

Bellani, Luna; Berriochoa, Kattalina; Kapteina, Mark; Schwerdt, Guido

Working Paper

Information Provision and Support for Inheritance Taxation: Evidence from a Representative Survey Experiment in Germany

IZA Discussion Papers, No. 17099

Provided in Cooperation with:

IZA – Institute of Labor Economics

Suggested Citation: Bellani, Luna; Berriochoa, Kattalina; Kapteina, Mark; Schwerdt, Guido (2024) : Information Provision and Support for Inheritance Taxation: Evidence from a Representative Survey Experiment in Germany, IZA Discussion Papers, No. 17099, Institute of Labor Economics (IZA), Bonn

This Version is available at:

<https://hdl.handle.net/10419/300995>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

DISCUSSION PAPER SERIES

IZA DP No. 17099

**Information Provision and Support for
Inheritance Taxation:
Evidence from a Representative Survey
Experiment in Germany**

Luna Bellani
Kattalina Berriochoa
Mark Kapteina
Guido Schwerdt

JUNE 2024

DISCUSSION PAPER SERIES

IZA DP No. 17099

Information Provision and Support for Inheritance Taxation: Evidence from a Representative Survey Experiment in Germany

Luna Bellani

Ulm University and IZA

Kattalina Berriochoa

University of Konstanz

Mark Kapteina

University of Konstanz

Guido Schwerdt

University of Konstanz, CESifo and ROA

JUNE 2024

Any opinions expressed in this paper are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The IZA Institute of Labor Economics is an independent economic research institute that conducts research in labor economics and offers evidence-based policy advice on labor market issues. Supported by the Deutsche Post Foundation, IZA runs the world's largest network of economists, whose research aims to provide answers to the global labor market challenges of our time. Our key objective is to build bridges between academic research, policymakers and society.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ISSN: 2365-9793

IZA – Institute of Labor Economics

Schaumburg-Lippe-Straße 5–9
53113 Bonn, Germany

Phone: +49-228-3894-0
Email: publications@iza.org

www.iza.org

ABSTRACT

Information Provision and Support for Inheritance Taxation: Evidence from a Representative Survey Experiment in Germany*

We study the effects of information on attitudes towards inheritance taxation using survey experiments fielded in Germany. We show that information about tax allowances increases demand for higher taxes and shifts public opinion from favoring abolition to supporting the tax. Effects are primarily due to a prevalent underestimation of tax allowances and the alteration of people's expectations of being affected by such taxes. In contrast, information highlighting the increasing proportion of inherited wealth only negligibly affects policy demand. Our results suggest that pocketbook motives and misinformation may contribute to explaining the paradox of limited demand for inheritance taxation despite growing inequality concerns.

JEL Classification: H20, D72, D83

Keywords: capital taxation, equality of opportunity, inheritance tax, information, randomized experiment

Corresponding author:

Guido Schwerdt
University of Konstanz
Department of Economics
Box 133
D-78457 Konstanz
Germany

E-mail: guido.schwerdt@uni.kn

* We thank Marius Busemeyer, Friedrich Breyer, Marco Castillo, Dietmar Fehr, Christina Felfe, Sebastian Findeisen, Isabel Martínez, Andreas Peichl, Panu Poutvaara as well as seminar participants in Konstanz, the RWI, Ulm and Stuttgart for valuable discussion and comments. Maximilian Thomas has provided excellent research assistance. This project is funded by the Deutsche Forschungsgemeinschaft (DFG - German Research Foundation) under Germany's Excellence Strategy -EXC-2035/1 - 390681379. Usual disclaimers apply.

1 Introduction

Wealth has become increasingly concentrated over the past decades (Zucman, 2019). The unequal distribution of wealth is partly attributed to inheritance flows (Nekoei and Seim, 2023). Yet, while the taxation of inheritances is widely considered an effective way to reduce inequality (Farhi and Werning, 2013; Piketty and Saez, 2013), it generates markedly little fiscal revenue in many countries (OECD, 2021). In explaining the apparent disconnect between concentrated wealth and lax inheritance taxation, scholars contend that the public holds misperceptions about the distributional effects of taxes, leading to low demand for reform (Stantcheva, 2021; Bastani and Waldenström, 2021).

For policymakers, public support is of particular importance to the political feasibility of capital tax reforms (Scheuer and Wolitzky, 2016; Fastenrath et al., 2022). Incorrect understanding about the effects of taxes is often considered a key feature for determining the public’s support of wealth-related taxes (Birney et al., 2006; Sides, 2016; Bischoff and Kusa, 2019). If people misperceive the effects of policies or do not consider wealth inequality to be problematic, they will be less likely to support taxation policies. To understand the factors that shape public support, it is then necessary to examine levels of misinformation about tax policies and how correcting this information shapes opinion.

To this end, we investigate the effect of information on public support of inheritance taxes in Germany. Using a survey experiment that exploits randomized provisions of information, we examine the effect of correcting information about tax allowances to assess the relative role of pocketbook (self-interest) effects. We argue that this information treatment primarily works through concerns about being personally affected, which upon learning about the taxable amount of wealth, reduces perceptions of being liable. This primary allowance treatment provides basic information about the German tax scheme that allows respondents to easily assess the threshold of wealth needed to meet tax liability and implicitly their own likelihood of paying the tax. To benchmark this treatment, we also investigate the effect of general information about wealth inequality providing a treatment on the importance of inheritance for wealth accumulation in Germany.

Our survey reveals several interesting descriptive patterns. We find that only 17% of respondents are in favor of increasing current tax rates and that a relative majority of 41% supports abolishing inheritance taxation. Moreover, we find that about 41% of respondents expect to be affected by inheritance taxation. This finding is puzzling, given that the vast majority of people in Germany will likely never be directly affected by inheritance taxation because of high exemption thresholds.¹ However, we also find that, in our sample, about 80% of respondents underestimate the level of the inheritance tax allowance.

Our experimental results show that providing simple information about the tax allowance threshold affects support for reforming inheritance taxes. We find that the tax allowance treatment increases support for raising tax rates (by about 4 percentage points) and decreases support for abolishing the inheritance tax (by about 6 percentage points). For the latter, these effects are large enough to shift a relative majority for abolishing inheritance taxation towards a relative majority for keeping the current status. In contrast, the benchmark treatment on wealth inequality has no significant effect on either outcome variable. Further analysis shows that the impact of providing information about the tax allowance comes solely from those survey participants who had underestimated this allowance. This finding points to a genuine belief updating rather than priming or interviewer demand effects. Furthermore, we do not observe any spillover effects on attitudes towards other capital taxes, such as the support for implementing a general wealth tax.

Investigating our hypothesis that financial self-interest is pivotal in how individuals respond to the informational treatment, we further examine the underlying mechanisms that drive the observed effect of the tax allowance information. Our analysis of effect heterogeneity uncovers that the impact is more pronounced among lower-income groups and particularly driven by participants who anticipate their bequests to be less than the exemption threshold. Interestingly, we find little variation in the treatment effect across different political ideologies, suggesting that economic self-interest plays a more crucial role than broader political inclinations in shaping responses to the information treatment.

¹The effective inheritance tax rate is estimated to be zero for more than 90% of all inheritance transfers (Bach and Thiemann, 2016).

To directly investigate the causal mechanisms, we also estimate the impact of the information treatment on various potential perceptual factors that could influence support for inheritance taxation. Our findings indicate no significant change in views on the intergenerational transfer of wealth, inequality concerns, or beliefs in meritocracy in response to the treatment. However, we find that the information treatment markedly decreases the perceived likelihood of being personally affected by the inheritance tax by approximately 17 percentage points—a relative reduction of almost 40%. This significant adjustment in expectations highlights the potential importance of pocketbook considerations as the key causal mechanism driving the effects on reform support.

Finally, we exploit the exogenous variation in the perceived likelihood of being personally affected by the inheritance tax generated by the information treatment to obtain an estimate of the pocketbook effect in an instrumental variable estimation. Our results reveal a substantial impact of updating personal beliefs on being affected by the tax on reform support. Among individuals who update their belief about being personally affected by the tax, between 35% to 45% change their view on abolishing the tax while between 20% to 30% change their view on increasing the tax rate.

This paper contributes to studies that have examined the determinants of public support for inheritance taxation (Kuziemko et al., 2015; Gross et al., 2017; Adermon et al., 2018; Bastani and Waldenström, 2020; Fisman et al., 2020; Stantcheva, 2021). Similar to studies that consider perceptions of inequality an important factor (e.g., Cruces et al., 2013; Alesina et al., 2018), we examine how the perception of being personally impacted by inheritance taxes shapes demand for taxation. This builds on the work of Sides (2016) in which providing information about who is subject to taxes (namely, how few) increases support for wealth taxation. We add to the literature by providing a simple information treatment, arguably bypassing much of the complexity in tax systems that leads to ongoing misunderstanding and misconceptions among the public (e.g., Slemrod, 2006; Blesse et al., 2019; Benzarti, 2020).

