

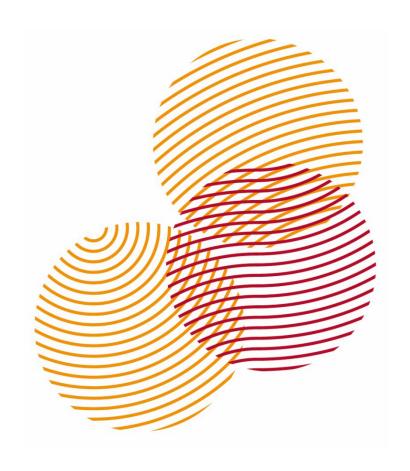


# **IDOS DISCUSSION PAPER**

# **Social Acceptance of Social Transfer Policies**

# The Role of Climate Vulnerabilities and **Policy Design**

Stefanie Roost



# Social acceptance of social transfer policies

The role of climate vulnerabilities and policy design

Stefanie Roost

**Stefanie Cipriano Roost** is a researcher in the department "Transformation of Economic and Social Systems" at the German Institute of Development and Sustainability (IDOS) in Bonn.

Email: stefanie.roost@idos-research.de

The German Institute of Development and Sustainability (IDOS) is institutionally financed by the Federal Ministry for Economic Cooperation and Development (BMZ), based on a resolution of the German Bundestag, and the state of North Rhine-Westphalia (NRW) as a member of the Johannes-Rau-Forschungsgemeinschaft (JRF).

#### Suggested citation:

Roost, S. (2025). Social acceptance of social transfer policies: the role of climate vulnerabilities and policy design (IDOS Discussion Paper 36/2025). IDOS. https://doi.org/10.23661/idp36.2025

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IDOS Discussion Paper / German Institute of Development and Sustainability (IDOS) gGmbH ISSN 2751-4439 (Print)

ISSN 2751-4447 (Online)

ISBN 978-3-96021-283-6 (Print)

DOI: https://doi.org/10.23661/idp36.2025

DOI: https://doi.org/10.23001/ldp30.2023

@ German Institute of Development and Sustainability (IDOS) gGmbH Tulpenfeld 6, 53113 Bonn

Email: publications@idos-research.de

https://www.idos-research.de

Printed on eco-friendly, certified paper



#### **Abstract**

This paper examines how citizens in a large middle-income country evaluate the design of cash transfer programmes, and whether these preferences shift when vulnerability is framed as climate-induced. Using a pre-registered online survey in Brazil, we combined a multi-attribute conjoint experiment with a climate information treatment. Respondents evaluated programmes varying in benefit level, eligibility, conditionalities, implementing actor, payment schedule and financing.

Support depends strongly on perceived fairness and financing choices. Expanding eligibility from extreme poverty to poverty substantially increases approval, while further expansion yields no additional gains. Conditionalities (in particular, empowering ones, such as financial training or health check-ups) raise support, whereas work requirements have heterogeneous effects across different social groups. Financing through personal income tax or cuts to existing programmes enjoys lower levels of approval, while corporate taxation and subsidy reductions are more acceptable. Climate information modestly increases solidaristic attitudes but does not eliminate underlying ideological divides. This study highlights how citizens update not only the extent but also the preferred form of redistribution under climate stress.

# **Acknowledgements**

The research design has been approved by the IDOS Ethics Committee with the following protocol number: 2025-B-003. This Discussion Paper is part of the IDOS project "Fostering resilience through Health and Social Protection policies in times of multiple crises" funded by the Federal Ministry for Economic Cooperation and Development (BMZ). I thank Francesco Burchi, Hanna Fuhrmann-Riebel, Markus Loewe, Daniele Malerba, Charlotte Reich and Semuhi Sinanoglu for their useful advice and feedback.

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Abstract

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# **Abbreviations**

AMCE average marginal component effect

IADB Inter-American Development Bank

OLS ordinary least squares

#### 1 Introduction

Social protection programmes worldwide address inequalities and improve livelihoods; their precise design varies widely, even across countries with similar levels of economic development (Banerjee et al., 2024; Esping-Andersen, 1990). Even though social protection systems have been expanded substantially over the past decade and currently, for the first time, more than half of the population is a direct beneficiary, governments and international organisations face the pressing challenge of understanding how to ensure social support for further expansion to reach the more than 2 billion people that still remain entirely uncovered (International Labour Office, 2024; World Bank, 2025). Despite this urge, little is known about voters' preferences regarding the building blocks of social protection policies, particularly differences across countries. Understanding societal preferences is important for two reasons. First, knowing what features people like or not helps with designing socially legitimate policies. Since people are more likely to comply with policies that they see merit in, programmes that mirror broad social preferences are more likely to be effective and efficient in achieving their goals (Besley & Dray, 2024). Therefore, policymakers should aim to emulate social preferences whenever possible; it is imperative that they know which policy features voters support. Nonetheless, there might be situations in which there is no margin for adapting policies to preferences. Thus, the second reason relates to when potentially unpopular measures are required: being aware of whether and how such measures deviate from the socially preferred allows policymakers to prepare communication and contingency plans to minimise social backlash.

A significant body of research is dedicated to exploring the determinants of preferences for redistribution – in other words, support or opposition to cash transfers. That literature is vast and rich, spans disciplines, and most importantly, is far from conclusive<sup>1</sup>. A possible explanation for these diverse findings is that it is not only the levels of transfers that matter, but the composition of the transfer programmes is important, and people vary in how they support or oppose specific policy features. Thus, it is crucial that academic work explores beyond support for redistribution and dives into examining these complexities, which remain understudied.

Indeed, an incipient body of literature acknowledges the need to recognise the multidimensional nature of attitudes towards redistribution (Cavaillé & Trump, 2015). Recently, studies using conjoint experiments have emerged, aiming to understand how different elements of policy composition interact to influence public support for them. Examples include preferences of tax structures (Ballard-Rosa et al., 2017); composition of fiscal policies, including for fiscal consolidation (Ardanaz et al., 2024; Bremer & Bürgisser, 2023a, 2025) and environmental policies, such as projects to achieve green transitions (Stadelmann-Steffen & Dermont, 2021); and support for carbon taxing (Malerba, 2022). Notably regarding preferences of welfare policy bundles, the findings indicate that support is context dependent. Support differs according to the function of the policy, and consequently which group it favours (Bremer & Bürgisser, 2023b; Gallego & Marx, 2017; Häusermann et al., 2019), and the generosity of transfers (Häusermann et al., 2019). Which financing mechanism is used for raising revenues for the policy (Nettle et al., 2025) is also important. While in some cases, the existence of conditionalities and targeting were important elements to feature for public support (Häusermann et al., 2019; Rincón, 2023; Rincón et al., 2022), in other contexts, unconditionalities and universality are either well accepted by societies (Rehm et al., 2012; Rincón et al., 2022) or do not make much difference (Nettle et al., 2025).

Despite recent scholarly advancements in understanding the complexities of welfare preferences, the scope of evidence remains limited and heavily concentrated in high-income

<sup>1</sup> For a review on the determinants of preferences for redistribution, see the seminal Alesina and Giuliano (2011) and the more recent Mengel and Weidenholzer (2023).

countries, notably Europe and the US, with evidence from middle-income countries remaining unexplored. Yet, the dynamics of public support for social protection schemes are likely to differ more in the middle-income context than in the low- or high-income contexts. On the one hand, middle-income countries have higher potential for domestic revenue mobilisation and domestic financing of social policies, distinguishing them from lower-income countries, where social protection is largely financed by international projects. On the other hand, informality and the economic structure limit the fiscal space in those countries compared with their richer counterparts, which entails (perceptions of) important trade-offs in public policies and investments by the society. To the extent that the diversity of results in public support for policy bundles suggests support is context-dependent, it is crucial to bring evidence from countries at different income levels.

Additionally, such studies explore a static scenario and assess which policy dimensions are relevant at that static moment. However, even though preferences have a steady core element shaped by culture and upbringing (Luttmer & Singhal, 2011; Mengel & Weidenholzer, 2023), personal experiences and other events have the potential to shape preferences by changing one's positioning in society or views about the world (Mengel & Weidenholzer, 2023; Stantcheva, 2024). Shocks, particularly those of a collective nature, are notable examples of occasions when preferences are found to be malleable (Giuliano & Spilimbergo, 2025). This is largely due to the fact that collective shocks make vulnerabilities evident and have the potential to shape beliefs about the world and, consequently, preferences. Indeed, a growing body of literature documents how in the aftermath of weather shocks and climate disasters people change their risk profile and become more present-oriented and trusting of others (Cassar et al., 2017; Gualtieri et al., 2019; Ingwersen et al., 2023). Communities experiencing natural disasters become more supportive of transfers (Gualtieri et al., 2019; Pañeda-Fernández, 2022). Most importantly, the literature suggests that these effects span beyond affected individuals. Other bystander members who have not personally suffered any losses but are embedded in affected communities also become more supportive of redistribution (Gualtieri et al., 2019). With media coverage of the situation, this effect extends to more distant groups (Chapman et al., 2023). While there are indications that people accept (and demand) more redistribution when vulnerability is induced by a weather shock, there is no systematic assessment of which form of transfers is accepted by society, especially among unaffected groups, and whether preferences for these systems differ from more traditional social assistance programmes.

Traditional social protection systems aim to help people and households cope with individual risks throughout their life cycles. Examples range from health and unemployment insurance to cope with individual health and labour shocks, to public pensions to assist people in their old age and in the event of disability, and a guaranteed minimum income to ensure that households do not fall below a minimum subsistence floor. However, with the increase in frequency of aggregate shocks, such as weather disasters, there is a call for a reconfiguration of social protection systems that are better equipped to address the interlinkages of collective shocks, beyond the role of traditional social protection in addressing idiosyncratic shocks (Bowen et al., 2020). There is a broad understanding that, in the context of emergencies and shocks, adaptive social protection needs to cover a wider share of the population than the traditional social assistance beneficiaries' pool. Conditionalities often need to be flexibilised to account for the disturbance in the livelihoods and infrastructure of affected communities. The benefits should be readily available and increased to provide higher amounts, helping affected households cope with the shock, avoid negative coping strategies and adapt to the situation, which translates into higher budget requirements. Coordination between different implementing actors, including the national government, local authorities and often humanitarian agencies, is crucial. Those differences in how responsive social protection instruments should operate in the case of an emergency or shock response translate into how social protection policies should be designed and which features should be included in that context. Thus, we also examine how the preferred

social protection bundle differs across poverty contexts and to what extent climate-induced poverty influences public support for the necessary measures.

To the extent that welfare packages are core elements of sustainable and inclusive development, we assess how respondents, on average, react more strongly to trade-offs between different policy attributes. With that in mind, we estimate the effect that different features of social protection policies, more specifically cash transfers, have on public support for them in the case of an upper-middle-income country: Brazil. Specifically, we examine the roles of benefit level and payment scheme, coverage and eligibility criteria, the implementing actor, conditionalities and policy financing method. We use a conjoint experiment to assess how Brazilians respond to changes in the composition of the cash transfers. The evaluation of transfers represents a multidimensional choice problem, along policy features and contexts, that cannot be examined with simple survey questions or standard vignette experiments.

We also analyse how the preferred social protection instrument differs across individuals. Variation across respondents is important for politicians to consider when designing a social protection instrument. They can anticipate support or opposition, opt for specific social protection packages or adjust targeted communication or conscientisation campaigns. We examine heterogeneity across various dimensions, including income, gender, receipt of social assistance, as well as attitudes such as ideology, trust and views on social protection. Lastly, we examine the extent to which support for cash transfer and the impact of policy design vary in the presence of climate-induced vulnerabilities. To this end, we surveyed 2,401 individuals aged 18 or older, employing a combination of two survey experimental methods: a conjoint experiment and a video treatment.

The findings from this study show that public support for cash transfers in Brazil is strongly shaped by both fiscal and benefit design and perceptions of fairness. Respondents distinguish clearly between financing methods: transfers funded by personal income tax increases or cuts in existing social protection programmes receive considerably less support than those financed through corporate taxation or the reallocation of energy subsidies. These fiscal preferences are rooted in self-interested pecuniary concerns but also reflect enduring ideological divisions. At the same time, conditionalities continue to play an important legitimising role, but their acceptance depends on how they are framed. Requirements that enhance beneficiaries' agency, such as participation in financial training or health check-ups, are viewed positively, while more burdensome conditions, such as mandatory public work, substantially reduce support.

Broader coverage and higher benefit levels are also valued, though with diminishing returns. Expanding transfers to include the poor population beyond those in extreme poverty increases acceptance, yet further extension to the non-poor vulnerable does not yield additional legitimacy. When vulnerability is presented as climate-induced, people become somewhat more solidaristic: respondents are less resistant to transfers and less insistent on strict reciprocity. However, ideological and fiscal cleavages persist, suggesting that the political feasibility of expanding social protection depends less on generosity per se than on perceived fairness, fiscal credibility and moral framing.

The contributions of this paper are threefold. First, it adds to the literature on the determinants of preferences for redistribution (Mengel & Weidenholzer, 2023; Stantcheva, 2024). That literature is rich and continuously evolving and seeking to understand the determinants of support for redistributive policies. Besides cultural and material self-interested determinants, research investigates how aggregate shocks shape preferences for redistribution. Yet, the evidence largely investigates how *personal experiences* with (climate) shocks shape one's preferences (Giuliano & Spilimbergo, 2025), while this study provides causal evidence on how the occurrence of weather shocks, and their socio-economic impacts, influences preferences for transfers among the broader population. The second contribution is to the literature on

multidimensional preferences of social policies with evidence from an emerging economy. The scholarly evidence on how support depends on the complex interplay between different features of social protection policies is based largely on studies of high-income countries with more comprehensive welfare systems (Bremer & Bürgisser, 2023b; Hamilton et al., 2023; Nettle et al., 2025). To the best of our knowledge, this is the first study examining which design of cash transfers voters in the Global South prefer. The third and final contribution is yet another addition to the scholarship on multidimensional policy preferences. Using conjoint experiments, researchers have unravelled how policy design shapes support for a wide range of policies, also beyond social protection (e.g., Ardanaz et al., 2024; Ballard-Rosa et al., 2017). However, the extent to which these multidimensional preferences are stable or malleable in response to various events remains underexplored. This paper demonstrates that preferences not only vary across different social groups but also change in response to the information presented to voters. Thus, this paper contributes with causal evidence that preferences are malleable to shocks, not only regarding how much the government should redistribute, but also how such transfers should be made.

The remainder of this paper is structured as follows. Section 2 discusses the theoretical underpinnings of social protection design preferences. Section 3 outlines the methodology and details the survey and conjoint experimental design as well as the empirical strategy. Section 4 discusses the main results and heterogeneity analyses, including the effects of climate-induced vulnerability. Section 5 concludes by synthesising the findings and their implications for the design and political feasibility of adaptive social protection policies.

## 2 Social protection design preferences

Voters' preferences of social protection policies should vary with the design of the transfer package. As research seeking to understand support for specific bundles of welfare policies is a recent effort, it follows that there is a lack of a unified theoretical framework conceptualising which dimensions matter (the most) and under which context. However, previous literature on preferences for redistribution, altruism and other social preferences provides findings that suggest how preferences for specific policy features might be structured.

The first dimension we explore is eligibility criteria. In their seminal work, Meltzer and Richard (1981) theorise that redistribution will occur when, in a situation of high inequality, the median voter is willing to pay taxes to finance transfers. Building on this basic logic, the literature on the political economy of targeting argues that universal social protection systems are preferable over narrowly targeted ones in ensuring social and political sustainability of such a system. The basic rationale argues that a system with wider coverage would receive greater social support, as more people would expect to become eligible and benefit from transfers, and thus would support such policies (Gelbach & Pritchett, 2002; Moene & Wallerstein, 2001). Although the predictions of Meltzer and Richard (1981) fail to find support in empirical evidence, much of this owes to voters misperceiving their placement in the income distribution, that is, their likelihood of becoming beneficiaries. Once corrected for that, studies show that individuals who are likely to benefit from transfers support them (Cruces et al., 2013; Hauser & Norton, 2017; Stantcheva, 2024). For that reason, voters' preferences of social transfers should vary with how likely they are to benefit personally from the transfers, which is dictated by the policy's eligibility criteria.

