RESEARCH ARTICLE



Voter perceptions and the politics of hidden costs in unilateral sustainable supply chain regulations

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(Received 14 February 2024; revised 21 January 2025; accepted 30 July 2025)

Abstract

While political opposition to economic globalisation has increased, several governments have adopted stricter unilateral interventions in global supply chains in the name of sustainability, despite their potentially significant economic costs. We argue that these policy choices are partly driven by politicians' incentives to align with domestic public opinion. In particular, new information disclosure rules enable governments to implement market access restrictions compliant with binding trade liberalisation commitments while (a priori) obscuring their costs to voters. We assess the latter argument with original survey data and experiments with representative samples from the twelve major OECD importing economies (N=24,000). Indeed, citizens expect substantive benefits while discounting costs from these new regulations, resulting in majority support for rather stringent standards. We further observe that these relationships are muted in countries with high trade exposure. These findings suggest that governments may strategically implement unilateral policies with high-cost obfuscation to garner domestic voter support, driving regulatory proliferation in international economic relations.

Keywords: globalisation; protectionism; public opinion; supply chains; survey experiment

Sustainability arguments have become an increasingly important channel of anti-globalisation backlash (Osgood and Ro 2022; Nguyen 2022). Global supply chains feature prominently in these debates, and many industrialised countries have adopted novel regulations. These policy frameworks often rely on reporting duties mandating information disclosure on 'Environmental, Social and Governance (ESG)' production conditions. Political actors across Europe, in particular, have been leveraging these debates for their electoral platforms.

In Germany, for example, the 'Lieferkettengesetz' (Supply Chain Due Diligence Act), which was unilaterally introduced in 2020, continued to be a focal point in the latest national electoral contest (Weihrauch, Carodenuto, and Leipold 2023). In December 2024, both the Liberal and Conservative parties in the German Bundestag called for the abandonment of these regulations. Even German Chancellor Scholz has emphasised the need to reduce burdensome regulations. The outcome of this controversy in Germany is closely linked to political developments at the European Union level. The EU adopted the Corporate Due Diligence Directive in 2024 after two years of debates, but it remains possible that increasing political pressure to reduce bureaucracy, driven by losses in economic competitiveness – particularly in Germany – may prompt a reassessment in 2025 (Falck, Guo, and Pfaffl 2024). Another example is Switzerland, a country

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deeply embedded in global economic networks (Dreher 2006), where a similar policy was rejected in a closely contested referendum in 2020, and with the new EU directive in place, another vote on the issue is anticipated in the near future. These cases highlight the broader tension between increased government intervention to restrict globalisation and the associated economic and opportunity costs.

Given that inertia often inhibits policy action in many governance contexts (Mildenberger and Tingley 2019; Hübscher, Sattler, and Wagner 2021), why do various high-income democracies implement unilateral supply chain regulation policies in the first place that are likely to incur significant societal costs, such as those related to restricted trade flows, burgeoning bureaucracy, or expensive lawsuits? Furthermore, in the absence of enforceable international law, why do we observe supply chain regulation designs that extend beyond minimal voluntary measures?

Initially, the sustainability governance of global supply chains was brought to the political forefront by the UN Guiding Principles on Business and Human Rights (Ruggie 2018) and has since been adopted in other governance frameworks, such as those established by the Organization for Economic Cooperation and Development (OECD). While these frameworks have ignited debates in international fora and mobilised civil society, they are most accurately understood as 'best practice' standards, with compliance remaining decentralised and voluntary. As a result, governments are not legally compelled to adopt regulatory measures to enforce these guidelines (Rudolph, Kolcava, and Bernauer 2023).

We build on the political economy presumption that domestic political dynamics are the main drivers of government choices with regard to (in our case, sustainability-focused) market access restriction policies. While efforts by actors that could extract rents from new rules and regulations (e.g. non-governmental organisations, consulting and law firms) or by (import-competing) sectors aiming to restrict market entry likely play an important role, we argue that, in addition, the diffusion of supply chain regulations has been spurred by politicians' incentives to garner voter approval. In other words, governments adopt new supply chain regulations because they are able to extract political benefits from implementing these market access restrictions – presuming that in democratic states, governments' rhetoric and decisions are generally aligned with prevailing citizeon attitudes and preferences (Wlezien 1995; Burstein 2003; Hager and Hilbig 2020). To revisit the German example, a petition prior to the adoption of the Due Diligence Act in 2020 gathered over 200,000 signatures (see also Amengual and Bartley 2022).

Electoral benefits for politicians may arise as voters hold 'nimbyist' (not-in-my-backyard) preferences – an aversion to being exposed to negative externalities in their proximate surroundings (Feinerman, Finkelshtain, and Kan 2004). These preferences frequently emerge in discussions surrounding globalisation, particularly in opposition to free trade agreements (Bernauer 2003). For example, concerns about the potential importation of goods perceived to be of inferior quality (e.g. debates on genetically modified crops, agriculture in deforested areas, animal welfare) are often cited as arguments against such agreements (e.g. TTIP, current debates on the EU-Mercosur agreement) (Duina 2019).

