

Carbon Copy: US Public Opinion on the Diffusion of Carbon Border Adjustment Mechanisms¹

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Abstract

In October 2023, the European Union officially implemented its Carbon Border Adjustment Mechanism (CBAM). This policy, which taxes carbon-intensive imports and aims to prevent carbon leakage, sets a precedent for other nations and incentivizing the global diffusion of similar carbon pricing schemes. Among the countries considering their own CBAM, the United States stands out. As both the world's largest economy and one of its top carbon emitters, US action on climate change has implications throughout the world. However, the success of a US CBAM hinges on public support. This raises the question: how does the American public perceive CBAM policies, and under what conditions will they support them? Using data from two original surveys, this paper investigates perceptions of CBAM diffusion and support for a US policy among the American public. Our findings reveal broad support for a US CBAM and expectations of further global diffusion. When considering CBAM proposals, respondents demonstrate sensitivity to both economic and geopolitical considerations. We find, for example, that large predicted price increases decrease support while endorsements from international organizations increase support. Across party lines respondents are supportive of allocating CBAM revenues to developing countries and green initiatives. This contributes to the literature on the determinants of public support for climate policies.

1 Introduction

In October 2023, the European Union formally adopted its Carbon Border Adjustment Mechanism (CBAM), which levies import taxes on carbon-intensive goods to account for emissions produced during manufacturing. In its transitional phase until the policy’s complete rollout in 2026, the CBAM serves as a complement to the EU Emissions Trading System (ETS), a cap-and-trade framework that promotes domestic industrial decarbonization. Together, the CBAM and ETS encourage companies both within and outside Europe to reduce reliance on carbon-intensive processes. While ETS aims to create financial incentives for greener domestic production methods, the CBAM subjects foreign manufacturers to similar taxes, disincentivizing “carbon leakage,” whereby companies transfer production overseas to avoid emissions regulations, and exerting similar pressures on foreign importers to curb emissions. The combined mechanism seeks to drive global progress towards carbon neutrality across industrial supply chains connecting Europe internationally (EP and Council, 2023; Commission, 2023b; Clausen and Wolfram, 2023).

The CBAM will require companies importing from non-EU countries to purchase and surrender certificates for relevant imports, with obligations determined according to the EU ETS carbon price. Fees are intended to be equivalent under the CBAM and ETS. However, importers can deduct any carbon taxes already paid on the producing country of origin, providing an incentive for non-EU countries to adopt their own internal carbon pricing schemes to collect revenues that would otherwise be paid to EU states. Importers are responsible for collecting data on embedded emissions associated with the relevant production process from third-party manufacturers, including manufacturers of upstream precursor materials. As of now, the EU has defined a limited number of carbon-intensive products subject to the CBAM including cement, electricity, iron and steel, aluminum, hydrogen, and fertilizers. During the transitional phase, importers are required to report the quantity of CBAM goods imported each quarter, along with the total embedded emissions of their products, covering direct and

indirect CO₂ emissions per ton of goods associated with the manufacturing process. Once the CBAM is fully implemented in 2026, countries will be required to obtain authorization to import CBAM goods (EP and Council, 2023; Commission, 2023b).

Initial projections suggest that by 2028, the CBAM will generate approximately €1.5 billion in annual revenues (Commission, 2023a). This revenue is modest compared to the ETS, which generated €33 billion in revenues in 2022 alone (Commission, 2023a). This difference is by design. By allowing importing companies to deduct carbon emissions contributions paid in the country of origin, the EU CBAM prioritizes incentivizing policy harmonization abroad over generating new revenues. Specifically, the CBAM encourages non-EU countries to set their carbon emission fee schedules equivalent to or higher than EU ETS prices to acquire a full deduction of CBAM assessments. That is, companies importing from countries that do not collect carbon emissions fees will be subject to the full ETS carbon price, whereas companies with products originating in countries that levy a lower carbon fee schedule than the ETS encounter ETS charges minus their origin price. Companies importing from countries with an equivalent or higher carbon price compared to the ETS are exempt from additional fees. In effect, if all states with importing firms set carbon pricing schemes greater than or equal to ETS fee schedules, the CBAM instrument would raise no revenue for the EU.

The European Union is not alone in pursuing a Carbon Border Adjustment Mechanism. In December 2023, following the EU's lead, the United Kingdom announced plans to implement a CBAM fee starting in 2027 (Treasury, 2023). Australia and Canada have initiated legislative procedures to propose the adoption of similar Carbon Border Adjustment Mechanisms (Australian Government: Department of Climate Change, Energy, the Environment, and Water, 2023; of Finance Canada, 2023). Additionally, several countries are taking policy action to respond to the EU CBAM. For example, Türkiye announced a domestic carbon trading system last year that will go online in late 2024 to collect carbon emissions revenues before they are subject to EU CBAM fees (Long et al., 2023; Türkiye, Türkiye; Directorate-General for Climate Action, 2021). China is considering the inclusion of steel, cement, and aluminum sectors in its ETS (International Carbon Action Partnership (ICAP), 2022, 2024).

Clausing et al. (2024) finds substantial increases in carbon-pricing initiatives introduced or scheduled globally since the EU CBAM’s introduction.

Implementing a US CBAM would have significant global implications. As the world’s largest economy, the United States is not only the second-highest annual carbon emitter but is also responsible for the most cumulative CO₂ emissions in history (United States Trade Representative, 2024; Crippa et al., 2023; Callahan and Mankin, 2022). Additionally, the US is a global trade leader, accounting for approximately \$2 trillion in exports and \$3 trillion in imports in 2023 alone (Bureau, 2024). A US CBAM would have far-reaching financial impacts on numerous countries and could drive the diffusion of similar CBAM policies while exerting additional pressure to reduce CO₂ emissions abroad. While most expect climate oriented policy to pause or reverse under the Trump administration, trade based pressure from the EU will likely sustain interest in US policy responses discussed below.

The passage of a US CBAM will depend on public support, and yet survey work analyzing public opinion on a US CBAM is quite limited. Sagatellova et al. (2023) report broad support for the policy, with 74% of respondents favoring its implementation, though their study provides limited insight into the factors driving this support. In the European context, Bayer and Schaffer (2024a) find that respondents generally favor a CBAM, with twice as many indicating support over opposition. Similarly, Kuehner et al. (2022) document substantial support for an EU CBAM, with 59% of respondents expressing approval. Despite these findings, the specific conditions under which a CBAM is supported in the United States, as well as the preferred attributes of such a policy, remain largely unexplored.

Our study aims to advance this literature by investigating public support for a US CBAM. We specifically focus on identifying the policy attributes and contextual factors that influence public preferences over a US CBAM. Additionally, we examine expectations over the downstream impact of US adoption on other countries. To achieve this, we draw on data from two original surveys conducted in 2024. Our findings reveal broad support for a US CBAM, with a majority of respondents favoring the policy and anticipating that the US adoption could spur global diffusion. As expected, fiscal aspects of the policy are salient

to public opinion. Respondents are sensitive to potential cost increases associated with the policy but demonstrate support for policies that reinvest revenues into domestic and international climate initiatives. Notably, support for allocating revenues abroad toward developing countries is positive across partisan lines. Finally, we find that policy attitudes are influenced by the international context, including endorsements from international organizations and the number of trading partners that adopt similar policies. We also observe that respondents across the political spectrum believe a US CBAM will lead to wider global adoption. While the pursuit of CBAM-style policies in the US will depend heavily on the Trump administration’s trade policy priorities, pressure from trading partners adopting similar border adjustment mechanisms will continue to influence the US economy.

2 Contemporary US CBAM Proposals

Legislators have actively discussed US CBAM policy proposals in recent years, with five related proposals introduced since 2021. Senator Christopher Coons proposed the first CBAM proposal in 2021 with the FAIR Transition and Competition Act (Congress.gov, 2021), which advocates for a CBAM on high-pollution imports without imposing a domestic carbon tax. Three additional CBAM proposals were introduced to the legislature in 2023. The Clean Competition and Foreign Pollution Acts propose a carbon tax on imported goods exceeding predetermined emission levels. The Clean Competition Act sets an industry-specific emissions baseline, while the Foreign Pollution Fee Act proposes a border tax on products that are 50% or more more polluting than the equivalent US-produced goods (Whitehouse, 2024; Congress.gov, 2023). Both acts include exemptions for “climate clubs” similar to the exemptions embedded in the EU CBAM. The Clean Competition Act also allows exemptions for “relatively least developed” countries (Whitehouse, 2024). The most recently introduced bill, titled the Market Share Act, shares similarities with the Clean Competition and Foreign Pollution acts, but places greater emphasis on fossil fuels (?).

In addition to these CBAM proposals, the Prove It Act was voted out of committee in January 2024. This bipartisan bill would “require the Secretary of Energy to conduct a study

and submit a report on the greenhouse gas emissions intensity of certain products produced in the United States and in certain foreign countries” (Senate, 2024). While not a carbon border adjustment mechanism itself, this bill lays the foundation for future CBAM policies as all future carbon border adjustment mechanisms will require the tracking and reporting capacity this bill seeks to develop.

3 Public Opinion and Climate Policy

The American public will play an important role in the passage of a US CBAM. Successful legislation is contingent on support from elected members of Congress who will consider impacts on their constituents, particularly because climate policies often generate sizeable costs and benefits that are likely to impact several constituencies. Existing evidence shows that policymakers exhibit responsiveness to public opinion on climate policy (Bromley-Trujillo and Poe, 2020; Schaffer et al., 2022). Furthermore, interest groups invest substantial resources to distort elite perceptions of public opinion (Hertel-Fernandez et al., 2019), an investment that would only be made if public opinion was seen as relevant.

One of the most important consequences consumers will face from a US CBAM is price increases on consumer goods. As with any tariff, the cost of covered goods will inevitably rise in response to a carbon border adjustment mechanism. A CBAM will inherit challenges of any cost-based approach to climate policy (Gazmararian et al., 2023; Ansolabehere and Konisky, 2016).¹

¹It is difficult to find precise estimates of the predicted price increases expected from a CBAM. However, we can look to the EU CBAM for an example. In 2023 the US imported 27 million metric tons of cement, 28 million metric tons of steel products, 6.5 million metric tons of aluminum, and 4.5 million metric tons of fertilizer (nitrogen and phosphate) (Hatfield and Survey, 2024; Economic Indicators Division and Office, 2024; Merrill and Survey, 2023; Apodaca and Survey, 2023; Jasinski and Survey, 2023). If the US implemented an EU-style CBAM, all of these products would be covered. Even with a lower carbon price such as \$25

The anticipated cost of a CBAM is particularly relevant to its potential policy success, as cost of living increases have become one of the most salient political issues for American voters (Gallup, 2024). It is unlikely any CBAM proposal will gain traction if voters perceive the policy to be too costly. Bayer and Schaffer (2024a) find that European respondents who learn more about the increased costs of imported goods due to CBAM are significantly less likely to support the policy. That being said, they also find that “learning about positive labor market effects somewhat offsets the negative effects of policy costs from price increases alone” (Bayer and Schaffer, 2024a, pg. 4).