Still with a focus on egotropic considerations, we turn to the other side of those pecuniary concerns. Eligibility can be understood as an *incoming* dimension of pecuniary motivations, but people are also concerned with the *outgoing* element, namely, how much social protection policies would cost them. Pecuniary interests help to explain why wealthier individuals tend not to support transfers (Cruces et al., 2013), as they are likely to be net givers of such policies. In the cases of social protection programmes financed through domestically raised revenues,

voters' support or opposition to programmes plausibly hinges also on the type of financing method (e.g., tax increases or redirection of spending). This preference might arise from the fact (or views) that different methods to finance a transfer potentially burden specific groups more (Ballard-Rosa et al., 2017) or might be due to inherent taste-based preferences grounded in views of fairness and merit (Ballard-Rosa et al., 2017; Bremer & Bürgisser, 2025). Regardless of what explains such preferences, individuals' interpretation of how desirable they are has important implications for how supportive (or opposing) a person is to the policy (Ballard-Rosa et al., 2017). Indeed, Ardanaz et al. (2024) finds that in Latin America, voters do not view all fiscal measures equally and tend to disapprove of large cuts in social policies or increases in income taxes as a means to achieve fiscal consolidation, while cuts in energy subsidies, for instance, spark a milder reaction. While it is evident that voters respond to changes in the composition of fiscal adjustment packages, it is less clear how they face trade-offs undertaken to increase spending in another fiscal area (i.e., social protection).

Although material considerations are central in research on preferences for social policies, nonpecuniary motivations have also received increased attention by researchers (Mengel & Weidenholzer, 2023; Stantcheva, 2021). Among these, the moral elements of deservingness have important prominence. The notion of deservingness lies in the combination of views on need and reciprocity: that assistance should be given to those who have a legitimate need and entitlement and who avoid relying on public assistance as much as possible by contributing productively to society. For this reason, the literature finds that voters tend to support transfers and lower tax burdens when those are means-tested (Schüring & Gassmann, 2016), support contributory modes and if they consider the poor to find themselves in that situation mainly because they were not given the same opportunities as better-off people or due to other factors beyond their control (Ballard-Rosa et al., 2017; Trautmann, 2023). Those considerations are reflected in two features of the social protection policies: who should be the legitimate beneficiary target group (eligibility criteria), how to ensure that beneficiaries contribute to remedying their vulnerable situation (conditionalities) and whether the benefit suffices to alleviate need or is considered too generous and could discourage work (benefit payment) (Hamilton et al., 2023). Eligibility conditions address needs-based deservingness concerns when they take the form of strict means-testing, categorical targeting of vulnerable groups (such as the elderly, people with disabilities, or families with your children) or exclusion of groups viewed by some as illegitimate members of society (e.g., transfers only to country nationals or foreigners who have spent a minimum amount of time in the country) (Larsen, 2025). Similarly, conditionalities might address reciprocity-based deservingness concerns when beneficiaries are required to perform tasks that contribute to society (such as engaging in public work) or that ensure they are better equipped to provide for their own livelihoods (e.g., through required investments in human capital). Zucco et al. (2020), for instance, finds that the presence of conditionalities is a key factor in explaining the acceptance of conditional transfers among betteroff Brazilians, particularly those who are most likely to morally distance themselves from beneficiaries. Indeed, there are lingering fears that in the absence of strong conditionalities, transfers will fuel in beneficiaries a disincentive to work<sup>2</sup> (Banerjee et al., 2017; Rincón et al., 2022), and even more so if benefits are high or frequent (Hamilton et al., 2023). Alternatively, lump-sum payments, although potentially resulting in a higher amount, have been associated with debt repayment (Hamilton et al., 2023). Other settings, nonetheless, show that greater transfer values do not spark opposition universally. Nettle et al. (2025) find that in the UK, increasing the benefit amount improves acceptance of universal basic income packages, possibly due to self-interested reasons.

Lastly, the literature indicates that even among individuals who would otherwise support transfers, distrust of the authorities involved in the policy design and implementation hinders

<sup>2</sup> Even though arguments that transfers have a negative impact on labour supply are generally unwarranted (Banerjee et al., 2017), it is important to consider social views on this topic.

public support (Günther & Martorano, 2025; Kuziemko et al., 2015). Trust could affect preferences for policies in two ways. First, via a direct mechanism. If voters are sceptical that government authorities are capable of implementing a policy in an integral manner, they would prefer a programme in which that agent had a limited role and worked in collaboration with others who would act as a counterbalance/surveillance to their actions. In a case in which an individual is suspicious of the federal government, they would prefer a decentralised programme implemented by local authorities, non- or supra-governmental organisations. In this regard, Kuziemko et al. (2015) demonstrate that mistrust in the government is a key factor in explaining why people do not support tax and transfer policies aimed at improving the livelihoods of the poor, even when they are aware of and oppose inequalities and poverty. Second, (mis)trust in political authorities can influence the preferred transfer bundles by shaping preferences for dimensions other than which political authorities would be responsible for the programme. Mistrustful voters perceive greater risks that governments will renege on their promises and are, therefore, wary of increasing taxes to increase the welfare state. Consequently, low trust is associated with preferences for lower public spending (Devine, 2024). Thus, given a choice between more generous benefits and smaller transfers, individuals with low trust should prefer the latter. Similarly, they would prefer policies with narrower coverage over more expansive programmes. Related evidence in Keefer et al. (2022) indicates that low-trusting Latin Americans support sacrificing the provision of public services and goods to protect their income, and, as a result, they oppose increases in tax-based revenues and opt for budget reallocation and cuts in spending for fiscal consolidation (Ardanaz et al., 2024). From that, it is likely that people, especially those who mistrust, would prefer the reallocation of public budget from other initiatives over taxes directed at them.

It is plausible that after collective shocks, non-affected individuals become more supportive of unconditional transfers to assist the vulnerable, including financing those measures via personal income tax. However, the effect of providing information on weather-related vulnerabilities is not ex ante clear for various policy features. Voters who are informed about climate-induced vulnerability might support larger and more immediate payments and provide those payments to more families. However, it is also possible that they would prefer to focus higher payments on only the poorer families most in need. Individuals might support delegating implementation to local authorities, who would be closer to the affected communities and thus have better information about local needs. However, they might be suspicious that those agents might favour undeserving households in times of collective need and would prefer a more centralised implementation or involvement of non-governmental actors.

# 3 Methodology and data

## 3.1 Survey design

Against the backdrop described above, this study aims to address two objectives. The first is to compare the relative importance of different policy design features on public acceptance of social policies. The second is to determine whether climate-induced vulnerability affects the acceptance of specific policy bundles differently. We embedded a conjoint experiment and a video treatment in an online survey fielded in October 2025 in Brazil to answer these questions.<sup>3</sup>

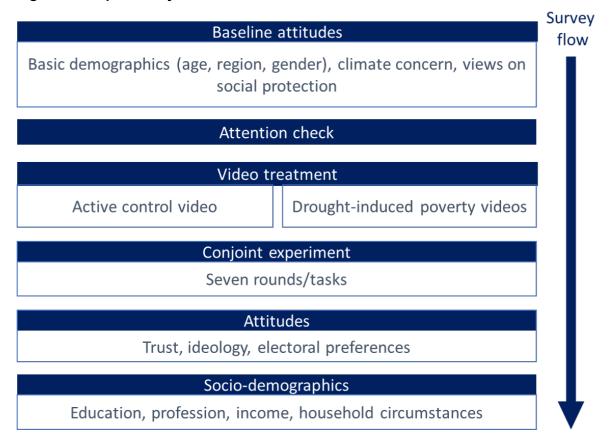
The survey was fielded online using the software Qualtrics and with the online panels created and supported by the survey firm Offerwise. The survey received prior ethics approval from

<sup>3</sup> We pre-registered the analysis strategy while the data was being collected before data analysis. As no robust framework existed at the moment of the pre-registration, predictions about the relative strengths of the effects of the different policy dimensions on support for the policy are not included.

IDOS's Internal Review Board on 2 July 2025 (Certificate Number: 2025-B-003) and was preregistered prior to the analysis while data was being collected at the Open Science Framework (OSF) on 20 October 2025.<sup>4</sup> Appendix B includes the transcriptions of the selected questions used in this study.

Respondents first answered questions about their gender, age, region and state of residence, and then questions about key potential determinants of their support for public transfers: views on the poor, on the extent of poverty, on the government's ability to fight poverty, inequality aversion and psychological distance to climate change. The video treatments (described in further detail later in this section) comprise the second part of the survey, which includes a battery of manipulation checks to ensure a correct understanding of the information provided and the salience of the video. Next, all respondents were presented with the conjoint experiment and repeated seven rounds of the conjoint exercise. After completing the conjoint, respondents answered questions on social and political trust, future discounting and economic knowledge and electoral preferences and ideology. Lastly, respondents answered questions about their education, professional occupation, income and household circumstances. The survey includes two attention checks and perceptions on survey political bias (Stantcheva, 2023). Figure 1 displays a simple flowchart of the different survey blocks.

Figure 1: Simple survey flow



Source: Author

We employ a conjoint experimental design to investigate how voters respond to variations in the design of cash transfers across five dimensions: benefit payment, eligibility criteria, conditionalities, implementing actor and financing mechanism. Conjoint experiments are powerful tools that allow for the simultaneous analysis of different attributes and, potentially, the exploration of

<sup>4</sup> Public access currently under embargo

interactions between the attributes. For that reason, there has been a surge in the use of conjoint experiments in economics and political science to understand how people evaluate competing complex policy goods. This is based on randomising, simultaneously for each dimension (referred to as attribute) and its entry (referred to as level). Due to this simultaneous randomisation, the average causal effect of multiple attributes can be retrieved, while reducing concerns about social desirability bias for specific sensitive attribute-levels (Horiuchi et al., 2022). Since each respondent is asked to compare competing schemes multiple times, this experimental design allows for a parsimonious sample size. Moreover, against alternative survey (experimental) designs, conjoint experiments are the ones that best match the effects of the same attributes in real-world situations as presented in a hypothetical survey situation; in other words, they provide the best external validity (Hainmueller et al., 2015).

To explore whether preferences differ when vulnerability is climate-induced, respondents were randomly assigned to one of the following groups: pure control, active control and climate vulnerability treatment. The latter two groups were each shown a 50-second video after answering the first block of attitude questions and before continuing to the conjoint module.

The following quality screening criteria were implemented, and the following individuals were excluded from completing the survey:

- individuals who answer at least three tasks in less than five seconds each in the conjoint exercise,
- individuals who answer the first task in less than 20 seconds and at least one additional task
  in less than five seconds in the conjoint exercise, and
- individuals who take more than 15 minutes between finishing the video and reaching the conjoint introduction screens.

In what follows, the conjoint experiment and the video treatments are explained in more detail.

## 3.2 Conjoint design

The respondents were initially presented with introductory screens informing them that social transfer programmes are instruments available to the government to address social challenges, and that they would be shown different policy proposals. Respondents were also informed that they should imagine a situation in which the government would start the country's social transfer scheme from scratch and that one of the proposals would be implemented. They were asked to compare the two policy proposals in each of the seven tasks and select which one they would prefer to be implemented (Policy Proposal A, B, or indifferent between A and B). Before the first task, all the attributes were briefly explained. The number and type of attributes were kept constant across the different tasks, while the specific characteristic (level) of the design feature (attribute) varied randomly. We kept the order of the attributes constant across individuals for ease of understanding and to be consistent with the introductory screens. Table 1 displays the attributes and levels of this study's conjoint.

The first randomly varied attribute refers to the benefit payment. The chosen payment schemes were selected to represent different types of cash transfer schemes and to assess preferences of total value amount and frequency of payment. Namely, one large lump-sum payment of BRL 7,200<sup>5</sup> emulates transfers of the nature of big-push graduation programmes. The payment of a constant BRL 600 benefit in 12 instalments aims to assess attitudes towards cash transfer

<sup>5</sup> Roughly EUR 1,150 or USD 1,350 in the nominal exchange rates, or PPP USD 2,880 or PPP EUR 3,376.50 using the International Monetary Fund's April 2025 PPP rates.

programmes common in Latin America, like Bolsa Família. The reasons for 12 instalments of BRL 600 are two-fold. First, the total amount adds up to BRL 7,200, allowing us to directly compare the mode of payment (lump-sum option or the instalment payment) while holding the total value constant. Second, the value of BRL 600 portrays a realistic scenario in Brazil, as the minimum benefit value under the Bolsa Família scheme is BRL 600 as of October 2025. Similarly, the lump-sum payment of BRL 7,200 corresponds to a value of emergency aid paid to low-income families following large-scale floods in the South of Brazil in 2024. Other levels vary greater frequencies with smaller monthly payments (or 36 instalments of BRL 200), and higher value of instalment and total benefit value (12 instalments of BRL 900).

The second attribute refers to the coverage and eligibility criteria. This attribute introduces eligibility that varies only by the income per capita dimension, allowing the respondent to more easily infer differences in policy coverage across the different levels. The levels chosen for the eligibility attribute reflect information previously presented in the videos. The first level of this attribute, income per capita below BRL 208 monthly, corresponds to the Brazilian extreme poverty line, fixed at the international line of USD 2.15 per capita daily. Moreover, it is worth noting that this threshold is nearly identical to Bolsa Família's actual income eligibility criterion, namely a maximum of BRL 218 per month per capita. The second level, BRL 665 threshold, corresponds to the poverty line of USD 6.85 per capita daily (Bello, 2023). The third and last level, BRL 1,200 per capita eligibility threshold, is designed to include the income of the vulnerable and the lower-middle class. Vulnerable households are defined as those with a daily per capita income between USD 7 and USD 10 (Stampini et al., 2016). Using the same PPP adjustment rate as the one computed by the Brazilian Institute of Geography and Statistics (IBGE) for the computation of the BRL 209 and BRL 665 thresholds (Bello, 2023) (ca 3.23), BRL 1,200 corresponds to USD 12.4 daily.

We examine the relevance of the actor involved in implementation efforts for public support. Evidence suggests that political and institutional trust influences how much people support the government assisting those in need (Kuziemko et al., 2015), although less is known about the role played by the involvement of different political actors. We investigate whether voters' opinions depend on the involvement of supranational bodies or the delegation to local authorities. To the extent that people differ in how they interact with those agents and how much they trust their abilities to implement policies in an integrated manner, it is important to understand whether involving those agents might increase social legitimacy for the programme. The first level indicates that implementation will be carried out by the federal government. In the second level, local (municipal) governments will be in charge of implementing the policy. This partly mirrors the multi-level implementation process of the Bolsa Família conditional cash transfer currently in place. Lastly, the third level indicates that the United Nations and World Bank would be responsible for implementing the programme. Even though most of Brazil's social protection programmes are funded and operated by national authorities, international agencies such as the World Bank, the International Labour Organization (ILO) and the Inter-American Development Bank (IADB) have a history of contributing to development and humanitarian projects.

Next, we vary the existence and types of conditionalities linked to the cash transfers. Brazil is home to one of the world's largest and most well-established conditional cash transfer

<sup>6</sup> Households in affected areas were eligible for a federal lump-sum transfer of BRL 5,100, and low-income households were additionally eligible for a state lump-sum transfer of BRL 2,500, totalling BRL 7,600 for low-income households (Tebaldi, 2025).

During the development of the experimental design (which ran from April 2025 to August 2025), the international poverty line was adjusted to USD 3 per capita daily. Nonetheless, as Brazilian statistics were only available at the USD 2.15 line, we opted to maintain the values equivalent to the previous value.

programmes, which requires families with children to adhere to the vaccination schedule and maintain active enrolment in school for children and teenagers and requires pregnant women to follow a prenatal care schedule.8 Two levels aim to reflect these conditionalities linked to health and human capital. The first level conditions benefit receipt to household members having to perform regular health check-ups at the public health units. The second level requires adults to attend a training in personal finances. We included one conditionality that would mimic cash-forwork/public work programmes. Namely, it requires one adult to work 15 hours per week on public infrastructure construction. Lastly, we included a "no conditionality" level, which renders the cash transfer unconditional. We avoided any conditionalities linked to children for two reasons. First, it is unclear how people would interpret the household eligibility attribute when the conditionality attribute indirectly restricts eligibility to households with children. This interaction between different attributes poses methodological challenges for the design of conjoint experiments. Moreover, we selected the levels for the eligibility attribute in a manner that would allow for easy derivation of the associated population coverage. By adding conditionalities for children, eligibility could be interpreted as depending on income per capita and the presence of children in the household, which would potentially compromise the simple coverage intuition. Second, we wanted to avoid priming the respondents to think about Bolsa Família when answering the conjoint, as it is a highly politically polarised programme. Given the strong focus of Bolsa Família on children-related conditionalities (which its name, meaning "family grant", alludes to), we opted to only focus on conditionalities referring to adults.