We argue that governments may cater to such preferences by implementing market access restrictions in global supply chains that facilitate discrimination between traded products. Prior binding international commitments (e.g. WTO law, bilateral free trade agreements) constrain governments in the selection of regulatory tools. We view the codification of information disclosure requirements for supply chains as an emulation of the shift in trade politics from tariff-based barriers to more 'subtle' regulatory obstacles (Goldstein 2017).

In domestic politics, institutionalised information disclosure policies offer a second significant advantage, which we aim to examine empirically. They represent a policy approach that obfuscates the costs of adoption, such that the publicly perceived benefits of the policy outweigh the expected costs, thereby garnering mass public approval. This also implies that higher levels of policy stringency (and hence, higher market-access barriers) may be achievable, as cost perceptions may be relatively insensitive across different levels of policy stringency. We suggest this is an

explanatory piece in the puzzle over why we observe the adoption of more stringent policies than would be expected given the unilateral characteristics of supply chain regulations.

Empirically, we examine the effects of policy stringency on expected benefits and costs of supply chain regulation designs. We evaluate citizens' preference formation towards information disclosure rules using original survey data and two survey experiments. This survey was implemented in the twelve largest OECD importing economies (BE, CA, CH, DE, ES, FR, IT, JA, KO, NL, UK, US, N=24,003), accounting for almost 45 percent of goods imports globally according to the International Trade Centre¹. In our main experimental design, participants were randomly assigned to one of three informational disclosure policy scenarios. These vary across dimensions of regulatory stringency, resulting in a low-, medium-, and high-stringency scenario. The regulatory stringency scenarios included attributes of (i) policy scope – the size of the firms to which the policy would apply, (ii) the extent of mandatory corporate disclosure, and (iii) top-down government accountability mechanisms to sanction non-compliance. We then compare respondents' evaluations of the regulatory stringency scenarios across dimensions of expected policy benefits and expected policy costs.

We find that, on average, citizens view supply chain regulations as having substantial expected benefits, and at the same time, comparatively limited cost impacts. Second, we demonstrate that expected benefits are more likely to shape public support than expectations regarding cost implications. Third, we evaluate benefits and cost expectations across subgroups finding that perceived benefits are lower in countries that strongly depend on trade in their economic output, thus further corroborating our overarching argument.

Our contribution adds to research on the micro-foundations of why and how governments may adopt globalisation-limiting measures, presented as motivated by ethical or transparency concerns (Bechtel, Bernauer, and Meyer 2012). The paper also contributes to debates on the strategic use of policy designs to serve dual purposes: for governments to garner voter support by engaging in unilateral regulation that (prima facie) does not break enforceable liberal economic commitments, while also opting for policies with a highly favourable (perceived) cost-benefit balance (due to cost in-transparency) domestically. Accordingly, policy design choices may enable the formation of broad political support in favour of regulatory proliferation in international economic relations. It is, therefore, closely linked to current political economy research on antiglobalisation alliances (Osgood and Ro 2022; Osgood 2023).

Theoretical argument

We first introduce a basic framework of preference formation that links policy stringency to perceived policy benefits and costs. We then utilise this framework to identify the microfoundations of public opinion towards information disclosure policies.

We presume that citizens evaluate variation in policy proposals' stringency in accordance with expected benefits (increasing the likelihood of support) and expected costs (decreasing the likelihood of support). Typically, increased regulatory stringency leads to more positive evaluations of policy proposals among certain segments of the electorate. However, it also simultaneously heightens perceptions of expected costs, whereby perceptions of benefits and costs may not be uniform substitutes across the political spectrum.

A preference formation framework can thus be stylised in terms of P(R) = P(B(S), C(S)), where an individual's ultimate position P towards a regulatory policy R depends on the balance of expected benefits B and costs C. Specifically, P becomes more favourable as expected benefits B increase and less favourable as expected costs C increase. Both B and C, in turn, increase with the proposed policy's regulatory stringency S.

¹https://www.trademap.org/Country_SelProduct.aspx?nvpm = 1.

Coercive	High ←	Cost Visibility	sibility Low	
1	Market Integration Behavioral Effect	Market-Based	Non-Market-Based	
Coerciveness	Push	Tariffs, Border Taxes	Import Quotas and Bans	
Coerc	Pull	Provisions in Trade Agreements Granting Preferential Access to Sustainable-Certified Products	Information Disclosure Requirements	
Non- Coercive				

Figure 1. Taxonomy of policy instruments.

