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Public Demand for Extraterritorial Environmental and Social Public Goods Provision

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Abstract

Vastly increased transnational business activity in recent decades has been accompanied by controversy over how to cope with its social and environmental impacts. The most prominent policy response thus far consists of international guidelines. We investigate to what extent and why citizens in a high-income country are willing to restrain companies to improve environmental and social conditions in other countries. Exploiting a real-world referendum in Switzerland, we use choice and vignette experiments with a representative sample of voters ($N = 3,010$) to study public demand for such regulation. Our results show that citizens prefer strict and unilateral rules (with a substantial variation of preferences by general social and environmental concern) while correctly assessing their consequences. Moreover, exposure to international norms increases demand for regulation. These findings highlight that democratic accountability can be a mechanism that motivates states to contribute to collective goods even if not in their economic interest and that awareness of relevant international norms among citizens can enhance this mechanism.

Keywords: global supply chains; norms; public opinion; survey experiment; sustainable development; United Nations Guiding Principles on Business and Human Rights

The rapid expansion of global production networks, particularly via multinational enterprises (MNEs),[1] has contributed to economic growth and increases in aggregate welfare in many parts of the world (Ben-David and Loewy 1998; Dollar and Kraay 2004; Sala-i-Martin 2006). However, this has also caused major environmental (Copeland and Taylor 2004; Spilker, Koubi and Bernauer 2017) and social problems (Ruggie 2013), especially in poorer countries (Aklin 2016; Kolcava, Nguyen and Bernauer 2019), as today's rich countries import a large share of polluting goods from abroad (Lutter et al. 2016; Weinzettel et al. 2013).

This environmental and social footprint shifting creates a policy dilemma for rich societies. The international community has issued guidelines to remedy current practices (OECD 2018; United Nations 2011). For example, the United Nations Guiding Principles on Business and Human Rights (UNGPs) highlight the responsibility of MNEs to conduct business in a 'diligent' manner irrespective of location and urges states to oversee the extraterritorial supply chains of corporations domiciled in their jurisdiction. Yet, prescribing and enforcing diligent business conduct of domestic companies *abroad* likely has economic consequences in both absolute (by restricting business opportunities) and relative terms (by affecting the international level playing field). These costs create shirking and free-riding incentives for states and companies, and

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[1]MNEs are corporate groups that comprise 'entities established in more than one country [that] coordinate their operations' (OECD 2011, 17). Approximately 80 per cent of goods traded globally are produced within the ever-longer and more complex global supply chains of MNEs (Gardner et al. 2019; UNCTAD 2013).

observers have noted that the UNGPs are, therefore, unlikely to affect global production networks in the intended way (Augenstein, Dawson and Thielbörger 2018; Fasterling and Demuijnck 2013). In addition, the relevance of potential costs is exacerbated because this setting is distinct from well-researched global public goods problems, such as climate policy (Bechtel, Genovese and Scheve 2019), in one crucial aspect: the UNGPs are concerned with sustainability that predominantly accrues *locally and abroad*. In contrast, economic costs materialize predominantly *domestically*; hence, societies and their citizens do not profit directly from sustainable conduct.

Nonetheless, several countries of the Global North have taken first regulatory action in the spirit of the UNGPs or are discussing the matter.[2] We propose that the accountability of democratic governments to their citizenry is an important driver of these policy shifts. Specifically, suppose that citizens show other-regarding concerns (for sustainable production abroad) and support policies that implement the UNGPs, even at the cost of domestic welfare. In that case, state incentives could shift towards compliance with international guidelines. However, studying such accountability pressures on the micro-level is empirically very demanding. The subject matter has only recently forced its way on to agendas in the political mainstream (for example, the debate on European Union [EU] draft legislation). Hence, it remains unclear whether citizens hold well-defined policy preferences at all. However, ideally, studies should observe citizens' preference formation in a realistic context with an adequate information environment. Therefore, we put forth detailed survey-experimental evidence on whether and under which conditions citizens exhibit such other-regarding policy preferences in a case with high ecological validity, where citizens have already faced a real-world vote on the issue: Switzerland.[3]

The Swiss citizenry has an immediate influence on policy making via direct democratic institutions. Initiated by civil society actors, a direct democratic proposal (the Responsible Business Initiative [RBI]) became the subject of a national vote in November 2020 (for details, see Section A.1 in the Online Appendix). Swiss voters were asked to decide on a new regulatory policy along the two key dimensions of the international policy debate: policy stringency and reciprocity. The RBI proposed a constitutional amendment that would (1) impose strict due diligence standards on Swiss companies operating abroad, including liability (in Swiss courts) for social and environmental damage caused abroad, (2) irrespective of other states' regulatory action. Early public opinion polls (see, for example, Soukup 2017) indicated landslide support for the initiative. After fierce political debates and despite initial rejections of the initiative's demands, this induced the Swiss Parliament to deploy a rarely used political instrument: a less radical parliamentary counter-proposal to come into force in case the public refuses support for the constitutional amendment (Serdült 2014). This counter-proposal was less stringent (having no liability requirement) and conditional on what other European countries do but still addressed the issue[4] – the strategy being to undermine public support for the initiative by changing the status quo (Hofer, Marti and Bütler 2017). A majority of Swiss voters (50.7 per cent) still supported the stringent RBI proposal, relative to the more lenient counter-proposal. However, it did not become law, as it did not meet the second criterion for a successful initiative: popular support in a majority of cantons (that is, the 'states' of Switzerland). This result holds two lessons: first, public pressure induced political elites, against their prior policy positions, to support a counter-proposal that is now being implemented and goes beyond policy in several other high-income democracies; and, second, even though Swiss business organizations and most political elites fiercely contested the initiative's demands,[5] a majority of voters were in favour of even stricter regulation.

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[2]Most prominently, France, the UK, Norway, Germany and Switzerland (the case on which we focus) have enacted binding regulation (ECCJ 2022). Several other political entities are currently drafting new laws and regulations in this area (for example, the European Union) (for details, see Section A.1.5 in the Online Appendix).

[3]Choice experiments in surveys have been found to correspond closely to actual political behaviour in the Swiss context (Hainmueller, Hangartner and Yamamoto 2015).

