 2*, ed. Roger D Congleton, Bernard Grofman and Stefan Voigt. Oxford: Oxford University Press pp. 609–652.

Eckhard, Steffen, Ronny Patz, Mirco Schönfeld and Hilde van Meegdenburg. 2021. "International Bureaucrats in the UN Security Council Debates: A Speaker-Topic Network Analysis." *Journal of European Public Policy* pp. 1–20.

Eisenberg, Eric M. 1984. "Ambiguity as Strategy in Organizational Communication." *Communication Monographs* 51(3):227–242.

Entman, Robert M. 1993. "Framing: Toward Clarification of a Fractured Paradigm." *Journal of Communication* 43(4):51–58.

Falkheimer, Jesper and Mats Heide, eds. 2022. *Research Handbook on Strategic Communication*. Cheltenham, United Kingdom: Edward Elgar Publishing Ltd.

Firth, John R. 1957. *Studies in Linguistic Analysis*. Wiley-Blackwell.

Fløttum, Kjersti and Øyvind Gjerstad. 2017. "Narratives in Climate Change Discourse." *Wiley Interdisciplinary Reviews: Climate Change* 8(1):e429.

Forster, Timon. 2024. "Respected Individuals: When State Representatives Wield Outsize Influence in International Organizations." *International Affairs* 100(1):261–281.

Forster, Timon, Dan Honig and Alexandros Kentikelenis. 2025. "Formal governance matters: when, how, and why states act on the IMF Executive Board." *Review of International Political Economy* pp. 1–29.

Fröhlich, Jannes and Jörg Knieling. 2013. Conceptualising Climate Change Governance. In *Climate Change Governance*, ed. Jörg Knieling and Walter Leal Filho. Berlin, Heidelberg: Springer pp. 9–26.
URL: *https://doi.org/10.1007/978-3-642-29831-8_2*

G20-IEG. 2023. Strengthening Multilateral Development Banks: The Triple Agenda. Technical report.
URL: *https://www.cgdev.org/sites/default/files/The*$_T$*riple*$_A$*genda*$_G$20 – *IEG*$_R$*eport*$_V$*olume*1$_2$023*.pdf*

Gallagher, Kevin P, Rishikesh Ram Bhandary, Rebecca Ray and Luma Ramos. 2023. "Reforming Bretton Woods institutions to achieve climate change and development goals." *One Earth* 6(10):1291–1303.

Gelles, David and Alan Rappeport. 2022. "World Bank Leader, Accused of Climate Denial, Offers a New Response." *The New York Times* . Available at: https://www.nytimes.com/2022/09/22/climate/malpass-world-bank-climate.html (Accessed: October 6, 2022).

Goes, Iasmin. 2023. "Examining the Effect of IMF Conditionality on Natural Resource Policy." *Economics Politics* 35(1):227–285.
URL: *https://doi.org/10.1111/ecpo.12214*

Grimmer, Justin and Brandon M Stewart. 2013. "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts." *Political Analysis* 21(3):267–297.

Gross, Matthias and Linsey McGoey, eds. 2022. *Routledge International Handbook of Ignorance Studies*. 2nd ed. Abingdon and New York: Routledge.

Hale, Thomas. 2024. *Long Problems : Climate Change and the Challenge of Governing across Time*. Princeton, NJ: Princeton University Press.

Hallahan, Kirk, Derina Holtzhausen, Betteke Van Ruler, Dejan Verčič and Krishnamurthy Sriramesh. 2007. "Defining strategic communication." *International journal of strategic communication* 1(1):3–35.

Heath, Robert L., ed. 2013. *The SAGE Handbook of Public Relations*. 2 ed. Thousand Oaks, CA: SAGE.

IMF. 2022. "Proposal to Establish a Resilience and Sustainability Trust.".
URL: *https://www.imf.org/en/Publications/Policy-Papers/Issues/2022/04/15/Proposal-To-Establish-A-Resilience-and-Sustainability-Trust-516692*

Jurafsky, Dan and James H Martin. 2014. *Speech and Language Processing*. Vol. 3 Pearson London.