The last attribute examines the realm of fiscal mechanisms that people prefer to use for financing social protection programmes. Of the four levels, two refer to revenue-raising methods via tax collection, and two to budget/expenditure reallocation from other social measures, in line with exercises as in Ardanaz et al. (2024). From the tax-raising perspective, we introduced an alternative with a more regressive nature and another with a progressive nature, namely, increases in personal income taxes and increases in corporate taxes. 9 Financing through shifts in public expenditure targets two mechanisms that are relevant not only to Brazil. First, reductions in energy subsidies are at the centre of international climate negotiations as one of the key tools for energy and green transitions (Zhang & Zahoor, 2025). Yet, if not accompanied by social protective measures, removing such subsidies may disturb labour markets and have adverse effects on the poor (Malerba, 2022). While arguments on the political economy of such reforms raise considerations regarding wealthier and more influential stakeholders (Sovacool, 2017), we assess the political feasibility in relation to the broader society. The final level of this attribute examines how voters respond to changes in the social protection bundle, focussing on the interplay between safeguarding against individual risks and collective risks. In Brazil, individuals have access to the social pension conditional on age and a minimum time of contribution. After a given threshold of contribution time, individuals have access to 100 per cent of their lifelong average income, with a maximum ceiling of BRL 8,157.41 (in 2025). The last level proposes reducing the top possible pension payment, which would affect upper-middle-income individuals.

In each conjoint task, the respondents compare two cash transfer bundles. They repeat the exercise a total of seven rounds, which corresponds to a total of 14 policies that every individual evaluates. Figure 2 displays an example of a round seen by the respondent. In this study, no restrictions were imposed to rule out combinations of attributes. The resulting total is 33,614 assessed bundles. The exact sample depends on the research question to be examined, as

<sup>8</sup> Those requirements are applicable only to families with children or pregnant women. Low-income households with no children, but that fulfil the income requirements, are also eligible for Bolsa Família.

Although taxes on goods and services are important taxes in the Brazilian system (Ardanaz et al., 2024), Brazil lacks a unified value-added tax system. Therefore, this project opts for personal income taxes for clarity and brevity reasons.

explained in Section 3.3. The policy bundles that the respondents receive are randomly drawn from the universe of all possible packages.

Figure 2: Example conjoint screen<sup>10</sup>

Round 1 of 7  Compare the two proposals, A and B, below, and select the one you prefer for the government to					
implement to assist families facing difficulties in Brazil.  (One of the two alternatives would be implemented anyway – choose the one you think is best between the two)					
Proposals	A	В			
How much and how will the money be paid:	36 equal installments of BRL 200 each (total value BRL 7,200)	12 equal installments of BRL 900 each (total value BRL 10,800)			
Families with the following income will be eligible for the programme:	Less than BRL 665 per person	Less than BRL 665 per person			
The main authority to execute and manage the programme will be:	Municipal governments	The <b>UN</b> and <b>World Bank</b>			
To receive the benefit, families must comply with the following activities:	<b>No</b> additional activities	Perform regular <b>health check- ups</b> in public health centres			
To pay for the total costs of the programme, the government will:	Increase corporate <b>taxes</b> for large companies	Reduce the maximum monthly benefit for retirement by INSS contribution			
Indifferent between A and B	A ()	В			

Source: Author

<sup>&</sup>lt;sup>10</sup> INSS (Instituto Nacional do Seguro Social, or Institute for National Security Studies in English) is the government agency that collects contributions linked to social insurance.

Table 1: Conjoint design (attributes and levels)

Attribute	Level			
	1	2	3	4
Benefit payment	One single instalment of BRL 7,200	12 instalments of BRL 600 each	12 instalments of BRL 900 each	36 instalments of BRL 200 each
Eligibility income	< BRL 208 per capita	< BRL 665 per capita	<brl 1,200="" capita<="" per="" th=""><th></th></brl>	
Implementing authority	Federal government	Local governments	World Bank and UN	
Conditionalities	None	Participation in personal finance training for adults	Regular health check-ups	Work in public constructions
Financing scheme	Increase personal income taxes	Increase corporate taxes	Reduce energy subsidies	Reduce maximum pension value

Source: Author

#### 3.3 Video treatments

We randomly allocate respondents to one of three video conditions, out of which one constitutes an active control. 11 Each video has a duration of approximately 50 seconds and is shown after an initial battery to gauge underlying beliefs and explore heterogeneity in the conjoint experiment. Respondents are informed that they will watch a video, to which they should pay attention, as the survey would include questions about it. Respondents who reached the conjoint experiment block more than 15 minutes after having watched the video were screened out before answering the conjoint.

All three videos share the initial 15 seconds, which provide information about the most recent official figures for the number of Brazilians living with incomes below the thresholds used to define poverty and extreme poverty, contrasting these with Brazil's average income levels. The treatment videos proceed to discuss regular droughts associated with the El Niño and La Niña phenomena, as well as the livelihood-suppressing effects they have. To emulate the narrative tone of the treatment videos, the control video describes similar (but not climate-related) challenges faced by low-income families, before explaining how the income thresholds mentioned in the first part are used to track the economic conditions of the population. 12

<sup>11</sup> In the full design, respondents are allocated to one of five conditions: one pure control where no video is shown, the three conditions discussed in this section, and an additional video explaining the socioeconomic effects of a recent flood. These additional conditions are included for other projects, and allocation (done with the software Qualtrics) is random and uniform, so it does not correlate to respondents' characteristics. The full sample, including all five conditions, is used to examine preferences among the population, so as to increase statistical power for the heterogeneity analysis across sociodemographics and underlying attitudes. The analysis of the video effects and related heterogeneities restricts the sample to the three arms presented here.

<sup>12</sup> The latter part was added as neutral information on the topic of poverty and vulnerability, to ensure that the control video is of approximately the same duration as the treatment videos and avoid differential cognitive loads.

A crucial part of our design refers to the use of an active control video. By including information on low-income families, we ensure that the control group is also primed to think about poverty and vulnerability. This is important for us to assess the effect of *climate-induced* poverty compared with other, more commonly thought-of types of income vulnerabilities. Moreover, it allows us to ensure that both groups have been primed with the topic of poverty and avoid that any results are driven solely by this priming, should we use a pure control where no videos are displayed, or where the video discusses a different and unrelated topic (Alesina et al., 2023). The scripts and links to the YouTube videos are included in Appendix B.

#### 3.4 Empirical strategy

To estimate voter preferences for different adjustment packages, we proceed in three steps. Specification 1 examines the impact of each policy dimension and their possible alternatives:

$$Y_{ij} = \beta_0 + \sum_{k=1}^{4} \beta_1^k Pay_{ij}^k + \sum_{k=1}^{3} \beta_2^k Elig_{ij}^k + \dots + \sum_{k=1}^{4} \beta_5^k Finan_{ij}^k + \varepsilon_{1,ij}$$
(1)

where i refers to the respondent and j to the policy package rated by the respondent;  $y_{i,j}$  is the binary choice variable  $^{13}$ ;  $Pay^k$  are dummy variables that take the value 1 if the benefit payment of policy package j that respondent i sees corresponds to the level k, and 0 if otherwise. The levels of each attribute are displayed in Table 1. The same logic applies to the other four policy dimensions. The coefficient  $\beta^1$  is interpreted as the average preference of respondents for policy packages that include a benefit of 12 equal instalments of BRL 600 each, compared with policy packages whose payment follows another schedule. The interpretation of the other coefficients follows the same logic. The error terms,  $\varepsilon_{1,ij}$ , are clustered at the individual level.

We are also interested in how respondents vary in their reactions to different types of transfers. We therefore estimate the different policy dimensions in Specification 1 for subsamples defined according to variables  $M_i$  representing different respondents' characteristics (e.g., sociodemographics and beliefs). We estimate the regression for each subsample following the specification below, in which n corresponds to the number of categories in the respondent characteristic ( $M_i$ ) of interest. In case the characteristic is defined by a binary variable (e.g., gender), n in the Specification 2 takes the value of 0 or 1. The estimations are computed for each subsample separately, and the coefficients are compared.

$$Y_{ij} = \beta_0 + \sum_{k=1}^{4} \beta_1^k Pay_{ij}^k + \sum_{k=1}^{3} \beta_2^k Elig_{ij}^k + \dots + \sum_{k=1}^{4} \beta_5^k Finan_{ij}^k + \varepsilon_{1,ij} \text{ if } M_i = n, \text{ with } n \in (0,1,\dots)$$
 (2)

Finally, we explore to what extent preferences are different in the context of climate-induced vulnerabilities using the same strategy. Namely, we estimate Specification 3 for the group of respondents allocated to the active control video ( $Treat_i = Control$ ) and separately estimate Model 4 for the subsample of respondents who watched one of the two treatment videos on drought-induced economic vulnerabilities ( $Treat_i = Drought$ ) and compare the coefficients. We further split these samples into subsamples according to variables of interest to perform a heterogeneous analysis of the response to the video treatment, such as whether the respondent identifies as a left-wing voter. That way we examine, for instance, the effect of the video treatment on preference ( $Treat_i = Drought$  compared with  $Treat_i = Control$ ) for public work

<sup>13</sup> Respondents were also given the option to select "Indifferent between A and B". In the cases where the respondent chose that option, the observation is dropped.

conditionalities ( $Cond^4$ ) for left-leaning respondents ( $M_i = Left$ ), and compare this with the effect of the videos ( $Treat_i = Drought$  compared with  $Treat_i = Control$ ) on support for work conditionalities ( $Cond^4$ ) for right-wing respondents ( $M_i = Not \ Left$ ). This exercise corresponds to performing triple interactions among all variables included in Specification 1. However, we opt for this approach as it provides a more intuitive interpretation and facilitates visualisation in the coefficient plots.

$$Y_{ij} = \beta_0 + \sum_{k=1}^{4} \beta_1^k Pay_{ij}^k + \sum_{k=1}^{3} \beta_2^k Elig_{ij}^k + \dots + \sum_{k=1}^{4} \beta_5^k Finan_{ij}^k + \varepsilon_{1,ij} \text{ if } Treat_i = Control$$
 (3)

$$Y_{ij} = \beta_0 + \sum_{k=1}^{4} \beta_1^k Pay_{ij}^k + \sum_{k=1}^{3} \beta_2^k Elig_{ij}^k + \dots + \sum_{k=1}^{4} \beta_5^k Finan_{ij}^k + \varepsilon_{1,ij} \text{ if } Treat_i = Drought$$
 (4)

#### 4 Results

#### 4.1 Main results

We first examine respondent support for transfers and explore the impact of specific policy constitutive attributes on acceptance of a bundle containing them. The dependent variable is the respondent's forced-choice preference. Observations in which the respondent indicated indifference between both policy profiles are excluded from the analysis. Figure 3 presents the point estimates for each attribute level equivalent to the average marginal component effect (AMCE)<sup>14</sup> of changing that attribute to that given level from the baseline value on the respondent choosing that policy bundle, together with the 95 per cent confidence intervals. The baseline levels are payment in 12 instalments of BRL 600 (benefit payment), income per capita up to BRL 209 (eligibility threshold), federal government (implementing agent), unconditional (conditionality) and increases in income tax (financing method).

When it comes to coverage, individuals support a broader social protection policy that reaches a larger share of the population. However, it is not always the case that a larger coverage automatically grants greater social legitimacy. Instead, the results in Figure 3 indicate that there is social support for moving beyond transfers that focus on providing for those in extreme need to also supporting a sizable population share living in poverty. However, even though there is broad acceptance for a system that also includes the non-poor vulnerable, this further expansion does not grant additional social legitimacy over one that covers the entire poor population (and not just those at the very bottom of the distribution).

Turning to implementation efforts, we see that actions headed by the federal government are the preferred alternatives. This might seem initially counterintuitive, as the literature records that local authorities tend to enjoy greater levels of trust (Arends et al., 2023), and given that Brazil is a highly politically polarised context, where the current president faces strong opposition. As a result, trust in the president's competence is significantly lower than that in mayors and international organisations, as evidenced by the low levels of trust in the president in opinion surveys (LAPOP Lab, 2024). However, it is important to note that those polls enquire about trust in subnational governments in the respondents' localities, while implementation led by local governments would involve officials in other municipalities, with potentially higher risks of shirking. Indeed, the influence of political intermediates has the potential of increasing local

<sup>14</sup> Figure A1 of the Appendix plots the marginal means.

clientelism (Frey, 2019). In addition, while the involvement of international development agencies, such as the World Bank and IADB, is not unprecedented, it usually takes the form of funding projects and, when such agencies are involved in implementation, that typically occurs in cooperation with Brazilian authorities. As a result, knowledge about organisations such as the World Bank is limited among Brazilians.<sup>15</sup>

Figure 3 shows that the existence of conditionalities strongly increases support for the transfer. All conditionality methods increase support, even more so requirements that involve learning skills to better manage finances. Out of the three levels, mandatory work in public construction induces the lowest positive response.

Lastly, the bottom panel in Figure 3 indicates that the financing mechanisms are not assessed equally, and that the fiscal measure chosen by the government is crucial to explain support. Methods that are (perceived) to directly burden people – via taxing their income, or reallocating income from other social transfers – receive considerably less broad support. Measures that do not directly influence people's incomes, on the other hand, positively impact respondents' probability of selecting that alternative. Compared with financing the transfer via increases in income tax, support for the measure increases by nearly 14.9 per cent when we move to a package that finances the transfers with raising corporate taxes and by 5.3 per cent when energy subsidies are reduced.

Table 2: P-values of Wald test for coefficients equivalence

	Level 2=Level 3	Level 2=Level 4	Level 3=Level 4
Benefit payment	0.000	0.008	0.000
Eligibility	0.188		
Implementation	0.269		
Conditionalities	0.035	0.204	0.001
Financing	0.000	0.000	0.000

Notes: For a description of each level with the corresponding number, see Table 1. The test of difference between Level 1 of all attributes and that attribute's other levels is equivalent to the coefficients' standard errors, as Level 1 is the baseline category for each attribute.

Source: Author

<sup>15</sup> Data from Latinobarómetro (2017, 2018), the most recent available, shows nearly 60 per cent of Brazilians report not knowing what the World Bank is.

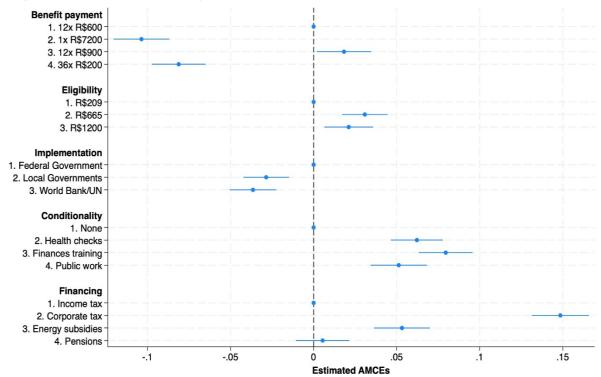


Figure 3: Main results of conjoint experiment

Notes: Presented is the estimated impact of a change in each attribute (in bold, as indicated in the left axis) on selecting that option, vis-à-vis the reference level of each attribute (in the first row of each attribute). Point estimates with 95 per cent confidence intervals. Regressions estimated with ordinary least squares (OLS). Standard errors clustered at the individual level.