[4]See: https://www.bj.admin.ch/bj/de/home/wirtschaft/gesetzgebung/verantwortungsvolle-unternehmen.html

[5]See for members of the political coalition against the intiative: https://leere-versprechen-nein.ch/koalition/

While this aggregate-level vote indicates that stringent supply-chain regulation can garner popular majorities, it raises several second-order questions. Hence, we draw on the referendum outcome as a starting point to investigate three interrelated questions: first, (why) does policy design affect citizens' preference formation? In response, we first examine citizens' preferences over the entire policy space of stringent versus shallow and unilateral versus conditional regulation. To this end, we extend a formal model by Vogel (2012) on the public demand component of the environmental Kuznets's curve (EKC) to argue that support for *extraterritorial* regulation should predominantly stem from ethical aspects of decision making. Combining pre-referendum conjoint experiments on average preferences with vignette experiments on the perception of policy consequences ($N = 3,010$), we show that citizens do indeed prefer strict over lenient policy while having benefits for foreign populations and adverse implications of such policy for the Swiss business environment in mind.[6] Secondly, which citizens are more likely to support strict regulation? If our value-based arguments are correct, general environmental and social concern should go hand in hand with problem awareness and ethical preferences, and thereby relate to preferences for regulation. Results from subgroup analyses indicate highly heterogeneous responses, confirming our argument: respondents with high expressions of concern favour strict policy; those with low expressions favour shallow policy. Thirdly, does international norm setting affect citizens' preference formation concerning supply-chain regulation? If support for strict regulation is based on ethical arguments, enhancing awareness and problem perception by an international-norms signal should have a positive effect. Indeed, we find that making respondents experimentally aware of the content of the UNGPs shifts their perceptions of the policy and its consequences, and induces stronger regulatory support on average (even though it decreases support among respondents with low levels of concern).

Our results contribute to recent research which indicates that the public is both a vigilant observer of foreign policy (see, for example, Kertzer and Zeitzoff 2017) and that mass public preferences matter for foreign policy making (Goldsmith and Horiuchi 2012), including international business conduct (see, for example, Dür and Mateo 2014).[7] Hence, a better understanding of citizens' preference formation in this area is important (Dür, Baccini and Elsig 2014; Kono 2008).

In particular, we speak to the current literature on the moral and economic bases of foreign policy preference formation (Bechtel, Genovese and Scheve 2019; Bechtel, Hainmueller and Margalit 2014; Kertzer et al. 2014; Rudolph, Kolcava and Bernauer 2022; Rudolph et al. 2020b; Tomz and Weeks 2020). First, due to its clear juxtaposition of domestic costs and foreign benefits, our research contributes evidence on how citizens weigh economic costs and non-economic gains, showing that citizens care for social and environmental conditions of production abroad. Secondly, recent arguments by Rho and Tomz (2017) suggest that citizens' ignorance of economic consequences is the main reason why they do not prefer policies that maximize their own or their society's income. In contrast, we find that when we experimentally trace citizens' perception of policy consequences, they attach reasonable consequences in both economic and non-economic terms to policies. Thirdly, our results corroborate prior literature in international relations suggesting that reciprocity may not be as important a determinant of public support for public goods provision as collective action theory suggests (Beiser-McGrath and

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[6]Strict regulation is meaningful for Swiss aggregate welfare, as MNEs make up about 35 to 42 per cent of Swiss corporate tax income and approximately 11 per cent of Swiss employment (Walser and Bischofberger 2013).

[7]Generally, a large body of research corroborates the notion that public opinion matters in shaping policy debates and particularly the scope and form of political mandates for government action, and hence policy makers' decisions (Burstein 2003; Page and Shapiro 1983; Wlezien 1995). Policy processes appear to be responsive to both short- and long-term shifts in public opinion (Bakaki, Böhmelt and Ward 2020; Schaffer, Oehl and Bernauer 2021). Exposure to public opinion polls can, for example, lead politicians to change both their priorities and positions in political speech (Hager and Hilbig 2020). For environmental policy, as summarized by Nguyen, Huber and Bernauer (2021), studies both in the United States and Europe indicate that political elites follow the preferences of their constituents (see, for example, Anderson, Böhmelt and Ward 2017; Vandeweerdt, Kerremans and Cohn 2016; Weaver 2008).

Bernauer 2017; Bernauer and Gampfer 2015; Tingley and Tomz 2014). Last but not least, the article contributes a public opinion perspective to the literature studying factors that facilitate the diffusion of norms (Zimmermann 2016; Zwingel 2012). Our findings suggest that domestic democratic accountability can drive states to contribute to public goods by adopting policy in response to initiatives put forth by the international community.

Theoretical Argument

We derive our arguments from the literature on the public demand component of the EKC. We extend these arguments in two ways: first, we propose that EKC arguments should also apply to social issues in production networks (for example, basic health and safety standards); and, secondly, we differentiate citizen demand for environmental and social public goods domestically versus abroad.

In the following, we align notation with the formal model by Vogel (2012) that we draw upon – we term environmental and social public goods Q and private goods X (that is, standard consumer goods). Vogel (2012) starts with the assumption that citizens derive positive utility from X and Q. However, producing these goods comes at a price – for Q, we can think of this price as opportunity costs of forgone additional consumption of X. Given that Q is a public good, the market does not provide it, and the question of whether citizens demand Q comes down to the question of whether citizens want their government to regulate the economy in a way that Q is provided while imposing costs on companies producing X.

In general, when can we expect citizens to demand Q? The consensus is that citizens are more likely to demand Q when the level of economic development is higher. At low levels of economic development, the production of Q (for example, pollution abatement) does not provide for sufficient utility due to a high marginal opportunity cost of forgone production of X (see, for example, Inglehart 1977; Martínez-Alier 1995; Roca 2003; Stern 2004). To be precise, individuals' utility gain from producing Q can stem from three components: (1) its direct consumption value (for example, citizens locally consuming clean air, recreational space or healthy fellow citizens); (2) its ethical value (for example, citizens deriving ethical value from their state upholding its obligations to protect the environment and ensure fair working conditions [Robinson 2017]); or (3) its indirect value when $X = X\left(\overset{+}{Q}\right)$ (that is, if output in consumer goods depends positively on Q[8]).

Consequently, if we were to assess public preferences concerning the domestic provision of Q at high levels of gross domestic product (GDP) (for example, environmental or health and safety standards for Swiss-based production), we would expect strong support for strict implementation. There, citizens obtain the consumption value, the ethical value and the indirect value of every unit of Q (Deacon 2009). In contrast, strict regulation in the light of the UNGPs for foreign contexts leads to public good provision *abroad*, and citizens can obtain no or only low consumption value from an additional unit of Q abroad.

Concretely, the damages that the UNGPs address predominantly concern standards in production that preserve the local environment and protect the local labour force (see Section A.1.4 in the Online Appendix), for example, child labour, the use of pesticides or chemicals in agriculture or mining, and air and water pollution by industry. Even if one assumed that some of these are global public goods (for example, reduced deforestation preserving global carbon sinks), the marginal value of contributing to these public goods in other countries, rather than in Switzerland, will certainly be low for Swiss citizens because the benefits will be shared globally, while costs are borne domestically.[9]

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[8]In our extraterritorial case, such indirect value could come about, for example, if care for the environment and labour standards is seen as a reputation-enhancing and, hence, profit-maximizing strategy (Schnietz and Epstein 2005) from the perspective of citizens.

[9]Strong corporate lobbying against a stringent implementation of the UNGPs in Switzerland demonstrated that businesses expected economic losses on average.