Policy preferences and information disclosure

In many areas of policy-making, however, available policy designs differ greatly by how they affect economic interactions, which, in turn, likely shape preference formation processes (Ejelöv et al. 2022). Broadly, diverse forms of policy instruments can be classified within a taxonomy, varying according to the desired behavioural effect (push/pull) and degree of market integration (market/ non-market) of regulatory frameworks (Figure 1). Push measures (top row) seek to change behavioural patterns by making particular options unattractive or unavailable (e.g. via quotas) and are comparatively more coercive (Cherry, Kallbekken, and Kroll 2012; Wicki, Fesenfeld, and Bernauer 2019). In contrast, pull measures (bottom row) aim to make certain behavioural options more attractive (e.g. via cost reductions) and are often less- or non-coercive. Market-based (leftcolumn) instruments use price mechanisms to de-incentivise certain behaviours (e.g. via tariffs), while non-market measures (right column) do not rely on price mechanisms, making the associated costs less visible (Stadelmann-Steffen and Dermont 2018).

Many of the recent restrictions enacted by governments in high-income countries concerning global supply chains have predominantly involved non-market pull measures (bottom-right cell) (Gardner et al. 2019). This is largely because direct and stringent measures, such as tariffs and import quotas, often conflict with WTO principles or other binding commitments to liberal economic policy. In terms of public support, however, such policy actions tend to be less coercive, as they do not require behavioural changes amongst individual citizens or consumers. Moreover, the associated costs are difficult to quantify in advance (low visibility) and are broadly dispersed across companies and consumers.

To derive predictions, we reconsider the preference formation framework within the context of low-cost visibility and regulatory coercion of non-market pull measures (see Figure 1). The costs of disclosure-based governance remain obfuscated to citizens. That is, even though companies are likely to pass on future compliance costs (e.g. increased costs of bureaucracy, contracts with more expensive suppliers) to consumers/citizens, these do not anticipate such a cost-trickle-down effect. Given non-coercion at the individual-level, citizens might, in fact, expect a continuing ability to 'opt out' of increased consumption expenses by purchasing lower-cost alternatives.

More formally, utilising the model P(R) = P(B(S), C(S)), we note that due to the cost obfuscation associated with non-market pull measures, the expected costs (C) should, on average, be relatively insensitive to increases in policy stringency (S). In other words, the marginal effect of S on C is likely to be muted. Given a baseline sensitivity of expected benefits (B) to stringency (S), an increase in policy stringency will, therefore, increase expected benefits (B) more than proportionally relative to expected costs (*C*). As a result, the overall balance of expected benefits and costs is likely to tilt in favour of expected benefits, since the costs are obscured (in the context of non-market pull measures) and therefore discounted in the preference formation process. This makes the expected benefits the dominant factor influencing individuals' policy support. Thus, in response to increasing stringency, an individual's position P towards regulatory proposal R should shift to become more favourable.

The following empirical expectations summarise these assumptions and arguments: First, reflecting the baseline preference formation model, increasing policy stringency is likely to have a positive effect both on citizens' expected policy benefits and costs (H1a). Second, as there is significant cost obfuscation associated with non-market pull measures, the effect of increased policy stringency on benefits expectations is going to be larger than on cost expectations (H1b). These individual-level differences in how expectations of benefits and costs are formed in response to increasing stringency should be reflected in the aggregate. Empirically, we expect that across a sample of individuals, the distribution of public support is likely to be skewed, with preferences leaning towards more stringent policy scenarios (H2a). If indeed compared to expected benefits, expected costs are relatively insensitive to upward shifts in policy stringency, then, when comparing across policy stringency levels, the resulting aggregate variation in policy support is likely to be more strongly associated with differences in expected policy benefits than with differences in expected policy costs (H2b).

Study design

To test the argument outlined above, we use original survey data collected in the twelve largest industrialised importing economies (BE, CA, CH, DE, ES, FR, IT, JA, KO, NL, UK, US, N = 2,000 each) between September 22 and November 3, 2021. The total number of completed questionnaires was 24,003. We surveyed participants sampled from Dynata's online panel based on a set of quotas: age (18+, six categories), gender (interlocked with age), and education (three categories). We sampled according to the distributions of these quota-relevant characteristics in the relevant national censuses. Samples drawn from commercial online panels have been increasingly adopted within academic literature, particularly for the implementation of surveyembedded experimental designs. Yet, while online panels typically provide high-quality data (Roulin 2015; Walter et al. 2019), we acknowledge caveats involved with data not drawn from a probability sample (Cornesse and Blom 2023). The SI summarises the translation procedure as well as precautions taken to ensure high data quality. The survey was translated from English into the non-anglophone target countries' official languages: German, French, Italian, Spanish, Flemish, Dutch, Japanese, and Korean. Our study design and questionnaire were reviewed and approved by the ETH Zurich's Ethics Committee (EK-2021-N67), and we pre-registered the survey instrument on Harvard Dataverse.