Kaya, Ayse and Aslı Leblebicioglu. 2025. "Understanding the World Bank's role in climate finance." *Climatic Change* 178(9):160.

Kaya, Ayse and Mike Reay. 2019. "How Did the Washington Consensus Move Within the IMF? Fragmented Change From the 1980s to the Aftermath of the 2008 Crisis." *Review of International Political Economy* pp. 1–26.

Kentikelenis, Alexander E and Erik Voeten. 2021. "Legitimacy Challenges to the Liberal World Order: Evidence from United Nations Speeches, 1970–2018." *The Review of International Organizations* 16:721–754.

Kentikelenis, Alexandros and Thomas H Stubbs. 2023. *A Thousand Cuts: Social Protection in the Age of Austerity*. Oxford: Oxford University Press.

Kentikelenis, Alexandros and Thomas Stubbs. 2025. *Greening the International Monetary Fund*. Cambridge: Cambridge University Press.

Keohane, Robert O and David G Victor. 2011. "The Regime Complex for Climate Change." *Perspectives on politics* 9(1):7–23.

Kranke, Matthias. 2020. "IMF-World Bank Cooperation Before and After the Global Financial Crisis." *Global Policy* 11(1):15–25.

Lang, Valentin, Lukas Wellner and Alexandros Kentikelenis. 2024. "Biased bureaucrats and the policies of international organizations." *American Journal of Political Science* .

Lukes, Steven. 2005. *Power: A Radical View*. 2nd ed. Basingstoke: Palgrave Macmillan UK.

McCombs, Maxwell E. and Donald L. Shaw. 1972. "The Agenda-Setting Function of Mass Media." *Public Opinion Quarterly* 36(2):176–187.

McGoey, Linsey. 2012. "The logic of strategic ignorance." *The British journal of sociology* 63(3):533–576.

McGoey, Linsey. 2019. *The Unknowers: How Strategic Ignorance Rules the World*. Bloomsbury Publishing.

McGoey, Linsey. 2021. "Oracular Power and the Architects of the Future." *Journal of Cultural Economy* 14(3):368–371.
URL: *https://doi.org/10.1080/17530350.2021.1895282*

Mehta, Lyla. 2001. "Commentary: the World Bank and its emerging knowledge empire." *Human Organization* 60(2):189–196.

Merling, Lara and Timon Forster. 2024. "Climate policy at the International Monetary Fund: No voice for the vulnerable?" *Global Policy* 15(3):539–553.

Mikolov, Tomas, Ilya Sutskever, Kai Chen, Greg S Corrado and Jeff Dean. 2013. Distributed Representations of Words and Phrases and their Compositionality. In *Advances in neural information processing systems*. pp. 3111–3119.

Myers, Teresa A, Matthew C Nisbet, Edward W Maibach and Anthony A Leiserowitz. 2012. "A public health frame arouses hopeful emotions about climate change: a letter." *Climatic change* 113:1105–1112.

Nelson, Stephen C. 2017. *The Currency of Confidence: How Economic Beliefs Shape the IMF's Relationship with its Borrowers*. Ithaca, NY: Cornell University Press.

Parizek, Michal. 2023. Media Reporting on International Organizations: Using Machine Learning to Identify Worldwide Patterns. In *15th Political Economy of International Organizations Conference*. San Diego: .
URL: *https://www.peio.me/wp-content/uploads/PEIO15/PEIO15$_p$aper$_1$08.pdf*

Peterson, Lauri and Jakob Skovgaard. 2019. "Bureaucratic Politics and the Allocation of Climate Finance." *World Development* 117:72–97.

Petrovic, Nada, Jaime Madrigano and Lisa Zaval. 2014. "Motivating Mitigation: When Health Matters More than Climate Change." *Climatic Change* 126:245–254.