Thus, we should be doubtful about whether citizens in high-income countries support the (costly) provision of environmental and social standards in production *abroad*. This expectation of low demand for *Q abroad* mirrors the observation that demand for *Q* in developed countries is low where personal involvement is low, for example, concerning inter-temporal optimization problems, such as the deposition of radioactive waste. Consequently, demand for *Q abroad* has to stem from ethical preferences (Esty 2001; Lupia 2016) or from its indirect value (national reputation specifically [Bush and Zetterberg 2021; Schnietz and Epstein 2005]). As a result, as the first step of our argument, we investigate whether we observe aggregate support for strict policy designs along the lines of the UNGPs. This should only be the case if the average citizen derives high ethical or indirect value from the provision of environmental and social public goods *abroad*. However, for this expectation to hold, we also need to understand why citizens support specific policy configurations, in particular, whether citizens perceive the economic costs and extraterritorial benefits of policy configurations as argued earlier. Such validation of perceived consequences is essential, as foreign policy has a high potential for biased and non-rational public policy perceptions (Charillon 2017; Rho and Tomz 2017) due to its distance to the quotidian information environments of citizens (Presberger et al. 2022). Thus, in the second step of our argument, we investigate whether the mechanisms entailed in the proposed utility function of citizens actually hold. We explore whether strict (compared to shallow) regulation that provides *Q abroad* is perceived by citizens as: (1) entailing higher economic costs for domestic companies; (2) effective in generating environmental and social public goods abroad; (3) appropriate from an ethical point of view; and (4) generating indirect (reputational) benefits for Switzerland. If (1) and (2) hold, citizens perceive a trade-off between the economy and environmental/social quality abroad. If (3) and (4) hold, this would explain why Swiss citizens might support strict regulation, despite an environment/social quality–economy trade-off where benefits accrue *abroad*.

That being said, we expect substantial variation in the value that citizens derive from regulation of *Q abroad*, depending on their general concern for the environment and social issues (Rudolph, Kolcava and Bernauer 2022; Rudolph et al. 2020b). A critical pathway linking such concern to demand for *Q* is via problem perception. Vogel (2012, 121), for example, proposes that environmental concern serves as a filter for the perception of the actual state of environmental conditions: 'the existence of pollution has no effect on utility unless people are aware of it or its physical consequences'. Additionally, high concern also goes hand in hand with high levels of personal involvement and saliency of ethical considerations that go beyond what a standard cost–benefit calculus would predict (Vogel 2012). As a result, when citizens decide based on use-unrelated (for example, ethical or altruistic) motives (Bénabou and Tirole 2006; Fehr and Fischbacher 2003; Schwartz and Howard 1981), their demand for *Q* should therefore be higher for any given level of forgone consumption of *X*. Hence, we expect, in the third step of our argument:

Hypothesis 1 (H1):   The higher a citizen's general concern for the environment and social issues, the more likely they will take into account the ethical value of environmental quality and social conditions abroad, and the more likely they will derive sufficient utility from environmental and social quality *abroad* to support its regulatory provision at the expense of the business environment for domestic companies.

As previously discussed, public demand for *Q* is partly determined by awareness – arguably one of the flexible components of public demand for *Q* (for example, compared to deeply entrenched value predispositions). Thus, we suggest that awareness could be susceptible to shifts, which might lead to changes in how citizens evaluate policy options. Thereby, we base our argument on the logic of appropriateness in decision making, as outlined by March and Olsen (2011, 8). This logic has two parts: (1) citizens are aware of a norm to be followed; and (2) a norm is set

'by a dominant institution that provides clear prescriptions and adequate resources, that is, prescribes doable action in an unambiguous way'. Such a 'clear prescription' by a dominant actor (the United Nations [UN] in our case) fits well with the case of the UNGPs, as they lay out a three-pillared framework of 'protect, remedy and respect' that leaves little room for interpretation as to how best to implement the norm. This brings us to the fourth step of our argument: when citizens become aware of concrete duties and obligations that identify the 'right' course of action (see Huber, Anderson and Bernauer 2018; Tankard and Paluck 2016), this should increase support for norm-abiding policy:[10]

Hypothesis 2 (H2): Information on international norms for environmental and social business conduct (an international-norms signal) is likely to increase the ethical value of environmental and social quality abroad, increasing the utility from minimum standards for production *abroad* and making citizens more likely to support strict regulation at the expense of the business environment for domestic companies.

There is some disagreement in the existing literature on the conditions under which public opinion on foreign policy is responsive to an international-norms signal.[11] For example, Bearce and Cook (2018) note that responsiveness to priming is conditional on individual predispositions. Accordingly, while we expect that a norms signal increases support for regulation in our case, we examine how the norms signal affects sub-populations with high or low levels of general environmental and social concern. We further explore whether a norms signal affects citizens' perceptions of particular policy designs and their consequences. Figure 1 provides a summary of our argument and the four steps we derive for our empirical investigation of public demand for extraterritorial public goods provision.

Drivers of citizens' demand for public goods provision (Q)

Domestic policy (Q at home)	Extraterritorial policy (Q abroad)*
✓ Consumption value	✗ Consumption value
✓ Ethical value	✓ Ethical value
✓ Indirect value	? Indirect value

Our case: citizens' support for UNGPs
(Regulation of domestic MNEs to provide public goods abroad)

*
➤ Aggregate support over strict versus shallow policy? (Step 1)
➤ Plausible perceptions of policy costs/benefits (assumption)? (Step 2)
➤ Support conditional on
    ➤ environmental and social concern? (H1) (Step 3)
    ➤ norms awareness? (H2) (Step 4)

Figure 1. Summary of the theoretical argument.

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[10]It should be note that we cannot disentangle UN endorsement and norm setting as such; however, as March and Olsen (2011, 8) observe, both go hand in hand as endorsement by a dominant institution is part of constituting the norm.

[11]Chilton and Versteeg (2016) show that priming citizens with information on how torture violates international law does not decrease support for the application of torture. In contrast, Kreps and Wallace (2016) find the opposite effect on drone strikes in counterterrorism operations.

Study Design and Operationalization

The research design for our study relies on the combination of a conjoint experiment (Hainmueller, Hopkins and Yamamoto 2014) and two vignette experiments (Mutz 2011). These were embedded in a survey implemented in Switzerland from 6 to 28 November 2018 through Intervista's online panel.[12] Intervista maintains one of the most extensive online survey panels in Switzerland. The sample ($N = 3,010$) consisted of Swiss citizens eligible to vote (18 and older), and we ensured representativeness concerning known distributions in the Swiss population by using interlocked quotas on age and gender, as well as quotas on the education and regional provenance of survey participants.[13] Due to Switzerland's multilingualism, we fielded the survey in the three major languages: German, French and Italian. The survey instrument was approved by ETH Zurich's Ethics Review Commission (decision EK 2018-N-68).[14]

Citizens' Preferences Concerning Due Diligence Regulation

Step 1: Conjoint experiment

To assess citizens' preference formation concerning social and environmental regulation, we implemented a conjoint experiment. In that experiment, we confronted respondents with three choice tasks. We presented two policies, A and B, for regulating Swiss corporations with operations abroad in each task. Respondents had to choose their preferred policy and rate these policies individually (on a seven-point scale). We ensured that participants understood the policy dimensions and the corresponding expressions on the levels of the attributes by providing them with a detailed description of each attribute. We chose the attribute levels such that they mirrored the policy debate in the Swiss Parliament and the media surrounding the RBI (see Section A.1 in the Online Appendix). Policies A and B were displayed in a fully randomized way in the full set of levels. Figure A.3 in the Online Appendix illustrates such a choice task.