We study political dynamics in high-income importing economies because their political decisions can significantly shape global supply chains, leveraging their economic size to influence trade policy design or production standards in exporting economies (Malesky and Mosley 2018; Distelhorst and Locke 2018; Jinnah and Morin 2020; Blümer et al. 2020). In this study, we draw on data from two survey-embedded experiments – a conjoint choice and a vignette experiment. Respondents first participated in the choice experiment, and then completed the vignette experiment. Figure 2 summarises the ordering of key components within the survey design.

One part of the data we also use for this paper, the choice-experimental data, was recently analysed for another paper, using standard statistical tools for choice experiment analysis (Kolcava, Smith, and Bernauer 2023). In that study, we investigated what preferences individuals hold regarding global supply chain policies. We also assessed, based on contemporary political debates, how key components of policy design may influence public support. Accordingly, that



Figure 2. Survey design overview.

study had largely an exploratory focus. In the present paper, our goal is to gain deeper insights into the cost-benefit perceptions that may drive public support patterns and understand why, as a result, unilateral sustainability-framed policies for global supply chains might be attractive approaches for governments. Methodologically, we employ choice-experimental data alongside additional data collected from a vignette experiment.

Full-factorial choice experiment

In the choice experiment, respondents indicated preferences concerning two policy proposals, A and B, displayed next to each other (conjoint design). Each of the policy proposals consisted of three attributes, which operationalised a dimension of potential global supply chain regulation. The attribute levels for policies A and B were drawn at random from a full set of varying levels. For example, the attribute 'rigour' varied with regard to reporting requirements, ranging from confidential reports to mandatory public reports with detailed requirements (see online SI Table A3 for full attribute levels). In total, the experiment included a full factorial of 36 separate policy designs, which were randomly displayed to respondents. The respondents completed five rounds of the choice experiment.

The attributes relate to key policy dimensions identified in the literature. The first attribute – the scope attribute - stands for the share of the private sector that would be regulated differentiating firms by the size of their workforce. Thereby, the attribute builds on previous studies, which have theorised variation in the share of the private sector as 'breadth' (Malhotra, Monin, and Tomz 2019). Notably, the attribute is scaled according to the European Commission recommendation 2003/361, in which small- and medium-sized enterprises are defined up to around 250 employees.

The second attribute – the reporting rigour attribute – indicates how firms have to report on their supply chains. This attribute varies depending on whether the report is confidential or public and to what extent the government mandates specific contents of the report. Common arguments suggest that nuanced and public reporting increases reputational risks for companies (McDonnell, King, and Soule 2015).

The third attribute – the enforcement attribute – corresponds to variation in accountability provisions. The attribute outlines the consequences of non-compliance with disclosure requirements. Standard views maintain that accountability mechanisms play a key role in upholding compliance pressure (Kinderman 2016). Government capabilities vary on several common sanctioning dimensions - 'naming and shaming', fines, and legal action - to make the differences between the attribute levels intuitive for respondents.

Three items were used to record respondents' policy preferences. First, respondents were asked to indicate whether they would oppose or favour either policy design as a stand-alone proposal (i.e. yes or no to Proposal [A/B]). Respondents were then asked to indicate which of the two policy designs they would support if they had to vote today, 'forced choice' (either Proposal A or B).

Policy stringency treatment

Following the choice experiment, respondents were directed to the vignette experiment. The experimental design aimed to identify the effects of varying stringency in global supply chain policy

Table 1. Policy stringency scenarios

Stringency	Scope	Rigour	Enforcement
Low	The law applies to very large companies with 25,000 or more employees.	Companies write an annual confidential report to the government. There are no government rules on required content (companies can freely choose what they report).	If a company withholds or presents false informa tion, the government cannot take any action against the company.
Medium	The law applies to large and medium-sized companies with 250 or more employees.	Companies write an annual confidential report to the government. There are some general government rules on required content (companies can only partially choose what they report).	If a company withholds or presents false informa tion, the government can put the company on a public list of companies that provide unreliable in- formation and impose a moderate financial penalty.
High	The law applies to all companies with 25 or more employees.	Companies write an annual public (online) report. There are detailed government rules on required content (companies must report all required information).	If a company withholds or presents false informa tion, the government can put the company on a public list of companies that provide unreliable in- formation, impose a severe financial penalty, stop buying government supplies from that company, and press legal charges against the company management.

measures on citizens' perceptions of the policy's expected benefits and costs. Respondents were randomly assigned to one of three hypothetical global supply chain policy scenarios of – low-, medium-, and high-stringency. Respondents then evaluated the scenarios by indicating their agreement or disagreement with six statements (one statement displayed per survey page, random order) on 7-point scales.

The policy stringency scenarios were based on the same policy attributes and levels adopted in the choice experiment: scope, rigour, and enforcement. Of the full-factorial policy designs, three directly correspond to the stringency policy scenarios. The low stringency design includes instruments at the lowest level across the policy attributes (e.g. very large companies, confidential reporting, and no potential for government action). Similarly, the medium- and high-stringency scenarios adopt instruments at the accordant levels (see Table 1 for scenario details).