The paper unfolds as follows. Section 2 outlines the institutional background, followed by Section 3 which delves into our opinion survey data, the experimental design, and pivotal descriptive results. Section 4 presents the main experimental results, while Section 5 explores

potential mechanisms and presents our instrumental variable estimates of the pocketbook effect. Section 6 concludes.

2 Institutional Background

In most industrialized countries, there are two main forms of taxation of intergenerational wealth transfers: estate taxes and inheritance taxes. An estate tax is levied on the total bequest of the testator, while an inheritance tax is levied on the share the recipient receives. A small number of countries, among them the United States and the United Kingdom, impose an estate tax, while the majority of industrialized countries, among them Germany, impose inheritance taxes. Inheritance tax laws vary between industrialized countries in terms of tax rates, allowances, and exemptions for specific groups. From a comparative perspective, Belgium has the highest inheritance tax rate among a selected set of OECD countries, taxing up to 80% on transfers between non-family relationships (see [Drometer et al., 2018](#)). Italy provides the highest tax allowance, with 1 million *euros* for spouses and direct relatives. Germany follows with the second-highest tax allowance, offering 500,000 *euros* for spouses and 400,000 *euros* for children. Unlike other sources of tax revenue, inheritance taxes contribute very little to total national tax revenue. In Germany, this amounted to 0.2% of GDP in 2016, while the total tax revenue as a percentage of GDP was 37.6%. In France, inheritance tax revenue as a share of GDP was 0.6%. In the United States, it amounted to only 0.1%. Several industrialized countries such as Canada, Norway, and Sweden have abolished inheritance taxes altogether.

In Germany, the inheritance tax depends on the size of bequest and the relationship between testator and heir. German inheritance tax law distinguishes between three tax classes defined by family relationships. Heirs in Germany can benefit from tax allowances on inheritance, which also vary depending on the degree of kinship. Tax allowances capture the threshold amount under which inherited assets remain tax-free. Allowances are greater when the degree of familiar relationship is more direct. For example, spouses and life partners can inherit up to 500,000 *euros* from their partner and a child can inherit up to 400,000 *euros* from

their mother or father without paying inheritance taxes. This tax allowance decreases with increasing distance in the family relationship, with siblings, nieces, nephews, and unrelated heirs having an allowance of 20,000 *euros* (ErbStG, §16). Tax rates, applied to assets above thresholds, also depend on the relationship between testator and heir. The tax schedule in each tax class is progressive, featuring a graduated tax rate. Marginal tax rates in Tax Class 1 vary from 7% for a taxable inheritance of 75,000 *euros* to 30% for a taxable inheritance of more than 26 million *euros* (ErbStG, §19).²

The average tax burden of the inheritance tax is only about 9%, a figure substantially lower than the approximately 30% average tax burden imposed on labor income in Germany.³ This relatively low *effective* rate can be attributed to various exemptions, which contribute to the complexity of this policy (Thiemann et al., 2021). An example of this is a provision allowing individuals who inherit real estate (e.g., *one's family home*) to remain tax-free through the condition of personally using inherited property for ten years. Moreover, current inheritance tax law allows, under certain conditions, an exemption of up to 85% to 100% on the operating assets of family businesses.

Despite the progressive nature of Germany's inheritance tax schedule, private wealth inequality has become increasingly pronounced. While the assessment of wealth inequality is complex due to insufficient data on the private assets of the very rich, Schröder et al. (2020) estimate that the wealthiest 1% of the population own around 35% of the total net private wealth in Germany. The growth of wealth among the top 10% has surged since the early 1990s, but has remained stagnant for the bottom 50% of the German population. Over the past 25 years, the wealth of the top 10% has increased by 100 times that of the bottom 50% of Germans (Albers et al., 2022). At the same time, the role of inherited wealth has become more relevant. After the Second World War, inherited wealth as a fraction of private wealth declined until the 1970s before sharply increasing from the 1980s onward (OECD, 2021).

²Marginal tax rates in Class 2 (3) vary from 15% (30%) for a taxable inheritance up to 75,000 *euros* to 43% (50%) for a taxable inheritance of more than 26 million *euros*.

³Own calculations based on Statistisches Bundesamt (2022).

3 Data and Empirical Strategy

3.1 The Opinion Survey

Data for this paper stems from the Inequality Barometer, an original survey conducted in September 2020, on a national sample of the German population.⁴ This survey targeted the adult population, requiring participants to be at least 18 years of age and residents of Germany. Utilizing computer-assisted web interviewing as the mode of survey enabled the seamless incorporation of random information treatments. The core objective of the survey was to study subjective perceptions and normative evaluations of inequality and social mobility, as well as their relation to policy preferences.⁵

The survey was comprised of four modules and a range of socio-economic descriptive and control questions. The focus of each module varied, including general perceptions of inequality and social mobility, attitudes towards inheritance taxation and higher education, support for long-term policies, and the relationship between climate change and economic inequality. The survey module on inheritance taxation consisted of 13 questions about respondents' prior experience and knowledge on the German inheritance tax, an information provision experiment, and two question sets on respondents' perceptions and policy preferences for taxing inheritances and wealth. The analysis in this paper predominately builds on, though not exclusively, the module on inheritance taxation.

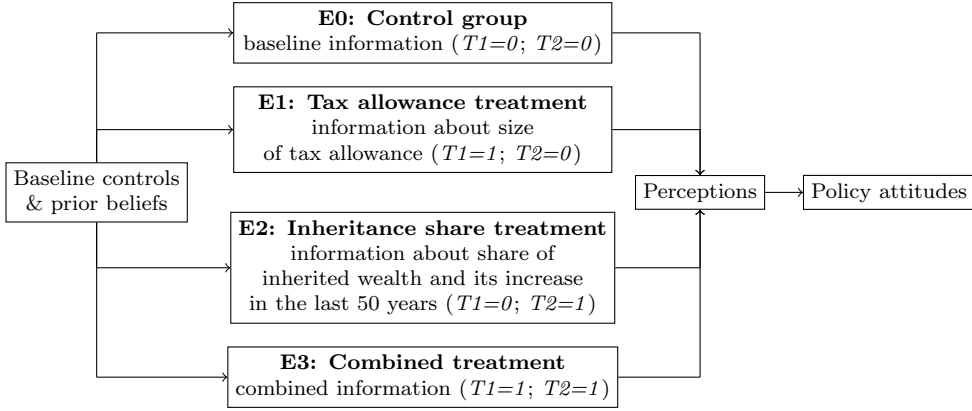
The survey company Verian conducted the survey using a quota sample from the German adult population, drawn from their commercial online access panel.⁶ Data collection for the survey was carried out from September 8-30, 2020. The sample was collected based on specified quotas for age, gender, education, and region of residence. The survey company further provided survey weights to ensure representativeness for the German population. The sample is representative at the German administrative district level (the "Regierungsbezirke"),

⁴Additional details regarding the Inequality Barometer and related research projects can be accessed at the following link: <https://www.exc.uni-konstanz.de/en/inequality/research/projects/inequality-barometer/>.

⁵Refer to Bellani et al. (2021) for a detailed description of the core survey.

⁶Verian, previously known as Kantar, holds a reputable position as a survey company in Germany. For example, the company is responsible for the election reporting of Infratest dimap for ARD (a consortium of public broadcasters in Germany), conducting the German Socio-Economic Panel (SOEP) and the IAB-Betriebspanel, and contributing to the European Social Survey (ESS).

Figure 1: Experimental Design



Notes: Depiction of the sequence of survey items (from left to right) and the survey experiment with two randomly assigned information treatments.

equivalent to the EU NUTS-2 level. The survey company enforced several response quality checks as a part of their standard procedure. Respondents yielding a response time of less than 40% of the median and those demonstrating consistent answer patterns in matrix questions are excluded. After executing these response quality checks, the final dataset was constituted of 6208 respondents, with the entire survey exhibiting an average response time of 23 minutes.⁷ Additionally, we impose a restriction to only include respondents in our analysis who answered our questions about their prior beliefs regarding the tax allowance and the importance of inherited wealth in Germany. Due to item non-response for these items, our estimation sample in this paper was reduced to 6178 observations.