Policy proposals in the conjoint experiment differ on two dimensions: stringency and reciprocity (see Table 1; see also Section A.2.1 in the Online Appendix). The first attribute indicates how stringent the new policy would be, that is, the extent to which Switzerland would regulate its domestic companies *abroad*. Increasing the stringency level of a policy thereby increases *public goods provision abroad* by Swiss firms since it would force them to exercise due diligence concerning environmental and social standards in their supply chains. At the same time, though, increasing the stringency level increases *costs at home* since the domestic regulatory burden on firms grows. The second attribute ('reciprocity attribute') indicates whether Swiss policy would be implemented conditional on other countries' engagement or unilaterally (unconditional). Accordingly, increasing the reciprocity level of a policy decreases *public goods provision abroad* by Swiss firms due to a lower likelihood of implementation of that policy. Simultaneously, however, an increase in reciprocity decreases *costs at home* because it ensures that Swiss companies would not face a competitive disadvantage vis-à-vis companies based in other countries. Relating the conjoint experiment to our expectations, if citizens care about sustainable supply chains and extend their social and environmental concern beyond the Swiss border, we expect public support to increase as the extent of policy implementation increases, that is, with higher levels of the stringency and reciprocity attributes.

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[12]See: https://www.intervista.ch/about/?lang=en.

[13]Survey company pools can be comparable to pure random samples in terms of representativeness of the general population beyond quoted measures (Ansolabehere and Schaffner 2014; Wang et al. 2015). We can show that this is the case for distributions of unquoted values with our survey as well. As indicated by Figure A.7 in the Online Appendix, comparing a measure of environmental concern from this survey to a high-quality address-based random sample of the Swiss population (Rudolph et al. 2020a) yields a comparable distribution.

[14]Survey respondents were exposed to a second experimental setting, which explored preferences on private vs. public regulation of global supply chains (Kolcava, Rudolph and Bernauer 2021). The order of exposure to the survey experimental conditions was randomized.

Table 1. Conjoint attribute levels

Attributes	Levels
Stringency: 'What do Swiss MNEs have to do?'	• Participate in regular round tables organized by business associations and the State Secretariat for Economic Affairs • Publish a detailed report about their locations abroad, which describes the risks to people and the environment abroad, and the measures taken by the company to counter them • Publish a detailed report as above and be liable in Switzerland so that they can be brought to court in Switzerland for damage to people and the environment that they may cause abroad
Reciprocity: 'Is the introduction of Swiss due diligence regulation conditional on action by other economies?'	• Yes, conditional on action of leading economies worldwide • Yes, conditional on action of Western economies • No, Switzerland acts in any case

Even though environmental policy preferences are likely a rather insensitive subject compared to political attitudes in other areas (for example, attitudes related to the role of gender in politics [see Teele, Kalla and Rosenbluth 2018]), implementing a conjoint experiment hedges against potential social desirability bias (Druckman and Green 2021; Wallander 2009). The advantage of conjoint choice tasks is that respondents do not have to disclose the reasons underlying their choices (Hainmueller, Hopkins and Yamamoto 2014; Horiuchi, Markovich and Yamamoto 2020). In our case, respondents do not have to indicate whether they do or do not care about environmental and working conditions abroad. They only have to express their preferences regarding a multidimensional policy package as a whole – without having been given any information on whether that policy would benefit environmental and working conditions abroad. We analyse the data collected in the conjoint experiment based on average marginal component effects (AMCEs) (see Hainmueller, Hopkins and Yamamoto 2014) for both the binary choice and the rating outcome, and partly display marginal means based on the suggestions of Leeper, Hobolt and Tilley (2020).

Step 2: Vignette experiment on policy consequences

To investigate the reasons underlying respondents' choice, after the conjoint experiment, we displayed experimental vignettes that contained a specific policy proposal to respondents, asking for their perception of its consequences. We framed these vignettes as a hypothetical outcome of a national vote on the issue. They were constructed from a randomized draw from each of the two conjoint attributes with their three levels (3×3 design).

We then asked respondents to indicate their agreement or disagreement with a battery of statements. These statements were tailored to assess four dimensions of policy consequences:

- Cost perceptions: in absolute terms, that is, as 'costly for Swiss firms', and in relative terms, that is, as 'disadvantaging Swiss firms' concerning the level playing field these companies operate in.
- Policy effectiveness: the direct benefits of the policy, where we assess whether the policy is perceived to 'reduce damage by Swiss firms' and, in a reverse-coded item, to be 'window dressing'.
- Policy appropriateness: whether the policy is perceived to constitute 'good behaviour' and be an 'expert solution'.
- Perceived side benefits: whether the policy is perceived to 'strengthen Swiss reputation'.

Section A.2.2 in the Online Appendix contains English translations of all vignettes. We estimate a linear regression model for the vignette experiment, regressing agreement with the statements on the vignette attribute levels.

How Levels of General Environmental and Social Concern and International Norm Setting Relate to Policy Support

Step 3: Levels of general environmental and social concern

In H1, we argue that support for strict/shallow regulation is conditional on the individual level of general environmental and social concern. We recorded respondents' concern for the environment and living conditions in developing countries, drawing on an established measurement instrument. We measured environmental concern by implementing the scale pioneered by Diekmann and Preisendörfer (2003). We constructed a similar set of items following the item wording of Diekmann and Preisendörfer (2003), adapting it to concern for social conditions in developing countries (see Section A.2.3 in the Online Appendix). We then performed a principal component analysis on both the environmental and social concern survey items, and extracted the first component based on rotated factor loadings. Based on a scree plot, we extracted one factor only. We then split this first component into quintiles to identify study participants with very low to very high levels of concern. We expect respondents with high levels of concern to be relatively more likely to support strict policy. We estimate effects by subgroups based on AMCEs and marginal means.