Ramos, Luma, Kevin P Gallagher, Corinne Stephenson and Irene Monasterolo. 2022. "Climate Risk and IMF Surveillance Policy: A Baseline Analysis." *Climate Policy* 22(3):371–388.

Rauh, Christian. 2022. "Supranational Emergency Politics? What Executives' Public Crisis Communication May Tell Us." *Journal of European Public Policy* 29(6):966–978.

Ray, Rebecca. 2021. "Who Controls Multilateral Development Finance?" *Global Governance: A Review of Multilateralism and International Organizations* 27(1):118–143.

Rittel, Horst WJ and Melvin M Webber. 1973. "Dilemmas in a General Theory of Planning." *Policy sciences* 4(2):155–169.

Rodriguez, Pedro L and Arthur Spirling. 2022. "Word Embeddings: What Works, What Doesn't, and How to Tell the Difference for Applied Research." *The Journal of Politics* 84(1):101–115.

Scheufele, Dietram A. 1999. "Framing as a Theory of Media Effects." *Journal of Communication* 49(1):103–122.

Schumacher, Gijs, Martijn Schoonvelde, Denise Traber, Tanushree Dahiya and Erik De Vries. 2016. EUSpeech: A New Dataset of EU Elite Speeches. In *Proceedings of the International Conference on the Advances in Computational Analysis of Political Text (PolText 2016)*. pp. 75–80.

Simmons, Beth A, Frank Dobbin and Geoffrey Garrett. 2008. Introduction: The Diffusion of Liberalization. In *The Global Diffusion of Markets and Democracy*, ed. Beth A Simmons, Frank Dobbin and Geoffrey Garrett. Cambridge: Cambridge University Press pp. 1–63.

Skovgaard, Jakob. 2021. *The Economisation of Climate Change: How the G20, the OECD and the IMF Address Fossil Fuel Subsidies and Climate Finance*. Cambridge: Cambridge University Press.

Soener, Matthew. 2024. "Are IMF Programs Raising Greenhouse Gas Emissions in the Global South?" *Socio-Economic Review* p. mwae006.

Stone, Randall W. 2011. *Controlling Institutions: International Organizations and the Global Economy*. Cambridge: Cambridge University Press.

Termeer, Catrien, Art Dewulf and Gerard Breeman. 2013. Governance of Wicked Climate Adaptation Problems. In *Climate Change Governance*, ed. Jörg Knieling and Walter Leal Filho. Berlin, Heidelberg: Springer pp. 27–39.

Volcovici, Valerie and Kate Abnett. 2022. "World Bank's Malpass Faces Calls to Resign After Climate Change Doubts." *Reuters* . Available at: https://www.reuters.com/business/environment/world-banks-malpass-faces-calls-resign-after-climate-change-doubts-2022-09-21/ (Accessed: December 18, 2023).

Vreeland, James Raymond. 2019. "Corrupting International Organizations." *Annual Review of Political Science* 22:205–222.

Wade, Robert. 1996. "Japan, the World Bank, and the art of paradigm maintenance:" The East Asian miracle" in political perspective." *New Left Review* (217):3.

WDI. 2025. "World Development Indicators (Version July).".
URL: *http://datatopics.worldbank.org/world-development-indicators/*

Webersinke, Nicolas, Mathias Kraus, Julia Anna Bingler and Markus Leippold. 2022. "ClimateBERT: A Pretrained Language Model for Climate-Related Text." *arXiv preprint arXiv:2110.12010v3* .

Woods, Ngaire. 2006. *The Globalizers: The IMF, the World Bank, and their Borrowers*. Ithaca, NY: Cornell University Press.

World Bank. 2023. "Evolution of the World Bank Group – A Report to Governors.".
URL: *https://www.devcommittee.org/content/dam/sites/devcommittee/doc/documents/mgr/Final*$_D$*C*202
0002*evolutionpaperforDCwebsite.pdf*

Zerfass, Ansgar, Dejan Verčič, Howard Nothhaft and Kelly Page Werder, eds. 2018. *The International Encyclopedia of Strategic Communication*. Hoboken, NJ: Wiley-Blackwell.