Source: Author

## 4.2 Heterogeneous effects

The findings in Figure 3 indicate that the policy design has a meaningful impact on how likely the broader population is to support it. However, the literature on multidimensional preferences of policies consistently reveals preference heterogeneity across different social groups. Therefore, we examine how preferences vary across the following demographic and belief dimensions: income, receipt of social assistance, age, gender, ideology, views on social protection and political trust. This section presents the results for the heterogeneity analysis, first according to sociodemographics and then according to values and attitudes. Note that differences in AMCEs across groups reflect differences in how each group responds to a change in a policy attribute vis-à-vis the attribute's baseline level, not differences in their overall levels of support. For example, if the AMCE for "health conditionalities" is positive for Group A and negative for Group B, this does not mean Group A supports conditionalities more than Group B. It means that adding a health conditionality increases support relative to unconditional transfers (baseline level) for Group A, but decreases it for Group B. This coefficient's interpretation is applicable to all results presented in the remainder of this paper. All tables displaying the Wald tests for coefficient differences for the heterogeneity tests are included in Appendix A. The evidence points to an important role of both material and non-pecuniary considerations in the preference formation of respondents. Table A1 of the Appendix, displays the summary statistics for the variables used in the heterogeneity analyses.

#### 4.3 Income demographics

Next, we assess the differences across three income groups: the poor, the middle class and the rich. 16 The results, in Figure 4 (coefficients difference test in Table A3), show that all respondents favour a monthly BRL 600 payment over a high-value lump sum. Even the effect of changing payments from the baseline to lump-sum payments is slightly weaker for poor respondents compared with middle- and higher-income respondents; that difference is small (ca. 1 pp) and is not statistically significantly different from zero. 17 However, there are clear distinctions along the effect of other attributes. While low-income respondents prefer wider coverage compared with a programme targeting the extreme poor, increasing coverage to reach the poor and vulnerable population does not increase support among high-income individuals. These dynamics suggest that pecuniary interests play a significant role but are likely to operate in tandem with other non-pecuniary factors. Conditionalities are particularly important for highincome respondents. While imposing conditionalities increases support for all respondents compared with unconditional transfers, different effects among the rich indicate that they are even more strongly in favour of conditionalities with a salient reciprocity element, namely, people investing time to build up useful skills and engaging in required work. As in Ardanaz et al. (2024), the universal higher support for corporate taxation compared with income taxes suggests that respondents have little concern with the potential indirect effects of such taxes on household incomes. However, because the consumption of middle-income respondents is more affected by the consequent increases in prices of goods due to corporate taxes than that of the rich, but have greater opportunities to consume beyond the basic necessities compared with the poor, they are less supportive of increases in corporate taxes instead of income taxes (albeit, in absolute terms, still preferring corporate over income taxes). Lastly, low-income respondents are more supportive of measures that reduce the maximum pension to finance transfers instead of increasing income taxes. This is likely a result of two factors. First, low-income households are more likely to be employed in informal sectors and thus do not have access to contributory pensions schemes. Second, the level indicated lowering the ceiling pension value, which lowincome households are unlikely to benefit from.

16 To compute these groups, per capita income of the household was calculated by dividing the median value of the income category (in total nine options) selected by the respondents by the total number of members in the household. Then the respondents were split into terciles, with the bottom tercile indicating the "poor", the second the "middle-income", and the top tercile the "rich", with mean per capita incomes of BRL 594, BRL 2,102 and BRL 7,510, respectively.

<sup>17</sup> Table A3 of the Appendix displays the *p*-values for the test of coefficient equivalence across different subgroups.

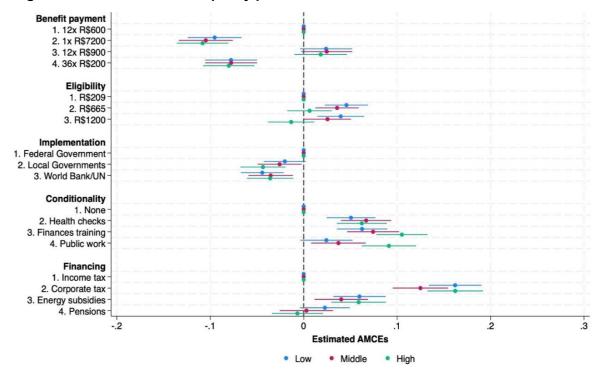


Figure 4: Effect of income on policy preferences

Source: Author

#### 4.3.1 Bolsa Família recipient

Being a Bolsa Família beneficiary household is likely to moderate via two channels: (i) as a proxy for (extreme) low-income due to the programme eligibility design and (ii) due to first-hand experience with the social protection system. Figure 5 (coefficients difference test in Table A4) indicates that preferences of Bolsa Família recipients are less elastic to changes in payment schemes that hold the total amount constant (although they still oppose those packages), but they react positively to increasing the monthly benefit from BRL 600 to BRL 900. Expanding the programme beyond extreme poverty thresholds (the BRL 209 baseline) to reach not only the poor but also the vulnerable has a strong positive effect on support among Bolsa Família recipients. Non-recipients, on the other hand, react positively to widening the coverage from BRL 209 to BRL 665, but are as supportive of programmes that include the vulnerable as they are of programmes with a focus on the extreme poor. Similar patterns of support for conditionalities, as in the case of income, are observed. The effects of changing the financing mechanism indicate that Bolsa Família recipients are less sensitive to increases in income taxes compared with other methods. Since Bolsa Família, and other minimum income guarantees, are programmes targeting the extreme poor, their annual income typically falls below the minimum threshold for income tax exemption.<sup>18</sup> Therefore, their earnings are not taxed, and changes to that tax schedule would not affect them.

<sup>18</sup> For the 2024 fiscal year, individuals earning up to BRL 2,259.20 were exempt from taxes (Brazilian Federal Reserve, 2025).

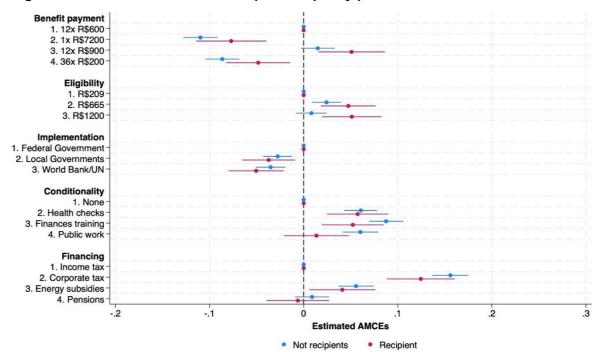


Figure 5: Effect of Bolsa Família recipient on policy preferences

Source: Author

#### 4.3.2 Age

Figure 6 (coefficients difference test in Table A5) describes the heterogeneity of policy preferences among voters of different ages. Respondents become gradually less supportive of increasing benefits from the BRL 600 monthly payment, either in total or through a lump-sum payment, as age increases. Older respondents, moreover, do not become more supportive of the transfer package when it has a larger coverage beyond poor households. Younger cohorts support municipally implemented transfers as much as federally implemented ones but are more sceptical of the involvement of supranational organisations compared with the national government. The opposite is true for older respondents. While younger cohorts respond positively to including conditionalities that bring gains to the beneficiaries, namely health checks and, even more so, participation in personal finance training, they are as supportive of mandatory work in low-skilled occupations as they are of unconditional transfers. Older respondents, on the other hand, are more likely to support transfers when they transition from being unconditional to attaching mandatory work in construction, particularly those aged up to 45 years. It is likely that respondents above that age consider that type of work physically strenuous, which limits the magnitude of the effect of that feature. Finally, Figure 6 shows that voters of different ages differ in their response to changes across financing methods, in a manner that does not perfectly map into income. Even though income tends to increase with age, following a hump shape (IBGE, 2025), the effect of financing the transfer via corporate taxes, vis-à-vis income taxes, is significantly stronger for younger respondents than for older individuals.

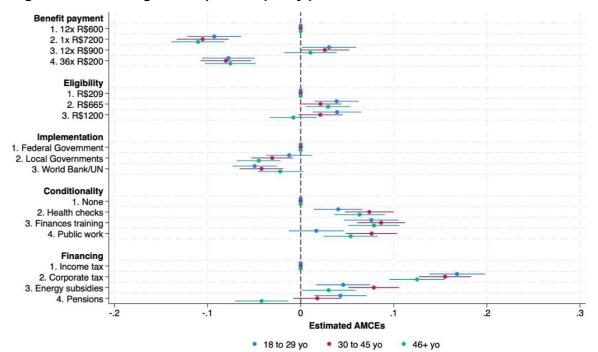


Figure 6: Effect of age of recipient on policy preferences

Source: Author

Meanwhile, individuals in the core productive years respond positively to reductions in energy subsidies instead of increases in income tax, as their withdrawal would have a lower burden on their incomes compared with other age groups. Lastly, the effect of financing the transfer by lowering retirement benefits instead of increasing income tax on support policy depends on the age of the respondents. The effects are statistically positive for younger respondents, positive but insignificant for middle-aged respondents, while (as expected) the effect is negative for older respondents, meaning that for the latter group support for the policy is lower when it is financed via reductions in pension than when it is financed by increases in income taxes. The null effect for the middle category might stem from the fact that they have accumulated years of contribution (unlike the younger group), but, unlike the older group, do not yet benefit from retirement pensions; they are (statistically) indifferent between cuts in pension and higher income taxes.

#### 4.3.3 Gender

Figure 7 presents heterogeneity among respondents according to gender (coefficients difference test in Table A6). The plot shows that men and women do not differ in responses to changes in payment schemes, but women are somewhat more supportive of schemes that include the vulnerable non-poor vis-à-vis schemes that focus on the extreme poor, while that effect is not observable for men, even though the share of respondents with per capita income that would fall under this scheme is roughly the same across genders: 48.96 per cent for men and 49.82 per cent for women. While men tend to react negatively to having municipal governments lead the implementation and are less supportive of these programmes compared with transfers implemented by the federal government, the effect of this change is smaller for women. This difference in effects plausibly reflects higher interactions of women with the bureaucracy and public services, either due to household care responsibilities or benefitting from social

protection. 19 The effect of required conditionalities induces substantially different effects between men and women. The preferences of women are significantly more elastic than the preferences of men to changes in conditionalities. Women are significantly more likely than men to increase their support for a transfer when it is attached to a welfare-enhancing conditionality. However, making transfers conditional on performing low-skill work has a weaker effect on support among women compared with its effect among men.

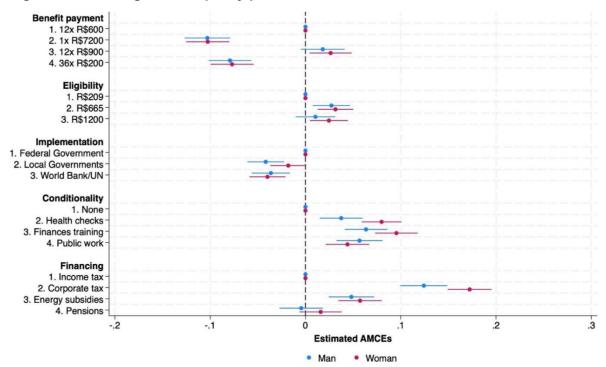


Figure 7: Effect of gender on policy preferences

Notes: Presented is the estimated impact of a change in each attribute (in bold) as indicated in the left axis, vis-à-vis the reference level of each attribute (in the first row of each attribute). The estimations are done for each income subgroup, as indicated in the plot. Point estimates with 95 per cent confidence intervals. Regressions estimated with OLS. Standard errors clustered at the individual.

Source: Author

#### 4.3.4 Values and attitudes

The cross-demographics heterogeneous results above indicate that material motivations connected to demographic characteristics play an important role in explaining support for policy features. However, age and gendered effects showcase that people do not rely solely on their material self-interests. To the extent that research demonstrates that the way people view the world influences their preferences for the scope of redistribution, it is likely to also shape how people contemplate trade-offs across policy features. People may differ in their preferences for social protection packages because they vary in how much they perceive poverty, its causes and potential solutions. Among the respondents of this paper's survey, 95 per cent of the individuals agreed with the statement that poverty is an issue directly affecting many households. Given the near consensus of the widespread nature of poverty, we aim to understand to what extent different beliefs account for varied support for public transfers.

<sup>19</sup> In Brazil, Bolsa Família is primarily granted to the woman of a household. Moreover, other programmes with a focus on children's development count on the active involvement of the mother and interaction with public health workers, who are important points of contact with the bureaucracy (Frey, 2019).

#### 4.3.5 Ideology

We first investigate the role of ideology. As a global proxy for a range of beliefs and interpretations about the world phenomena, ideology has been strongly linked to preferences for redistribution, either directly or indirectly by shifting other beliefs (Alesina & Giuliano, 2011; Alesina et al., 2018; Esarey et al., 2012; Mengel & Weidenholzer, 2023). Since left-wing voters prefer more redistribution, they should be more supportive of broader and higher transfers compared with narrow and lower ones.

Figure 8 plots the results for the three main ideological groups (coefficients difference test in Table A7). Indeed, the top panel shows that left-wing voters increase their support for policies more than the right and centre voters when higher values are made available to beneficiaries. However, the left and the centre are rather aligned regarding their response to broadening coverage beyond the extremely poor, while the effects for the right are significantly different and suggest that this group is as supportive of transfers centred on the extremely poor as of broader coverage. This means that broadening coverage will induce greater support among the centre and left, but not among the right. This is not an artifact of right-leaning respondents being wealthier, and thus not among the probable beneficiaries, as the mean income of left- and rightwing respondents in the survey is roughly the same, around BRL 3,500 per capita. The decrease in support for the policy when they are not implemented by the federal government gradually fades as respondents move away from the left, since the Brazilian Executive, as of 2025, is led by Lula, a prominent left-wing figure. Notions of reciprocity have a lower impact on policy support among the left-wingers. Making transfers conditional has a lower impact on support by the left compared with the effect for other groups, especially if the conditionalities do not benefit the beneficiary beyond the transfers. Lastly, the bottom panel shows that respondents across the ideological spectrum share progressive preferences for a policy financed by corporate taxes on large companies compared with those financed by income taxes, albeit the magnitude of the coefficients differs remarkably across groups. Left-wingers are 20 per cent more likely to select the policy when financed by corporate taxes instead of income taxes, and right-wing voters are 11 per cent more likely to do so. However, since reallocation of public expenditure does not expose households to further governmental interference, right-wing households increase their support more than other groups when policies are funded via reductions in subsidies rather than an income tax increase. For the same reason, they also respond differently than left-wingers to reductions in pensions.

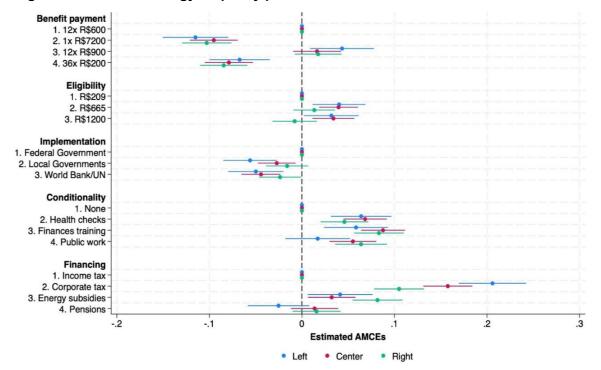


Figure 8: Effect of ideology on policy preferences

Source: Author

#### 4.3.6 Views on social protection

Although people may agree that poverty is a social problem that ought to be addressed, they may not agree with addressing it through cash transfers. However, the conjoint exercise imposes a hypothetical scenario in which the government would implement a public transfer. Therefore, we investigate whether preferences for the design of the transfer differ among individuals who would prefer other types of welfare interventions (if any) to be implemented. This sheds light on alternatives for adjusting the design of cash transfers when facing broad opposition to having them in the first place. For this, we examine heterogeneity according to whether respondents view social benefits negatively and agree with the statement that benefits "make people lazy". Figure 9 (coefficients difference test in Table A8) indicates that negative views on social benefits prompt people to prefer more restrictive schemes, both in lower benefit payment and in coverage, mirroring lower preferences for redistribution. Providing the payment in a single large lump sum instead of monthly instalments has a stronger negative effect on sceptics than on non-sceptics. As expected, incorporating conditionality that imposes a work requirement is crucial for this group, and the effect of including this feature on support is stronger for them compared with the effect among supporters of social benefits. The effect of strict work conditionalities found for the broader population in Figure 3 is largely driven by this group. Nonetheless, the same increase in approval can be achieved through other means of reciprocity that better develop skills beneficial to the recipient, via financial training. Lastly, we observe a significant polarisation, referring to the effect of funding the scheme through corporate transfers. Since respondents who are wary of the labour effects of transfers place great value on work, financing methods that are perceived as detrimental to businesses (and therefore employers) provoke lower support boosts in this group compared with the effects among individuals who welcome transfers, although both groups prefer that funding mode over increases in income taxes.