Step 4: Vignette experiment on a norms signal

In H2, we propose that international guidelines constitute a norm, which increases public support for strict regulation providing *public goods abroad* and generating *economic costs at home*, if citizens become aware of it. Specifically, the vignette experiment we implemented to test H2 – which we refer to as the 'norms treatment' from here on – contained a brief text summarizing the core elements of the UNGPs along with their non-binding nature (for our translation from German, see Section A.2.2 in the Online Appendix). To be as realistic as possible, we based our description on the three principles of the UNGPs (United Nations 2011): state obligation to ensure compliance; company obligation to engage in 'diligent' business conduct; and access to remedy in case of violation. In the norms treatment, we also highlighted that the UN was the prescribing actor. In sum, we treat respondents with a 'dominant institution' that 'prescribes doable action' (March and Olsen 2011).

It should be noted that within the survey flow, the norms treatment was the first experimental component administered to study participants. This allows us to compare responses in the conjoint and vignette experiments outlined earlier by respondents receiving or not receiving the norms treatment beforehand. If H2 holds, we expect average respondent support to shift towards support for stricter policy (increased support for higher levels of the stringency and reciprocity attributes) after being exposed to the norms treatment. Additionally, we assess how the norms treatment interacts with baseline levels of environmental and social concern, and whether respondents' perceptions of policy proposals change due to the norms treatment.

Results

In this section, we first report the effects of policy design (based on a policy's stringency and reciprocity) on average policy support. Thus, we provide evidence on whether the average citizen prefers strict or shallow regulation of domestic corporations abroad. In a second step, we analyse whether citizens relate particular policy designs to differing policy consequences. In a third step, we investigate whether high (low) levels of environmental and social concern relate to preferences for strict (shallow) policy, as stated in H1. In a fourth step, we investigate whether the

norms signal shifts policy support in favour of strict policy implementation (as stated in H2) and why this might be case.

Step 1: Aggregate Citizen Policy Preferences

Figure 2 presents AMCEs for policy choice. AMCEs report the average causal effect on the probability of choosing a policy profile when changing the level of an attribute within a profile from the baseline to another level (while averaging over the other attribute).

Increasing stringency from *Round table* to *Public report* or *Liability* has positive and significant effects on respondents' choice. The difference in AMCEs is substantial, with 4.6 percentage points for the former and 5.2 percentage points for the latter. Effects are highly statistically significant, but it should be noted that the increase from *Public report* to *Liability* is not statistically significant. In addition, we can also indicate how attribute levels influence conjoint ratings (see Figure A.6 in the Online Appendix). Average ratings are around 4.35 for profiles including the *Round table* attribute level but increase by 0.1 and 0.15 rating points (4 per cent and 5 per cent, respectively) for the *Public report* and *Liability* requirement. This amounts to around a tenth of a standard deviation of the rating variable at baseline. In sum, with the *Liability* attribute level, average ratings tilt towards the 'favourable' end of the policy rating scale.

When implementing the policy is no longer conditional on compliance of all *Economies worldwide*, but conditional on compliance of *Western economies*, we only see a marginal increase in policy support by around 2 percentage points (insignificant). However, increasing the attribute level to *In any case*, that is, unconditional unilateral policy implementation, relates to substantially large and significant positive shifts in choice probabilities. Policy support increases by about 18 percentage points. Average ratings are around 4.25 for the *Economies worldwide* and *Western economies* attribute levels but increase by more than half a scale point (15 per cent) with the *In any case* attribute level. This amounts to around 15 per cent of a standard deviation of the rating variable for this attribute level at baseline and tilts ratings clearly towards the 'favourable' end of the policy rating scale.

Overall, these results provide a clear picture concerning average respondent preferences: citizens prefer highly stringent and unilateral regulation of Swiss MNEs operating abroad. In other words, we find that citizens show consistent support for policies that increase *public goods provision abroad* and, thus, reveal that average citizens' concern for the environment and social issues extends beyond Swiss borders.
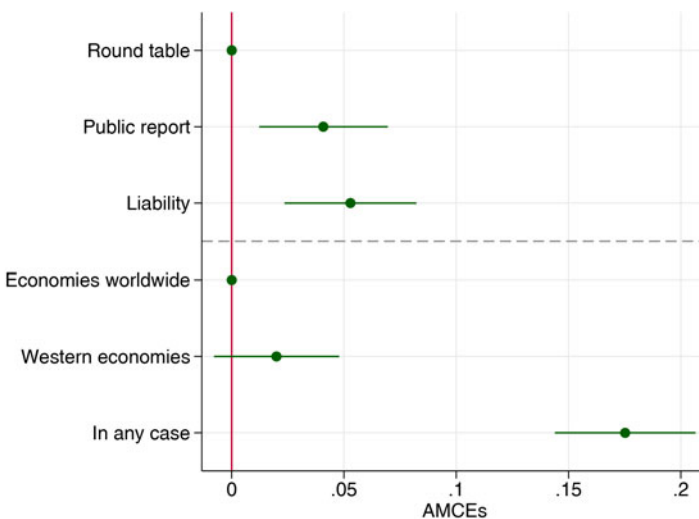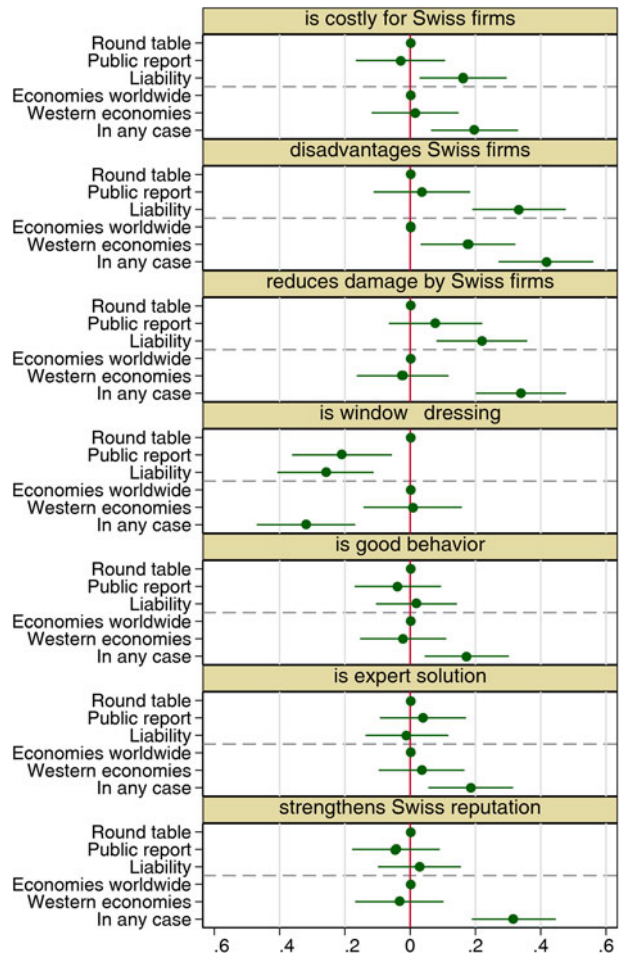

Figure 2. AMCEs of the conjoint choice experiment for the two attributes of stringency (upper panel, baseline attribute level: *Round table*) and reciprocity (lower panel, baseline attribute level: *Economies worldwide*). *Notes*: Respondents make repeated choices in a hypothetical referendum between two policy proposals. Estimation only draws on respondents not receiving the norms treatment ($N = 9,004$; clusters = 1,507). The solid line indicates 0. Error bars are 95 per cent confidence intervals based on respondent-level clustered standard errors.