3.2 Experimental Design

Figure 1 visualizes our experimental design. The four experimental conditions are defined by the random assignment of two specific information treatments. The control group (E0) only received the baseline information that there is an inheritance tax in Germany, which we provided to everyone in the survey. Respondents in the first experimental group (E1) additionally received specific information on the tax allowance for inheritances in Germany. In particular, they were informed that “Children can inherit up to 400,000 *euros* from their

⁷Additional insights into survey construction, data cleansing, and quality assurance by the survey company can be found in Bellani et al. (2021).

parents without having to pay an inheritance tax.” This information is our primary information treatment ($T1$) of interest. We expect that, with this information, respondents update their beliefs about the probability of being personally affected by inheritance taxes.

To benchmark our main information treatment, a second treatment ($T2$) was incorporated, which informed respondents about the significance of inherited wealth in Germany. Participants in the second experimental group (E2) received only $T2$, while those in the third group (E3) received both treatments. The second treatment conveyed general information about inheritances in Germany: ‘Half of the total wealth in Germany is inherited’ and ‘The share of inherited wealth in Germany has doubled in the last 50 years,’ with estimates referenced from [Alvaredo et al. \(2017\)](#). Inspired by a treatment used in [Bastani and Waldenström \(2021\)](#), it seeks to alter respondents’ perspectives on whether a majority of wealth in Germany is inherited, potentially influencing their policy demands accordingly.⁸ [Bastani and Waldenström \(2021\)](#) established that informing individuals in Sweden about the substantial aggregate significance of inherited wealth increased support for inheritance taxation.

Prior to randomizing participants into our four experimental groups, we collected data on socio-economic characteristics and respondents’ preliminary beliefs about the information in the treatments. Subsequent post-treatment questions assess perceptions and policy attitudes. Perceptions are gauged through a set of questions evaluating respondents’ views of their likelihood of being impacted by inheritance tax and the perceived significance of inherited wealth in Germany, with answer options ranging from no agreement to complete agreement. Policy preferences are measured through questions regarding support for i) the abolition and ii) rate increases of the inheritance tax, with answers varying on a 5-point Likert scale from strong opposition to strong support. Detailed operationalization of our key variables is outlined in [Appendix Table A3](#).

⁸Specifically, we hypothesize that if notions of fairness and equality of opportunity significantly impact individual utility, the economic importance of inherited wealth may be systematically underestimated, explaining sub-optimal levels of inheritance taxation. This fairness perspective presupposes that altruistic motives shape preferences for redistributive taxation ([Fong, 2001](#); [Alesina and La Ferrara, 2005](#); [Alesina and Giuliano, 2011](#)). Accordingly, an enhanced understanding of inherited wealth structures might increase support for inheritance taxation.

3.3 Baseline Beliefs and Attitudes

Table 1 reports descriptive statistics by experimental group.⁹ The table facilitates comparisons of our sample with alternative settings and aids in assessing its representativeness. The sample was designed to be representative of the German population at the NUTS-2 governmental regions known as Regierungsbezirke (corresponding to a lower aggregation level than federal States known as Bundesländer). Table 1 illustrates that several key average characteristics closely align with their population counterparts. For instance, the share of females across all groups in our sample is 51%, precisely mirroring the share reported in official statistics. Furthermore, about 34% of the population holds a university entrance degree, which is also exactly reflected in our sample across all four experimental groups.¹⁰

Our survey of beliefs and attitudes towards inheritance taxation yields several insightful descriptive results that were previously unavailable. To set the stage for our empirical analysis, we highlight some of these key descriptive findings in Figure 2. Although the figure aligns with the values presented for the control group in column (1) of Table 1, it diverges by illustrating response shares across all five answer categories for each survey item.¹¹ This approach, rather than employing simplified binary indicators, provides a clearer depiction of relative majorities.

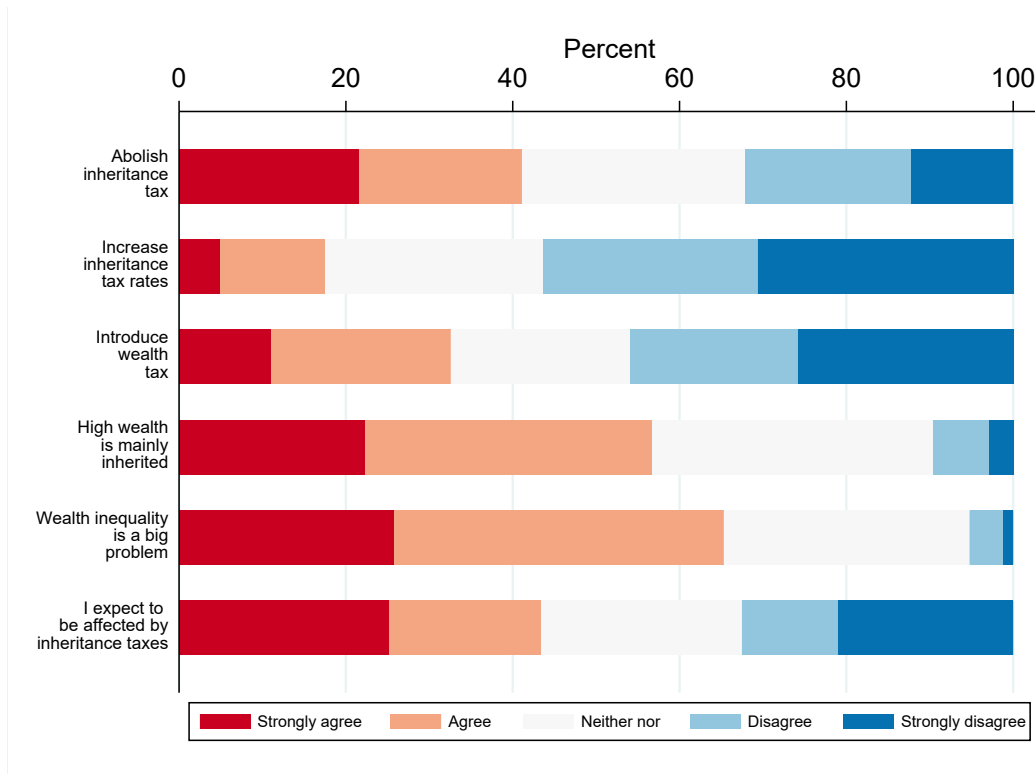
Figure 2 reveals that Germany is no exception to the widespread pattern of low public support for wealth and inheritance taxation despite substantial concerns over wealth inequality. Our data shows that about 41% of Germans support or strongly support abolishing inheritance taxation, while 32% disagree or strongly disagree, and 27% neither agree nor disagree. This shows that a relative majority of Germans support a reform to end inheritance taxation. Examining the intensive margin of this policy measure, we find that only 18% support raising inheritance tax rates, while a clear majority of 57% are against this policy proposal. Support is similarly low for an annual wealth tax, with only 33% in favor and 46% against

⁹Table 1 showcases our formal balancing check, elaborated upon in Section 3.5. Given the random assignment, minimal variation in average background characteristics across the four experimental groups is anticipated and observed.

¹⁰The average characteristics from the official statistics reported in the text are sourced from Destatis.de, the website of the German Statistical Agency, for the years 2019 and 2020.

¹¹Our focus on binary operationalizations of our outcome variables in our preferred empirical specifications is purely for expositional clarity. Further analyses, based on multi-valued operationalizations of our outcomes, reveal identical patterns of results. These results are available from the authors upon request.

Figure 2: Perceptions and Attitudes towards Inheritance and Wealth Taxation in Germany



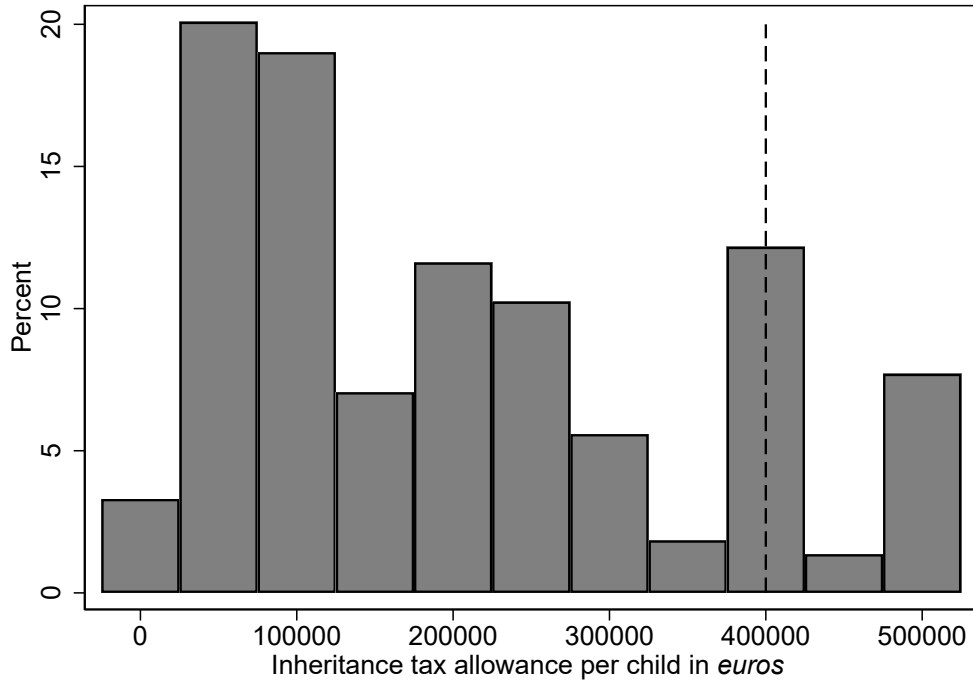
Notes: Figure represents the response shares in the control group, distributed across five answer categories for the survey item specified in each row. The shares have been adjusted using sample weights. Data source: Own survey conducted in 2020.

its introduction. On the other hand, we find that a majority of Germans believe that most high wealth is inherited (57%) and that wealth inequality is a major problem (67%).