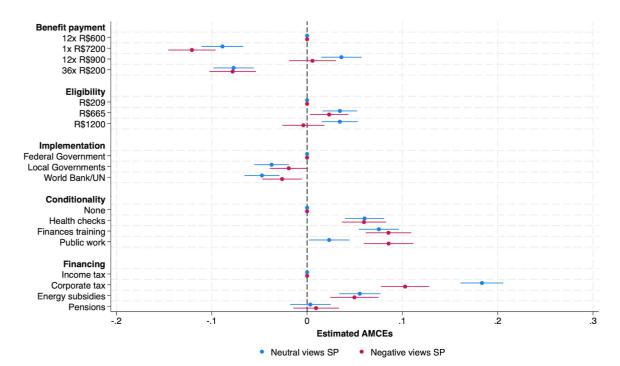


Figure 9: Effect of views on social benefits on policy preferences

Source: Author

#### 4.3.7 Views on the government

The last dimension we explore is the role of views on the government. Even in situations where individuals view poverty as a pressing social issue, are ideologically favourable to welfare measures to address it and do not oppose their delivery in the form of transfers and services, a lack of trust in the government's integrity in implementing these measures jeopardises its support (Kuziemko et al., 2015). In this final exercise, we explore the extent to which mistrust in the government influences preferences for types of transfers, beyond preferences for the existence and magnitude of transfers. As the figure of the president and the federal executive is of relevance in the Latin American context, Figure 10 (coefficients difference test in Table A9) presents the difference in preferences for policy features among respondents who trust and mistrust the president. One important distinction is that mistrustful individuals no longer prefer programmes where the federal government has a leading role. However, they are equally suspicious of the other political actors and are indifferent between policies implemented by the supranational bodies, the federal government and municipal authorities. Even though people tend to view their own municipal government more favourably, they are as mistrustful of local governments shirking their responsibilities when given the opportunity as they are of national authorities. Although the difference is not statistically significant, changing the payment from monthly BRL 600 to BRL 900 induces lower support increases among mistrustful individuals than among trusting respondents. Moreover, they are as supportive of a programme that covers the vulnerable as transfers targeting the extreme poor, unlike trusting respondents, who support broadening coverage beyond the extreme poor to include the vulnerable. This is consistent with the evidence that politically mistrustful prefer leaner (welfare) policies. Lastly, wary voters are statistically more likely to support a policy that is funded by the reallocation of public spending than an increase in revenues via income taxes, since the latter makes households more vulnerable to the effects of government shirking. Since corporate taxes have a more diffuse

effect and do not directly expose households, trusting and mistrustful respondents react equally as strongly to this financing mode, corroborating the findings in Ardanaz et al. (2024).

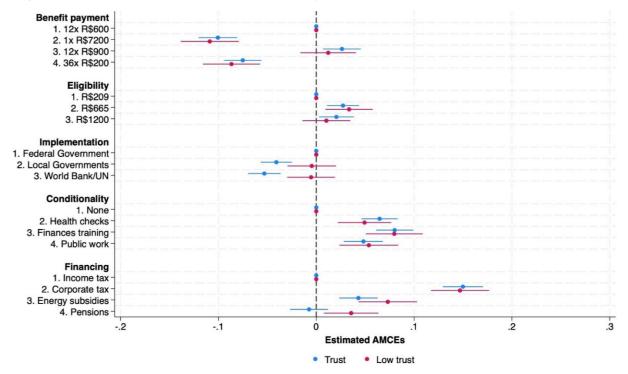


Figure 10: Effect of political mistrust on policy preferences

Notes: Presented is the estimated impact of a change in each attribute (in bold) as indicated in the left axis, vis-à-vis the preference level of each attribute (in the first row of each attribute). The estimations are done for each income subgroup, as indicated in the plot. Point estimates with 95 per cent confidence intervals. Regressions estimated with OLS. Standard errors clustered at the individual.

Source: Author

#### 4.4 Weather-induced vulnerabilities

Not only do people differ in their preferences across policy bundles, but they also adjust their support for different features depending on the social issue it seeks to address. While previous research on support for welfare policies in general, and income transfers in particular, documents that preferences vary across societies, we provide evidence of an additional elasticity dimension: for the same country, preferences vary across different situations.

We provide evidence on how support or opposition for policy features react to a context of increased financial vulnerability brought about by weather shocks. Figure 11 plots the effect of the policy design elements for two groups (coefficients difference test in Table 3): respondents who were informed about the negative effect of droughts on the financial well-being of families and respondents who were informed only about economically insecure families in general. By comparing the effect of policy design changes between the two groups, we can retrieve the causal effect of information on climate vulnerabilities on policy preferences. Table 3 displays the *p*-values of the tests of coefficient equivalences between control and drought treatment groups for each attribute-level coefficient.

The most striking change refers to how people react to the presence of conditionalities. In the control condition, a policymaker could expect a circa 9 per cent to 15 per cent increase in support for a programme if that was made conditional (ceteris paribus). This effect is halved in the drought-video condition, and while conditionalities still increase support, the effect is of a

magnitude between 4 per cent and 7 per cent. Required public work and personal finance training see the sharpest drop. Among respondents who saw the drought video, both finance and health enjoy the same higher levels of support, while finance literacy was the most welcomed conditionality for individuals in the control group.

However, the fact that the reduction in effect for training in personal finance management is starker than that for health check-ups suggests that respondents perceive less added value for recipients to be educated on responsible money management in situations where the cause of their vulnerability is largely due to factors outside their control. It is plausible that in the control condition, respondents are also driven by the belief that training develops positive skills that benefit households. Nonetheless, the sharp drop in that coefficient and the lower impact of public work on support in the case of droughts could indicate that, in addition, people are generally motivated by the demand to ensure that recipients will not use the benefits in ways deemed undesirable and should be willing to actively contribute to improve their livelihoods. Meanwhile, the decrease in the effect of mandatory health consultations for the family is less extreme, suggesting that respondents view the requirement as more suitable for the context and believe it will improve household well-being.

It is also worth highlighting other coefficient changes that, although statistically insignificant, imply differences in attitudes. First, respondents who watched the drought video statistically support higher monthly transfers of BRL 900 compared with monthly transfers of BRL 600, while this is not a shared opinion among the control group, and as a result, that group's coefficient is not well specified.

The effect of lump-sum payments or longer and lower transfers on support, on the other hand, is not affected by which video was watched. Secondly, although shy, watching the drought video increases preference for broader coverage compared with a focus on the extreme poor. Moreover, the respondents who watched the climate video react slightly less negatively to having local authorities involved in implementing programmes compared with having a federally implemented transfer. Finally, the coefficients of all modes of funding the transfer (vis-à-vis income taxes) see a slight decrease, which suggests that the drought video has a mild dampening effect on the elasticity of the respondents' preferences regarding funding modes.

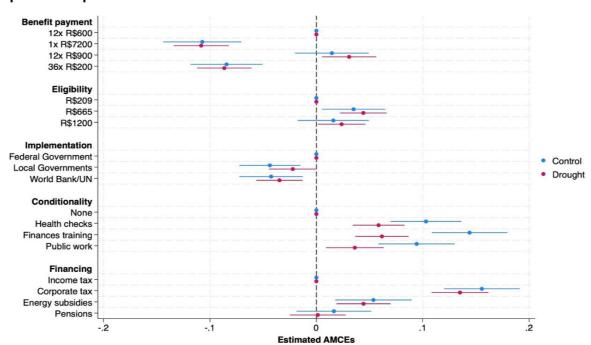


Figure 11: The effect of climate-induced vulnerabilities on preferences for social protection policies

Source: Author

Table 3: Effect of weather-induced poverty on support for transfer policy: coefficients equivalence (p-value)

Attribute	Level	Control = Drought	
	1 x BRL 7,200	0.964	
Benefit payment	12 x BRL 900	0.460	
	36 x BRL 200	0.922	
Eligibility	Income < BRL 665	0.627	
	Income < BRL 1,200	0.704	
	Local governments	0.245	
Implementation	World Bank/UN	0.677	
	Health check-ups	0.034	
Conditionality	Finance training	0.000	
	Public work	0.011	
	Corporate taxes	0.363	
Financing	Energy subsidies	0.677	
	Pension benefit	0.497	

Notes: Displayed are the p-values of the Wald tests checking for the equivalence between the same attribute-level coefficients (indicated in the first two columns) calculated for the different subsamples displayed in the top row. In bold are the coefficients for which the difference is statistically significantly different from 0, at a 10 per cent significance level.

Source: Author

### 4.4.1 Heterogeneities in response to the treatment

The collection of results so far identifies (i) a significant role of transfer design for support of the policy, (ii) a significant role of various individual demographic characteristics and attitudes in the formation of their policy preferences, and (iii) that respondents respond strongly to the drought video treatment, especially in terms of the relevance of conditionalities for policy support. Given these findings, this section examines whether heterogeneity is present not only in underlying policy preferences but also in the effect of the drought video treatment on these preferences. Namely, we explore whether response varies across the following attributes: proximity to affected regions, underlying views on social assistance, ideology and views on climate change. This exercise is of an exploratory nature, and, given the limited size of most subsamples, it focusses on broad patterns in the results across them, rather than more narrowly seeking to uncover significant statistical differences. Table A2 of the Appendix displays the summary statistics for the variables used in the heterogeneity analyses in this section.

## 4.4.2 Region

The first dimension explored refers to the proximity to the affected regions, which we define as whether the respondents reside in the same macro-region as the one mentioned in the video they watched.<sup>20</sup> Proximity to the area may influence preferences due to self-motivated considerations and perceived exposure, but also due to other behavioural and socio-tropic concerns related, for instance, to a social closeness to affected communities. The plots in Figure 12 present the estimate coefficients for the control and drought video groups among respondents in different regions from the videos (Plot 12a) and the coefficients for the drought video group for respondents in the same region (Plot 12b).<sup>21</sup> The plots indicate that for people in the same region there is a clear, positive effect of higher monthly transfers on policy support, while this is absent in both the control group and among respondents who watched the drought video but are in different regions than the ones portrayed. This variation suggests that (social) proximity to the shock victims promotes solidarity and acknowledgement of the needs of that population. However, this is not followed by an increase in support for including more families in the beneficiary pool instead of focussing on the poor. Instead, respondents in the same region are statistically indifferent between different coverage, and there are (weak) suggestions that they would rather have a programme that only includes the poor but excludes the vulnerable nonpoor, as the point estimate for the BRL 1,200 coefficient is negative and the one for BRL 665 is positive. For people from other regions, on the contrary, watching the video increases the effect of having a larger programme on support for transfers, when a larger programme is defined in terms of coverage, but not in terms of the generosity of benefits.

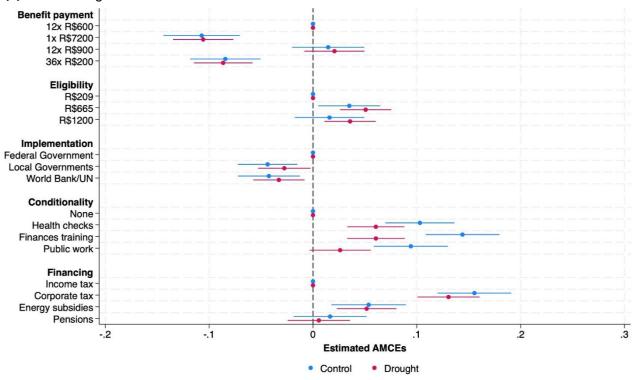
Interestingly, respondents from the same regions as the weather shocks still prefer having conditionalities over unconditional transfers, including those with a clear reciprocity component, such as public work engagement, whereas preference for this measure over no conditionalities decreases among people from other regions who watch the drought video. Lastly, people in affected regions are as supportive of local authorities leading the implementation efforts as they are of federal authorities, whereas respondents from other regions still lean towards a centralised approach, including those who watched the drought video. These results highlight the trade-offs between notions of deservingness, need and adequacy among individuals with varying social distance to families in need.

<sup>20</sup> Thus, respondents are classified as close to the region if they reside in the South region for those in the La Niña treatment and in the Northeast region for the El Niño treatment.

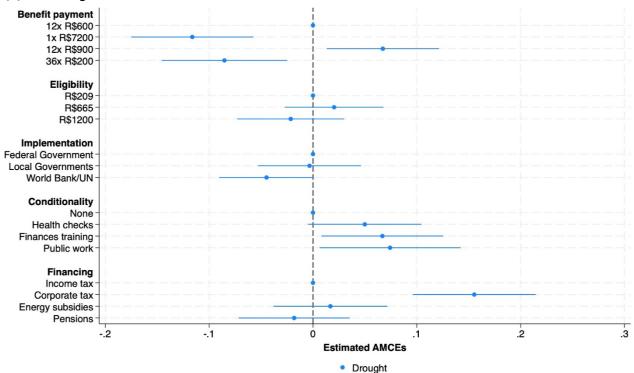
<sup>21</sup> Since the control video does not mention any region, it is by construction not possible to allocate individuals in the control video arm to the same region condition.

Figure 12: Policy preferences for climate-induced vulnerability: locality









Notes: Presented is the estimated impact of a change in each attribute (in bold) as indicated in the left axis, vis-à-vis the preference level of each attribute (in the first row of each attribute). The estimations are done for each income subgroup, as indicated in the plot. Point estimates with 95 per cent confidence intervals. Regressions estimated with OLS. Standard errors clustered at the individual.

#### 4.4.3 Views on social protection

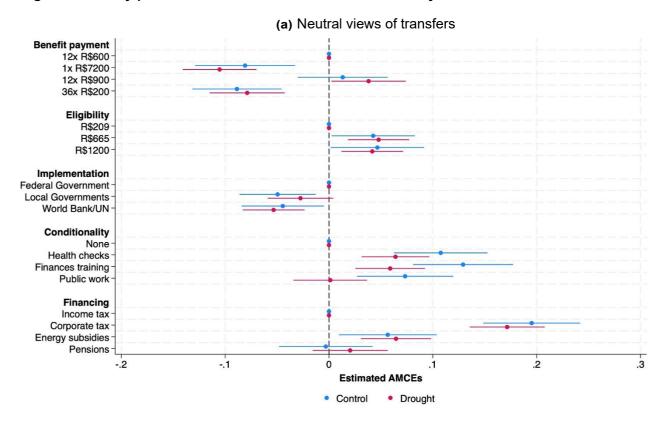
Moving on to factors that directly relate to the filters through which people interpret the world, we explore heterogeneities in treatment responses according to views on cash transfers as disincentives to work. By exploring how respondents react differently to the video treatments, we examine whether evidence that vulnerability is (also) a result of events exogenous to the households' control helps with overcoming negative views on social protection. Figure 13 plots the difference in responses to the drought video treatment across respondents who have neutral views on transfers (Plot 13a) and those who view them negatively (Plot 13b). When informed about climate vulnerabilities, individuals with negative views on social transfers become less opposed to lump-sum transfers compared with the BRL 600 monthly instalments, while those without negative perceptions become less supportive. Even though the coefficient differences are not significant, this pattern is consistent with evidence that respondents tend to associate lump-sum payments with investment decisions and monthly transfers with work disincentives (Hamilton et al., 2023). Therefore, in the face of a situation where transfers of resources to those in need could be morally easier to justify, sceptics of social protection would react negatively to lump sums (vis-à-vis the baseline) less than in other situations. On the other hand, the effect of increasing the value of frequent payments becomes positive and statistically significant for supporters of transfers who watch the drought video. The effect of lump-sum transfers is somewhat more negative for that group than for their control counterpart, as constant income is needed to replace lost incomes due to the drought.