A Sample of IFIs and leader speeches

Table A1: Sample of IFIs

	IMF	**World Bank (IBRD)**	**African Dev. Bank**	**Asian Dev. Bank**
Geographic scope	Global	Global	Regional	Regional
Headquarters	Washington DC, United States	Washington DC, United States	Abidjan, Cote d'Ivoire	Manila, Philippines
Assets (in $ millions, as per 2017)	NA	405,898	46,392	182,381
Total membership	190	189	81	67
Number of borrowing countries	141	85	54	45
Vote share of borrowing countries	40.9%	33.1%	59.1%	45.8%

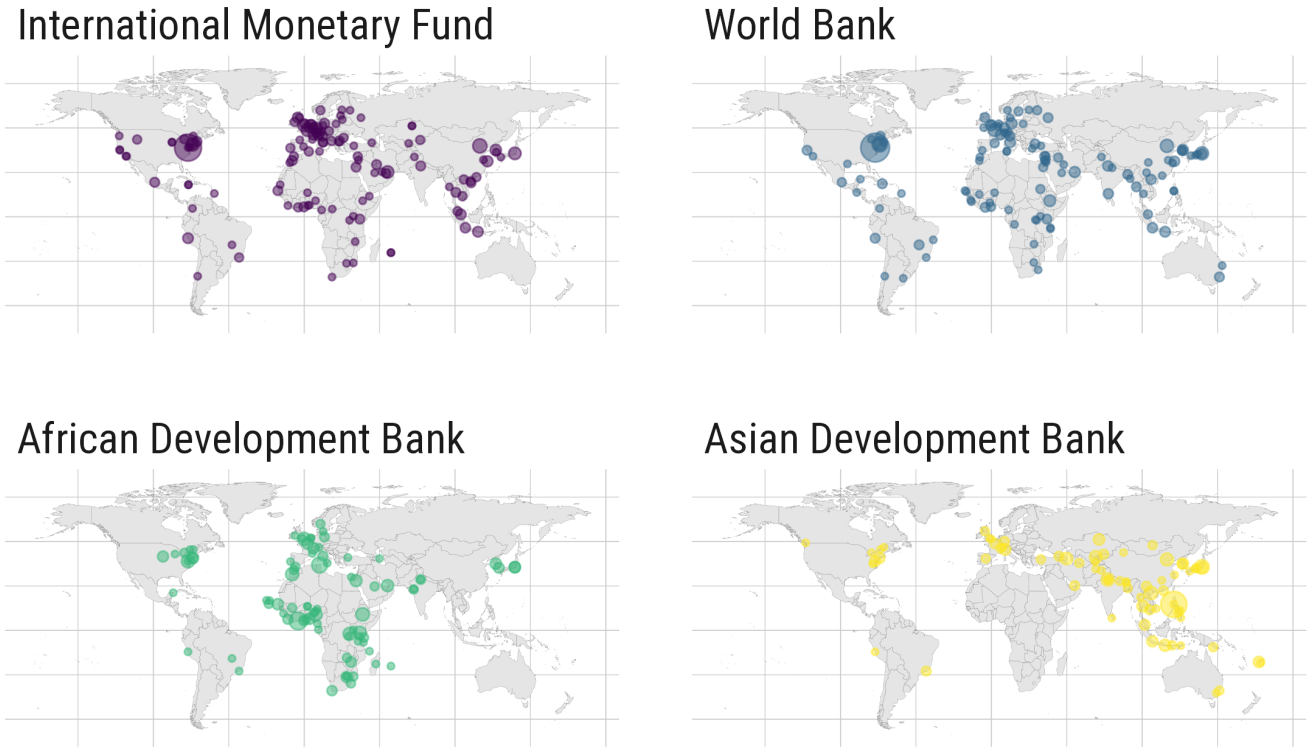
Source: Drawing on Ray (2021) and websites of the IFIs. For the IMF, I define borrowing countries as Emerging and Developing countries (Merling and Forster, 2024).