Moving beyond cost, we observe intense political rhetoric and framing regarding the geopolitics of carbon border adjustment mechanisms in the US. The most often cited consideration is concern over the competitiveness of US production, often in comparison with China. In a press release for the Foreign Pollution Act, Senator Bill Cassidy stated “It makes absolutely no sense that we allow China to pollute freely and export their products to the US displacing U.S jobs, manufacturing, and excellence. . . The Foreign Pollution Fee begins to hold China accountable for their lack of environmental standards. . . We are leveling the playing field” (Cassidy and Graham, 2023). His cosponsor, Senator Lindsey Graham, also stated that “It is long past time that the polluters of the world, like China and others, pay a price for their environmental policies” (Cassidy and Graham, 2023). These sentiments are shared across the aisle, including by Senator Sheldon Whitehouse, who introduced the Clean Competition Act and stated it would give “a competitive advantage to American companies doing their part to address climate change” (Whitehouse, 2022).

Concerns over fair international competition are often also tied to concerns over domestic job loss. Congresswoman Suzan DelBene, a co-sponsor of the Clean Competition Act, highlighted in her statement on the bill that “For too long, American industries producing goods in a less carbon-intensive way have been undercut by foreign competitors with dirtier production processes. Washington saw this firsthand with the closure of the Intalco aluminum smelter due to China’s overproduction, which resulted in the loss of over 700 good-paying

per ton of carbon, this represents a meaningful cost that would be passed onto consumers.

union jobs.” (Whitehouse and DelBene, 2023).² Much of the reasoning for a CBAM in the United States is motivated by this concern over Chinese competition and its impact not only on producing companies but also on American job loss.

Outside of highlighting the impact of a US CBAM on American businesses and consumers, politicians also highlight the potential for a CBAM to impact international cooperation, US climate change leadership, and relations between the US and its allies. One of the main objectives of the FAIR Transition and Competition Act is “supporting international climate cooperation” (Coons and Peters, 2021). Many politicians also frame the opportunity for American leadership on climate change as a major benefit of the policy. For example, the press release for the Clean Competition Act notes that “A carbon border adjustment mechanism would bring substantial... national security and geopolitical benefits to the US and its economy, while cementing America’s global leadership in clean industry and environmental stewardship” (Whitehouse and DelBene, 2023). On the national security and geopolitics front, the statement also states that “With China’s Belt and Road Initiative floundering, we can supplant the financing of carbon-intensive manufacturing and fossil fuel projects around the world. By offering an alternative path for Least Developed Countries, climate-forward trade bills like the Clean Competition Act are important opportunities to assert American global leadership” (Whitehouse and DelBene, 2023). Politicians highlight that not only does a CBAM present an opportunity to “level the playing field,” but it allows the US to cooperate with its allies and assert itself as a leader in fighting climate change. This policy context is likely to influence public perception of CBAM policies in the US.

While several experts and politicians have opined on the promises and pitfalls of a US CBAM, any potential policy relevance is contingent upon, amongst other things, public

²Senator Graham echoed this sentiment in his statement on the Foreign Pollution Act saying, “In the last 20 years, the US has lost roughly five million jobs, and half of those losses are a result of our trade deficit with China. Meanwhile, the US has eliminated more emissions than any other country and our economy is 44% more carbon efficient than the world average”.

support. Thus, understanding if, when, and why different segments of the electorate support or reject a CBAM provides critical insight into the future of climate change policy in the US. Moreover, examining voter preferences on a CBAM offers broader insights into public attitudes toward climate policy more generally. This paper explores how citizens balance short-term economic challenges against the long-term benefits of carbon reduction, the influence of international influences on voter preferences, and the relationship between geopolitical concerns and personal economic interests in shaping support for climate change and environmental policies.

3.1 Previous Public Opinion Work on CBAM

Existing survey work on CBAM policies is limited. To date, most studies have focused on evaluating stakeholder preferences in the EU and the UK, offering insights specific to contexts where the policy was already in the process of being passed or implemented. Kuehner et al. (2022) conducted a survey of 81 German respondents from industry, civil society, and academia. Their findings indicate majority support (59%) for the CBAM, with nuanced preferences regarding implementation. Civil society representatives and researchers predominantly favored exemptions for least developed and low-income countries. When considering revenue allocation, industry representatives showed the strongest support for reinvesting in EU green technologies. About a third of civil society respondents and researchers supported funds directed to transferring green technologies to low-income countries. Support for recycling revenues into the general EU budget or compensating EU citizens most affected by climate policies was low across all respondents.

Buylova et al. (2022) also surveyed members of industry and civil society organizations confirming general support for CBAM while highlighting divergent priorities. Civil society organizations were more likely to cite the need for protecting low-income countries while industry groups were focused on protecting the competitiveness of EU industries. Bayer and Schaffer (2024b) evaluated public attitudes in a large sample spanning Germany, Hungary, Switzerland and the United Kingdom, investigating how information framing impacts

CBAM support. While the majority favored implementation, information about increased costs for imported goods decreased support across all countries. This negative effect was partially mitigated by highlighting potential positive impacts on domestic labor markets. Interestingly, framing the policy as either promoting climate action or impeding global trade had limited influence on respondents’ opinions.

A survey conducted by the US-based think tank Third Way surveyed registered voters in the US, with a focus on four republican-leaning states: Indiana, South Carolina, Louisiana, and Utah. They find broad support (74%) for the implementation of a CBAM in the US, with partisan affiliation driving variation in support. Nonetheless, over 80% of all respondents found two justifications for the CBAM compelling: supporting domestic manufacturers producing low-carbon goods and holding disproportionately large polluters like China and Russia accountable were convincing reasons to support the CBAM. These findings offer potential insights for framing and communication strategies that may help increase support for a CBAM in the US (Sagatellova et al., 2023).

Next, we turn our focus to how policy design and forces of policy diffusion impact public attitudes about CBAM in the US.

4 Policy Diffusion and Institutional Design Features

Understanding interstate diffusion of national policies and the role of policy design in this process is necessary to analyze the conditions under which the US may adopt its own CBAM. In this section, we apply existing policy diffusion frameworks to expectations over CBAM preferences before testing them empirically.

4.1 Diffusion

Policy diffusion, or the process by which policies spread across various jurisdictions, has been studied across a wide range of policy contexts. Early studies analyzed the dissemination of policies across subnational boundaries. Scholars have since applied these same insights

internationally to understand how policies migrate across national borders. We draw from the Marsh and Sharman (2009) framework in differentiating policy diffusion, or the indirect proliferation of policies, from policy transfer, the active and deliberate exchange of policy knowledge and practices between entities. The breadth of international policy diffusion research spans several domains, including democratization, trade policy, labor rights, and, most relevant to the current discussion, environmental regulation.

Several mechanisms have been proposed to explain how policy diffusion occurs (for an extensive review vis a vis CBAM, see Ingles et al. (2024).). Simmons et al. (2006)’s analysis of the proliferation of economic liberalism during the late 20th century identifies four primary channels through which policies become adopted across international contexts: coercion, competition, learning, and emulation. Coercion and competition focus on interstate relations to explain whether and when policy diffusion occurs. Coercion underscores the impact of power differentials, suggesting that weaker actors may adopt policies under pressure from more dominant entities. Competition assumes instead that actors willingly adopt policies to gain an equal or greater advantage vis-a-vis their rivals. Learning posits that actors independently assess the perceived successes and failures from peers before deciding whether to adopt the same policies on their own. Nicholson-Crotty and Carley (2016) extend this further by arguing that states evaluate their ability to implement policy innovations before deciding whether to adopt, incorporating state capacity as a necessary condition for policy diffusion to occur. As such, states may not only look to the success of external policy outcomes, but also whether the institutional conditions of the external state are similar enough to their own to suggest that the adopting state can reproduce successful implementation. Finally, emulation describes the process by which shared identity and norms influence actors’ decisions to enact policies in alignment with those they perceive as peers, driven by a desire for conformity or legitimacy.

These mechanisms map well onto extant studies of environmental policy diffusion. For example, Vogel (2009)’s early analysis of the gradual intensification of environmental regulations, both within US states and globally, identifies mechanisms that can be classified

as competition and coercion to explain what he terms the “California effect.” By adopting higher environmental standards early, firms can innovate and develop more efficient, eco-friendly technologies or processes. This allows them to establish a leadership position in the market, which can result in cost savings over time, especially if they are the first to comply with regulations that others eventually have to adopt. Moreover, powerful governments can impose such regulatory influence on weaker states reliant on their markets. This dynamic was observed in the context of strengthening vehicle emissions standards, which originated in California and subsequently became adopted across the US and in many other developed countries. Saikawa (2013) builds on this analysis with the inclusion of developing countries and finds evidence suggesting that competitive market forces indeed drive regulatory diffusion. Ovodenko and Keohane (2012) observe the diffusion of international environmental institutions such as emissions trading schemes, focusing primarily on the mechanism of learning. They argue that states are inclined to adopt external policies particularly when the nature of the problem that the originator and adopter faces is similar between contexts, and when the earlier institutional innovation has demonstrated effectiveness.

We anticipate that the diffusion of a carbon border adjustment mechanism to the US will be driven by coercion, competition, and learning. Coercion will compel US firms to develop carbon emissions measurement systems to avoid restricted access to EU markets. Simultaneously, the EU’s carbon fee will incentivize US firms to reduce their emissions and encourage the US government to implement its own CBAM, ensuring competitiveness in the EU market and retaining tax revenue domestically rather than sending it abroad. Additionally, the US is likely observe successes and setbacks from the EU’s gradual CBAM implementation to inform its own policy decisions.

Historically, the policy diffusion literature has taken the perspective of states in evaluating evidence of cross-unit policy diffusion and the mechanisms driving government-level adoption (Graham et al., 2013). However, more recent scholarship has begun to explore the micro-foundations of policy diffusion at the individual level by employing experimental methods. A strong body of literature has developed around this topic in the field of American Politics

where, among other results, studies demonstrate that factors such as ideology, partisanship, geographical proximity, and the similarity between originating and adopting units shapes policymakers’ willingness to consider policies enacted by peers (Butler et al., 2017; Butler and Pereira, 2018; Pereira, 2022; Einstein et al., 2019).

Beyond local influences, some studies have broadened the scope to consider the influence of international factors on policy diffusion. In a survey experiment among local policymakers in nine EU countries, Butler et al. (2019) find that respondents valued information on policy implementation from the EU and other countries similarly to information from local politicians within their own country. Linos (2011) demonstrates that U.S. voters shift their opinions in favor of family policies when informed about the policy recommendations and choices of the UN and other countries. Specifically, the authors suggest that governments are more likely to adopt policies from countries whose news their voters follow and that international organizations exert the most influence among individuals who are internationally oriented (Linos, 2011). Complementary work by Jensen et al. (2011) finds a positive effect on policy diffusion when the originating country is perceived as a competitor. Additionally, these studies highlight important heterogeneous effects based on partisanship, issue knowledge, policy awareness, and the salience of the policy itself (Linos, 2011; Jensen et al., 2011).

Importantly, the extant policy diffusion survey literature has focused primarily on evaluations of existing policies and their salient features. This approach implicitly assumes that diffusion will occur, rather than testing the relative importance of diffusion pressure against other key policy considerations. Moreover, to our knowledge, existing studies have not examined downstream diffusion effects such as whether policy adoption by one actor is likely to influence others. This suggests two critical gaps in public opinion literature on policy diffusion: understanding how diffusion pressure compares to other factors driving policy adoption, and assessing expectations about the cascade effects of U.S. policy leadership.