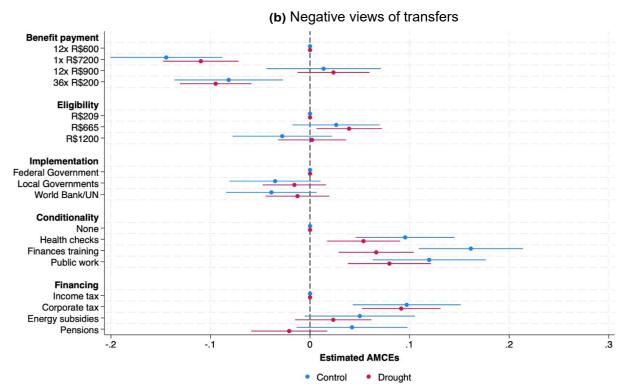
While the effect of imposing conditionalities falls for both groups when they watch the drought video, additional support for work-related requirements shifts to zero only when people do not view transfers negatively. Not only do wary individuals still prefer aid that ties benefits to mandatory (low-skill) work compared with unconditional transfers, but they also equally desire this mode of conditionality, compared with the preference for financial training in the control condition. This suggests that there are limits to how willing sceptics are to flexibilise the mode transfers. People with a neutral or positive view of transfers react more favourably to financing the scheme via funds reallocated from other social benefits, such as pensions (albeit not significantly different from income taxes), if they watch the drought video. The opposite is true for sceptics of transfers, who become less willing to support them compared with increasing income taxes. Likely, the contributory nature of pensions explains this distinction, as contributory pensions (especially top pensions) indicate years of work engagement. Lastly, it is important to note that the point estimate of preferences for corporate taxes remains unaltered among transfer opponents, which corroborates the focus that group places on work merit.

### 4.4.4 Ideology

As noted by Giuliano and Spilimbergo (2025), the fact that aggregate shocks influence preferences in ways that are at odds with much of the theoretical expectations suggests that ideology is a key heuristic that permeates how individuals perceive shocks and incorporate the information (Esarey et al., 2012).

Figure 13: Policy preferences for climate-induced vulnerability: views of transfers





Notes: Presented is the estimated impact of a change in each attribute (in bold) as indicated in the left axis, vis-à-vis the preference level of each attribute (in the first row of each attribute). The estimations are done for each income subgroup, as indicated in the plot. Point estimates with 95 per cent confidence intervals. Regressions estimated with OLS. Standard errors clustered at the individual.

Therefore, we broaden the analysis beyond support specifically for transfer and explore to what extent the video treatment influences preferences for policy features across two main ideological groups: the left-wing and the centre-right.<sup>22</sup> Figure 14 plots the heterogeneity in responses for left-wing and the other respondents (Plots 14a and 14b, respectively). The first finding is that the drop in the positive effect of conditionalities is largely driven by respondents with left-leaning views. In the case of training and work in construction, the coefficients' point estimates become negative (albeit not significant, likely due to the sample size). Since regular, required, health check-ups are still seen as a desirable feature in cash transfers in the case of climate-induced vulnerabilities, mandatory activities that do not provide a positive return to households hit by the shock are perceived by left-wing voters as additional burdens placed on families already in need. The responses to the drought video regarding benefit payment are remarkably similar for the two groups, indicating that greater support for more generous schemes compared with lower transfers induced by the droughts video is shared across the ideological spectrum. Moreover, although both political sides become somewhat more tolerant towards personal income tax increases compared with other financing modes, the results show that polarised responses to changes in fiscal mechanisms design are sticky across ideological lines in the face of changes in circumstances. Namely, the effect of increasing corporate taxes on support is larger for leftwing respondents than the effect for right-wing respondents for all videos, and the effect of reducing pensions is negative (albeit insignificant) for left-wingers, and positive for right-wingers. Interestingly, the effect of coverage broadening on policy support among left-wing voters is relatively inelastic to the vulnerability context, whereas right-wingers are more clearly supportive of expanding coverage to the entire poor population, rather than focussing on the extreme poor, in the context of droughts, but the effect is less well specified (and insignificant) in other contexts. The duality between, on the one hand, a defence of focussing on those most in need, who are likely to be the ones most severely affected by droughts, and, on the other hand, the broad progressive agenda of supporting the expansion of social protection, might help explain the stability of the left's preferences vis-à-vis changes in policy features.

## 4.4.5 Psychological distance to climate change

Lastly, it is possible that people's reactions to the video treatment differ according to their psychological distance from climate topics and their level of scepticism about climate change. This is crucial, as the effects of natural meteorological phenomena, such as El Niño and La Niña, are intensifying due to changes in the global climate, which the video indirectly alludes to by highlighting recent droughts that are stronger than usual. A priori, it is unclear how uncertainty about the factuality of climate change would influence the treatment's effect. On the one hand, wary respondents might distrust the information provided, thereby dampening the effect. On the other hand, the video might provide new information to this group, and since information treatments exert (the largest) effect when they correct substantially deviant priors, those respondents might respond more strongly to the information provided. The results in Figure 15 suggest the latter might be at work. While both climate change sceptics and believers react to the video<sup>23</sup>, the effects seem to be somewhat stronger for sceptics. For instance, the effect on policy support of conditioning transfers shifts to null among members of that group who are allocated to the drought treatment arms, even though, in the control group, they display similar preferences across types of conditionalities as non-sceptics. Sceptics also change their reaction towards income tax as a funding method towards supporting it more relative to other means, unlike climate realists, who, to the extent any effect exists, become less supportive of funding

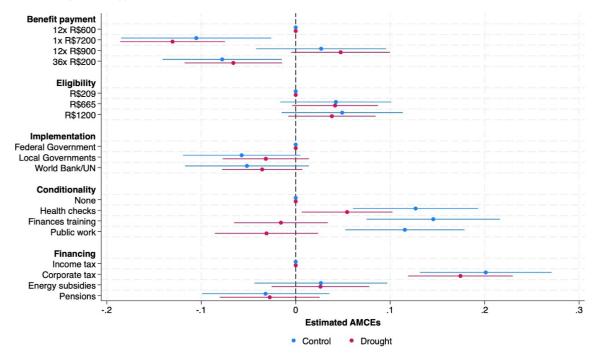
<sup>22</sup> Due to sample size limitations, this exercise limits the analysis to a dichotomous definition of ideology, which distinguishes respondents who report standing on the left of the 11-point ideological spectrum (from 0 to 4) from the rest.

<sup>23</sup> The coefficients of "climate believers" are better specified as this group is double the size of climate sceptics.

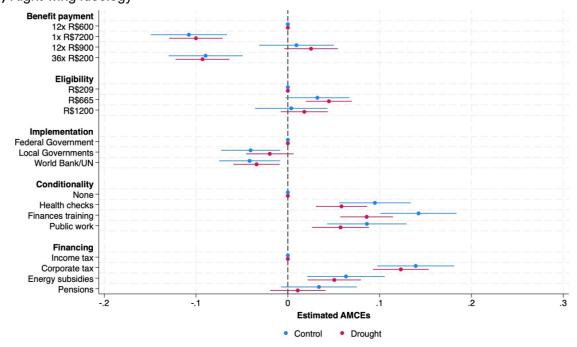
transfers via income tax instead of other methods. Lastly, larger and more generous schemes increase support for transfers among respondents who subscribe to climate science, whereas this effect is not observed among deniers.

Figure 14: Policy preferences for climate-induced vulnerability: ideology

### (a) Left-wing ideology



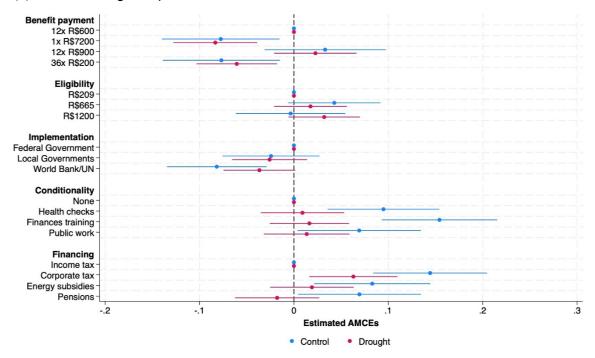
#### (b) Right-wing ideology



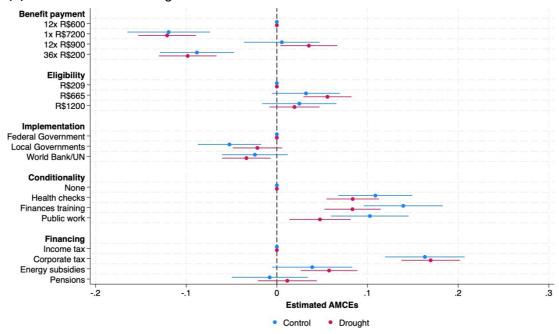
Notes: Presented is the estimated impact of a change in each attribute (in bold) as indicated in the left axis, vis-à-vis the preference level of each attribute (in the first row of each attribute). The estimations are done for each income subgroup, as indicated in the plot. Point estimates with 95 per cent confidence intervals. Regressions estimated with OLS. Standard errors clustered at the individual.

Figure 15: Policy preferences for climate-induced vulnerability: climate change scepticism

### (a) Climate change sceptical



### (b) Believes climate change



Notes: Presented is the estimated impact of a change in each attribute (in bold) as indicated in the left axis, vis-à-vis the preference level of each attribute (in the first row of each attribute). The estimations are done for each income subgroup, as indicated in the plot. Point estimates with 95 per cent confidence intervals. Regressions estimated with OLS. Standard errors clustered at the individual.

## 5 Conclusion

This study examined how citizens in a middle-income context evaluate the design of social protection policies and how such preferences shift when vulnerability is framed as climate induced. Using a conjoint experiment embedded in a large-scale survey in Brazil, it unpacked the relative importance of five design features, namely benefit payment scheme, eligibility criteria, implementing actor, conditionalities and financing mechanism, and assessed whether information about collective shocks reshapes these preferences. Three broad insights emerge.

First, citizens' fiscal preferences are decisive for the legitimacy of redistribution. Respondents are markedly less supportive of funding schemes that place the burden on a household's income through increases in income taxes or cuts in pensions, while strongly supporting measures with a diffuse impact, particularly increases in corporate tax. However, financing support hinges on concerns beyond pecuniary interests. Political mistrust limits the government's ability to raise additional revenue, as those voters prefer a reallocation of existing public spending from other activities. Importantly, fiscal preferences are highly ideologically anchored: left- and right-leaning individuals differ strongly, and these divides remain largely unaltered by contextual shocks. While the left reacts to changes in social spending, the right is more responsive to measures involving energy or production subsidies: two politically salient topics in emerging economies.

Second, deservingness considerations matter beyond need. Making transfers conditional weighs positively for public support, but not all conditionalities are viewed equally positively. Conditionalities that build capacities, capital or agency, such as health check-ups or participation in financial training, attract broad support across social groups. Conversely, paternalistic or burdensome requirements, such as mandatory public work, erode legitimacy, particularly among potential beneficiaries. Furthermore, support for specific types of capacity-building requirements varies depending on the context. The activities must be viewed as compatible with the circumstances; when they are not, support drops. As a result, even conditionalities that otherwise equip beneficiaries with desirable skills become less appealing across the broader population. This occurs when insecurity is perceived as a result not solely of decisions made by the poor. In such instances, conditionalities that more clearly embody a moral framing are met with scepticism by a portion of the population. This heterogeneity highlights that the broader public, including potential beneficiaries, does not inherently oppose conditionalities. On the contrary, the presence of conditionalities can significantly enhance the broad legitimacy of transfers. What it shows is that conditionalities with a reciprocity framing are both more disputed across social groups and contexts, while agency-building requirements enjoy a more stable support.

Third, while citizens value inclusion, more generous or extensive transfers do not automatically grant greater legitimacy. Beyond a certain threshold (typically framed around poverty lines), broader coverage or larger payments yield diminishing social returns. Women and lower-income respondents are consistently more supportive of expansion, yet even among them, the preference for gradual, predictable improvements outweigh the acceptance of abrupt, large-scale increases. These findings suggest that continuity and stability are crucial for political feasibility.

Lastly, when vulnerability is portrayed as climate-induced, attitudes become modestly more solidaristic, as respondents become less strongly motivated by strict conditionalities. This indicates that framing poverty as externally driven can soften moral boundaries of deservingness. Yet, these effects do not override deeper ideological divides. Moreover, there are important limits to attitude change as pecuniary interests are more deeply rooted. The increased need for assistance induced by collective shocks can thus expand the constituency for social protection, but this acceptance is not widely shared. Instead, increased support for larger transfers occurs mainly among respondents who are in the same region and who are not sceptical about climate change. This means that if climate shocks are strongly localised and political polarisation increases scepticism about climate change, obstacles to deepening social protection can be expected.

The results in this paper add to existing literature and emphasise that support for different social protection policies is context-specific (Häusermann et al., 2019; Rincón, 2023; Rincón et al., 2022). Yet, it expands the existing research by highlighting how context refers not only to different countries, but also includes different moments and events that affect the society in that country. The role of conditionalities exemplifies how this nuanced interpretation of context specificity helps to reconcile apparently divergent previous findings. Similar to Häusermann et al. (2019) and Rincón (2023), we find that conditional transfers enjoy significantly greater levels of public support. However, our findings indicate that this higher support diminishes as people become aware that the reasons for economic insecurity include factors beyond a person's control. In some cases, support for unconditional transfers is as high as for conditional transfers that rely on burdensome requirements, which lies close to the social acceptance of unconditionalities in Nettle et al. (2025) and Rehm et al. (2012). Unlike Zucco et al. (2020), who also investigate the Brazilian context, we find that conditionalities closer to those currently employed by Bolsa Família induce greater support for the transfer across different social groups, including among respondents demographically similar to probable beneficiaries. A potential explanation that reconciles these divergent findings lies in the beliefs about whether the conditionalities are indeed enforced in the case of Bolsa Família. Unlike Gallego and Marx (2017), the findings in this paper indicate that diffuse financing streams, such as corporate taxes and cuts in energy subsidies, receive consistently greater approval, and income taxes are the least preferred funding method. Lastly, this paper's findings corroborate the evidence of support presented by Nettle et al. (2025), albeit with diminishing returns, for coverage broadening.

Not only does this paper contribute to the growing academic research on multidimensional preferences, but the findings here also have particular policy relevance. First, it provides evidence on how voters in a major middle-income country consider policy trade-offs under fiscal constraints. This is crucial for policymakers when considering how to ensure social support. When policymakers deliver programmes that resonate with the preferences of their constituents, people see the merit in that instrument. Not only are people then more willing to approve it, but also to comply with it, easing the implementation of future interventions (Besley, 2020). While the paper focusses specifically on the design of cash transfers, preferences regarding implementation and financing mechanisms are also useful for other public policies, including, but not limited to, other social policies. Examples include public investments and services, such as health, education and energy transitions. Thus, the findings of this paper help not only with the design of isolated cash transfers but also provide information for the development of a continuously more legitimate government with a wider range of feasible (future) interventions.

Second, the findings provide a roadmap for governments in other middle-income countries that so far lack evidence. Even though the specific levels of support for each policy element may differ across countries, the trade-off and relationship between the attributes and how people evaluate trade-offs between policy designs may apply to other middle-income countries. As countries with analogous histories of institutional and socio-economic development face comparable challenges and pressing issues, the evidence presented in this paper likely applies to those cases. Therefore, the external validity of our findings naturally refers to other Latin American countries. Mexico stands out as the most notable example in the region. Mexico, like Brazil, is a large middle-income federal republic in the region, with a middle-income class that perceives income taxes as poorly used, and is of large dimensions with high (regional) inequalities. Moreover, Mexico's history with conditional cash transfers, namely PROGRESA/Oportunidades, mirrored Brazil's Bolsa Família for decades (Bastagli et al., 2016). Even though the Mexican cash transfer programme underwent changes in 2019, its long experience under the old format plausibly shaped social views on conditionalities. Beyond the region, other middleincome countries with a history of conditional cash transfers are also likely to benefit from the findings of this paper, especially given the relevance of different modes of conditionalities for public support in our findings. Indonesia, for instance, has experience with the Program Keluarga Harapan (PKH), in which similar health and education conditionalities, similar to those in

Bolsa Família, are employed (Bastagli et al., 2016). Moreover, the country also has a decentralised structure and has high exposure to climate risk, including droughts that affect the livelihoods of small farmers, as in the case of Brazil (World Bank, 2025).