The bottom bar of Figure 2 might provide a clue as to why inheritance taxes are viewed so unfavorably in Germany. When asked about their expectation of being impacted by inheritance taxation—either through leaving a taxable bequest or anticipating future tax payment—a notable 43% of respondents anticipate being affected. This sharply contradicts expert expectations and official statistics, which suggest that, in reality, no more than approximately 10% of Germans will likely ever be affected by inheritance taxation.¹²

¹²No direct data specifies how many Germans will be impacted by inheritance taxation. However, expert projections, including those by Fratzscher (2022), estimate that under 10% of Germans will ever be subject to these taxes. Further, official 2020 statistics identified, among 985,620 reported deaths, roughly 133,326 taxable inheritances (Statistisches Bundesamt, 2022). By conservatively assuming a single heir for each deceased person, the proportion of deaths leaving taxable inheritances relative to all deaths reaches a maximum of 13.5%. Additionally, it is notable that only a minority of German households possess net wealth exceeding 400,000 euros. Estimates of the total net wealth distribution based on the SOEP Top Shareholder (SOEP-P) sample suggest that the 95th percentile lies at about 435,000 euros (Schröder et al., 2020).

Figure 3: Distribution of Prior Beliefs about Tax Allowance



Notes: Figure reports the distribution of prior beliefs about the inheritance tax allowances per child in Germany. Dotted vertical line represents the actual level of the tax allowance of 400,000 euros. Data source: Own survey conducted in 2020.

Figure 3 presents the distribution of prior beliefs regarding the amount of the inheritance tax allowance for assets left by a parent to their child. A mere 12% accurately estimate that the inheritance tax allowance for this family relationship is 400,000 euros (marked by the dashed line). A remarkable 78.8% of respondents underestimate the size of the tax allowance. In contrast, only a small number estimate the value of the tax allowance to be greater than 400,000 euros. These results, showing a majority underestimating the tax allowance amount, may explain why a substantial number of Germans erroneously anticipate being affected by the inheritance tax.

3.4 Econometric Model

To investigate the impact of disseminating information about the inheritance tax allowance on policy attitudes and perceptions, we employ the following linear probability model:

$$y_i = \alpha_0 + Treatment_i' \alpha_1 + X_i' \alpha_2 + \epsilon_i, \quad (1)$$

where y_i represents the outcome of interest for individual i , $Treatment_i$ is a vector of indicator variables denoting the information received by individual i , X_i is a vector of control variables, and ϵ_i is an error term.

Due to the random assignment to the experimental conditions, the causal average treatment effects, α_1 , are identified. The randomization implies that the incorporation of the exogenous control variables, X_i , is not anticipated to influence the estimates of α_1 , but might enhance statistical precision. In our analysis, we present estimation results both with and without the inclusion of additional covariates.

To explore the heterogeneous information treatment effects by prior beliefs, we augment our baseline regression model as follows:

$$y_i = \beta_0 + Treatment_i' \beta_1 + \beta_2 Prior_i + Prior_i Treatment_i' \beta_3 + X_i' \beta_4 + \eta_i, \quad (2)$$

where $Prior_i$ is a binary variable equal to one if respondent i belongs to the subgroup holding the respective prior belief, and zero otherwise. In this model, β_1 measures the effect of information provision for the baseline group, while β_3 quantifies the additional effect for the designated subgroup characterized by the respective prior belief.

3.5 Test of Randomization

To test whether the randomization successfully balanced respondents' observable characteristics across the control and treatment groups, we investigate whether covariates differ across experimental groups. Each row of Table 2 reports differences between the control group and the treatment groups as the coefficients γ_1 of the following regression model:

$$covariate_i = \gamma_0 + Treatment_i' \gamma_1 + \kappa_i. \quad (3)$$

It is reassuring to note that the magnitudes of all differences are negligible. Out of the 63 regression coefficients, only three are significant at the 10% level, a result we could expect by pure chance. Overall, the balancing tests indicate that the random assignment worked as intended.

4 Effects of Information Provision on Policy Support

4.1 Main Results

Table 3 displays our results of how the information treatment influences policy support, with main insights summarized in Figure 4.¹³ In our analysis of the tax allowance treatment, we observe significant impacts on both policy attitudes. When informed about the tax allowances, the support for the abolition of the inheritance tax decreases from 41% in the uninformed control group to 35% in the first treatment group, a reduction of 6 percentage points (or 15% in relative terms). The observed negative effect is substantial enough to break the relative majority support for the abolition of inheritance taxation.¹⁴ Additionally, the tax allowance treatment increases support for raising inheritance tax rates by about 3 percentage points.

To contextualize the results from our tax allowance experiment, it is insightful to compare its effects with those of our second information treatment, which focused on the role of inherited wealth in Germany. Bastani and Waldenström (2021) show that a similar information treatment significantly increased support for introducing an inheritance tax in Sweden.¹⁵ However, Figure 4 illustrates that emphasizing the significance of inherited wealth in our experiment does not have a pronounced influence on policy support.¹⁶ Table 3 shows that

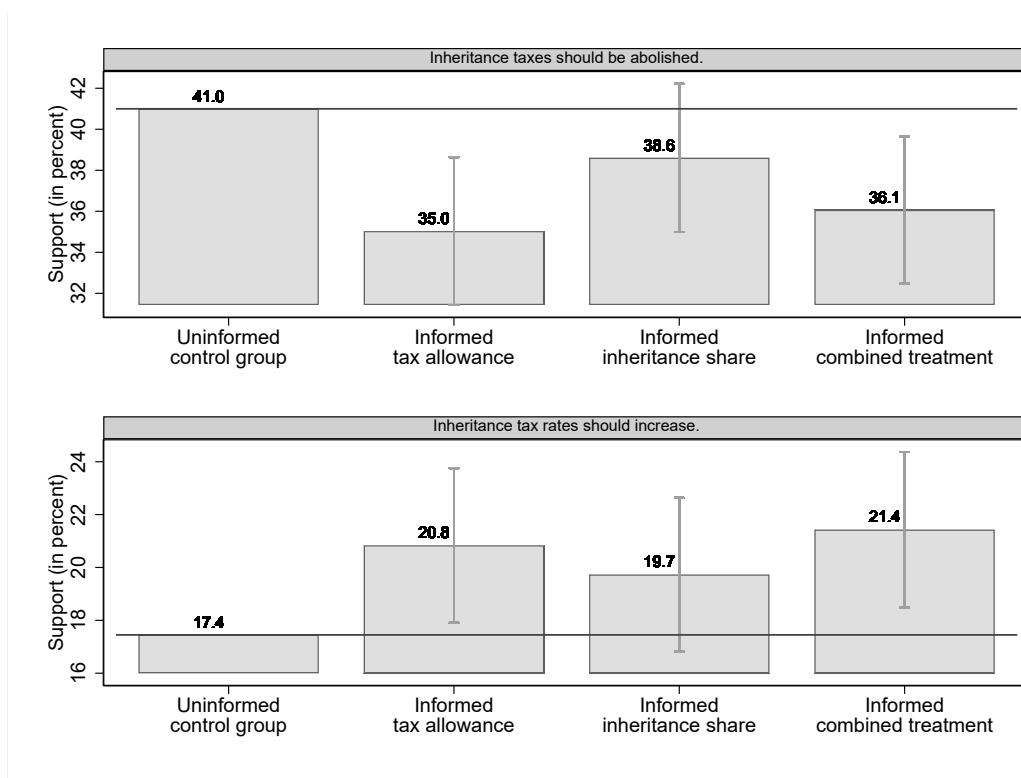
¹³Table 3 presents the reduced form effect of the information treatment on policy support. Columns (1) and (2) measure support for abolishing inheritance taxation, while columns (3) and (4) gauge support for increased rates. Across all outcomes, the inclusion of additional covariates does not yield significant differences. Figure 4 visualizes results from columns (1) and (3).