EU statements explicitly note promoting policy diffusion of CBAM as a central goal of the policy’s design (EP and Council, 2023; European Commission, 2023). The diffusion

of global CBAM policies may function as both a catalyst for and outcome of a US CBAM policy adoption. As more countries adopt CBAM policies, US firms will be subject to increasing fees on exports, intensifying pressure for US adoption. Furthermore, as CBAM fees are expected to rise over time, so too will the incentives for U.S. policymakers to take action (Clausing and Wolfram, 2023). Conversely, US initiative in CBAM adoption may also accelerate downstream global diffusion of similar policies. Similar mechanisms to the EU's incentives for CBAM adoption are already present in proposed U.S. legislation, such as the Clean Competition Act and the Foreign Pollution Fee Act (Whitehouse, 2024; Congress.gov, 2023). These provisions, like those of the EU, encourage the spread of CBAM policies by providing countries with a choice: either implement comparable carbon fees or forfeit such tax revenue to foreign government CBAMs. Furthermore, the external pressure created by CBAM policies coming from a country such as the US may offer policymakers a means to overcome internal political resistance by positioning the policy as a necessary response to international economic pressures (Clausing et al., 2024).

Public perceptions of CBAM diffusion can also affect how individuals assess the broader international policy context. For instance, if key trading partners like the EU or China adopt CBAMs, it could shift public support in favor of a US CBAM due to the desire to remain competitive.³ Support may also be spurred if US CBAM adoption is framed as a retaliatory action against the Chinese-equivalent tariff. In addition, individuals may be motivated to support a CBAM out of a desire for the US to be perceived as a leader on climate change issues or to conform to changing norms in environmental responsibility. This relationship can work in both directions. The perception of diffusion may lead to more support for a CBAM, and other countries are more likely to adopt a CBAM if public support leads to a US CBAM. However, these dynamics are dependent on public perceptions of CBAM diffusion.

³Similar effects have been documented by scholars studying the role of reciprocity in climate effort (e.g., Tingley and Tomz, 2014). Here of course the underlying incentive problem differs from a public good problem as there are strong incentives to adopt a CBAM if others are adopting one rather than free-rider incentives.

4.2 Policy Design Preferences and International Context

Expectations of policy diffusion are likely to be conditional on both the specific design features of CBAM policies and observed responses of global actors to the EU’s CBAM implementation.

As motivated above, the economic impact of a CBAM on carbon-intensive goods is likely to play a key role in shaping public opinion and support for the policy among US citizens. Like other policies addressing environmental externalities, CBAM policy design faces a cost-effectiveness trade-off. On one hand, higher carbon border fees can support the policy’s purpose of internalizing the environmental costs of carbon-intensive production and incentivizing more sustainable consumption patterns. However, these fees will likely lead to higher consumer prices, which may face resistance from consumers sensitive to price increases, particularly for essential goods. Prior studies have shown that price sensitivity can influence public support for climate policies (Ansolabehere and Konisky, 2016; Gazmararian et al., 2023; Bayer and Schaffer, 2024a).

That said, opposition to cost increases from climate policies can be mitigated if citizens believe the revenue generated will be directed toward initiatives they support. For example, Beiser-McGrath and Bernauer (2019) show that revenue recycling, or the redistribution of funds back to citizens through mechanisms such as cash transfers, rebates, or subsidies, can bolster public support for carbon taxes. Similarly, Carattini et al. (2019) confirm the positive impact of citizen-directed redistribution on carbon tax support and highlight substantial public backing for policies that allocate revenues to global and domestic climate mitigation efforts. Gaikwad et al. (2024) also find evidence of public support for climate finance projects that incentivize partnership models between US firms and firms in developing countries. In fact, revenue allocation emerged as a key debate during the development of the EU’s CBAM policy, and is likely to continue to moderate public opinion over policy proposals in other countries (Ingles et al., 2024).

Beyond policy design characteristics, features of the broader international landscape will shape the likelihood and extent of CBAM policy diffusion across nations. The previous

section summarized features of interstate relations that can impact the incentives for state governments to adopt policies from their peer governments. Such peer effects may also extend to impact public opinion on policy adoption as well. For example, Beiser-McGrath and Bernauer (2019) find that public support for carbon taxes is conditional on the participation of other countries, both in terms of whether specific countries participate and how many do so. Moreover, citizens often express particular concern over whether countries perceived as the strongest polluters are doing their fair share by exerting comparable efforts in passing climate mitigation policies.

Responses to policy adoption by international organizations may also impact public opinion for CBAM policies. Indeed, multiple countries have already submitted formal objections to the World Trade Organization (WTO) in response to the EU’s CBAM, charging that the policy infringes on free trade regulations by favoring nations with the institutional capacity and financial resources to adapt to the policy. The debate over CBAM’s compatibility with WTO regulations underscores the broader importance of IO support or opposition in shaping both the legal viability and public support of climate mitigation strategies. Prior research has shown that endorsements, rulings, or legislation passed by international organization can shape public opinion on government performance and policy across multiple domains including economic (Matsumura, 2019), security (Grieco et al., 2011; Wallace, 2019), and climate policy (Greenhill, 2020).

5 New Public Opinion Evidence

To investigate public preferences over US CBAM adoption and expectations of policy diffusion, we introduce original survey evidence from two nationally-representative surveys in the US. These surveys were conducted in March and August 2024, respectively, each sampling approximately 1,500 respondents.⁴ Both surveys began with an introduction to Carbon

⁴Surveys were fielded through Qualtrics with nationally representative quotas for age, education, income, and region.

Border Adjustment Mechanisms, tailored for a general audience. To ensure participants had a basic understanding of the concept, we included a series of comprehension checks before proceeding to the main survey questions. The core of each survey focused on exploring respondents’ preferences and attitudes toward the potential implementation of a CBAM in the US as well as expectations about the effect of countries adopting border adjustment mechanisms.⁵

The two surveys share a similar purpose in exploring diffusion and support for a CBAM, but differ in significant ways. The March 2024 survey focused on identifying general public support for a United States CBAM and exploring respondents’ preferences for the use of CBAM revenues. Respondents were asked a battery of questions concerning their support for a CBAM and perceptions of its diffusion. This was followed by an experiment exploring respondents’ preferences for the use of CBAM revenues. The August 2024 survey focused on evaluating comparative CBAM policy characteristics to investigate what features increase support. Respondents were presented with a conjoint experiment that manipulated CBAM policy proposals. This was followed by a variety of CBAM related questions further exploring policy support, policy diffusion, and policy justification.⁶

5.1 Results

We first examine baseline support for a CBAM in the United States. We detail the overall level of support and the underlying reasons for this support. We then explore perceptions of CBAM diffusion by presenting both descriptive and experimental findings regarding expectations of CBAM adoption by other regions. Next, we discuss an experiment assessing preferences for the allocation of revenues generated by a CBAM. Finally, we analyze a conjoint experiment that asks how various policy attributes and geopolitical considerations

⁵We also collected a standard set of demographic characteristics as well as a battery of questions designed to gauge respondents’ beliefs about climate change.

⁶The full survey texts can be found in Appendix A and Appendix B.

influence support for a CBAM. We aim to investigate general levels of support for a CBAM, American perceptions of diffusion and revenue use, and policy characteristics that lead to increased support.

5.1.1 Support baselines

A majority of respondents in our March 2024 survey (63.1%) favored the US adopting a carbon border adjustment. Support was highest among respondents identifying as Democrats (76.4%), followed by respondents who did not identify with either party (57.4%) and respondents identifying as Republicans (50.7%).

Rationales for supporting or opposing CBAM were roughly consistent across party affiliations. Promoting global environmental sustainability was the most popular justification among all supporters, followed by safeguarding US economic interests among Democrats and Republicans. The third most popular reason for support among Democrats was the potential to generate funds to support climate efforts in developing countries. Conversely, Republicans valued the benefit of additional tax revenue raised for US government programs. Among respondents who thought the US should not adopt CBAM, respondents most commonly cited increasing costs to consumers as the top reasons for their opposition, followed by the belief that the US already imposes taxes on too many products. Approximately one-fifth (19.6%) of Republican opponents reported that there is insufficient evidence to justify climate change as a basis for trade policies.

5.1.2 Policy Diffusion

We explore respondent’s perceptions of diffusion in both surveys. In the first survey, we examined expectations around the diffusion of CBAM policies to other regions. Respondents were randomly assigned to consider whether countries in Asia, Africa, or “other countries” were likely to implement their own CBAM. Figure 1 presents the results, again broken out by the respondent’s party affiliation. Overall, respondents who identified as Democrats were more inclined to expect broader adoption of CBAM by various countries, regardless

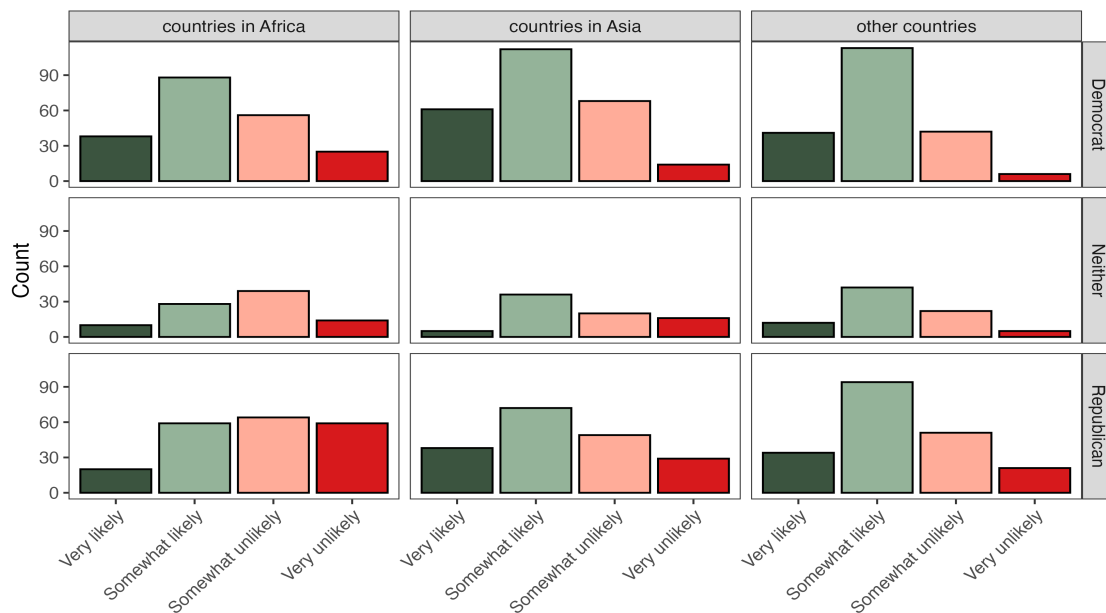


Figure 1: Expectations of the likelihood of ... establishing their own CBAM.

of whether they were asked about a specific continent. Republicans and respondents with neither affiliation tended to predict that Asian countries or other countries, generally, were likely to establish their own CBAM. A greater number of Republicans and respondents with neither affiliation reported that countries in Africa were unlikely to adopt similar policies.