More concretely, what are the policy implications of the findings? How governments design cash transfers matters for whether voters will support them or not. Importantly, that support does not depend only on pecuniary concerns and related budgetary pressures. Instead, deservingness and fairness values play an important role. Pragmatically, governments can address that with the inclusion of conditionalities, although they face difficult decisions in doing so. While conditionalities do increase support across the social spectrum, there are risks that they marginalise precisely the households most in need who, when unable to meet conditionalities, will be driven into poverty traps (Bastagli et al., 2016). Therefore, if policymakers aim to embed conditionalities as modes of increasing broad support, it is crucial that they opt for requirements that limit costs incurred by beneficiary households to comply by them. Moreover, our findings indicate that support is higher and more stable for conditionalities that also benefit the recipients. Therefore, conditionalities linked to health are preferable measures to be chosen, as not only do they induce greater public support, but they also provide gains in human capital investments. In cases where conditionalities are costly or undesirable, such as following climate shocks, governments may address notions of deservingness and increase public support by labelling the unconditional cash transfers as benefits to support a specific outcome, for instance, as an "education support programme" (Benhassine et al., 2015), or, as in the case of Brazil's recent floods shock, as a "reconstruction support benefit" (Tebaldi, 2025).

Moreover, since support for transfers is sensitive to benefit payments that are substantially different from existing transfers, governments should avoid providing lump sums or low monthly benefits that are seen as inadequate. Rather, our findings suggest that adaptive protection systems should "piggyback" on existing schemes and extend coverage of payments that society is already accustomed to. Leveraging on existing social protection schemes thus brings two complementary benefits: they are likely to induce greater support among the broader population, and they allow for timely policy implementation and expansion in the aftermath of shocks (Bowen et al., 2020). Moreover, we find that people are either indifferent or supportive of relatively small to moderate increases in the value of the benefit. In practical terms, these results imply that governments should frequently adjust the value of the benefit to reflect changes in living costs, rather than performing rare but large adjustments to correct for accumulated inflation, which are likely to be met with higher social opposition than regular and small adjustments.

We argue that "situation-specificity" is a crucial factor to consider when assessing public support for cash transfers, as current and future socio-economic dynamics will likely pressure new groups of people into vulnerability. This paper demonstrates how climate shocks and climate-induced economic insecurity influence individuals' preferences regarding policy bundles. However, future research can explore whether other types of aggregate shocks and economic changes induce similar patterns of preference shifts. One example of such a critical challenge is the changes in the structure of economic production resulting from the diffusion of AI and increased automation, which is predicted to increase vulnerability among displaced workers. As discussions between the policy and academic worlds focus on how to design social protection instruments, including universal basic incomes, to address these new forms of need, it is imperative that future research investigates preferences for policies embedded in that context.

Overall, the findings in this paper highlight that support for social protection depends not only on who benefits but also on how fairness, responsibility and fiscal burden are communicated. Building legitimate and adaptive welfare systems, therefore, requires a focus on citizens' moral and fiscal perceptions as much as on administrative capacity. In middle-income countries facing fiscal constraints and increasingly recurrent climate shocks, transparent financing, empowerment-oriented conditionalities and gradual adjustments in benefit design may together enhance both the legitimacy and resilience of social protection systems.

## References

- Alesina, A., & Giuliano, P. (2011). Preferences for redistribution. In J. Benhabib, A. Bisin & M. O. Jackson (Eds.), *Handbook of social economics* (Vol. 1) (pp. 93-131). North-Holland/Elsevier.
- Alesina, A., Miano, A., & Stantcheva, S. (2023). Immigration and redistribution. *The Review of Economic Studies*, *90*(1), 1-39.
- Alesina, A., Stantcheva, S., & Teso, E. (2018). Intergenerational mobility and preferences for redistribution. *American Economic Review*, 108(2), 521-554.
- Ardanaz, M., Hübscher, E., Keefer, P., & Sattler, T. (2024). *Voter responses to fiscal crisis: Experimental evidence on preferences for fiscal adjustment in emerging markets* (IDB Working Paper Series 1545). Inter-American Development Bank (IDB).
- Arends, H., Brik, T., Herrmann, B., & Roesel, F. (2023). Decentralization and trust in government: Quasi-experimental evidence from Ukraine. *Journal of Comparative Economics*, 51(4), 1356-1365.
- Ballard-Rosa, C., Martin, L., & Scheve, K. (2017). The structure of American income tax policy preferences. *The Journal of Politics*, 79(1), 1-16.
- Banerjee, A. V., Hanna, R., Kreindler, G. E., & Olken, B. A. (2017). Debunking the stereotype of the lazy welfare recipient: Evidence from cash transfer programs. *The World Bank Research Observer*, *32*(2), 155-184.
- Banerjee, A., Hanna, R., Olken, B. A., & Lisker, D. S. (2024). Social protection in the developing world. *Journal of Economic Literature*, 62(4), 1349-1421.
- Bastagli, F., Hagen-Zanker, J., Harman, L., Barca, V., Sturge, G., Schmidt, T., & Pellerano, L. (2016). Cash transfers: What does the evidence say. *A rigorous review of programme impact and the role of design and implementation features*. Overseas Development Institute (ODI).
- Bello, L. (2023, 12 April). *Em 2023, pobreza no país cai ao menor nível desde 2012*. Agência de Notícias IBGE. https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-denoticias/noticias/42043-em-2023-pobreza-no-pais-cai-ao-menor-nivel-desde-2012
- Benhassine, N., Devoto, F., Duflo, E., Dupas, P., & Pouliquen, V. (2015). Turning a shove into a nudge? A "labeled cash transfer" for education. *American Economic Journal: Economic Policy*, 7(3), 86-125.
- Besley, T. (2020). State capacity, reciprocity, and the social contract. Econometrica, 88(4), 1307-1335.
- Besley, T., & Dray, S. (2024). Trust and state effectiveness: The political economy of compliance. *The Economic Journal*, 134(662), 2225-2251.
- Bowen, T., Del Ninno, C., Andrews, C., Coll-Black, S., Johnson, K., Kawasoe, Y., . . . Williams, A. (2020). *Adaptive social protection: Building resilience to shocks*. World Bank Publications.
- Brazilian Federal Reserve. (2025). *Tributação de 2024*. Author: https://www.gov.br/receitafederal/pt-br/assuntos/meu-imposto-de-renda/tabelas/copy\_of\_2024
- Bremer, B., & Bürgisser, R. (2023a). Do citizens care about government debt? Evidence from survey experiments on budgetary priorities. *European Journal of Political Research*, *62*(1), 239-263.
- Bremer, B., & Bürgisser, R. (2023b). Public opinion on welfare state recalibration in times of austerity: Evidence from survey experiments. *Political Science Research and Methods*, *11*(1), 34-52.
- Bremer, B., & Bürgisser, R. (2025). Lower taxes at all costs? Evidence from a survey experiment in four European countries. *Journal of European Public Policy*, 32(5), 1225-1252.
- Cassar, A., Healy, A., & Von Kessler, C. (2017). Trust, risk, and time preferences after a natural disaster: Experimental evidence from Thailand. *World Development*, *94*, 90105.
- Cavaillé, C., & Trump, K.-S. (2015). The two facets of social policy preferences. *The Journal of Politics*, 77(1), 146-160.
- Chapman, C. M., Hornsey, M. J., Fielding, K. S., & Gulliver, R. (2023). International media coverage promotes donations to a climate disaster. *Disasters*, *47*(3), 725-744.

- Cruces, G., Perez-Truglia, R., & Tetaz, M. (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. *Journal of Public Economics*, 98, 100-112.
- Devine, D. (2024). Does political trust matter? A meta-analysis on the consequences of trust. *Political Behavior*, 1-22.
- Esarey, J., Salmon, T., & Barrilleaux, C. (2012). Social insurance and income redistribution in a laboratory experiment. *Political Research Quarterly*, *65*(3), 685-698.
- Esping-Andersen, G. (1990). The three worlds of welfare capitalism. Princeton University Press.
- Frey, A. (2019). Cash transfers, clientelism, and political enfranchisement: Evidence from Brazil. *Journal of Public Economics*, 176, 1-17.
- Gallego, A., & Marx, P. (2017). Multi-dimensional preferences for labour market reforms: A conjoint experiment. *Journal of European Public Policy*, *24*(7), 1027-1047.
- Gelbach, J., & Pritchett, L. (2002). Is more for the poor less for the poor? The politics of means-tested targeting. *Topics in Economic Analysis & Policy*, *2*(1), 1027.
- Giuliano, P., & Spilimbergo, A. (2025). Aggregate shocks and the formation of preferences and beliefs. *Journal of Economic Literature*, *63*(2), 542-597.
- Gualtieri, G., Nicolini, M., & Sabatini, F. (2019). Repeated shocks and preferences for redistribution. *Journal of Economic Behavior & Organization*, 167, 53-71.
- Günther, I., & Martorano, B. (2025). Inequality, social mobility and redistributive preferences. *Journal of Economic Behavior & Organization*, 229, 106828.
- Hainmueller, J., Hangartner, D., & Yamamoto, T. (2015). Validating vignette and conjoint survey experiments against real-world behavior. *Proceedings of the National Academy of Sciences*, *112*(8), 2395-2400.
- Hamilton, L., Despard, M., Roll, S., Bellisle, D., Hall, C., & Wright, A. (2023). Does frequency or amount matter? An exploratory analysis the perceptions of four universal basic income proposals. *Social Sciences*, *12*(3), 133.
- Hauser, O. P., & Norton, M. I. (2017). (Mis)perceptions of inequality. *Current Opinion in Psychology*, 18, 21-25.
- Häusermann, S., Kurer, T., & Traber, D. (2019). The politics of trade-offs: Studying the dynamics of welfare state reform with conjoint experiments. *Comparative political studies*, *52*(7), 1059-1095.
- Horiuchi, Y., Markovich, Z., & Yamamoto, T. (2022). Does conjoint analysis mitigate social desirability bias? *Political Analysis*, *30*(4), 535-549.
- IBGE (Instituto Brasileiro de Geografia e Estatística). (2025). Pesquisa nacional por amostra de domicílios contínua. tabela 5437, rendimento médio mensal real das pessoas de 14 anos ou mais de idade ocupadas na semana de referência com rendimento de trabalho, habitualmente e efetivamente recebidos no trabalho principal e em todos os trabalhos, por grupo de idade. https://sidra.ibge.gov.br/tabela/5437#resultado
- Ingwersen, N., Frankenberg, E., & Thomas, D. (2023). Evolution of risk aversion over five years after a major natural disaster. *Journal of Development Economics*, *163*, 103095.
- International Labour Office. (2024). World social protection report 2024-26: Universal social protection for climate action and a just transition (ILO Flagship report). https://www.ilo.org/sites/default/files/2024-09/WSPR\_2024\_EN\_WEB\_1.pdf
- Keefer, P., Scartascini, C., & Vlaicu, R. (2022). Demand-side determinants of public spending allocations: Voter trust, risk and time preferences. *Journal of Public Economics*, 206, 104579.
- Kuziemko, I., Norton, M. I., Saez, E., & Stantcheva, S. (2015). How elastic are preferences for redistribution? Evidence from randomized survey experiments. *American Economic Review*, 105(4), 1478-1508.
- LAPOP Lab. (2024). *AmericasBarometer Data Playground*. Center for Global Democracy: https://www.vanderbilt.edu/lapop/data-playground-eng.php

- Larsen, M. H. (2025). Politics of welfare exclusion: Open and concealed welfare chauvinism and public support for social assistance reform. *Acta Sociologica*. https://doi.org/10.1177/00016993251351544
- Latinobarómetro. (2017). *Latinobarómetro Corporation: 2017 Wave Aggregated Version*. JD Systems Institute: https://www.latinobarometro.org/latinobarometro-2017
- Latinobarómetro. (2018). *Latinobarómetro Corporation: 2018 Wave Aggregated Version*. JD Systems Institute: https://www.latinobarometro.org/latinobarometro-2018
- Luttmer, E. F. P., & Singhal, M. (2011). Culture, context, and the taste for redistribution. *American Economic Journal: Economic Policy*, 3(1), 157-179.
- Malerba, D. (2022). Just transitions: A review of how to decarbonise energy systems while addressing poverty and inequality reduction (Discussion Paper 6/2022). German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE). https://doi.org/10.23661/dp6.2022
- Meltzer, A. H., & Richard, S. F. (1981). A rational theory of the size of government. *Journal of Political Economy*, 89(5), 914-927.
- Mengel, F., & Weidenholzer, E. (2023). Preferences for redistribution. *Journal of Economic Surveys*, *37*(5), 1660-1677.
- Moene, K. O., & Wallerstein, M. (2001). Inequality, social insurance, and redistribution. *American Political Science Review*, 859-874.
- Nettle, D., Chrisp, J., Johnson, E. A., & Johnson, M. T. (2025). What do people want from a welfare system? Conjoint survey evidence from UK adults. *Poverty & Public Policy*, 17(2). https://doi.org/10.1002/pop4.70018
- Pañeda-Fernández, I. (2022). Natural disasters and preferences for redistribution: The impact of collective and abrupt disruptions. *European Sociological Review*, *38*(4), 575-589.
- Rehm, P., Hacker, J. S., & Schlesinger, M. (2012). Insecure alliances: Risk, inequality, and support for the welfare state. *American Political Science Review*, *106*(2), 386-406.
- Rincón, L. (2023). A robin hood for all: A conjoint experiment on support for basic income. *Journal of European Public Policy*, *30*(2), 375-399.
- Rincón, L., Vlandas, T., & Hiilamo, H. (2022). What's not to like? Benefit design, funding structure and support for universal basic income. *Journal of European Social Policy*, 32(4), 467-483.
- Schüring, E., & Gassmann, F. (2016). The political economy of targeting: A critical review. *Development Policy Review*, *34*(6), 809-829.
- Sovacool, B. K. (2017). Reviewing, reforming, and rethinking global energy subsidies: Towards a political economy research agenda. *Ecological Economics*, *135*, 150-163.
- Stadelmann-Steffen, I., & Dermont, C. (2021). Acceptance through inclusion? Political and economic participation and the acceptance of local renewable energy projects in Switzerland. *Energy Research & Social Science*, 71(1). https://doi.org/10.1016/j.erss.2020.101818
- Stampini, M., Robles, M., Sáenz, M., Ibarrarán, P., & Medellín, N. (2016). Poverty, vulnerability, and the middle class in Latin America. *Latin American Economic Review*, *25*, 4.
- Stantcheva, S. (2021). Understanding tax policy: How do people reason? *The Quarterly Journal of Economics*, 136(4), 2309-2369.
- Stantcheva, S. (2023). How to run surveys: A guide to creating your own identifying variation and revealing the invisible. *Annual Review of Economics*, *15*(1), 205-234.
- Stantcheva, S. (2024). Perceptions and preferences for redistribution. *Oxford Open Economics*, 3 (Supplement 1), i96-i100.
- Tebaldi, R. (2025). Social protection and the climate crisis: The case of Brazil's emergency responses to the 2024 Rio Grande do Sul floods. *International Social Security Review*, 78(2-3), 123-144.
- Trautmann, S. T. (2023). Procedural fairness and equality of opportunity. *Journal of Economic Surveys*, 37(5), 1697-1714.
- World Bank. (2025). Climate risk profile: Indonesia. The World Bank Group.

- World Bank. (2025). State of social protection report 2025: The 2-billion-person challenge. https://doi.org/10.1596/978-1-4648-2156-1
- Zhang, Y., & Zahoor, Z. (2025). The role of energy subsidies, savings, and transitions in driving energy transformations toward net-zero emissions. *Energy*, 320. https://doi.org/10.1016/j.energy.2025.135209
- Zucco, C., Luna, J. P., & Baykal, O. G. (2020). Do conditionalities increase support for government transfers? *The Journal of Development Studies*, *56*(3), 527-544.