Expected policy benefits and costs

Expected policy benefits and costs were measured via respondents' evaluations of the policy scenarios based on six statements (see Table 2). First, for expected policy benefits, two of the statements identify differential aspects of perceived effectiveness – reducing information asymmetries for domestic consumers (Meemken et al. 2021) and genuine improvements of production processes. The third expected benefits item refers to economic benefits, safeguarding domestic jobs in the name of 'green' stewardship (Bechtel, Bernauer, and Meyer 2012). Further, while not an expected benefit in the narrow sense, citizens may derive a moral utility of normative appropriateness of particular policy action, which constitutes one statement in this design (Taufik, Bolderdijk, and Steg 2015).

Second, the statements elicit respondent perceptions of two types of expected costs: corporate opportunity and consumer costs. Corporate opportunity costs relate, for example, to more extensive compliance bureaucracy and disadvantages vis-à-vis producers based/operating in less regulated markets. This aspect is crucial if the policy is unilaterally adopted. Given that many products (for instance, coffee, electronics, fish, or gold) cannot be produced domestically at low cost in the

Dimension	Working Conditions	Environmental Conditions	
Better information	This new law would ensure companies provide accurate information to consumers about the working conditions under which these imported products were made abroad.	This new law would ensure companies provide accurate information to consumers about the environmental conditions under which these imported products were made abroad.	
Better production	This new law will create fair local working conditions in international supply chains.	This new law will protect the local environment in international supply chains.	
Protect jobs	This new law would make it harder to import products from abroad and help to protect jobs in [country] from foreign competition.		
Moral duty	This new law is our moral duty because it helps create fair working conditions abroad.	This new law is our moral duty because it helps preserve the environment abroad.	
Firm costs	This new law would create many new bureaucratic barriers that would deter companies from doing business in [country].		
Consumer costs	This new law would hurt consumers in [country] by making imported products more expensive.		

Table 2. Expected policy benefits and costs statements

countries of the data collection, consumer costs are captured by expectations of potential price increases resulting from these policies (possible, e.g. if supply chains have to be re-routed).

Analytical strategy

H1a and H1b: We use data from the vignette experiment only, whereby we estimate the effect of (experimentally manipulated) policy stringency on expected benefits and costs using ordinary least squares (OLS) regressions. In order to facilitate the interpretation of treatment effects, we calculate marginal means for the low-, medium-, and high-stringency scenarios for each benefit and cost expectation item (Williams 2012). We estimate a 95% confidence interval for each marginal mean. If both H1a and H1b hold, relative to the low-stringency scenario, the positive treatment effects for the medium- and high-stringency scenarios (evidenced in differences between the marginal means) should be larger for expected policy benefits than for expected policy costs.

H2a and H2b: We draw on the choice experiment to evaluate how support varies by level of policy stringency – H2a. We then combine data from both the choice and the vignette experiments to test for differences in policy support across expectations of costs and benefits – H2b.

In the choice experiment, respondents were asked for each of the designs, 'if you were presented this proposal today, would you be opposed or in favour of it?'. Utilising the subset of three policy scenarios that correspond directly to the policy stringency vignettes, we calculate the marginal means of support for each of these policy scenarios (Leeper, Hobolt, and Tilley 2020). Thus, if H2a holds, the marginal mean of support for the high-stringency policy should be higher than the marginal mean of support for the low-stringency policy – resulting in a skewed distribution of public support. We use the same outcome from the choice experiment to identify supporters and opponents of the three treatment policy scenarios. To that end, we determine which respondents randomly encountered any of the three stringency scenarios at least once throughout the choice experiment. Then, we identify those who indicated either support for or opposition to any of the stringency scenarios – resulting in six respondent subgroups (supporters: $N_{low} = 2,656$, $N_{mid} = 4,111$, $N_{high} = 3,833$, opponents: $N_{low} = 3,141$, $N_{mid} = 1,650$, $N_{high} = 1,917$).

Then, we explore how expectations of benefits and costs vary by the supporter and opponent subgroups and the policy stringency scenarios. We estimate three separate models, in which we interact 'supporter' and 'opponent' subgroup dummies with the low-, medium-, and high-stringency policy scenarios. Thereby, we control for quota-relevant characteristics – that is, age, education, and gender – by including these factors in the model. Again, to aid interpretation, we calculate marginal means at the relevant level of the stringency treatment (e.g. 'low') for both supporters and

opponents. Note that due to the structure of the choice experiment, support and opposition do not constitute empirical baselines to each other, as not all respondents randomly encountered all three policy packages corresponding to the policy stringency treatments. In this case, we cannot formally test for differences by subgroup using average marginal effects. Rather, if H2b holds, visually, the differences in marginal means for expected benefits between respondents who accepted/opposed the proposals throughout the choice experiment should be greater than the differences in expected policy costs.