In the second survey we simply asked respondents how much they agree or disagree with the statement “If the US adopts a CBAM, it will motivate other countries to adopt their own CBAM.” Figure 2 demonstrates that we find generally similar results across the two surveys. Somewhat agree is the mode for Democrats and Republicans while roughly the same number of non affiliated respondents say they somewhat agree or neither agree or disagree. As before, respondents who identified as Democrats were more inclined to expect broader adoption of CBAM. While these questions do not allow us to investigate why respondents belief diffusion is or is not likely or explore perceptions of different regional adoption, it provides a starting baseline for future investigation.

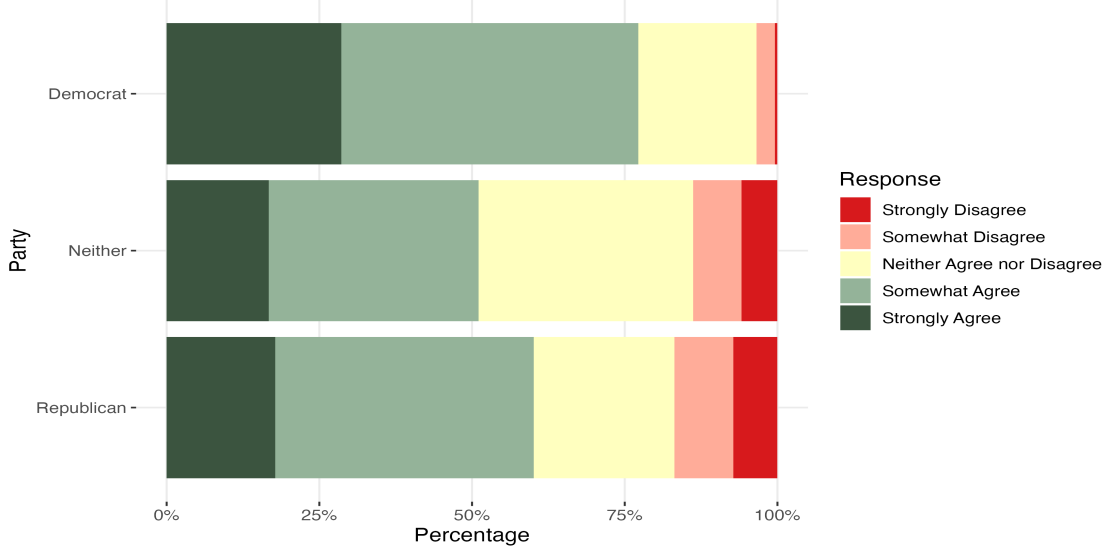


Figure 2: Expectations about whether a US CBAM will motivate other countries to adopt their own CBAM

5.1.3 Revenue Usage

In the first survey, we explored how individuals would use funds raised by a CBAM by asking respondents to allocate revenues across four categories with two experimental treatments. The first treatment randomized whether the question asked about how the EU should spend revenues from an EU CBAM or how the US should spend revenues from a US CBAM. This treatment aims to evaluate whether our US-based respondents exhibited a “local bias” consistent with previous climate finance work (Gaikwad et al., 2024). The second treatment included a prime informing respondents that developing countries may be particularly disadvantaged by a CBAM policy. This treatment aims to evaluate if support for sending funds to developing countries could be increased with a relatively small amount of information.

The first two categories directed funds to help poorer developing countries implement their own carbon pricing systems or invest in green technologies, respectively. The latter two categories allotted EU (US) funding to help EU (US) companies develop green technologies or to general EU (US) government initiatives. We plot the results in Figure 3.

Respondents were categorized based on their assignment across both experiments, resulting in four subgroups. We further differentiate results by the individual’s partisan ori-

entation. First, we observe that on average there is support for all of the different funding categories. By and large, the median levels are similar across the different categories. Reinvesting funds into domestic green technology was the top category that respondents allocated funds to, regardless of party identification. Although this provides some evidence to support prior work highlighting domestic revenue recycling as a determinant of climate policy support, we find that respondents allocated as much or more revenue toward initiatives in developing countries compared with returning the revenues to general domestic government initiatives. We also observe a small depressing effect of the informational prime on keeping resources within the implementing country, which tended to be offset by greater support for technology transfers to developing countries.

5.1.4 Multidimensional Institutional Design

Our second survey sought to evaluate comparative policy characteristics to evaluate which features increase support for a US CBAM. After an extensive introduction to the CBAM (see Appendix B), respondents were presented with a single-profile conjoint experiment wherein respondents were presented with a policy profile that could vary across six attributes. Each respondent was presented a total of five policy profiles and asked to rate their level of support for the CBAM policy on a scale of 1-10. The levels for each policy attribute are presented in Table ???. Respondents also answered four comprehension questions prior to viewing the conjoint profiles.^{7 8}

⁷The multidimensional nature of this design made it somewhat more challenging for respondents to pass our comprehension checks. If respondents got a question wrong, a follow-up informed them of the correct answer so as to ensure respondent comprehension. See the appendix for more information.

⁸After evaluating five policy profiles, respondents ranked the policy attributes based on their importance in influencing support or opposition to the policy. Following this, we asked respondents to report on their familiarity with carbon border adjustment mechanisms. Respondents were asked -‘Prior to this survey, how familiar were you with the Carbon

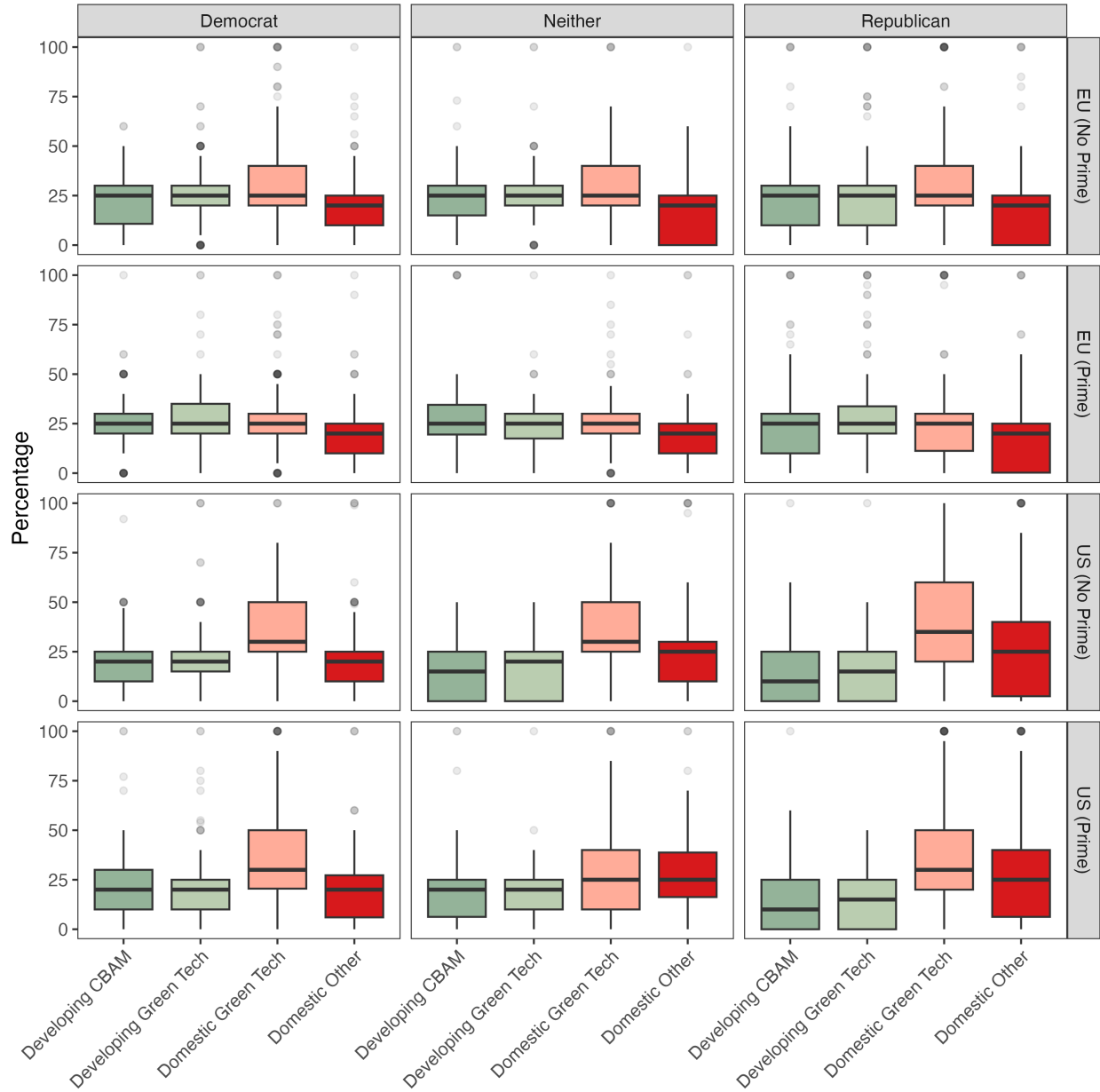


Figure 3: Distribution of preferred fund allocation by party affiliation and treatment. In this plot, the middle 50% of the data lies within the box, while the line within the box represents the median value. The dots represent outliers.

Attribute	Possible Levels
Trading Partners	10, 25, or 50 Countries
Important Country	China, Japan, or India
WTO Position	Approves, Disapproves, or Undecided
Retained Money	USD \$1 Billion, \$4 Billion, or \$7 Billion
Cost Increase	0.6%, 1.2%, or 1.8%
Fund Recipient	Poorer developing countries to implement their own carbon pricing systems, US companies to reduce carbon emissions General US government initiatives, or US companies' green investments in developing countries

Table 1: Conjoint Attributes and Possible Levels

The average rating for CBAM proposals is relatively high but exhibits substantial variation by party. The mean rating across all proposal profiles and respondents is 6.2. On a scale of definitely oppose (1) to definitely support (10). On average respondents are more supportive than opposed to a CBAM regardless of the policy attributes. Respondents who identify as Democrats had a mean proposal rating of 6.8. Republican respondents indicate the least support with an average rating of 5.6. Respondents who identify with neither party fall in the middle with an average rating of 6. This aligns with prior research that finds Border Adjustment Mechanism policy?. On average, respondents report low familiarity with CBAM. 53% of respondents reported that they were ‘Not at all familiar’ with CBAM prior to the survey, and only 22% reported that they were somewhat or very familiar with CBAM. If anything we expect that self-reported familiarity is biased upwards. We also included a series of questions probing expectations about the policy’s impact on domestic activities and developing countries, and how other countries might react to a US CBAM enactment. Finally, we asked questions to identify information sources respondents prefer for making decisions regarding the CBAM and other climate policies. We present these results in Appendix C.1.