# **Appendix**

# A Auxiliary tables and figures

## A1 Summary statistics

Table A1: Summary statistics: full sample

Variable	Obs.	Mean	Std. dev.	Min.	Max.
Bolsa Família recipient	33,194	0.2197	0.4141	0	1
Woman	33,614	0.5198	0.4996	0	1
Negative views social protection	33,614	0.4348	0.4957	0	1
Political mistrust	33,614	0.3053	0.4605	0	1
Income	32,816	1.9868	0.8154	1	3
Age group	33,614	2.0020	0.7965	1	3
Ideology	33,194	2.1451	0.7563	1	3

Notes: The first four variables/rows are dummy variables that take the value of 1 when the respondent corresponds to the category indicated in the first column. Income is a three-category variable, computed according to the description in the text under Section 5.2.1, and with values 1 (poor), 2 (middle-income) and 3 (rich). Age group is a three-category variable, with the values 1 (18-29 years old), 2 (30-45 years old) and 3 (46+ years old). Ideology is a three-point categorical variable with the value of 1 (left-wing), 2 (centre) and 3 (right-wing). The unit of analysis (observation) is "Respondent × Round × Profile".

Source: Author

Table A2: Summary statistics: sample active control and drought videos

Variable	Obs.	Mean	Std. dev.	Min.	Max.
Drought video	19,768	0.6629	0.4727	0	1
Same region	19,768	0.1381	0.3450	0	1
Negative views social protection	19,768	0.4476	0.4973	0	1
Left	19,768	0.2479	0.4318	0	1
Believes climate change	19,768	0.6671	0.4712	0	1

Notes: Presented are the summary statistics for the dummy variables, which take the value of 1 when the respondent corresponds to the category indicated in the first column. The unit of analysis (observation) is "Respondent × Round × Profile".

# A2 Coefficients equivalence and marginal means plots

Table A3: Effect of income on support for transfer policy: coefficients equivalence (p-value)

Attribute	Level	Low = Middle	Middle = High	Low = High
-	1 x BRL 7,200	0.648	0.866	0.524
Benefit payment	12 x BRL 900	0.972	0.746	0.775
	36 x BRL 200	0.996	0.902	0.907
Eligibility	Income < BRL 665	0.548	0.083	0.020
	Income <brl 1,200</brl 	0.432	0.030	0.003
	Local governments	0.738	0.298	0.163
Implementation	World Bank/UN	0.593	0.974	0.625
	Health check- ups	0.394	0.810	0.540
Conditionality	Finance training	0.549	0.120	0.029
	Public work	0.531	0.010	0.001
	Corporate taxes	0.074	0.081	0.996
Financing	Energy subsidies	0.338	0.370	0.968
	Pension benefit	0.320	0.633	0.131

Notes: Displayed are the p-values of the Wald tests checking for the equivalence between the same attribute-level coefficients (indicated in the first two columns) calculated for the different subsamples displayed in the top row. In bold are the coefficients for which the difference is statistically significantly different from 0, at a 10 per cent significance level.

Benefit payment 12x R\$600 1x R\$7200 12x R\$900 36x R\$200 Eligibility R\$209 R\$665 R\$1200 Implementation Federal Government **Local Governments** World Bank/UN Conditionality None Health checks Finances training Public work Financing Income tax Corporate tax Energy subsidies Pensions -.35 .55 45 .5 **Estimated MMs** 

Figure A1: Main results: marginal means

Source: Author

Table A4: Effect of Bolsa Família on support for transfer policy: coefficients equivalence (p-value)

Attribute	Level	BF Recipient = BF Not recipient
	1 x BRL 7,200	0.149
Benefit payment	12 x BRL 900	0.121
	36 x BRL 200	0.057
Eligibility	Income < BRL 665	0.210
	Income < BRL 1,200	0.017
	Local governments	0.608
Implementation	World Bank/UN	0.409
	Health check-ups	0.826
Conditionality	Finance training	0.042
	Public work	0.020
	Corporate taxes	0.135
Financing	Energy subsidies	0.445
	Pension benefit	0.490

Notes: Displayed are the *p*-values of the Wald tests checking for the equivalence between the same attribute-level coefficients (indicated in the first two columns) calculated for the different subsamples displayed in the top row. In bold are the coefficients for which the difference is statistically significantly different from 0, at a 10 per cent significance level.

Table A5: Effect of age on support for transfer policy: coefficients equivalence (p-value)

Attribute	Level	18-30 = 30-45	30-45 = 46+	18-30 = 46+
	1 x BRL 7,200	0.552	0.720	0.347
Benefit payment	12 x BRL 900	0.853	0.420	0.344
	36 x BRL 200	0.996	0.931	0.928
Eligibility	Income < BRL 665	0.517	0.758	0.740
	Income < BRL 1,200	0.613	0.059	0.021
	Local governments	0.275	0.355	0.051
Implementation	World Bank/UN	0.688	0.267	0.136
	Health check-ups	0.052	0.604	0.166
Conditionality	Finance training	0.566	0.725	0.822
	Public work	0.003	0.276	0.062
	Corporate taxes	0.487	0.164	0.042
Financing	Energy subsidies	0.128	0.028	0.508
	Pension benefit	0.165	0.003	0.000

Notes: Displayed are the p-values of the Wald tests checking for the equivalence between the same attribute-level coefficients (indicated in the first two columns) calculated for the different subsamples displayed in the top row. In bold are the coefficients for which the difference is statistically significantly different from 0, at a 10 per cent significance level.

Source: Author

Table A6: Effect of gender on support for transfer policy: coefficients equivalence (p-value)

Attribute	Level		Man = Woman	
	1 x BRL 7,200		0.960	
Benefit payment	12 x BRL 900		0.778	
	36 x BRL 200		0.900	
Eligibility	Income < BRL 665	0.709	0.709	
	Income < BRL 1,200	0.218	0.218	
	Local governments	0.066	0.066	
Implementation	World Bank/UN		0.958	
	Health check-ups		0.006	
Conditionality	Finance training		0.045	
	Public work		0.512	
	Corporate taxes		0.010	
Financing	Energy subsidies		0.669	
	Pension benefit		0.263	

Notes: Displayed are the *p*-values of the Wald tests checking for the equivalence between the same attribute-level coefficients (indicated in the first two columns) calculated for the different subsamples displayed in the top row. In bold are the coefficients for which the difference is statistically significantly different from 0, at a 10 per cent significance level.

Table A7: Effect of ideology on support for transfer policy: coefficients equivalence (p=value)

Attribute	Level	Left = Centre	Centre = Right	Left = Right
	1 x BRL 7,200	0.385	0.763	0.544
Benefit payment	12 x BRL 900	0.270	0.949	0.291
	36 x BRL 200	0.584	0.814	0.448
Eligibility	Income < BRL 665	0.995	0.078	0.136
	Income < BRL 1,200	0.991	0.019	0.043
	Local governments	0.120	0.558	0.048
Implementation	World Bank/UN	0.700	0.257	0.188
	Health check-ups	0.926	0.164	0.282
Conditionality	Finance training	0.199	0.730	0.345
	Public work	0.084	0.680	0.044
	Corporate taxes	0.050	0.006	0.000
Financing	Energy subsidies	0.792	0.017	0.080
	Pension benefit	0.059	0.970	0.057

Notes: Displayed are the *p*-values of the Wald tests checking for the equivalence between the same attribute-level coefficients (indicated in the first two columns) calculated for the different subsamples displayed in the top row. In bold are the coefficients for which the difference is statistically significantly different from 0, at a 10 per cent significance level.

Source: Author

Table A8: Effect of views on social benefits on support for transfer policy: coefficients equivalence (p-value)

Attribute	Level	Neutral = Negative
	1 x BRL 7,200	0.089
Benefit payment	12 x BRL 900	0.074
	36 x BRL 200	0.956
Eligibility	Income < BRL 665	0.388
	Income < BRL 1,200	0.014
	Local governments	0.193
Implementation	World Bank/UN	0.152
	Health check-ups	0.903
Conditionality	Finance training	0.521
	Public work	0.000
	Corporate taxes	0.000
Financing	Energy subsidies	0.574
	Pension benefit	0.800

Notes: Displayed are the *p*-values of the Wald tests checking for the equivalence between the same attribute-level coefficients (indicated in the first two columns) calculated for the different subsamples displayed in the top row. In bold are the coefficients for which the difference is statistically significantly different from 0, at a 10 per cent significance level.

Table A9: Effect of political mistrust on support for transfer policy: coefficients equivalence (p-value)

Attribute	Level	Trust = Low Trust
	1 x BRL 7,200	0.607
Benefit payment	12 x BRL 900	0.436
	36 x BRL 200	0.510
Eligibility	Income < BRL 665	0.735
	Income < BRL 1,200	0.534
	Local governments	0.011
Implementation	World Bank/UN	0.001
	Health check-ups	0.310
Conditionality	Finance training	0.881
	Public work	0.725
	Corporate taxes	0.957
Financing	Energy subsidies	0.094
	Pension benefit	0.010

Notes: Displayed are the p-values of the Wald tests checking for the equivalence between the same attribute-level coefficients (indicated in the first two columns) calculated for the different subsamples displayed in the top row. In bold are the coefficients for which the difference is statistically significantly different from 0, at a 10 per cent significance level.

## B Survey questionnaire

## **B1** Baseline questions

#### B1.1 Filters

- 1. State of residence
- 2. Municipality of residence
- 3. Age
- 4. Gender

#### **B1.2** Attitudes

We want to know your opinion on some Brazilian topics. We would like to know how much you agree or disagree with the statements below. Use the scale from 1 to 5, where 1 means you strongly agree, and 5 that you strongly disagree with each statement.

- 1. Large income differences are acceptable to reward differences in talent and effort.
- 2. Social benefits and social services in Brazil make people lazy.
- 3. The government is more capable than the private sector in fighting poverty.
- 4. I am not sure if the climate is changing.
- 5. Climate change affects mainly people whom I do not know.
- 6. Poverty directly affects many people in Brazil.

#### **B1.3** Video treatments

The respondents are randomly allocated into different treatment conditions, as described in the main text. The list below includes the scripts of each video and the links to the videos on YouTube.

- 1. Active control (link): Brazil has 211 million inhabitants and an average income of BRL 2,970 per month. Fifty-nine million Brazilians live on less than BRL 665 per month and 9.5 million live on less than BRL 209. These figures are used in official surveys to monitor the situation of low-income families. They help to compare data between different regions and identify trends over time. With this level of income, many families deal with tight budgets and are vulnerable to unforeseen events. Money is used carefully, prioritising basic needs. Monitoring how many people belong to these groups helps to understand how the economic situation of the population evolves and what challenges they face on a daily basis.
- 2. **La Niña** (link): Brazil has 211 million inhabitants and an average income of BRL 2,970 per month. Fifty-nine million Brazilians live on less than BRL 665 per month and 9.5 million live on less than BRL 209. Many of these families are vulnerable to climate disasters. La Niña is a phenomenon that occurs on average every four years and causes droughts in the South. In 2022, more than 80 per cent of municipalities in Rio Grande do Sul declared a state of emergency, and soybean production fell by 40 per cent. Due to the drought, small farmers lose their crops, and many rural workers are left without work. These families' incomes fall, and with food prices rising, hunger increases. Families prioritise basic needs and households must go into debt.

3. **El Niño** (link): Brazil has 211 million inhabitants and an average income of BRL 2,970 per month. Fifty-nine million Brazilians live on less than BRL 665 per month and 9.5 million live on less than BRL 209. Many of these families are vulnerable to climate disasters. El Niño is a phenomenon that occurs on average every four years, causing droughts in the North and Northeast. The droughts of 2023 were the most intense ever recorded, and eight states had the lowest rainfall levels in 40 years. In the northeastern hinterland, families who live off subsistence farming lose their crops and livestock due to drought. These families' income falls, and with food prices rising, hunger increases. Families prioritise basic needs, and households must go into debt.

## B2 Outcome variable: conjoint experiment

### **B2.1 Introductory screens**

- 1. "One way for the government to address different social challenges is to create programmes to help families in need of financial support. In the following questions, you will see different proposals for government financial support programmes for families. Imagine that the government is going to implement one of these programmes. Your task is to compare these proposals and say whether or not you support each one."
- 2. "Each programme proposal has five main characteristics:
  - Benefit payment: How will the payment be made? How many instalments will there be, and what will the total amount be?
  - Beneficiaries: Which families will be eligible to receive the benefit?
  - Organisation and implementation: Who will be responsible for registering families, verifying information, monitoring the programme and distributing resources?
  - Additional requirements: What do families need to do to receive the benefit?
  - Financing: Where will the money to pay for the programme come from? The total cost depends on the amount paid and the number of families receiving the programme."
- 3. "Now we ask for your full attention for the next part! Procedure: Step 1: On each screen, you will see two packages presented side by side (as in the image below). Each line will show the characteristics of each package for that category. Step 2: Compare the two packages and click on the option you prefer. Read each category before deciding, and make sure you are selecting the right package. For example, if you prefer package B over A, then you will click on B. If you have no preference between A and B, choose 'Indifferent between A and B."
- 4. "This will be repeated seven times. When answering, [only for respondents that watched the video: keep in mind the situation described in the video you saw earlier and] imagine that no other social programmes exist. Each round is independent of the previous ones—you don't need to remember your previous choices. Thank you for taking the time to compare the proposals!"

## **B2.2** Conjoint tasks

1. "Header: Compare the two proposals A and B below and select the one you would prefer the government to implement to support families facing difficulties in Brazil. (One of the two will be adopted in any case—choose the one you consider best between the two.)

- How much and how the money will be paid:
- Families with the following monthly income will be eligible:
- The main authority that implements and administers the programme will be:
- To receive the benefit, families must comply with the following activities:
- · To pay for the total cost of the programme, the government will:"

### **B3** Trust

- (a) In general, would you say that you can trust most people, or do you need to be very careful with them?
- (b) I would like to ask you how much you trust the following groups. For each one, could you tell me whether you trust the people in the groups below completely, partly a little, or not at all?
  - · People you know personally
  - · People you meet for the first time
  - · People in your city
  - · People in other regions in Brazil
- (c) Now we want to know if these groups usually deliver on their promises. How common or uncommon is it for the following people to deliver on their promises?
  - President
  - · Mayor of your city
  - · Public workers in your municipality
  - Businessmen
  - · World Bank and UN

# **B4** Political position

- (a) "Now we would like to know your political position. We have a scale from 0 to 10, where 0 means 'left' and 10 means 'right'. Thinking about what 'left' and 'right' mean to you, where would you place yourself on this scale?"
- (b) Who did you vote for in the second round of the last presidential elections (in 2022)?
  - · Luiz Inácio Lula da Silva
  - · Jair Bolsonaro
  - No one (cast a blank or null vote)
  - Did not vote (justified not voting)

## **B5** Sociodemographics

"To interpret the survey responses, it is helpful to know a little more about the living situation of those who participated.

- (a) How many people (adults and children) live in your household? (Including you, but not counting temporary visitors or domestic workers)
- (b) Of these, how many are children or adolescents (under 18 years old)?
- (c) What is the highest level of education you have completed?
  - None
  - Primary / Elementary School (incomplete)
  - Primary / Elementary School (complete)
  - Secondary / High School (incomplete)
  - Secondary / High School (complete)
  - Higher Education / Bachelor's / College (incomplete)
  - Higher Education / Bachelor's / College (complete)
- (d) Are you currently working? [yes/no]
- (e) [If selected 'is working'] What is your main occupation?
- (f) [If selected 'is not working'] Do you study, are you retired, dedicate yourself to household tasks or are you unemployed?"

### **B6** Income

"We're almost done! Knowing participants' income helps us understand how it might influence their answers.

- (a) Household monthly income is the sum of everything your household receives per month. In which range does your family's monthly income fall, including salaries, pensions, rent, social benefits and any other income from all household members?
- (b) In the past two years, the salary or household income of your home: [increased/stayed the same/decreased]
- (c) Imagine a ladder with 10 steps: on the first step are the poorest people and on the tenth step are the richest people. On which step would you place yourself on this ladder?
- (d) In the past three years, have you or anyone in your household received any benefits from a social assistance programme, such as Bolsa Família? [yes/no]"