Table A2: Sample of leader speeches

Organization	**Leader name**	**Number of speeches**	**Tenure**
IMF	Kristalina Georgieva	213	Oct 2019–
IMF	Christine Lagarde	238	July 2011–Oct 2019
IMF	Dominique Strauss-Kahn	29	Nov 2007–July 2011
World Bank	Ajay Banga	20	June 2023–
World Bank	David Malpass	194	April 2019–June 2023
World Bank	Jim Yong Kim	244	July 2012–April 2019
World Bank	Robert B. Zoellick	25	July 2007–July 2012
AFDB	Sidi Ould Tah	3	Sept 2025–
AFDB	Akinwumi Adesina	271	Sept 2015–Sept 2025
AFDB	Donald Kaberuka	100	Sept 2005–Sept 2015
ASDB	Masato Kanda	31	Feb 2025–
ASDB	Masatsugu Asakawa	110	Jan 2020–Feb 2025
ASDB	Takehiko Nakao	154	April 2013–Jan 2020
ASDB	Haruhiko Kuroda	111	Feb 2005–April 2013

Notes: In total, the text corpus currently includes 1,744 speeches, all delivered between January 2010 and December 2025.

Figure A1: Location of leader speeches



Notes: Location of 1,677 speeches delivered in English by the IMF Managing Director, the World Bank President, the AFDB President, and the ASDB President, all between 2010 and 2025. 67 speeches without city location dropped.

B Robustness checks: Climate change coverage

Table B1: Climate change coverage: log-fossil fuel rents

	Tokens (log)	Tokens (log)	Tokens (log)	Tokens (log)
Fossil fuel rents (% GDP, log)	−0.232**	−0.239***	−0.244**	−0.234**
	(0.073)	(0.070)	(0.078)	(0.075)
Formal vote share	−0.006	0.005	−0.006	−0.007
	(0.020)	(0.022)	(0.020)	(0.020)
GDP per capita (log)	0.003	0.013	0.011	0.005
	(0.063)	(0.067)	(0.064)	(0.063)
Liberal democracy index	−0.408	−0.506	−0.438	−0.408
	(0.424)	(0.418)	(0.417)	(0.419)
Speech length (tokens, log)	1.029***	1.028***	1.026***	1.033***
	(0.088)	(0.086)	(0.087)	(0.086)
HQ in host country (dummy)	0.260	0.288	0.252	0.260
	(0.241)	(0.232)	(0.235)	(0.243)
Disaster count (3 months prior)		−0.039		
		(0.040)		
Political–institutional audience			0.237	
			(0.140)	
Global audience				0.132
				(0.108)
Num.Obs.	1293	1293	1293	1293
R2	0.312	0.313	0.314	0.313
R2 Within	0.106	0.107	0.108	0.107
Speaker fixed effects	Yes	Yes	Yes	Yes
Month–year fixed effects	Yes	Yes	Yes	Yes

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: Dependent variable is the logarithm of climate-related tokens. Constant suppressed. All models include speaker and month–year fixed effects. Standard errors are two-way clustered by host country and speaker.

Table B2: Climate change coverage: natural-resource rents

	Tokens (log)	Tokens (log)	Tokens (log)	Tokens (log)
Natural-resource rents (% GDP)	−0.034**	−0.038**	−0.037**	−0.035**
	(0.014)	(0.014)	(0.015)	(0.014)
Formal vote share	−0.009	0.004	−0.009	−0.010
	(0.020)	(0.022)	(0.020)	(0.020)
GDP per capita (log)	−0.035	−0.025	−0.029	−0.034
	(0.060)	(0.066)	(0.062)	(0.061)
Liberal democracy index	−0.302	−0.436	−0.330	−0.305
	(0.402)	(0.401)	(0.393)	(0.396)
Speech length (tokens, log)	1.031***	1.031***	1.028***	1.035***
	(0.089)	(0.088)	(0.089)	(0.088)
HQ in host country (dummy)	0.272	0.305	0.264	0.271
	(0.236)	(0.220)	(0.230)	(0.238)
Disaster count (3 months prior)		−0.048		
		(0.037)		
Political–institutional audience			0.245	
			(0.146)	
Global audience				0.148
				(0.112)
Num.Obs.	1293	1293	1293	1293
R2	0.312	0.314	0.314	0.313
R2 Within	0.107	0.108	0.109	0.107
Speaker fixed effects	Yes	Yes	Yes	Yes
Month–year fixed effects	Yes	Yes	Yes	Yes