Results

We first report respondents' evaluations (marginal means) of expected benefits (Panels A-C) and costs (Panels E-F) across the experimentally manipulated low-, medium-, and high-stringency policy scenarios (Figure 3 and online SI Table A4). Relative to the low-stringency scenario, for the medium- and high-stringency scenarios, we observe substantially higher expected benefits (Panels A-C). The difference in marginal means between the low- and high-stringency scenarios in terms of the expected improvement in consumer information amounts to 1.04 (Panel A). We find effects of similar magnitude on the 'better production' outcome measure (0.85, Panel B). Among expected benefits, we observe smaller differences between the low- and high-stringency scenarios on the 'protect jobs' item (0.46, Panel C).

On average, the expected costs increase with greater stringency as well, but the effects induced by stringency are comparatively smaller, though (Panels E-F). The difference between the marginal means of the low- and high-stringency scenarios in costs for firms only amounts to 0.36 (Panel E), while for consumer costs, the difference is 0.32 (Panel F). We further observe substantially large differences induced by variation in regulatory stringency for moral duty, whereby more stringent policy scenarios, on average, are more strongly perceived as moral duty (difference in marginal means between low- and high-stringency of 0.68, Panel D).

The evidence supports both H1a and H1b: increasing regulatory stringency of informational disclosure has a larger positive effect on citizens' expected policy benefits than on expectations concerning policy costs.

Linking expected benefits and costs and public support

Utilising the choice experiment, we depict policy support by regulatory stringency (see Figure 4). We estimate that 66 percent of respondents support the high-stringency policy design, compared to 72 percent for the medium- and 46 percent for the low-stringency designs. A substantial majority of respondents are in favour of either high- or medium-stringency policy designs, while a minority of respondents prefer low-stringency designs.

This pattern provides important validation for our theoretical arguments. Specifically, Figure 4 is compatible with the presumption that citizens are also aware of costs, evidenced by comparatively lower support for the high-stringency scenario than for the medium-stringency scenario. Nonetheless, the results point to a left-skewed (i.e. towards more stringency) distribution of preferred policy stringency levels, providing support for H2a.

Furthermore, Figure 5 presents marginal means of expected benefits and costs calculated for respondents who supported or opposed the policy proposals in the choice experiment (see also SI Tables A6, A7, and A8). Across all stringency levels, supporters of the policy scenario report higher perceptions of expected benefits and moral duty than those who oppose the scenario (Panels A-D). For the medium- and high-stringency policy scenarios, we find negligible differences between supporters' and opponents' perceptions of expected costs (Panels E-F). We do, however, observe substantive differences between supporters' and opponents' expected costs in response to the low-stringency scenario. In fact, opponents expect, on average, *lower* firm- and consumer-level costs than supporters do. We revisit this observation in the discussion section.

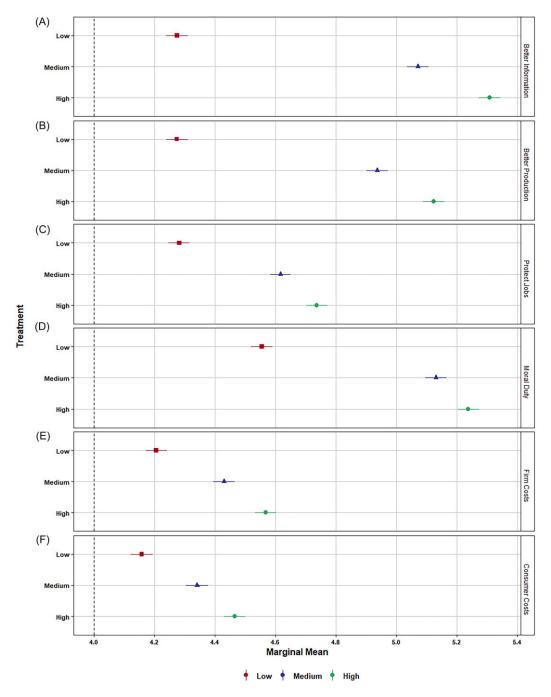


Figure 3. Marginal means of expected policy benefits and costs of the low-, medium-, and high-stringency policy scenario, with 95% confidence intervals (N = 24,003).

These findings suggest that support for supply chain policies is associated with expected benefits, a finding that is consistent across all regulatory stringency scenarios. Costs are not strongly associated with policy support across medium- and high-stringency scenarios.