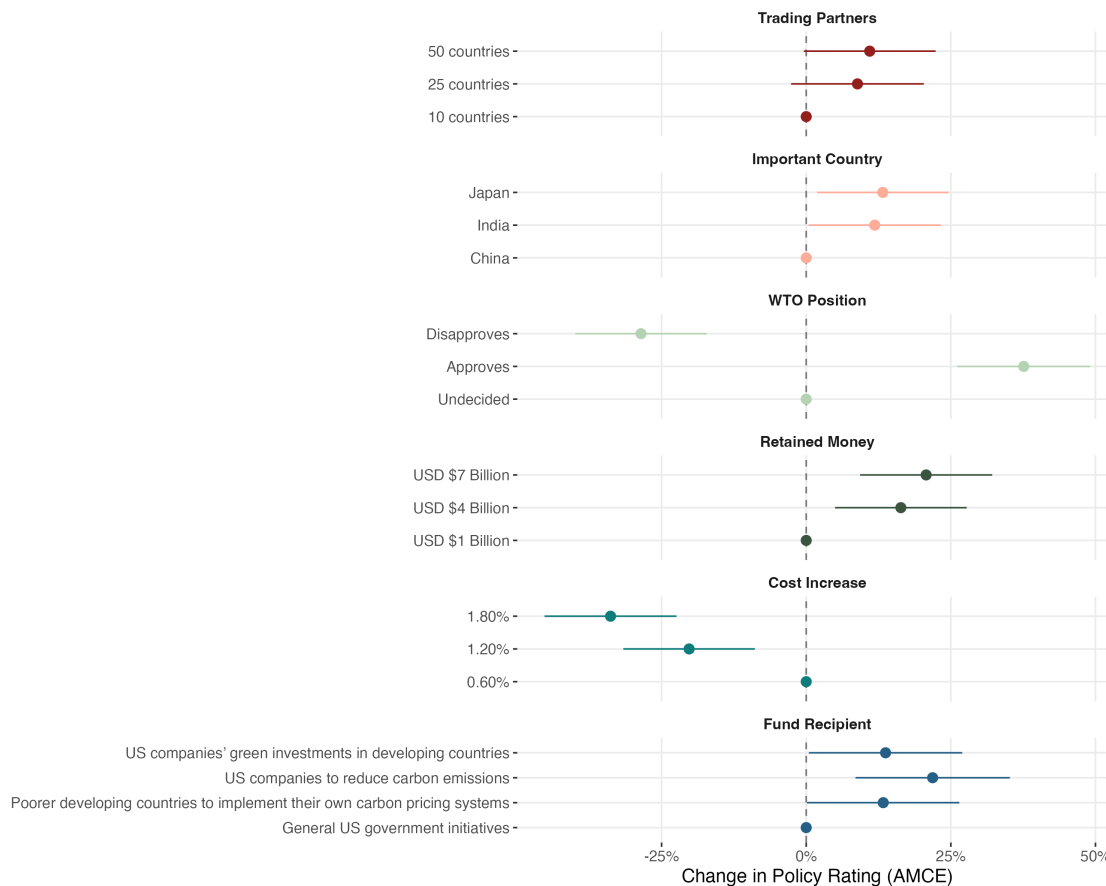


Figure 4: Conjoint Experiment Results. Average marginal causal effects with 90% confidence intervals.

respondents are relatively supportive of CBAM.

To analyze the conjoint data, we estimated average marginal component effects (AMCEs) estimated through ordinary least squares (OLS) regression, with standard errors clustered by respondent ID to account for intra-respondent correlation. The largest reduction in average respondent rating across the experiment occurs for the price increase attribute. As the anticipated cost of the CBAM rises, there is a significant decrease in support for the policy proposal. In the case of a predicted 1.80% price increase, average proposal ratings drop by 0.34 points. This is a meaningful shift on a ten-point scale considering the difference between Republicans and Democrats is only 1.2. These results are consistent with existing public opinion data which highlight the role of cost in CBAM policy consideration. It also

reflects the broader literature demonstrating that public sensitivity to price increases can significantly influence attitudes toward climate policy (Gazmararian et al., 2023; Ansolabehere and Konisky, 2016; Bayer and Schaffer, 2024a).

Closely related, an increase in retained money leads to increased policy support. When compared to the baseline of \$1 billion, retention of \$4 billion and \$7 billion leads to a rating increase of 0.16 and 0.21. This complements the price increase results. It further demonstrates that economic considerations are very salient for individuals as they assess a US CBAM. Not only are respondents concerned about the personal economic effects of a CBAM, but they also consider the broader economic implications of a CBAM.

The adoption of a CBAM by other key countries had similar positive effects. When told Japan had already implemented a CBAM, support increased by 0.13. Adoption by India increased support by 0.12. We anticipated that respondents might be more likely to support a U.S. CBAM if China had already adopted its own, potentially as a retaliatory measure. However, that does not appear to be the case. It is possible support may be driven by competitive pressure for the U.S. to demonstrate leadership on climate change.

As a more direct test of diffusion, we find evidence that broader adoption among trading partners increases support for a US CBAM. For example, a shift from 10 to 50 adopting countries increasing support for a CBAM by approximately 0.11 points though the confidence interval narrowly overlaps with 0. While our instrument cannot disentangle specific mechanisms like strategic alignment or policy emulation, the results offer novel evidence of a marginal effect of diffusion pressure, even when accounting for other salient policy features. This, coupled with the previous survey’s results supporting expectations that US CBAM adoption would motivate other countries to implement similar policies (Figure C.1), suggests that policy diffusion can operate in two directions.⁹ While existing adoption by trading partners influences support for a US CBAM, respondents also anticipate downstream diffu-

⁹The appendix presents additional results that had respondents rank the importance of the different dimensions. This shows that, following cost, diffusion considerations were relatively important to survey respondents.

sion effects, viewing US policy choices as catalysts for broader international adoption. These results add to a relatively limited set of public opinion work around international policy diffusion (e.g., Linos, 2011) by examining upstream and downstream diffusion effects, presenting diffusion-related information alongside other characteristics of a policy’s design, and applying it to CBAM specifically.

Respondents are more supportive of a CBAM designed to support green programs for US companies compared to spending the money on a general US government initiative. Respondents prefer policies that utilize revenues to support US companies in taking green actions both at home and abroad. We expected that respondents would be more supportive of domestic revenue recycling, but this was not observed in the sample as a whole. Providing the revenue to US companies for green investment in developing countries shifted average ratings positively by 0.14 while spending the revenue to help US companies reduce carbon emissions shifted ratings positively by 0.22. This potentially suggests a smaller degree of “local bias” in climate finance than found by previous climate finance work but is consistent with results that support providing US firms with resources to make green investments in developing countries (Gaikwad et al., 2024; Ingles et al., 2024).

WTO approval or disapproval of a CBAM moved respondents in both directions relative to an undecided WTO ruling. WTO approval increased average ratings by 0.38 points, the largest average effect across all policy attribute levels. WTO disapproval had a smaller but still significant impact decreasing support by an average of 0.29 points.¹⁰ This may support prior research indicating that endorsements from international organizations lend legitimacy to policy proposals in contention, especially those which require overcoming global collective action problems.¹¹

¹⁰Interestingly, we observe that WTO position is ranked as the least important attribute by respondents across the political spectrum. See appendix C.4. Such a gap in effect sizes can be due to the extreme ends of the scale used for the WTO’s position.

¹¹Beyond the primary analysis, we also performed several subgroup analyses. By and large there was relative consistency. The appendix shows how respondents expressing nationalist

6 Discussion

As it stands, the US faces both economic and environmental incentives to consider a Carbon Border Adjustment Mechanism (CBAM). Early estimates suggest that approximately 7% of US exports to the EU will be subject to the CBAM in its current form, translating to approximately \$300 million in fees that would otherwise be collected by the US if it implemented its own carbon pricing scheme (Hoenig, 2024). Furthermore, US adoption of carbon pricing systems and a CBAM would create new revenue streams, incentivize carbon emissions reduction, and signal leadership on climate action. Our analysis highlights that there exists political appetite for a US CBAM across party lines. Furthermore, policy design choices over fee schedules and revenue allocation can further influence policy support. These results may be valuable to legislators as they consider policy instrument design, as public support can increase the likelihood of legislative success in the US.

In addition to these policy characteristics, we find that diffusion pressures can influence policy support in two ways. First, public support for domestic adoption increases as more trading partners implement the policy before the U.S. Second, respondents also factor in considerations of whether a CBAM adoption is likely to encourage other countries to follow suit. Furthermore, support from international organizations significantly increases respondent support for a CBAM. These findings offer novel evidence to suggest that international diffusion dynamics influence public preferences over policies, even when compared with other salient policy design characteristics.

Our study is subject to limitations inherent to survey design and conjoint experiments in particular. Our analysis is limited to the specific policy attributes and levels that were included in the survey, which is not exhaustive of all dimensions of CBAM policy design that may influence public opinion. Specifically, additional policy features, such as which goods

attitudes are more sensitive to trade partner adoption and price increases while respondents expressing lower levels of nationalist attitudes show greater support for the proposal when the funds are allocated to specific purposes rather than general U.S. government initiatives.

will be subject to the tariff, whether exemptions will be offered, how the tariff will be levied (e.g., through the purchase of certificates or a fee at import), and the investment required to monitor emissions and enforce the tariff, will be salient to public support. Additionally, because our survey was fielded in the general population, it does not capture particular preferences among other important stakeholders such as interest groups and business leaders. Finally, while our findings suggest that policy diffusion influences matter for public opinion, the current survey cannot disentangle which the specific mechanisms (e.g., coercion, competition, learning, emulation) through which this occurs.

7 Conclusion

The emergence of carbon border adjustment mechanisms marks a significant step in aligning international trade with environmental policy. In this paper, we examine how aspects of CBAM policy design and geopolitical context impact US public opinion toward the policy. Our findings reveal that although there is broad support generally for the US adoption of a CBAM, the design of a CBAM –ranging from the most salient fiscal policy features to how funds are used– are likely to shape public attitudes. Furthermore, our findings demonstrate that policy diffusion pressures influence public opinion in two key ways: first, through peer effects driven by the number of trading partners that have already adopted the policy, and second, through expectations that U.S. adoption may encourage further global diffusion. These dynamics highlight the importance of international context in shaping domestic support for policy initiatives.

Although public support is a crucial determinant of US policy adoption, the influence of other domestic stakeholders, including industry and government actors, will of course play a significant role. Ongoing work engages with private and public actors to understand competing interests that may affect legislative outcomes. Furthermore, given that CBAM policies may disproportionately harm economies in developing countries, evaluating how international support can help developing countries adapt to a more environmentally sustainable economy will be crucial. Future research should also investigate the institutional capacity re-

quired for CBAM implementation, particularly in the areas of emissions reporting and tariff enforcement (Ingles et al., 2024). To the extent that CBAM policies seek to encourage global policy harmonization, these policies must be complemented by international arrangements to facilitate technical support and training between states.

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A March 2024 Survey Instrument

Preamble

The European Union (EU) is a group of European countries that work together to make laws and trade with each other.

The EU has a new policy called a Carbon Border Adjustment Mechanism. This policy affects companies in countries outside the EU that want to sell their products inside the EU.

When a company makes a product, it requires energy which often creates carbon emissions that warm the planet. Since 2005, companies that make products in the EU have had to pay a fee to the EU when they create emissions. Until now, companies making products outside the EU did not have to pay that carbon fee.

The Carbon Border Adjustment Mechanism tries to level the playing field by charging a similar fee on products imported into the EU from non-EU countries. Products made outside of the EU and exported into the EU will now be charged a fee based on the carbon emissions of the product. This fee is paid once products cross the border into the EU. That's why it's called a carbon border adjustment.

This carbon fee can be avoided if the product is made in a country that has its own carbon fee. If the carbon fee is lower than the EU's, the charge would be the difference between the two. If the fee is higher than the EU's, there would be no fees paid to the EU.