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: Dependent variable is the logarithm of climate-related tokens. Constant suppressed. All models include speaker and month–year fixed effects. Standard errors are two-way clustered by host country and speaker.

Table B3: Climate change coverage in leader speeches: Winsorization

	Tokens (log)	Tokens (log)	Tokens (log)	Tokens (log)
Fossil fuel rents (% GDP)	−0.037***	−0.040***	−0.040***	−0.038***
	(0.011)	(0.011)	(0.012)	(0.011)
Formal vote share	−0.011	0.002	−0.011	−0.012
	(0.020)	(0.023)	(0.020)	(0.020)
GDP per capita (log)	0.021	0.035	0.032	0.024
	(0.070)	(0.074)	(0.071)	(0.071)
Liberal democracy index	−0.377	−0.501	−0.413	−0.381
	(0.414)	(0.409)	(0.403)	(0.408)
Speech length (tokens, log)	1.028***	1.027***	1.025***	1.032***
	(0.087)	(0.085)	(0.086)	(0.086)
HQ in host country (dummy)	0.287	0.320	0.281	0.287
	(0.232)	(0.219)	(0.225)	(0.233)
Disaster count (3 months prior)		−0.044		
		(0.039)		
Political–institutional audience			0.247	
			(0.142)	
Global audience				0.142
				(0.114)
Num.Obs.	1293	1293	1293	1293
R2	0.312	0.313	0.314	0.313
R2 Within	0.106	0.108	0.109	0.107
Speaker fixed effects	Yes	Yes	Yes	Yes
Month–year fixed effects	Yes	Yes	Yes	Yes

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: Dependent variable is the logarithm of climate-related tokens, winsorized at the 95% level. Constant suppressed. All models include speaker and month–year fixed effects. Standard errors are two-way clustered by host country and speaker.

Table B4: Climate change coverage: Alternative dependent variables

	Share (sentences)	Share (tokens)	Tokens
Fossil fuel rents (% GDP)	−0.001*	−0.001*	−1.582**
	(0.001)	(0.001)	(0.556)
Formal vote share	−0.001	−0.001*	−1.022
	(0.001)	(0.001)	(0.878)
GDP per capita (log)	0.003	0.004	5.574
	(0.003)	(0.004)	(4.641)
Liberal democracy index	−0.007	−0.009	−13.860
	(0.014)	(0.018)	(17.443)
Speech length (tokens, log)	−0.011***	−0.012***	63.370***
	(0.003)	(0.004)	(12.364)
HQ in host country (dummy)	0.008*	0.013***	28.253***
	(0.004)	(0.004)	(5.612)
Num.Obs.	1293	1293	1293
R2	0.217	0.226	0.264
R2 Within	0.015	0.016	0.108
Speaker fixed effects	Yes	Yes	Yes
Month–year fixed effects	Yes	Yes	Yes

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: Dependent variables are the share of climate-changes sentences per speech, the length of climate-change coverage in terms of speech length, and the absolute length of climate-change sentences (number of tokens). Constant suppressed. All models include speaker and month–year fixed effects. Standard errors are two-way clustered by host country and speaker.