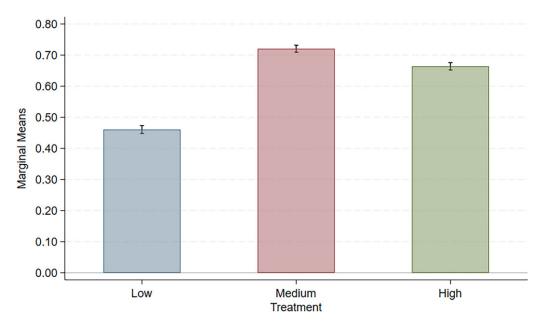


Figure 4. Marginal means of policy support in the choice experiment for the low-, medium-, and high-stringency policy scenario, with 95% confidence intervals.

Accordingly, we find evidence in support of H2b, where public support for informational disclosure policies appears to be driven largely by differences in expected policy benefits.

Variation by countries' trade exposure and further tests

As an exploration of country-level characteristics, we estimate marginal means of expected benefits and costs for country subgroups at tertiles of their trade/GDP ratio (based on World Bank data). We find systematic variation based on countries' dependency on trade (Figure 6 and SI Table A5). Although we do not derive strong inferences from these exploratory insights, the evidence suggests that respondents in countries with the highest trade/GDP ratios (i.e. Belgium, Germany, the Netherlands, Switzerland), on average, indicate lower levels of expected benefits and moral duty across all three stringency levels (Panels A-D). Further, countries with higher trade/GDP ratios are slightly more likely to expect increased costs at high stringency levels (Panels E-F). Yet, even amongst countries with higher trade/GDP ratios, the marginal means for expected benefits exceed those with regard to costs.

We conduct several tests on the main findings: We estimate a model controlling for country indicators to account for national circumstances (e.g. the existence of supply chain disclosure mandates), thereby also calculating clustered standard errors by country. The findings summarised in SI Figure A8 (see also SI Table A10) do not reveal differences from Figure 3. We also test whether the exposure to any of the three policy stringency packages throughout the choice experiment moderates the effect of the policy stringency vignette treatments on respondents' evaluations of expected policy benefits and costs. Again, we do not find differences (see SI Figure A9 and SI Tables A11, A12, and A13). Last, we estimated the effect of policy stringency on expected policy benefits and costs stratified by whether the corresponding items in the survey referred to either environmental or working conditions (see the SI for a description of this design feature). We find non-significant differences, which we report in SI Figure A7 and SI Table A9.

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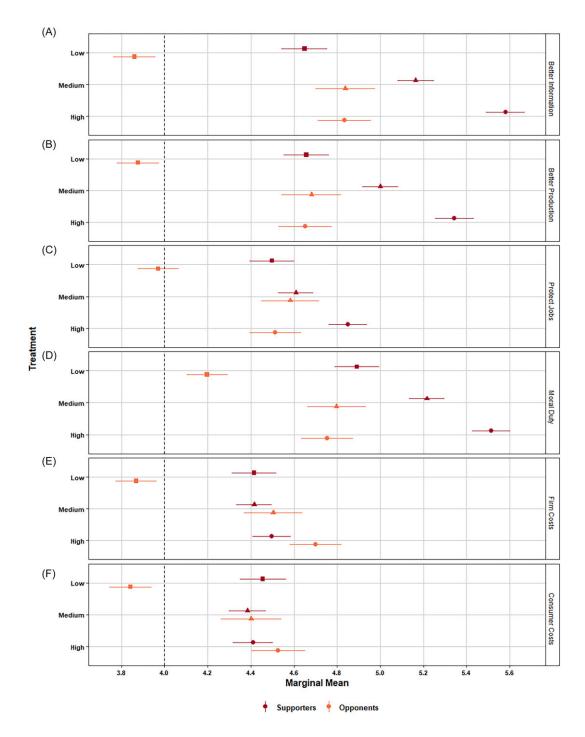


Figure 5. Marginal means of expected policy benefits and costs of the low-, medium-, and high-stringency policy scenarios separated for supporters and opponents of these scenarios in the choice experiment, with 95% confidence intervals.

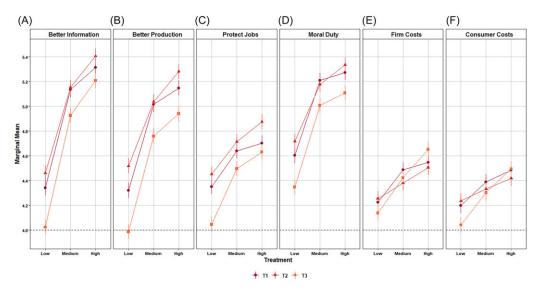


Figure 6. Marginal means of expected policy benefits and costs of the low-, medium-, and high-stringency policy scenarios conditioned by countries' trade/GDP ratio (light orange: high (BE, CH, DE, NL), red: medium (CA, ES, FR, KO), dark red: low (IT, JA, UK, US), with 95% confidence intervals.