The policy means that if countries outside the EU do not adopt their own carbon fee system, their exports will cost more. This means businesses outside the EU may be less competitive in the EU market.

The next questions are about this Carbon Border Adjustment policy.

Survey

1. How can companies avoid paying the EU carbon border fee?

- The country where the exporting company is located can apply for an exemption.
- The country where the exporting company is located can sign a treaty with the EU.
- The country where the exporting company is located can charge its own carbon fee equivalent to the EU amount,
- The country where the exporting company is located can provide “green aid” to poorer developing countries.

The following questions will ask about your opinion about carbon border adjustment policies.

2. Given that the European Union adopted a fee on internal carbon emissions and a fee on products imported from countries without a carbon fee, should the United States adopt a similar carbon border adjustment policy?

If the US adopts the EU policy, it will mean that:

- US Manufacturers will pay carbon emissions fees to the US government based on how much carbon dioxide is released during the manufacturing of many products
- When US companies export many products to the European Union, carbon emission fees will not be paid to the European Union.
- When foreign countries that do not themselves charge for carbon emissions import many products into the United States, fees will be charged on these products based on the amount of carbon released during manufacturing.
- Goods that are charged carbon emissions fees may become more expensive to consumers.
- The US should adopt a carbon border adjustment.
- The US should NOT adopt a carbon border adjustment.

- The US should adopt a carbon border adjustment.
- The US should NOT adopt a carbon border adjustment.

3A In your opinion, which of the following best describes why the US should adopt a carbon border adjustment?

- The policy would promote global environmental sustainability by encouraging cleaner production.
- The policy would safeguard US economic interests and ensure fair trade practices.
- The policy would generate additional tax revenue for US government programs.
- The policy would generate funds for assisting developing countries in combating climate change.
- The policy would enhance US leadership in global climate change efforts.

3B In your opinion, which of the following best describes why the US should not adopt a carbon border adjustment?

- The policy would increase costs for consumers due to higher prices on imported goods.
- The US already levies taxes on too many products.
- The policy would negatively impact developing countries' economies and trade.
- Environmental regulation should not interfere with free market dynamics and international trade.
- There is insufficient evidence to justify climate change as a basis for trade policies.

4 How likely do you believe it is that [other countries/countries in Asia/countries in Africa] will establish their own carbon pricing and carbon border adjustment policies?

- Very likely

- Somewhat likely
- Neutral/unsure
- Somewhat unlikely
- Very unlikely

5 Products imported from countries without carbon fees will lead to charges being paid to the country that has the carbon border adjustment policy. There are debates about what countries should do with the money. [Some argue that developing countries will be the hardest hit by these policies and are the least able to adapt. / no text]

Where should funds raised by the [European Union / United States] from a carbon border adjustment policy be spent? Please allocate percentages to each option so that the total sums to 100%. Enter positive integers only.

[Require positive integers that sum to 100]

- ___% of the funds should be used to help poorer developing countries implement their own carbon pricing systems.
- ___% of the funds should be used to help poorer developing countries invest in technologies that help them reduce their emissions.
- ___% of the funds should be used to help companies in the [European Union / United States] develop technologies to reduce carbon emissions.
- ___% of the funds should be used for other [European Union / United States] government initiatives.

B August 2024 Survey Instrument

Introduction

Many countries around the world are considering a new policy called a Carbon Border Adjustment Mechanism. The European Union (EU), which is a group of European countries

that work together to make laws and trade with each other, is the first place to implement a Carbon Border Adjustment Mechanism.

This is how the new Carbon Border Adjustment Mechanism works in the EU.

When a company makes a product it uses energy, which often creates carbon emissions that warm the planet. Since 2005, companies that make products in the EU have had to pay a carbon fee to the EU when they create emissions. Until now, companies making products outside the EU did not have to pay this carbon fee.

The Carbon Border Adjustment Mechanism tries to level the playing field by charging a similar fee on some products imported into the EU from non-EU countries. Some products imported into the EU will now be charged a fee based on the carbon emissions of the product. This fee is paid once products cross the border into the EU. That is why it is called a carbon border adjustment.

The products currently covered by the EU Carbon Border Adjustment Mechanism are cement, iron and steel, fertilizers, electricity, and hydrogen.

This carbon border fee can be avoided if the product is made in a country that has its own carbon fee.

If the country's carbon fee is lower than the EU's fee, the border fee amount would be the difference between the two. If the country's carbon fee is higher than the EU's, there would be no carbon border fees paid to the EU.

As mentioned above, the United States is considering adopting a similar carbon border adjustment policy. If the US adopts the EU policy, it will mean that:

- US companies will pay carbon emissions fees to the US government based on how much carbon dioxide is released during the manufacturing of many products.
- When US companies export many products to the European Union, carbon emission

fees will not be paid to the European Union.

- Products from foreign countries without charges for carbon emissions that are imported into the United States will be charged a fee based on the amount of carbon released during manufacturing.
- Goods that are charged carbon emissions fees may become more expensive to consumers.

In the following section you will be asked several questions concerning carbon border adjustment mechanisms.

Comprehension Check Questions

1. How can companies avoid paying the EU carbon border fee?
 - The country where the exporting company is located can apply for an exemption.
 - The country where the exporting company is located can sign a treaty with the EU.
 - The country where the exporting company is located can charge its own carbon fee equivalent to the EU amount.
 - The country where the exporting company is located can provide “green aid” to poorer developing countries.
2. What does a carbon border adjustment mechanism (CBAM) tax?
 - A CBAM taxes the amount of carbon emitted when a product is made in another country
 - A CBAM taxes the amount of carbon emitted when a product is made in another country that has a lower tax on carbon.
 - A CBAM taxes the amount of pollution dumped into bodies of water shared by two or more countries.

- A CBAM taxes the extraction of fossil fuels in countries that export to nations with stricter environmental regulations.
3. Which of the following products is currently covered by the EU Carbon Border Adjustment Mechanism?
- Corn
 - Textiles
 - Cement
 - All of the above

Conjoint Analysis

We would like to get your opinion on different proposals for a US Carbon Border Adjustment Mechanism.

We next describe the ways the US Carbon Border Adjustment Mechanism proposals can differ.

Each proposal for the US Carbon Border Adjustment Mechanism (CBAM) policy varies in the following ways:

- **Trading Partners:** The *number* of US trading partner countries that will have adopted a CBAM in addition to the EU.
- **Important Country:** Which strategically important country—
China, Japan, or India—along with the EU and UK, will have adopted a CBAM.
- **WTO Position:** Whether the World Trade Organization (WTO) *approves, disapproves*, or is *undecided* on the policy. The WTO is an international organization that helps to establish, negotiate, and enforce free trade between countries.

- **Retained Money:** This is the amount of money that the United States will no longer have to pay to the EU and other countries that have adopted a CBAM if the US enacts its own CBAM. This amount will instead be collected by the US government. The retained amounts can be *USD \$1 Billion*, *USD \$4 Billion*, or *USD \$7 Billion*.
- **Cost Increase:** The estimated average cost increase on consumer goods as a result of a US CBAM. Cost increases can be *0.6%*, *1.2%*, or *1.8%*.
- **Fund Recipient:** The funds raised by the US CBAM can be allocated to: *Poorer developing countries to implement their own carbon pricing systems*, *US companies to reduce carbon emissions*, *General US government initiatives*, *US companies' green investments in developing countries*

4-8 Please read the following policy proposal and indicate your level of support:

Policy Proposal	
Trading Partners	10 Countries
Important Country	China
WTO Position	Approves
Retained Money	USD \$1 Billion
Cost Increase	0.6%
Fund Recipient	Poorer developing countries to implement their own carbon pricing systems.

On a scale from definitely oppose (1) to definitely support (10), how much do you support this policy proposal?

[Slider scale from 1-10]

[This format is repeated for questions 5-8, each with a unique policy proposal]

9. Please rank the proposal characteristics by order of importance in your decision to oppose or support the Carbon Border Adjustment Mechanism (CBAM) proposals.

Click each option and drag it to place the characteristics in the order of importance.

- The number of US **trading partners** that have adopted a CBAM.
 - Which strategically **important country** has adopted a CBAM.
 - The amount of **retained money** from adopting the CBAM.
 - The **WTO Position** on the policy.
 - The estimated average **cost increase** on consumer goods.
 - The proposed **fund recipient** for revenue collected from the CBAM.
10. Prior to this survey, how familiar were you with the Carbon Border Adjustment Mechanism policy?
- Very familiar
 - Somewhat familiar
 - Not very familiar
 - Not at all familiar

C Additional Results

C.1 Basic Demographics

Characteristic	Spring 2024		Summer 2024	
	N = 1503	Proportion	N = 1536	Proportion
Gender				
Female	806	53.6%	806	52.5%
Male	697	46.4%	730	47.5%
Age				
Age 18-34	466	31.0%	451	29.4%
Age 35-54	550	36.6%	496	32.3%
Age 55+	487	32.4%	589	38.3%
Race				
Black	212	14.1%	206	13.4%
Hispanic	286	19.0%	279	18.2%
White	1182	78.6%	1195	77.8%
Asian	65	4.3%	84	5.5%
Highest Education Level				
High School Diploma or Less	367	24.4%	434	28.3%
Some College	575	38.3%	568	37.0%
Bachelor's Degree	361	24.0%	329	21.4%
Advanced Degree	200	13.3%	205	13.3%
Income				
≤ \$30,000	328	21.8%	345	22.5%
\$30,000 - \$59,999	391	26.0%	373	24.3%
\$60,000 - \$99,999	394	26.2%	362	23.6%
\$100,000 - \$149,999	236	15.7%	267	17.4%
≥ \$150,000	136	9.0%	142	9.2%
Income not reported	18	1.2%	47	3.1%
Employment Status				
Unemployed	636	42.3%	716	46.6%
Employed part-time	194	12.9%	185	12.0%
Employed full-time	673	44.8%	635	41.3%
Partisanship				
Democrat	664	44.2%	728	47.4%
Neither	249	16.6%	239	15.6%
Republican	590	39.3%	569	37.0%
Belief in Climate Change				
Climate change is not happening	161	10.7%	162	10.5%
Unsure if climate change is happening	56	3.7%	55	3.6%
Climate change is happening	1286	85.6%	1319	85.9%

C.2 Expectations about impact of CBAM

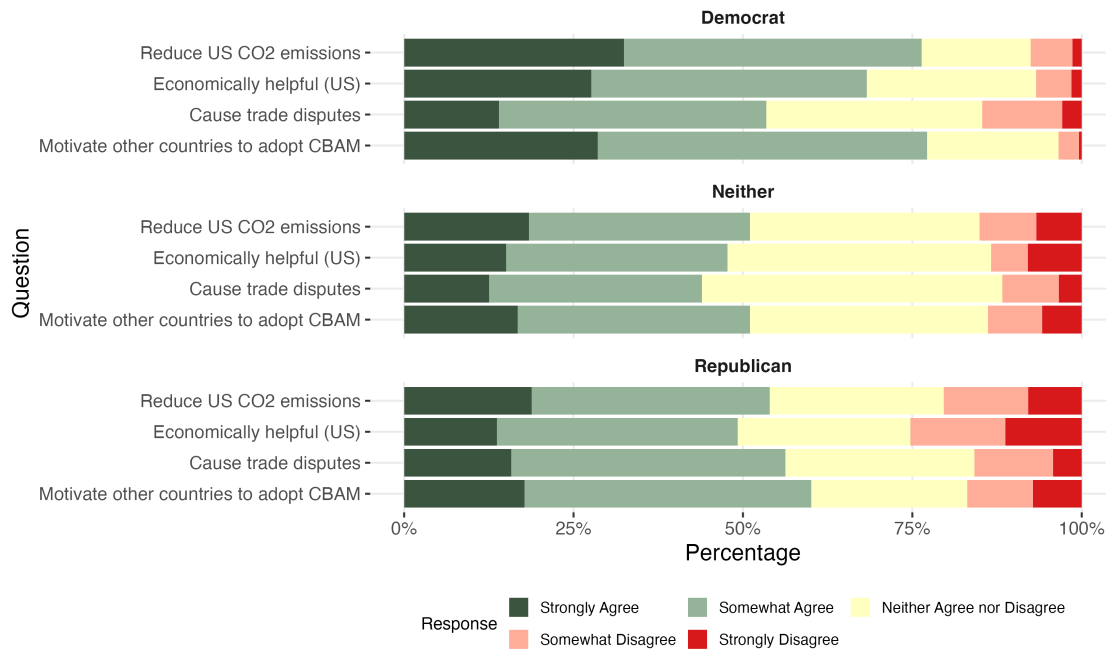


Figure C.1: General Expectations of the Impact of a US CBAM. A majority of Democratic and Republican respondents believe that a US CBAM would reduce CO2 emissions and motivate other countries to adopt their own CBAM policies.