Step 2: Perceived Policy Consequences

Next, we discuss how citizens perceive the consequences of strict versus shallow policy implementation. We thereby investigate whether citizens actually have a trade-off between economy and environment/social quality abroad in mind, and why they hold the preferences for strict policy as observed in the previous section.

Figure 3 depicts the average effects of policy characteristics being present in a vignette on citizens' perception of policy costs, effectiveness, appropriateness and side benefits – panels are in that order from top to bottom in Figure 3. For the stringency attribute, effects have to be interpreted in comparison with an attribute level that requires *Round tables*. The *Public report* level is not perceived to affect companies' absolute or relative costs. However, it is seen as potentially effective: respondents perceive it as a strategy that is slightly (not significantly so) damage reducing and less 'window dressing' compared to round tables. Lastly, respondents do not relate a public reporting requirement to good corporate behaviour, an expert solution or an improved reputation for Switzerland. In contrast, the *Liability* attribute level is clearly perceived not only as increasing costs in absolute and relative terms, but also as effective (reducing damage and being less 'window dressing'). Again, we see no changes for 'good behaviour', 'expert solution' or 'reputation enhancement'. In sum, then, we can conclude that a strict policy that requires *Liability* for corporate misconduct in Swiss courts is indeed perceived not only as costly for Swiss companies, but also as more effective concerning public goods provision.

Figure 3. Perceived consequences of regulatory frameworks, which vary by the two policy attributes of stringency (upper panels of subplots, baseline attribute level: *Round table*) and reciprocity (lower panel of subplots, baseline attribute level: *Economies worldwide*).

Notes: Respondents rate perceived consequences of a hypothetical policy. Estimation only draws on respondents not receiving the norms treatment ($N = 1,410–1,456$). Respondents are presented with one experimental vignette each. Coefficients depict the effects of attribute level change on respondents' evaluation of the statement in the subplot header (five-point rating scale whether such a policy would [not] have the consequence of the subplot header). The solid line indicates 0. Error bars are 95 per cent confidence intervals based on robust standard errors.

With respect to the reciprocity attribute, when the policy is enacted conditional on actions by Western economies instead of economies worldwide, this is seen as more costly in relative terms – without any significant changes in perceptions of effectiveness or side benefits. However, when the policy is enacted unilaterally, this is perceived not only as more costly in absolute and relative terms, but also as more effective, less window dressing, good behaviour, an expert solution and reputation enhancing. Thus, we can again relate the substantially higher choice probabilities for the *In any case* attribute level in the conjoint experiment to an informed choice of respondents.

Taken together, we find strong support for the argument that citizens correctly perceive a trade-off between the domestic economy and environmental/social quality abroad. In other words, respondents hold no misconceptions regarding policy consequences and have implications for the Swiss business model in mind when they choose a strict policy.

As their reasoning (particularly for the reciprocity argument) also shows differences in perceived policy appropriateness and side benefits, this provides a plausible explanation for the choice behaviour in the conjoint experiment: on average, citizens seem to value the combination of high stringency/unilateral policy primarily due to arguments tied to the provision of public goods abroad (policy less 'window dressing' and 'reducing damage by Swiss firms') given not only its non-material consequences ('good behaviour' and 'expert solution'), but also, potentially, reputational co-benefits, and despite higher absolute and relative costs.

Step 3: Subgroup Effects by Levels of General Environmental and Social Concern

Now, we turn to H1 and assess whether policy support differs by respondent levels of general environmental and social concern. The effects displayed in Figure 4 indicate substantial
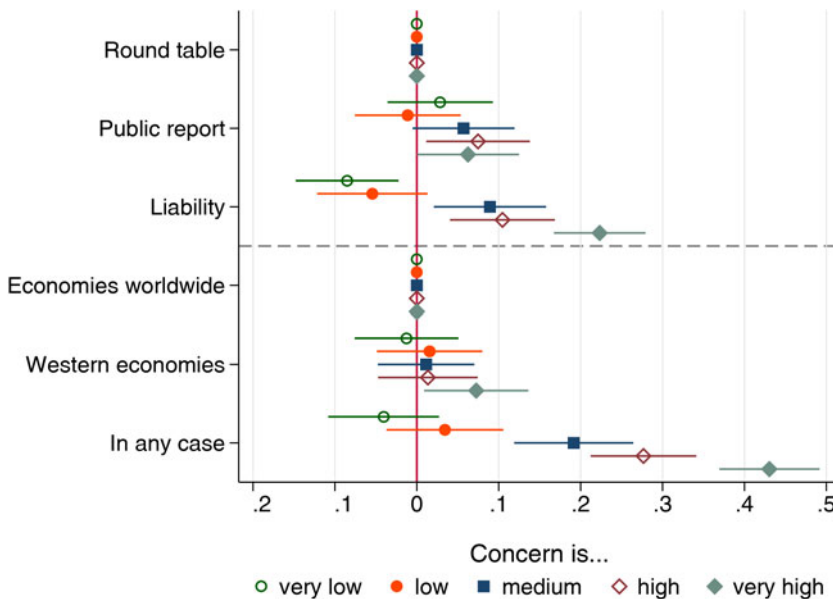
Figure 4. AMCEs of the conjoint choice experiment for the two attributes of stringency (upper panel, baseline attribute level: *Round table*) and reciprocity (lower panel, baseline attribute level: *Economies worldwide*) by subgroups of environmental and social concern.
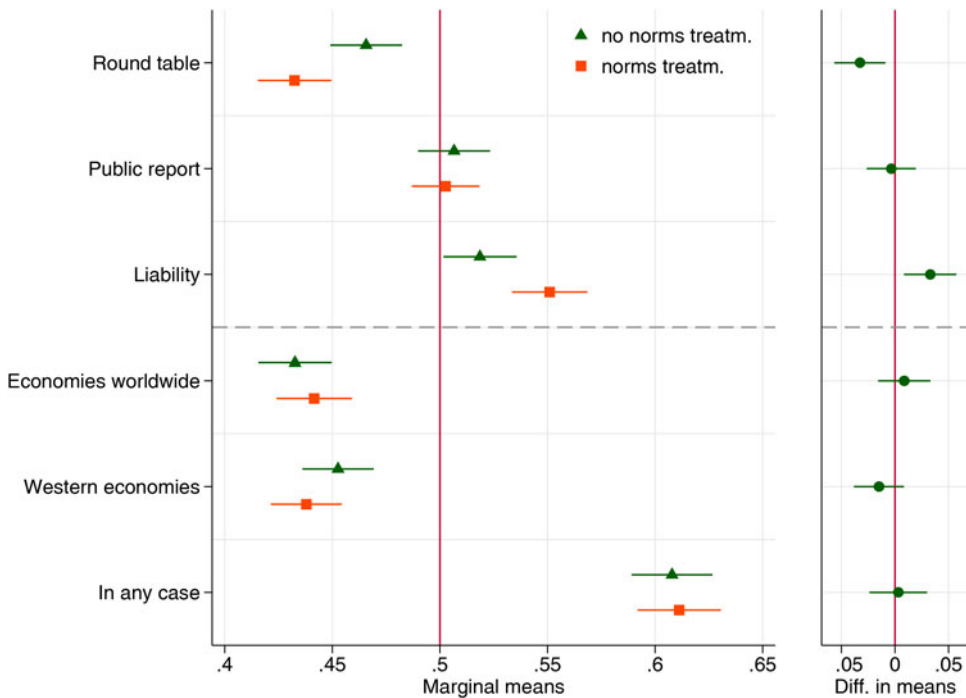*Notes*: Respondents make repeated choices in a hypothetical referendum between two policy proposals. Coefficients are based on split-sample regressions for quintiles of the first component of ten indicators of environmental (Diekmann and Preisendörfer 2003) and six of social concern (see Section A.2.3 in the Online Appendix). Estimation only draws on respondents not receiving the norms treatment (*N* = 1,712–1,854; clusters = 286–309). The solid line indicates 0.5. Error bars are 95 per cent confidence intervals based on respondent-level clustered standard errors.