Discussion

What role does public opinion play in shaping regulatory interventions aimed at limiting the widely perceived negative effects of economic globalisation? Our study contributes to the extant body of political economy literature on how (perceived) external risks affect high-income democratic societies (Walter 2021) and why citizens in these societies support costly measures to protect themselves in response, such as in reaction to economic decline (Rodrik 2021; Osgood and Ro 2022).

The paper sheds light on the micro-foundations of recent market access restrictions in global supply chains, and how governments and political entrepreneurs may leverage particular policy designs to cater to voters' concerns, thereby introducing protective measures against perceived risks arising from the global exchange of goods. Specifically, we focus on perceptions of informational disclosure policies in the sustainability domain – measures that allow governments to uphold prior commitments to liberal economic policies (e.g. WTO rules) while obfuscating potential costs to their constituents.

Based on two original survey-embedded experiments conducted across twelve high-income OECD member states, we find that, on average, citizens expect disproportionately greater benefits from new supply chain regulations than the associated costs across policy stringency levels. In alignment with this imbalance, we further demonstrate that expected benefits are more strongly linked to policy support than expected costs. Moreover, in countries with a higher embeddedness in global trade networks, citizens appear to perceive lower benefits. Our results help make sense of why countries are implementing more stringent, sustainability-framed supply chain regulation unilaterally, even in the absence of international institutions that would require or enforce the adoption of such measures. Nevertheless, economic conditions (e.g. national trade dependence) may represent boundary conditions within which citizens form their preferences in this policy area.

From a methodological perspective, our study suggests an adaptable research approach to leverage choice and vignette experiments in unison. Political science scholars have increasingly implemented choice experiments to study preferences towards policy instruments and policy design mixes (Beiser- McGrath and Bernauer 2019). While recent choice-experimental designs focusing on policy preferences have adopted framing vignettes prior to the choice experiment (Wicki, Hofer, and Kaufmann 2022), we invert the sequencing, where we leverage respondent

familiarity with policy instruments generated within the choice experiment to evaluate expected consequences at varying levels of policy stringency.

Using this approach, we find that supporters of low-stringency regulations exhibit higher cost expectations compared to those who oppose these policies. We interpret this result as potential evidence that economic knowledge could be a moderating factor – that is, individuals with a better understanding of economics may have a preference for liberal economic policies (Hainmueller and Hiscox 2006) and, therefore, associate higher costs with even modest regulatory interventions. Disentangling these differences could be an interesting topic for further inquiry.

As this is a rapidly evolving political agenda, future studies could investigate the effects on public preference formation when the costs of unilateral regulatory agendas are revealed (Sausgruber and Tyran 2005; LeBaron and Lister 2021). This also pertains to awareness of 'rhetoric-efficacy' gaps (Hafner-Burton and Ron 2007) in relation to regulatory effects on developing countries, where more tightly regulated business relationships might harm local economies (Garrett et al. 2021). We also consider this a highly interesting area for studying political entrepreneurship and alliance-building in mobilising anti-corporate sentiment (Menon and Osgood 2024).

Lastly, our study examines variation in regulatory stringency for one particular policy approach to governing global supply chains (disclosure rules). Given the expanding literature on policy instruments (Stadelmann-Steffen and Dermont 2018; Ejelöv et al. 2022), future research could quantify expected benefits and costs across a broader range of governance instruments currently on the political agenda. This would include alternatives from other sub-areas of the policy universe, such as import-tariff levels based on certification or similar market access restrictions. Given the seeming erosion of liberal economic achievements in recent years, it is possible that government regulations involving more coercive or price-based mechanisms could become more prevalent.

Data availability statement. Code and replication data are publicly available in the Harvard Dataverse (https://doi.org/10.7910/DVN/C840BK).

Acknowledgements. We are grateful to seminar audiences for valuable feedback on the research design, the survey instrument and early drafts of the paper. Stefano Amberg provided excellent research assistance. We thank Azusa Uji, Do Hyung Shin, Johann Schuur, Maria Murias Munoz, Paul Tromp, and Bianca Clément for helping us with the translations of the survey. We thank the editors at EJPR and three anonymous reviewers for their insightful comments.

Funding statement. This research was supported by the Swiss National Science Foundation (SNSF) within the framework of the SNSF National Research Programme 73 Sustainable Economy: resource-friendly, future-oriented, innovative (Grant No. 172363), and by SNSF Grant No. 182235 Environmental Burden-Shifting Through International Trade: Driving Forces and Policy Implications.

Competing interests. The authors declare that there are no competing interests.

Ethics. Our research plan was approved by the ETH Zurich's Ethics Committee (EK- 2021-N67), and we pre-registered it on Harvard Dataverse (https://doi.org/10.7910/DVN/KLOTB6).

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Cite this article: Kolcava D, Smith EK, and Bernauer T (2025). Voter perceptions and the politics of hidden costs in unilateral sustainable supply chain regulations. *European Journal of Political Research*, 1–16. https://doi.org/10.1017/S1475676525100212