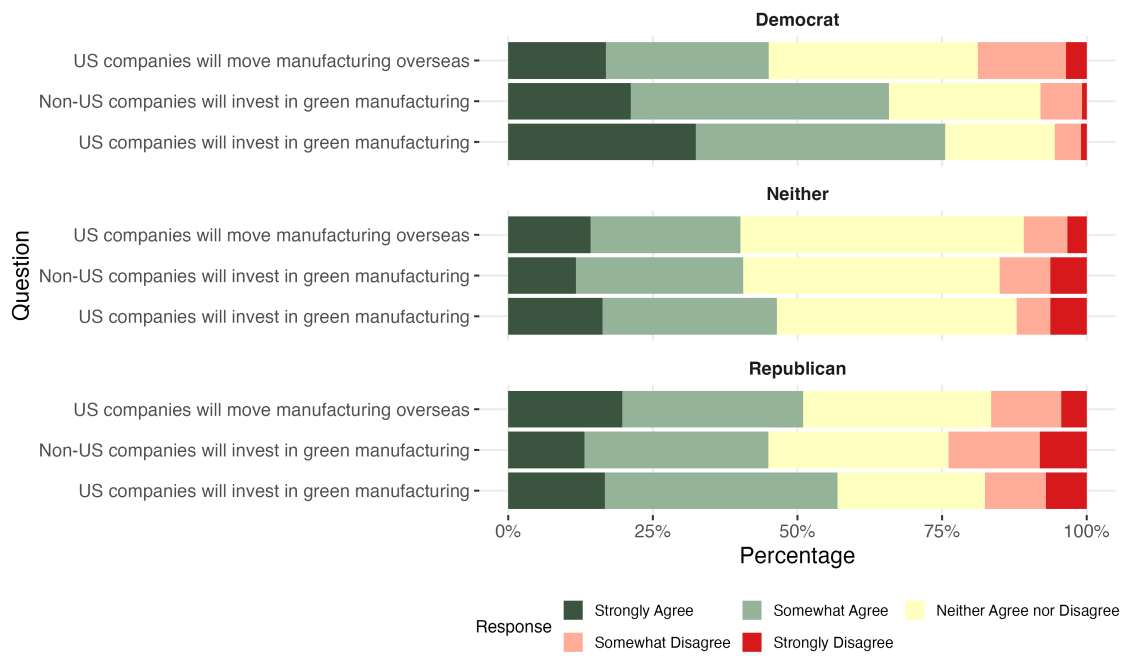


Figure C.2: Expectations of the Impact of a US CBAM on Firms. A majority of Democratic and Republican respondents believe that a US CBAM would motivate US companies to invest in more green manufacturing.

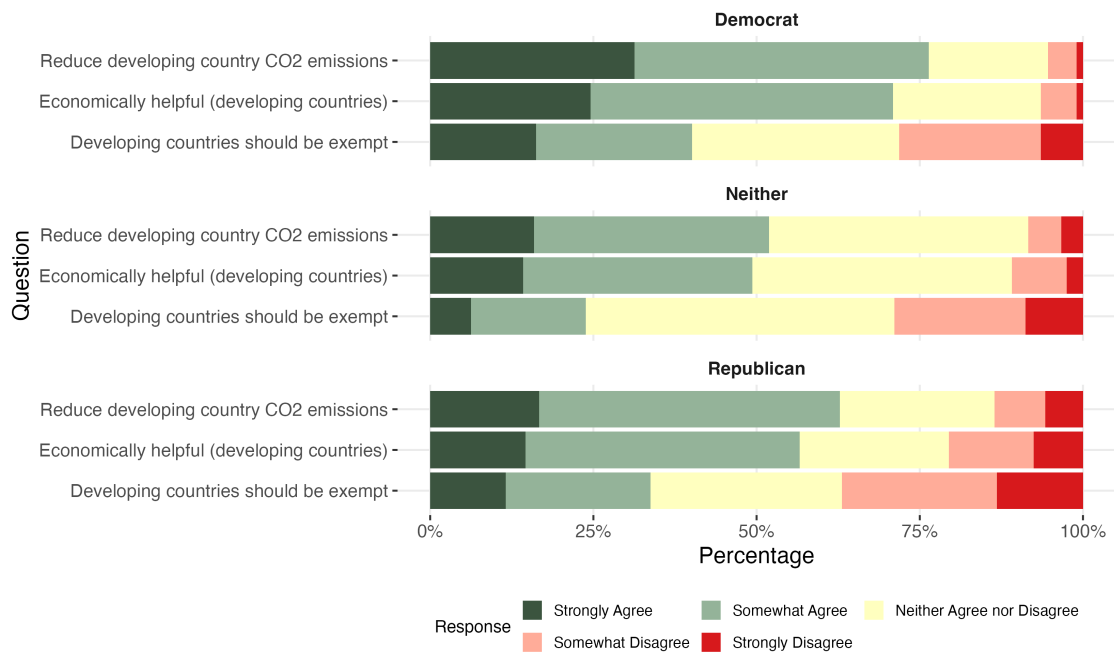


Figure C.3: Expectations of the Impact of a US CBAM on Developing Countries. A majority of Democratic and Republican respondents believe that a US CBAM would reduce CO2 emissions and provide economic benefits in developing countries.

C.3 Importance Ranking

Following the conjoint experiment respondents were asked to rank the conjoint attributes (displayed in random order) in order of their importance on their decisions. These results are plotted in Figure C.4 as a heatmap illustrating the ranking of attribute importance by partisanship. The x-axis (1–6) represents the numerical rankings assigned to each attribute, where 1 denotes the highest importance and 6 the lowest. The color scale and intensity indicates the percentage of respondents assigning each ranking to each attribute. For example, in the Republican panel, the dark green cell in the ‘Cost Increase’ row under ranking 1 shows that 37% of Republicans consider cost increase to be the most important attribute.

The amount of cost increase expected from CBAM was the most commonly-ranked first choice attribute across party affiliation. Among Democrats, the mean ranks indicate that the number of trading partners adopting the policy and whether an important peer country adopted the policy were the second and third most important attributes, respectively. For respondents identifying with neither party and Republicans, the amount of retained money was the second most important attribute, followed by the number of trading partners who adopted the policy.

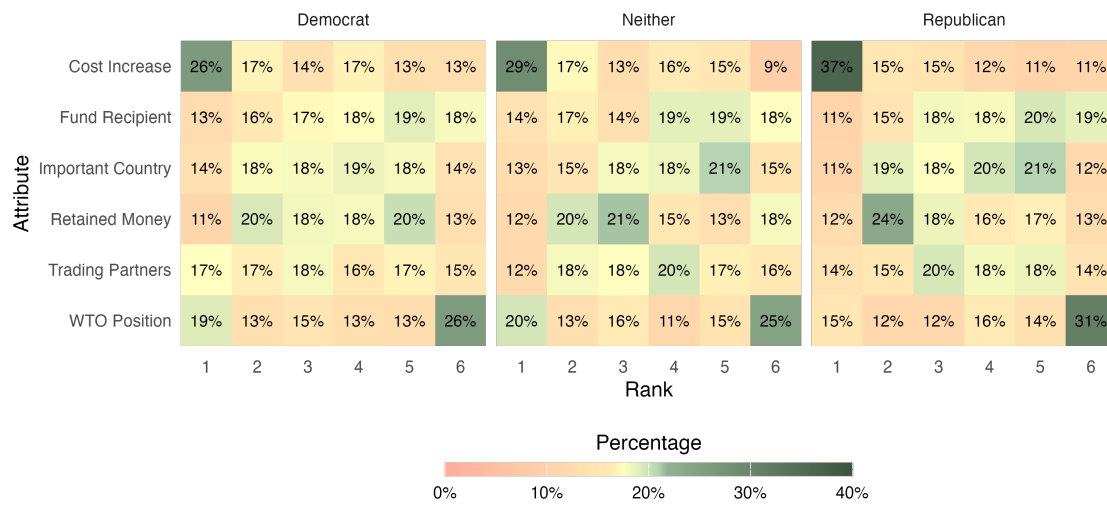


Figure C.4: Ranking of Conjoint Attributes.