differences in responses by quintiles of concern. The three groups holding the highest levels of environmental and social concern prefer a policy with high levels of stringency, unilaterally implemented. Policy profiles that contain *Liability* see choice probabilities up to 20 percentage points higher and support for unilateral policy up to 40 percentage points higher (relative to baseline). However, the two groups holding the lowest degree of environmental and social concern have a reversed preference order and react with minor changes (for public reporting) and an even lower probability of choosing policy that contains *Liability* (relative to *Round tables*).

Relating these findings to H1, we can meaningfully differentiate respondents with high from those with low levels of environmental and social concern, whereby the former prefer strict, and the latter shallow environmental and social regulation of corporate supply chains. Therefore, higher levels of awareness of the underlying problem and/or a different value base likely lead to diverging preferences in the population. While, of course, we cannot rule out that environmental and social concern are correlated with other factors that explain this pattern, one plausible explanation is that subsets of respondents apply different logics of decision making: while those with high levels of concern (and, thus, also average Swiss citizens) follow a logic of appropriateness when deciding on the matter, those with low levels follow a logic of consequences instead, prioritizing adverse effects on the Swiss business model.

Step 4: Effects of a Norms Signal

Lastly, we turn to the question of how a norms signal affects policy preferences. Figure 5 depicts marginal means for the conjoint choice outcome with and without the norms signal (left panel)

Figure 5. Marginal means (left panel) and difference in marginal means (right panel) of the conjoint choice experiment for the two attributes of stringency (upper panel, baseline attribute level: *Round table*) and reciprocity (lower panel, baseline attribute level: *Economies worldwide*) by respondents receiving the norms treatment (squares) or not (triangles).
Notes: Respondents make repeated choices in a hypothetical referendum between two policy proposals. Coefficients based on split-sample regressions for respondents receiving the norms treatment ($N = 8,980$; clusters = 1,503) or not ($N = 9,004$; clusters = 1,507). Solid lines indicate 0.5. Shown are 95 per cent confidence intervals based on respondent-level clustered standard errors.

and the difference between treatment conditions (right panel). Receiving the norms treatment clearly affects citizens' reasoning: the marginal means of the stringency attribute shift substantially with the norms treatment. While average support for *Public report* is only marginally affected, the marginal mean for *Round tables* decreases by 3.4 percentage points, while the marginal mean for *Liability* increases by 3.6 percentage points. In terms of AMCEs, the coefficient for the *Liability* attribute level more than doubles compared to the control group estimate from 5 to 12 percentage points. Respondents' evaluation of the reciprocity attribute is barely altered by the norms vignette.

In brief, this implies that respondents' preferences for high stringency policy increases from already high baselines when exposed to a norms signal. Hence, we find evidence in favour of H2: international-norms signals can have a positive effect on public support for stringent regulation and promote public demand for policy in line with a logic of appropriateness.

Why is this the case? As reported in Table A.1 in the Online Appendix, on average, the norms treatment induces citizens to see policies rather as good behaviour and less disadvantageous for Switzerland. As indicated in Figure A.4 in the Online Appendix, with respect to the specific policy vignettes, the norms treatment induces respondents to perceive lower relative (but not absolute) costs for Swiss companies when evaluating the *Liability* attribute level. Also, they perceive *Liability* as more of an 'expert solution' and more as 'good behaviour'. Moreover, they perceive unilateral policy as more 'damage reducing', less 'window dressing', more of an 'expert solution', a revelation of 'good behaviour' and reputation enhancing. All in all, the norms treatment reduces the perception of strict policy as costly and increases perceived policy effectiveness. Hence, the perceived trade-off between economy and environment/social quality is lessened. At the same time, citizens seem to attach higher utility to strict policy as the perceived policy appropriateness (and hence its ethical value) and the perception of positive side benefits increase. Taken together, the shifts in average perceptions of policy consequences through the norms treatment link plausibly to the observed shifts in preferences in the conjoint choice task.

It should be noted, however, that shifts in policy preferences vary between subsets of the population. As shown in Figure A.5 in the Online Appendix, the norms signal increases the wedge between the policy choice of those with low and high levels of social and environmental concern. While we cannot causally infer that environmental and social concern leads to this differential take-up of the norms signal (for example, low concern might correlate with anti-globalization and/or isolationist views), it provides a case in point that even a strong normative signal (set by a very important institution, and providing clear guidance for appropriate action) does not necessarily activate reasoning along the lines of a logic of appropriateness (March and Olsen 2011) among all citizens.

Taken together, we observe that the norms treatment induces average citizens to select stricter policy. This average response masks heterogeneous reactions by respondents with low and high general environmental and social concern. On average, however, it likely stems from changes in the perception of the policy, which is seen as less costly in relative terms and more effective and adequate under the norms treatment on average.

Discussion and Conclusion

Current international efforts to protect the environment and ensure fair working conditions throughout transnational supply chains rarely extend beyond business conduct guidelines and do not include robust enforcement mechanisms (Westerwinter 2021). Departing from this status quo and moving towards stricter transnational supply-chain management will require robust commitments, particularly from high-income democratic countries that are currently 'outsourcing' environmental and social impacts via international supply chains and trade. However, if democratic governments in high-income countries fear electoral backlash from unilateral policy action, they will be reluctant to step up efforts in line with international guidelines, such as the UNGPs.