¹⁴Within the first treatment group, 36% of respondents opposed the abolition of inheritance taxation. See Appendix Figure A2 for details.

¹⁵The inheritance treatment in Bastani and Waldenström (2021) provided participants with three research-grounded facts about inherited wealth in Sweden: ‘Inherited wealth constitutes roughly half of all wealth within the population’, ‘Those with the highest incomes are the primary beneficiaries of inheritances’, and ‘The majority of Swedish billionaires have inherited their wealth’.

¹⁶The difference between our findings and those in Sweden could stem from various factors, including differing institutional frameworks, methodologies, or even participants’ existing beliefs and preferences in the two countries.

Figure 4: Effects of Information Provision on the Support for Inheritance Taxation



Notes: Figure displays policy attitudes across experimental groups E0 through E3. 95% confidence intervals are derived from estimates found in columns (1) and (3) of Table 3. Data source: Own survey conducted in 2020.

estimated effects of the inheritance share treatment, with the exception of the estimate in column (4), are just shy of statistical significance. This implies that while providing information on inherited wealth might slightly shift policy attitudes, its influence remains relatively mild. This observation is significant on its own, but also underscores the substantial impact of informing participants about tax allowances in our specific research context.

Finally, we find that the policy attitudes of participants in our fourth experimental group, who were exposed to the combined information treatment, closely align with those in the first experimental group. A more rigorous analysis of interaction effects presented in Table A1 confirms that the interaction between the two information treatments lacks statistical significance. Therefore, information regarding the value of the tax allowance stands out as the predominant factor in the combined treatment, and supplementing it with details on inherited wealth does not further influence policy attitudes.

In sum, the information treatment concerning tax allowances emerges as the primary influential factor in shaping policy demand in our study. Given this finding, our subsequent analysis will concentrate on the isolated effects of the information treatment concerning tax allowances (E1).

4.2 Information vs. Priming: Disentangling Effects

A critical aspect of our survey experiment is understanding whether the observed effects of information on tax allowances are a result of respondents being primed to consider these allowances, or whether they genuinely reflect improved knowledge. To address this, all respondents were initially asked to report their pre-existing beliefs about the level of inheritance tax allowance, thus partially addressing the concern of priming. Additionally, we can leverage the variation in these initial beliefs, illustrated in Figure 3, to discern if the effects are indeed driven by information updating. To this end, we analyze the extent to which the effect of the information treatment varies with the accuracy of respondents' initial beliefs about the tax allowance. To simplify the exposition of this analysis, we categorize respondents by their prior beliefs into two groups: those who substantially underestimated the tax allowance and those who did not. This categorization is based on a binary indicator, *underestimator*, assigned to respondents who guessed the tax allowance to be 300,000 *euros* or less. Utilizing Equation (2), we then estimate the differential effects of the information treatment between these under-estimators and those with more precise initial beliefs.

The results of this analysis, reported in Table 4, indeed reveal distinct patterns. Respondents with accurate initial beliefs about the tax allowance show no significant change in policy demand following the information treatment. However, the interaction term indicates a stronger treatment effect for those who initially underestimated the allowance. This suggests that the overall average treatment effect is entirely driven by these under-estimators, pointing to genuine belief updating rather than priming or interviewer demand effects.

4.3 Effects on the Support for other Policies

In examining support for various reform proposals, we also probe into whether informing participants about tax allowances influences policy demand beyond inheritance taxation. Our expectation is that if effects are confined to enhanced knowledge of inheritance tax allowances, they should not generate large impacts on policy demand in other areas.

Results in Table 5 indeed show no clear evidence for significant spillover effects on the support for other taxes. In particular, the information treatment on inheritance tax allowances does not affect support for a general wealth tax or a carbon tax in Germany. We find, however, slight adjustments in the support for removing further exemptions in inheritance tax for family firms and the support for introducing tuition fees at public universities. Both effects are significant at the 10% level.¹⁷

5 Pocketbook Motives as a Causal Mechanism

In this section, we shed light on the causal mechanism driving the reduced form effect of the information treatment on tax allowances. Our hypothesis is that the provision of information on the tax allowance affects policy support mainly because of a self-interested, pocketbook effect. This effect is one in which individuals are primarily motivated by economic self-interest and is often contrasted to other social considerations (Elinder et al., 2015; Meya et al., 2020). That is, preferences are shaped by how one perceives that they will be affected, rather than based on considerations of broader social inequalities or injustices. In the case of inheritance taxation, this means that individual policy preferences are crucially shaped by the estimation of individuals that they will be personally subject to a tax on future bequests (Rutström and Williams, 2000; Durante et al., 2014). In this regard, individual preferences are related to both misinformation and misperceptions. Namely, incorrect information about the amount of assets that incur tax liability as well as the incorrect perception that they will be personally impacted by the tax. Misconceptions about being personally impacted are more likely if

¹⁷Note that the finding regarding tuition fees lacks robustness. Additional analyses, not reported here, suggest that the significance of this result is quite sensitive to variations in model specifications and changes in the estimation sample.

individuals are under the incorrect assumption that the level of taxable income is lower than expected. Accordingly, support for policy reforms are skewed.¹⁸

5.1 Exploring Effect Heterogeneity

We begin our investigation of the causal mechanism with an examination of the differences in how information about tax allowances affects various groups, with a particular focus on economic status. We hypothesize that if economic self-interest mainly drives individuals' reactions to new information regarding tax allowances, then those with lower economic status—who are generally less affected by inheritance taxes—should also be more likely to adjust their perceptions upon learning the real exemption thresholds. To test this hypothesis, we analyze the data by dividing participants into income quartiles and by distinguishing between individuals based on their anticipated wealth at death, namely whether it is expected to be above or below the exemption limit.

Table 6 presents the results of how the information treatment on tax allowances influences support for inheritance tax reform across different subgroups. These findings align with our hypothesis, showing the most substantial effects in the lowest income quartile. Notably, in this group alone, the effects remain significant across various specifications and for both evaluated outcomes. The distinction in information treatment effects by economic status becomes particularly pronounced when examining the sample divided by expected wealth at the time of death. For individuals anticipating assets above the exemption threshold at death, there is no observable effect. Conversely, the overall average effect seems to be exclusively driven by those who expect their bequests to fall below the exemption threshold, suggesting a significant role of economic self-interest in explaining the overall information treatment effect.

To benchmark the influence of economic status on reactions to information about tax allowances, we also examine the role of political ideology, which is another significant factor expected to affect treatment effects. Appendix Figure A3 reveals a clear division in support for inheritance tax reform in Germany based on political orientation. Individuals with a more

¹⁸This mechanism may entail important welfare implications. The demand for inheritance taxation of voters could be sub-optimal, if (i) uninformed utility-maximizing voters systematically overestimate the probability of being affected by inheritance taxation and if (ii) individual policy preferences are crucially shaped by the expectation to be affected by the tax.

left-leaning political orientation are more inclined to support an increase in inheritance tax rates, whereas those with a more right-leaning political orientation prefer the elimination of such taxes. This ideological split is mirrored in the positions of German political parties regarding inheritance taxation. For example, the most left-wing party, *Die Linke*, advocates for expanding inheritance taxes, contrasting with the objective of the right-wing populist party, *Alternative für Deutschland (AfD)*, to abolish them. Additionally, several empirical studies (e.g., [Jerit and Barabas, 2012](#); [Druckman et al., 2013](#)) have argued that individuals filter their understanding of complex issues through their political beliefs. This observation aligns with political science theories suggesting that the integration of new information and the subsequent adjustment in policy preferences are significantly influenced by party affiliation ([Campbell et al., 1980](#); [Slothuus and Bisgaard, 2021](#)).