C Robustness checks: Type of climate communication

Table C1: Type of climate change communication: additional covariates

	Opportunity	Commitment	Specificity
Fossil fuel rents (% GDP)	−0.006	−0.002	−0.004
	(0.006)	(0.006)	(0.003)
Formal vote share	−0.005***	−0.014**	−0.003
	(0.001)	(0.005)	(0.002)
GDP per capita (log)	0.003	0.016	0.004
	(0.019)	(0.034)	(0.018)
Liberal democracy index	−0.180*	−0.047	−0.088
	(0.089)	(0.107)	(0.072)
Speech length (tokens, log)	0.020	0.011	0.004
	(0.012)	(0.014)	(0.003)
HQ in host country (dummy)	−0.009	0.064**	−0.004
	(0.021)	(0.023)	(0.026)
Disaster count (3 months prior)	0.001	0.001	0.002
	(0.006)	(0.007)	(0.005)
Political–institutional audience	−0.032	0.036	−0.003
	(0.033)	(0.050)	(0.037)
Global audience	0.025	0.041	−0.029*
	(0.030)	(0.036)	(0.013)
Num.Obs.	682	682	682
R2	0.313	0.364	0.449
R2 Within	0.034	0.029	0.016
Speaker fixed effects	Yes	Yes	Yes
Month–year fixed effects	Yes	Yes	Yes

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: Subset of speeches that cover climate change. Dependent variables are the mean ClimateBERT-predicted scores for opportunity, commitment, and specificity. Constant suppressed. All models include speaker and month–year fixed effects. Standard errors are two-way clustered by host country and speaker.

Table C2: Type of climate change communication: log-fossil fuel rents

	Opportunity	Commitment	Specificity
Fossil fuel rents (% GDP, log)	−0.021	−0.022	−0.041**
	(0.027)	(0.029)	(0.014)
Formal vote share	−0.005**	−0.013***	−0.002
	(0.002)	(0.004)	(0.002)
GDP per capita (log)	0.002	0.015	0.005
	(0.017)	(0.034)	(0.018)
Liberal democracy index	−0.171*	−0.063	−0.126*
	(0.084)	(0.095)	(0.064)
Speech length (tokens, log)	0.019	0.011	0.006
	(0.014)	(0.014)	(0.006)
HQ in host country (dummy)	−0.006	0.066**	−0.007
	(0.023)	(0.021)	(0.025)
Num.Obs.	682	682	682
R2	0.310	0.361	0.451
R2 Within	0.030	0.025	0.019
Speaker fixed effects	Yes	Yes	Yes
Month–year fixed effects	Yes	Yes	Yes

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: Subset of speeches that cover climate change. Dependent variables are the mean ClimateBERT-predicted scores for opportunity, commitment, and specificity. Constant suppressed. All models include speaker and month–year fixed effects. Standard errors are two-way clustered by host country and speaker.

Table C3: Type of climate change communication: natural-resource rents

	Opportunity	Commitment	Specificity
Natural-resource rents (% GDP)	−0.001	0.004	0.000
	(0.004)	(0.004)	(0.002)
Formal vote share	−0.005**	−0.014***	−0.002
	(0.002)	(0.004)	(0.002)
GDP per capita (log)	−0.002	0.016	0.001
	(0.019)	(0.036)	(0.017)
Liberal democracy index	−0.145*	−0.010	−0.064
	(0.077)	(0.097)	(0.051)
Speech length (tokens, log)	0.018	0.008	0.004
	(0.014)	(0.015)	(0.007)
HQ in host country (dummy)	−0.005	0.074***	−0.002
	(0.023)	(0.019)	(0.025)
Num.Obs.	682	682	682
R2	0.309	0.361	0.445
R2 Within	0.029	0.025	0.010
Speaker fixed effects	Yes	Yes	Yes
Month–year fixed effects	Yes	Yes	Yes

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: Subset of speeches that cover climate change. Dependent variables are the mean ClimateBERT-predicted scores for opportunity, commitment, and specificity. Constant suppressed. All models include speaker and month–year fixed effects. Standard errors are two-way clustered by host country and speaker.