We have put forth several arguments on the potential drivers of mass public opinion concerning ambitious policy interventions aimed at reducing negative environmental and social impacts in supply chains. Our main goals were fourfold: first, we aimed to gauge whether public demand for local public goods provision extends beyond national borders; secondly, we sought to assess to what extent ideational and material factors drive opinion formation on such measures; thirdly, we investigated to what extent preferences among citizens are heterogeneous; and, fourthly, we examined whether and how the setting and communication of an international norm (the UNGPs in our case) affect policy preferences in this area.

Based on conjoint and vignette survey experiments, we find surprisingly high levels of average support for a strict implementation of the UNGPs – surprising because the UNGPs aim at providing *public goods abroad* while causing *economic costs at home*, which citizens also perceive in this way. We also find that policy preferences differ strongly by respondents' levels of general environmental and social concern: high levels of concern are associated with stronger preferences for unilaterally implemented strict regulation; while low levels are associated with the opposite. Moreover, we find that informing citizens that sincerely 'cleaning up' supply chains constitutes an international norm prescribed by the UN increased support for stringent and unilateral regulation on average but decreased it for citizens opposing such regulation beforehand. Lastly, we show that norm communication can change respondents' average evaluation of policies that implement the norm – in our case, such that citizens perceive less of a trade-off between economic costs and the environmental and social benefits of compliance with the UNGPs.

Our findings lead us to expect that the moral dimensions of foreign policy play an important role in citizens' preference formation in this area and that the communication of what constitutes appropriate behaviour can facilitate norm-based preference formation. We note, however, that the effects of norm communication on public opinion can depend on the prior distribution of attitudes in the population and even contribute to a polarization of preferences.

Our research contributes to an ongoing debate on how citizens form foreign policy preferences. The embedded liberalism argument, prominently used in the trade literature, revolves around the economic consequences of policy choices (Burgoon 2009; Kaltenthaler, Gelleny and Ceccoli 2004; Rodrik 2018). Non-economic factors (for example, social concerns and moral arguments) are said to be subordinate to economic considerations or are argued to constitute economic protectionism in disguise (Dür, Eckhardt and Poletti 2019). We tie in with recent research on the formation of foreign policy preferences, which reveals that citizen attitudes are more nuanced. For example, Kertzer et al. (2014), Kertzer and Zeitzoff (2017) and Kertzer and Tingley (2018) show that citizens base foreign policy preferences on values, beliefs and social cues. Our findings highlight that material preferences and economic calculi play a role in citizens' foreign policy preference formation (see also Flores-Macías and Kreps 2017; Heinrich and Kobayashi 2020; Scheve and Slaughter 2001), though only for subsets of the population (for related research on climate policy or international bailouts, see Bechtel, Genovese and Scheve 2019; Bechtel, Hainmueller and Margalit 2014; Kleider and Stoeckel 2019), and that preference formation based on normative grounds is predominant – at least in our case of sustainable supply chains.

The research presented here thereby also speaks to recent theoretical arguments on global public goods governance. Specifically, scholars increasingly challenge the standard view of environmental (especially climate) governance as a 'traditional' collective action problem (Aklin and Mildenberger 2020; Colgan, Green and Hale 2021; Hale 2020). Instead of 'invoking free-riding', these novel arguments explain state behaviour in international public goods politics via subnational shifts in domestic political alignments due to distributional conflicts. Such domestic politics, then, may result in both unilateral action (which one would not expect if states free-ride internationally) and strong disincentives to act in the first place (which current institutions might not be capable of resolving) (Aklin and Mildenberger 2020). Our article contributes empirical evidence on the micro-level to these arguments by focusing on public demand as a driver of unilateral contributions to (international) public goods provision. Similarly, we offer a micro-level

perspective on established arguments explaining how domestic politics (and their regulatory outputs) may affect transnational economic activity (see, for example, Vogel 2008; Vogel 2009).

While our experimental approach ensures that our results have high internal validity, the realistic empirical setting (in which our survey respondents were, in fact, going to vote on the issue in a direct democratic proposal) implicates that our results have high external validity. Notably, the arguments in the real-world political campaigns and debates on the issue focused on creating safe/fair working conditions and preserving the local environment abroad. This supports our argument that respondents likely had local, not global, public goods, provided abroad, in mind when answering our survey.[15] To illustrate this, companies with 'upstream' operations in agriculture and mining (for example, Glencore, Nestlé and Syngenta) received particularly negative publicity during the campaign for local child rights violations and local environmental pollution abroad (compare excerpts from the official voting leaflet and the website of the Swiss supply-chain regulation advocacy coalition in Section A.1.4 in the Online Appendix). Assessing to what extent our results generalize to other countries and policy areas will require additional research, and our study hopefully provides a useful template for this. However, it is noteworthy that Swiss citizens hold very similar attitudes towards regulatory policy concerning business activities as citizens in other high-income countries. In Section A.4 in the Online Appendix, we show these similarities based on data from the 2016 International Social Survey Programme (ISSP 2018). This suggests that using a similar or even identical study design in other high-income democracies is likely to produce similar findings.

Besides implementing similar studies in other countries, it would also be useful to address the issue of competing norms. We have shown that a norms signal can not only shift aggregate public opinion, but also increase heterogeneity in the preferences of sub-populations. The intensifying debate over whether unilateral due diligence policy of the type examined in our article is a new form of colonialism, whereby Western regulatory standards are forced upon other nations (see, for example, Schnell and Dümmler 2019), lends itself to further research assessing the effect of competing norms (such as non-interventionism) and the effect of contestation on the robustness of a normative framework like the UNGPs (Deitelhoff and Zimmermann 2018; Delcour and Tulmets 2019; Simmons and Jo 2019).

Last but not least, our research also has policy implications. Many companies with large market shares and long supply chains are headquartered in high-income countries. Given the intense public debate on the matter in most Western societies – for example, the EU committed to the implementation of comprehensive due diligence regulation in 2022 (ECCJ 2022; Smit et al. 2020) – our research probes into the political feasibility space at policy makers' disposal as citizens value the upholding of environmental and social standards in the worldwide economy. Moreover, our research shows that, when communicated, existing international guidelines can influence public policy preferences and that the domestic realm might be an important channel through which such norms could translate into effective rule making on the domestic level.

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[15]This is important for our assumption that citizens perceive a low direct consumption benefit from regulating MNE behaviour abroad and our conclusion that citizens base preference formation primarily on normative grounds. It should be noted that we cannot rule out the existence of a perceived 'objective' public goods co-benefit to Swiss citizens (and find some indication in terms of increased reputation attached to stricter policy). Future research could further explore the drivers of support for sustainable supply-chain management, and we suggest that the mechanism tests we have already provided could serve as a useful template in this regard.

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Ethical Standards. Respondents provided their informed consent. The study design was approved by ETH Zurich's Ethics Review Commission (decision EK-2018-N-68).

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