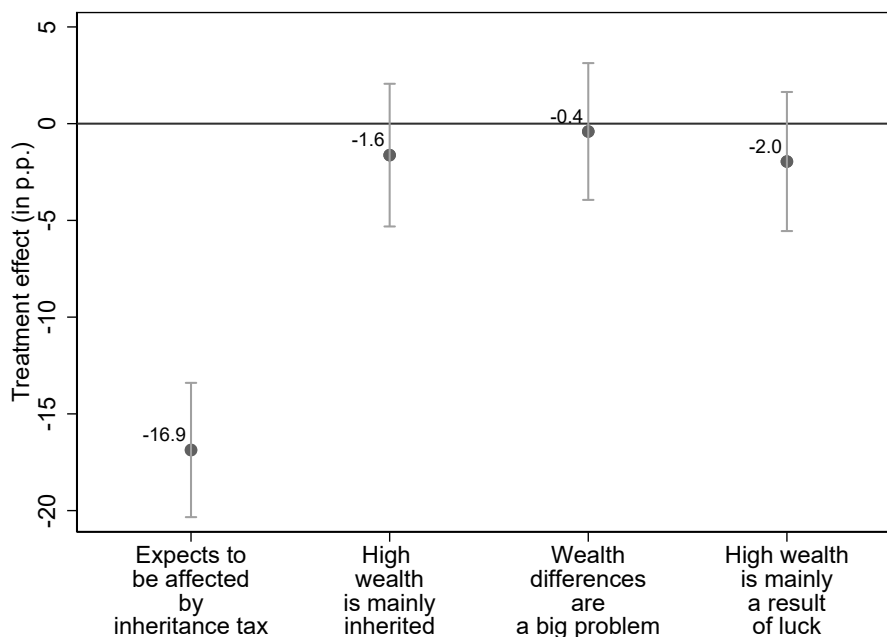
However, the final three rows of estimates in [Table 6](#) show no clear sign of a left-right political divide in how the tax allowance information treatment influences opinions. All coefficients point in the same direction, and the estimated effects for respondents with left- or right-leaning political orientations are strikingly alike. This finding emphasizes the significance of variations in effects based on economic status, implying that differences in how individuals respond to the treatment are likely rooted in more personal economic considerations rather than in overarching political ideologies.

5.2 Effects of Information Provision on Perceptions

To investigate causal mechanisms directly, we look into the effect of informing people about the amount of the inheritance tax allowance on the perceived likelihood of being affected by the tax. Additionally, we check whether other potential perceptual determinants of support for inheritance taxation are affected by the information treatment. In particular, we focus on empirical measures of perceptions about the intergenerational transmission of wealth, inequality concerns, and meritocratic beliefs.

We present estimates of [Equation \(1\)](#) using perceptions as dependent variables in [Table 7](#) and highlight the main findings in [Figure 5](#). The figure shows that the tax allowance treatment strongly affects the perceived likelihood of being personally impacted by the tax,

Figure 5: Effect of Information Provision on Perceptions



Notes: Figure displays estimates of the effect of information provision on the tax allowance on perceptions. Estimates and 95% confidence intervals are based on the regression model in Equation (1) without further covariates. Data source: Own survey conducted in 2020.

but influences none of the other perceptions. The causal effect of the information treatment, without additional controls, is estimated to reduce the perceived likelihood of being affected by the tax by 16.9 percentage points.¹⁹ Recall that the baseline expectation to be affected by the tax is 43% in the control group (see Table 1). Thus, the treatment reduces this expectation to about 26%, a reduction of almost 40%. In other words, 40% of Germans who believe to be personally affected by inheritance taxation do so only because they hold erroneous beliefs about the tax allowance.

5.3 Instrumental Variable Estimates of the Pocketbook Effect

The estimation of the treatment effect on the perceived likelihood of being personally affected by the tax also enables us to quantify the pocketbook effect among individuals who alter their perception due to the tax allowance information. To this end, we can scale the estimate (without controls) of the information treatment's effect on reform support (as reported in

¹⁹With controls, this estimate becomes -16.5 percentage points as reported in column (1) of Table 7.

Table 3) against the effect on the perceived personal impact (illustrated in Figure 5). In the context of an instrumental variable estimation, these are referred to as the *reduced form* and the *first stage* effects, respectively, both identified through the random allocation of the information treatment. For instance, regarding support for eliminating the inheritance tax, the ratio computes to $-0.06 / -0.169 \approx 0.354$. The underlying rationale of this *Wald* estimator is straightforward: it suggests that if the information treatment had universally shifted reform support among those who alter their perception about being affected, the effect on reform support would also be -0.169. Consequently, the observed -0.06 effect suggests that only about 35% of those who changed their perception about being affected also change their reform support.

The effect is identified given the additional assumption that, conditional on the perceived likelihood of being personally impacted by the tax, the effect of the information treatment can be excluded from the causal model determining the reform support for inheritance taxation. In other words, the exclusion restriction here suggests that information about the tax allowance alters policy support only through its effect on the perception of being personally impacted. While inherently untestable, the credibility of this assumption can be supported within an instrumental variable framework (IV) that incorporates further covariates.

We present IV estimates of the pocketbook effect in Table 8, where the straightforward *Wald* estimator corresponds to the IV estimates in Columns (1) and (5). When we introduce a set of exogenous controls into the estimation in Columns (2) and (6), the IV estimates remain robust, underscoring the effectiveness of the random assignment. With these controls, the effects on reform support for eliminating or increasing the tax are 0.375 and -0.220, respectively.

In columns (3) and (7) of Table 8 we add controls for perceptions to the model. As we elicit perceptions in the survey after the information treatment, these measures are potentially endogenous. These controls might therefore capture the confounding impact of some violations of the exclusion restriction. To provide a concrete example, learning about the level of the tax exemption may also provide new information about the distributional implications of the tax, which may impact policy preferences independent of pocketbook motives. Conditioning

our IV approach on an endogenous measure of inequality concerns addresses such concerns to the extent that learning about distributional implications of a tax affects policy preferences through adjusted inequality concerns. It is reassuring that integrating controls for perceptions related to wealth transmission, inequality, and meritocratic beliefs only has a minor impact on the IV estimates. The respective estimates for altering reform support remain consistent, illustrating the robustness of our findings against these confounding impacts.

The IV estimates indicate an average causal effect, but the precise subgroup for which the average effect is estimated remains indeterminate. In the LATE framework, IV estimates identify the average causal effect specifically for the *complier* population—individuals whose perceptions about being impacted by the tax are influenced by information on tax allowances. But the LATE interpretation requires an additional monotonicity assumption regarding how the information provision affects individual perceptions. This assumption suggests that information regarding tax allowances consistently impacts individuals’ perceptions—either not at all or in a uniform direction. This eliminates the potential for *defiers*, those who, without information, would not consider themselves affected by the tax but change their belief upon receiving information about the allowance. This assumption is non-trivial in our context, as some individuals in our full sample initially overestimated the tax allowance, as shown in Figure 3.

While the issue of non-monotonicity in the context of information treatments is discussed more generally in recent ongoing work (Castillo and Ige, 2023), our specific setup allows for addressing monotonicity concerns by simply refining our IV estimates for survey participants with a prior belief regarding the level of the tax allowance of 400,000 *euros* or less, as detailed in Columns (4) and (8) of Table 8. This subgroup arguably aligns more closely with the monotonicity assumption. Here, the treatment effects on reform preferences for tax abolishment or increase become more pronounced, possibly reflecting the absence of *defiers* in this sample. Specifically, within this subgroup, the estimated effects on support for abolishing the tax and for increasing the tax rate are 0.453 and -0.296, respectively.

In sum, our IV estimates point towards a significant role of pocketbook motives in shaping the demand for inheritance taxation. Depending on the specification, estimates of the positive

effect on support for abolishing the tax range from 35% to 45%. Concerning support for increasing the tax rate, we estimate negative effects between -20% and -30%. In other words, among individuals who update their belief about being personally affected by the tax between 35% to 45%, change their view on abolishing the tax, while between 20% to 30% change their view on increasing the tax rate.

A final question concerns the characterization of the group of individuals whose policy support is ultimately affected by the provision of information on the tax allowance. While *compliers* can never be individually identified, it is possible to describe the *complier* population.²⁰ In Appendix Table A2 we report an analysis of the *complier* population following Marbach and Hangartner (2020). The table reveals some interesting differences across groups. Most interestingly, *compliers* expect to amass the least wealth by the end of their lives and have the lowest estimates for the tax allowance threshold, but, compared to the average population, they tend to be better educated, more likely to be employed, and earn more. This characterization of a *complier* is in line with our hypothesis that the effect of providing information on the tax allowance affects policy support mainly because of pocketbook considerations.