C.4 Effect heterogeneity in conjoint experiment

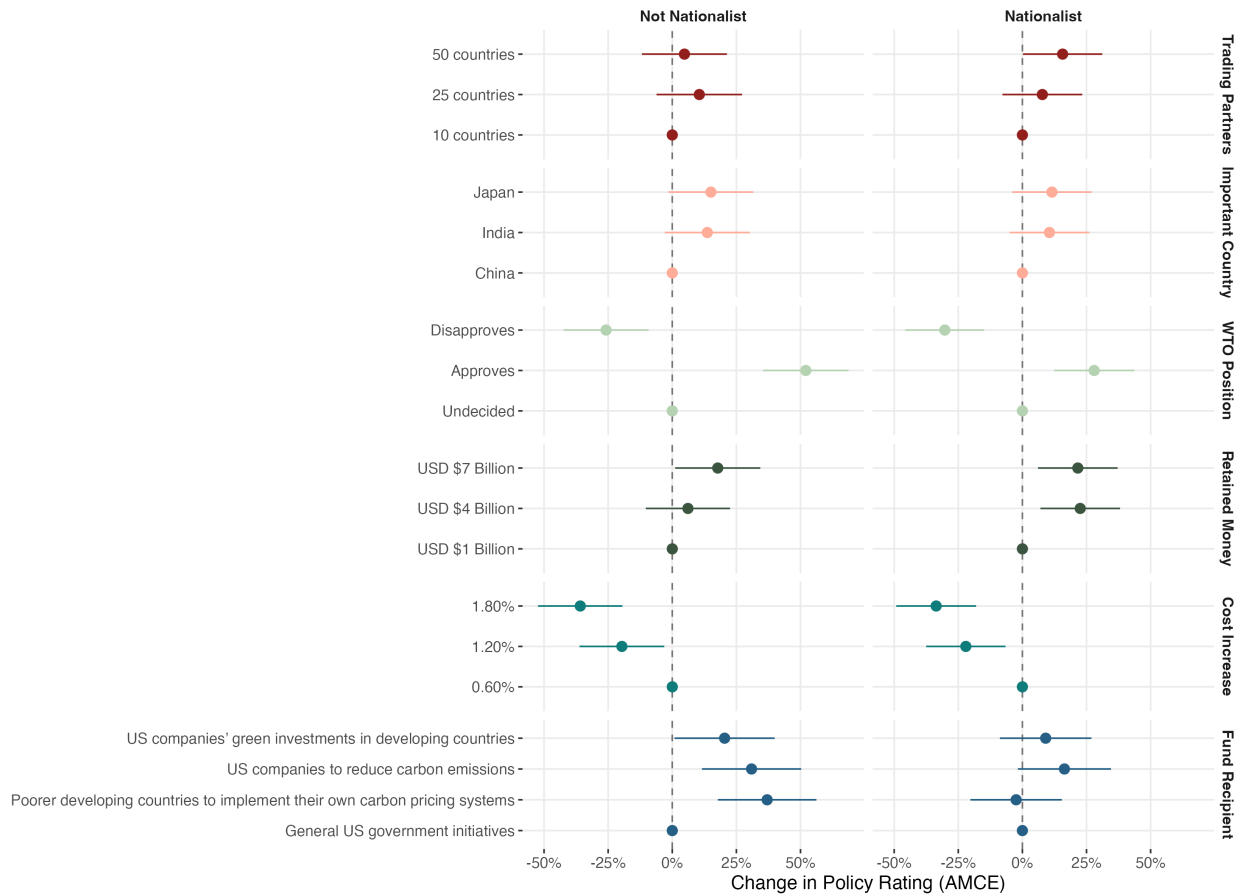


Figure C.5: Conditional AMCEs by Nationalism. We measure nationalism post-treatment with the following question: “*How much do you agree or disagree with the following statement: The United States is superior to other nations.*” Those who answered somewhat agree or strongly agree are coded as nationalist. We observe some variation between these groups. Nationalists are more sensitive to price increases but unaffected by different CBAM revenue uses.

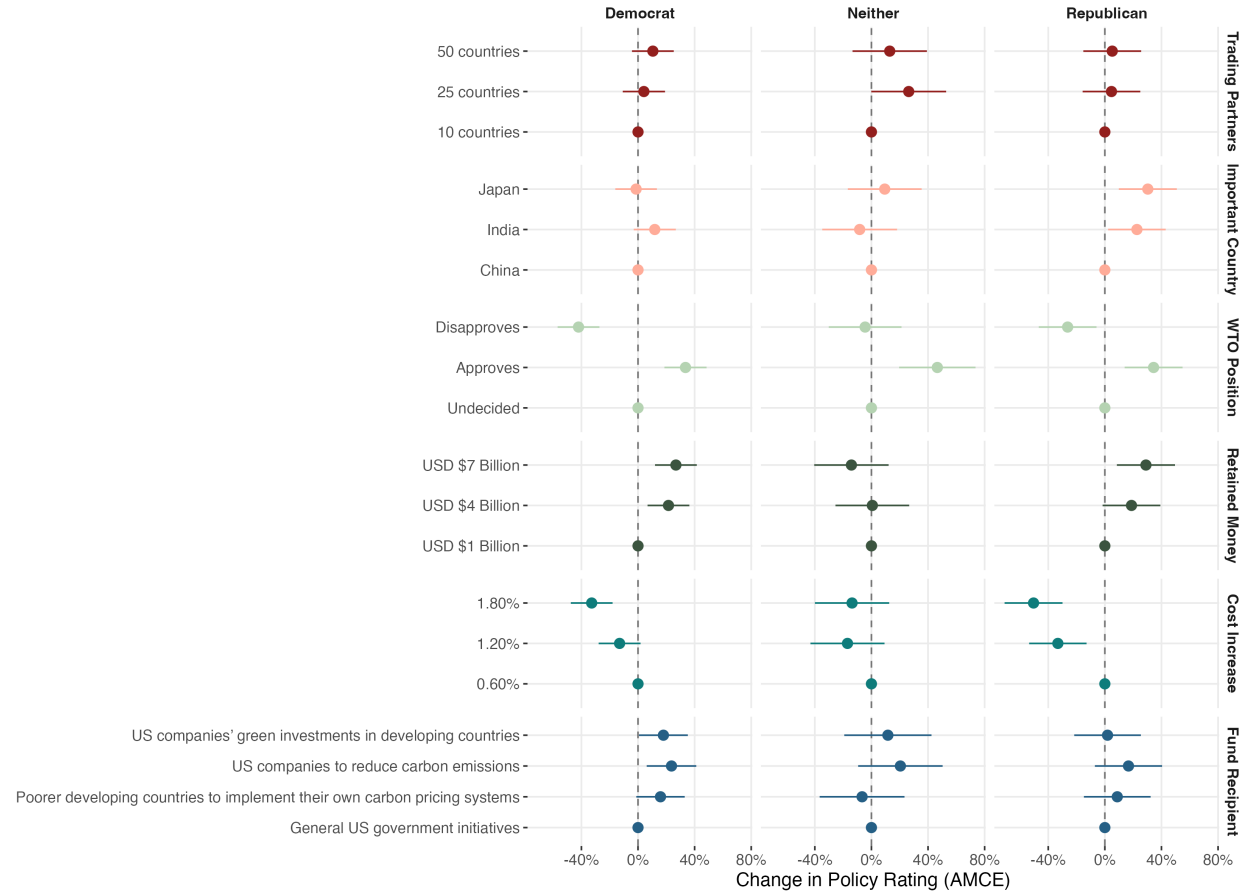


Figure C.6: Conditional AMCEs by Partisanship. The results are largely consistent across partisan groups, with only minor variations. Republicans show greater support for CBAM implementation when Japan or India, rather than China, adopts the policy, while Independents appear unaffected by cost increases.

C.5 Comprehension Checks

In each of our surveys we asked a set of comprehension checks. The first question—'How can companies avoid paying the EU carbon border fee?' [Response options: The country where the exporting company is located can apply for an exemption, The country where the exporting company is located can sign a treaty with the EU, **The country where the exporting company is located can charge its own carbon fee equivalent to the EU amount**, The country where the exporting company is located can provide “green aid” to poorer developing countries]—was asked in both surveys. In the second survey that provided respondents with a multidimensional set of attributes, 62% of respondents initially answered correctly. In the first, simpler survey, 89% answered correctly.

The second survey also asked additional questions. When asked —'What does a carbon border adjustment mechanism (CBAM) tax?' [Response options: A CBAM taxes the amount of carbon emitted when a product is made in another country, **A CBAM taxes the amount of carbon emitted when a product is made in another country that has a lower tax on carbon**, A CBAM taxes the amount of pollution dumped into bodies of water shared by two or more countries, A CBAM taxes the extraction of fossil fuels in countries that export to nations with stricter environmental regulations]— 39% answered correctly. Respondents fared slightly better with the question -'What does the World Trade Organization (WTO) do?' [Response options: **The WTO helps to establish, negotiate, and enforce free trade between countries**, The WTO regulates international stock markets, The WTO provides financial aid to developing countries to boost their export capabilities, The WTO regulates international labor laws to prevent exploitation in global supply chains]- with 66% answering correctly. Comprehension was best for the question -'One proposed way to use the funds from a Carbon Border Adjustment Mechanism is to help poorer developing countries implement their own carbon pricing system' [Response options: **True**, False]- with 90% of respondents answering correctly.

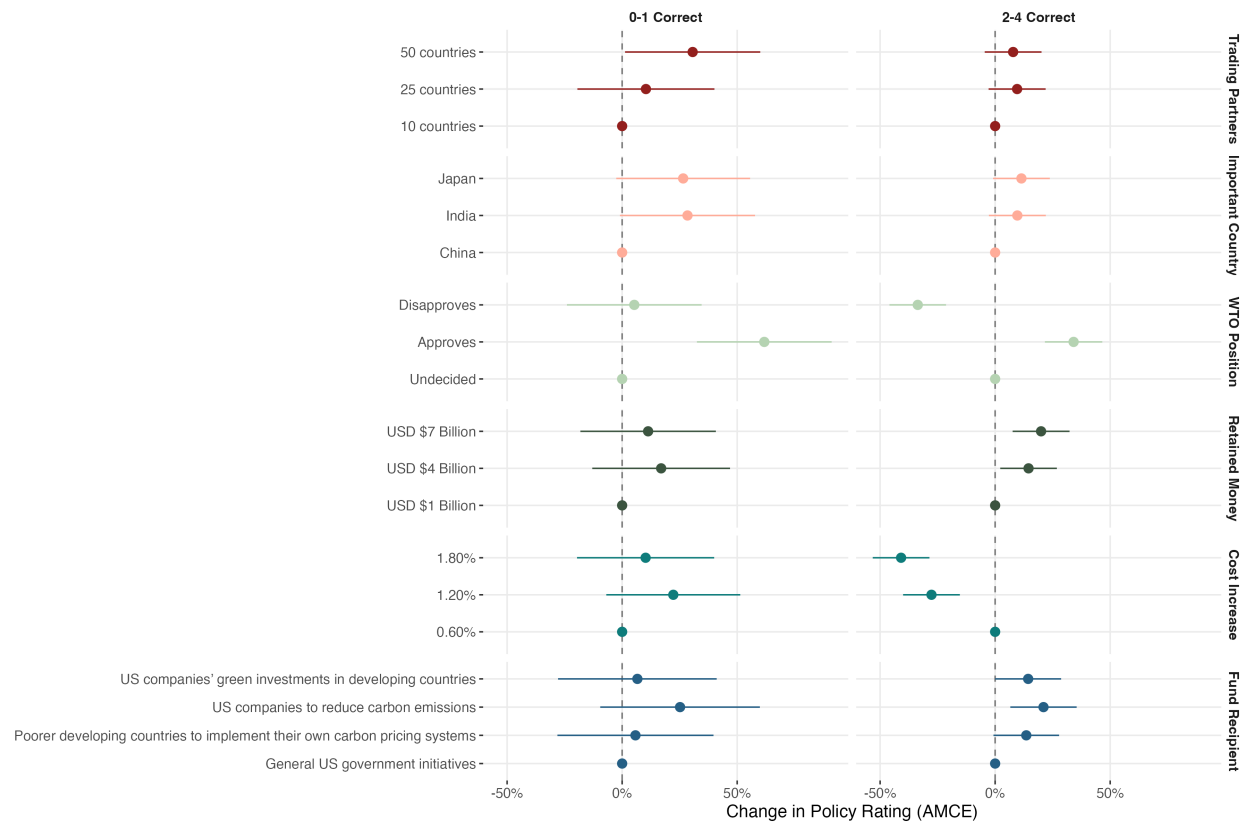


Figure C.7: Conditional AMCEs by Number of Correct Comprehension Checks (Collapsed). The majority of respondents (86%) answered between 2-4 comprehension check questions correctly.