6 Concluding Remarks

In this paper, we contribute to the research investigating the effects of information on individual's attitudes towards taxes (e.g., Slemrod, 2006; Sides, 2016; Stantcheva, 2021). Specifically, we examine a representative survey experiment aimed at evaluating how information concerning inheritance tax allowances impacts German public attitudes towards reforms. Our findings highlight substantial misconceptions among participants, who predominantly underestimate the actual threshold for inheritance tax allowances, thereby overestimating their likelihood of incurring inheritance taxes. The analysis shows that providing information about tax allowances markedly shifts public opinion, undermining widespread support for the abolition of inheritance taxation and fostering support for higher inheritance tax rates. Furthermore, in a

²⁰For example, Angrist and Pischke (2009) show that the variation in the estimated first-stage effects across subgroups can be used to describe the distribution of characteristics of *compliers*.

benchmark survey experiment, we show that providing information on the rising significance of inheritance transfers for total wealth accumulation does not markedly affect reform support on average. This contrast accentuates the important role that accurate information about tax allowances can play in shaping public support for inheritance tax reform.

Our research also provides new insights into the role of financial self-interest in shaping public reactions to information about tax allowances. Our analysis of effect heterogeneity indicates that the response to this information is especially significant among lower-income individuals, particularly those who expect their inheritances to fall below the tax exemption threshold. While exploring various factors that might influence attitudes toward inheritance taxes—such as perceptions of wealth transfer, inequality concerns, and meritocratic beliefs—we found that these views remain largely unchanged. However, the perception of being personally impacted by the inheritance tax markedly shifts following the information provision.

Moreover, by leveraging the exogenous variation created through our information treatment, we are able to conduct an instrumental variable analysis of the ‘pocketbook effect’—how changes in perceived personal tax burden translate into support for tax reform. Our findings reveal significant pocketbook effects, indicating that many individuals who change their perceptions about their personal tax obligations in response to the information treatment also adjust their policy preferences. This result underscores the critical influence of self-interest in how the public reacts to tax-related information, especially in the area of inheritance taxation, highlighting that individuals’ financial considerations significantly drive their responses to policy information.

In our study, as in many others within the field, we examine survey-based stated preferences. These preferences, while prevalent, sometimes face criticism due to concerns about reporting bias, given their lack of direct political consequences. Critics warn that these preferences might not accurately reflect true intentions or behaviors, as they do not involve real-world repercussions. Nonetheless, a growing body of research highlights the validity and importance of these survey responses in political contexts. For instance, [Hainmueller et al. \(2015\)](#) demonstrates the external validity of survey experiments by aligning hypothetical survey results with actual referendum outcomes on immigration policy, showing that

survey-based preferences can indeed reflect genuine electoral behaviors. Furthermore, the political significance of public opinion surveys is highlighted by their extensive use in political strategy. As [Blinder and Krueger \(2004\)](#) notes, politicians invest significantly in polling to guide their decisions. Similarly, [Hager and Hilbig \(2020\)](#) provides quasi-experimental evidence that politicians' policy positions are responsive to public sentiment captured in survey data, further attesting to the importance and influence of stated preferences in shaping political outcomes.

Finally, we would like to highlight some policy implications of our results. First, in line with findings of other studies (e.g. [Alesina et al., 2018](#); [Lergetporer et al., 2018](#); [Haaland and Roth, 2023](#)), we show that providing quite basic policy-relevant information can substantially affect reform support. The low public awareness regarding inheritance issues has been suggested as a key reason for the relatively minor role that inheritance taxation plays in many developed countries. Thus, informational campaigns—highlighting simple information—could aid policymakers in aligning policy design with the actual policy demand of the electorate. For example, voters are often ambivalent towards tax reforms despite rising concerns about wealth inequality. But if public opposition to inheritance taxation is largely caused by misperceptions about one's own tax burden, informational campaigns could potentially break this opposition and provide policymakers with a politically viable tool to reduce wealth inequality. Second, the significant misperception within the electorate regarding the level of tax allowance and the incidence of inheritance taxes is noteworthy, especially because inheritance taxation frequently features in public debates. Understanding why such misunderstandings persist could provide valuable insights for public discussions and future political economy research, shedding light on how information dissemination and public perceptions interact in the context of complex tax policies.

References

- Adermon, A., M. Lindahl, and D. Waldenström (2018). Intergenerational wealth mobility and the role of inheritance: Evidence from multiple generations. *The Economic Journal* 128(612), F482–F513.
- Albers, T., C. Bartels, and M. Schularick (2022). Wealth and its distribution in Germany, 1895-2018. World Inequality Lab. Working Paper No. 09.
- Alesina, A. and P. Giuliano (2011). Preferences for redistribution. In J. Benhabib, A. Bisin, and M. O. Jackson (Eds.), *Handbook of Social Economics*, Volume 1, pp. 93–131. Amsterdam, North Holland: Elsevier.
- Alesina, A. and E. La Ferrara (2005). Preferences for redistribution in the land of opportunities. *Journal of Public Economics* 89(5-6), 897–931.
- Alesina, A., S. Stantcheva, and E. Teso (2018). Intergenerational mobility and preferences for redistribution. *American Economic Review* 108(2), 521–554.
- Alvaredo, F., B. Garbinti, and T. Piketty (2017). On the share of inheritance in aggregate wealth: Europe and the USA, 1900-2010. *Economica* 84(334), 239–260.
- Angrist, J. D. and J.-S. Pischke (2009). *Mostly harmless econometrics: An empiricist's companion*. Princeton University Press.
- Bach, S. and A. Thiemann (2016). Inheritance tax revenue low despite surge in inheritances. *DIW Economic Bulletin* 6(4/5), 41–48.
- Bastani, S. and D. Waldenström (2020). How should capital be taxed? *Journal of Economic Surveys* 34(4), 812–846.
- Bastani, S. and D. Waldenström (2021). Perceptions of inherited wealth and the support for inheritance taxation. *Economica* 88(350), 532–569.
- Bellani, L., N. Bledow, M. R. Busemeyer, and G. Schwerdt (2021). Perception of inequality and social mobility in Germany: Evidence from the Inequality Barometer. Cluster of Excellence: The Politics of Inequality, Working Paper No. 3.
- Benzarti, Y. (2020). How taxing is tax filing? Using revealed preferences to estimate compliance costs. *American Economic Journal: Economic Policy* 12(4), 38–57.

- Birney, M., J. Graetz, and I. Shapiro (2006). Public opinion and the push to repeal the estate tax. *National Tax Journal* 39(3), 439–461.
- Bischoff, I. and N. Kusa (2019). Should wealth transfers be taxed? Evidence from a representative German survey. *Public Finance Review* 47(4), 635–661.
- Blesse, S., F. Buhlmann, and P. Doerrenberg (2019). Do people really want a simple tax system? Evidence on preferences towards income tax simplification. ZEW Discussion Papers 19-058.
- Blinder, A. S. and A. B. Krueger (2004). What does the public know about economic policy, and how does it know it? *Brookings Papers on Economic Activity* 35, 327–397.
- Campbell, A., P. E. Converse, W. E. Miller, and D. E. Stokes (1980). *The American Voter*. Chicago: University of Chicago Press.
- Castillo, M. and M. Ige (2023). Compliers, defiers and the evaluation of information interventions. www.marcocastillo.org/uploads/8/5/0/1/85015586/castilloige_dec2023.pdf.
- Cruces, G., R. Perez-Truglia, and M. Tetaz (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. *Journal of Public Economics* 98, 100–112.
- Drometer, M., M. Hofbauer Pérez, C. Rhode, S. Schworm, and T. Stitteneder (2018). Wealth and inheritance taxation: An overview and country comparison. *ifo DICE Report* (16), 45–54.
- Druckman, J. N., E. Peterson, and R. Slothuus (2013). How elite partisan polarization affects public opinion formation. *American Political Science Review* 107(1), 57–79.
- Durante, R., L. Putterman, and J. van der Weele (2014). Preferences for redistribution and perception of fairness: An experimental study. *Journal of the European Economic Association* 12(4), 1059–1086.
- Elinder, M., H. Jordahl, and P. Poutvaara (2015). Promises, policies and pocketbook voting. *European Economic Review* 75, 177–194.
- Farhi, E. and I. Werning (2013). Estate taxation with altruism heterogeneity. *American Economic Review* 103(3), 489–495.

- Fastenrath, F., P. Marx, A. Truger, and H. Vitt (2022). Why is it so difficult to tax the rich? Evidence from German policy-makers. *Journal of European Public Policy* 29(5), 767–786.
- Fisman, R., K. Gladstone, I. Kuziemko, and S. Naidu (2020). Do Americans want to tax wealth? Evidence from online surveys. *Journal of Public Economics* 188, 104207.
- Fong, C. (2001). Social preferences, self-interest, and the demand for redistribution. *Journal of Public Economics* 82(2), 225–246.
- Fratzcher, M. (2022). Wir brauchen eine andere Erbschaftssteuer. *Deutsches Institut für Wirtschaftsforschung (DIW) Blog*.
- Gross, C., K. Lorek, and F. Richter (2017). Attitudes towards inheritance taxation – Results from a survey experiment. *The Journal of Economic Inequality* 15(1), 93–112.
- Haaland, I. and C. Roth (2023). Beliefs about racial discrimination and support for pro-black policies. *The Review of Economics and Statistics* 105(1), 40–53.
- Hager, A. and H. Hilbig (2020). Does public opinion affect political speech? *American Journal of Political Science* 64(4), 921–937.
- Hainmueller, J., D. Hangartner, and T. Yamamoto (2015). Validating vignette and conjoint survey experiments against real-world behavior. *Proceedings of the National Academy of Sciences* 112(8), 2395–2400.
- Jerit, J. and J. Barabas (2012). Partisan perceptual bias and the information environment. *The Journal of Politics* 74(3), 672–684.
- Kuziemko, I., M. I. Norton, E. Saez, and S. Stantcheva (2015). How elastic are preferences for redistribution? Evidence from randomized survey experiments. *American Economic Review* 105(4), 1478–1508.
- Lergetporer, P., G. Schwerdt, K. Werner, M. R. West, and L. Woessmann (2018). How information affects support for education spending: Evidence from survey experiments in Germany and the United States. *Journal of Public Economics* 167, 138–157.
- Marbach, M. and D. Hangartner (2020). Profiling compliers and noncompliers for instrumental-variable analysis. *Political Analysis* 28(3), 435–444.

- Meya, J., P. Poutvaara, and R. Schwager (2020). Pocketbook voting, social preferences, and expressive motives in referenda. *Journal of Economic Behavior & Organization* 175, 185–205.
- Nekoei, A. and D. Seim (2023). How do inheritances shape wealth inequality? Theory and evidence from Sweden. *The Review of Economic Studies* 90(1), 463–498.
- OECD (2021). Inheritance Taxation in OECD Countries. Technical report, OECD Tax Policy Studies, No. 28, OECD Publishing, Paris.
- Piketty, T. and E. Saez (2013). A theory of optimal inheritance taxation. *Econometrica* 81(5), 1851–1886.
- Rutström, E. and M. Williams (2000). Entitlements and fairness: An experimental study of distributive preferences. *Journal of Economic Behavior & Organization* 43(1), 75–89.
- Scheuer, F. and A. Wolitzky (2016). Capital taxation under political constraints. *American Economic Review* 106(8), 2304–2328.
- Schröder, C., C. Bartels, K. Göbler, M. M. Grabka, and J. König (2020). Millionaires under the microscope: Data gap on top wealth holders closed; wealth concentration higher than presumed. *DIW Weekly Report* 10(30/31), 313–322.
- Sides, J. (2016). Stories or science? facts, frames, and policy attitudes. *American Politics Research* 44(3), 387–414.
- Slemrod, J. (2006). The role of misconceptions in support for regressive tax reform. *National Tax Journal* 59(1), 57–75.
- Slothuus, R. and M. Bisgaard (2021). How political parties shape public opinion in the real world. *American Journal of Political Science* 65(4), 896–911.
- Stantcheva, S. (2021). Understanding tax policy: How do people reason? *The Quarterly Journal of Economics* 136(4), 2309–2369.
- Statistisches Bundesamt (2022). Erbschaft- und Schenkungsteuerstatistik—2021. Data retrieved from <https://www.destatis.de/DE/Themen/Staat/Steuern/WeitereSteuern/Publikationen/Downloads-weitere-Steuern/statistischer-bericht-erbschaft-schenkungssteuer-5736101227005.html>.

- Thiemann, A., D. Ognyanova, E. Narazani, B. Palvolgyi, A. Kalyva, and A. Leodolter (2021). Shifting the tax burden away from labour towards inheritances and gifts: Simulation results for Germany. JRC Working Papers on Taxation and Structural Reforms No. 16.
- Zucman, G. (2019). Global wealth inequality. *Annual Review of Economics* 11, 109–138.

Tables

Table 1: Descriptive Statistics - Sample Means by Experimental Group

Experimental group	E0 Control (1)	E1 Tax allowance (2)	E2 Inheritance share (3)	E3 Both treatments (4)
<i>Control variables</i>				
<i>Basic demographics</i>				
Female	0.52	0.53	0.50	0.50
Age	50.71	50.25	49.86	50.40
Married	0.49	0.48	0.47	0.48
Children living at home	0.22	0.20	0.20	0.21
Migration background	0.14	0.15	0.13	0.14
East Germany	0.15	0.17	0.15	0.16
No degree/basic degree	0.37	0.35	0.35	0.34
Middle school degree	0.31	0.31	0.29	0.31
Univ. entrance degree	0.32	0.34	0.36	0.35
University degree	0.31	0.29	0.32	0.31
Academic family background	0.16	0.14	0.17	0.16
Household size	2.26	2.25	2.23	2.22
<i>Political orientation</i>				
Left	0.33	0.32	0.31	0.32
Center	0.36	0.36	0.33	0.35
Right	0.21	0.21	0.24	0.22
<i>Economic status</i>				
Employed	0.61	0.59	0.61	0.61
Monthly household income (/100)	32.24	31.53	34.66	34.18
Expected wealth at death > 400k	0.10	0.08	0.09	0.09
<i>Prior beliefs</i>				
Tax allowance (/100)	2043.08	1991.12	2110.28	2057.15
Share of inherited wealth	49.50	48.58	48.86	48.10
Inheritance share has doubled	0.35	0.35	0.38	0.37
<i>Perceptions</i>				
Expects to be affected by inh. tax	0.43	0.27	0.45	0.34
Perceives high wealth as mainly inherited	0.57	0.55	0.64	0.63
Perceives wealth inequality as a problem	0.65	0.65	0.66	0.67
Perceives high wealth as a result of luck	0.63	0.61	0.60	0.63
<i>Policy attitudes (Share support)</i>				
Abolish inheritance tax	0.41	0.35	0.39	0.36
Increase inheritance tax	0.17	0.21	0.19	0.21
Introduce wealth tax	0.33	0.31	0.31	0.32
Abolish tax exemptions for family firms	0.37	0.34	0.36	0.34
Observations	1590	1520	1537	1531

Notes: Averages of key variables by experimental group. All variables are binary indicator variables except for age, household size, monthly household income, prior beliefs about tax allowance and the share of inherited wealth with respect to total wealth. Data source: Own survey conducted in 2020.

Table 2: Balancing Test - Difference in Means between Treated and Controls

Comparison between experimental groups	E1 vs E0 (1)	E2 vs E0 (2)	E3 vs E0 (3)
<i>Basic demographics</i>			
Female	.012 (.019)	-.021 (.019)	-.015 (.019)
Age	-.367 (.670)	-.807 (.679)	-.400 (.665)
Married	-.012 (.019)	-.008 (.019)	-.006 (.019)
Children living at home	-.014 (.015)	-.008 (.015)	-.004 (.015)
Migration background	.022 (.014)	-.010 (.013)	.001 (.013)
East Germany	.017 (.014)	-.005 (.013)	-.000 (.014)
No degree/basic degree	-.023 (.018)	-.020 (.018)	-.030 (.018)
Middle school degree	.005 (.018)	-.015 (.017)	-.000 (.017)
Univ. entrance degree	.018 (.018)	.035* (.018)	.030 (.018)
University degree	-.009 (.017)	.018 (.017)	.007 (.017)
Academic family background	-.025 (.014)	.005 (.014)	-.009 (.014)
Household size	-.005 (.043)	-.026 (.041)	-.024 (.041)
<i>Political orientation</i>			
Left	-.009 (.018)	-.020 (.018)	-.019 (.018)
Center	-.006 (.018)	-.040* (.018)	-.007 (.018)
Right	-.001 (.015)	.032* (.016)	.016 (.016)
<i>Economic status</i>			
Employed	-.019 (.019)	.002 (.019)	.003 (.019)
Monthly household income (/100)	-.365 (1.366)	2.889 (1.840)	1.880 (1.737)
Expected wealth at death > 400k	-.012 (.011)	-.001 (.011)	-.010 (.011)
<i>Prior beliefs</i>			
Tax allowance (/100)	-45.415 (55.748)	86.623 (56.459)	16.526 (55.424)
Share of inherited wealth	-1.093 (.821)	-.555 (.808)	-1.444 (.809)
Inheritance share has doubled	-.055 (.050)	.046 (.049)	.044 (.049)

Notes: Difference in means in the characteristic indicated in each row between the control group and the respective treatment groups. Significance levels based on linear regressions of the respective background variables on the respective treatment indicator. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Data source: Own survey conducted in 2020.

Table 3: Reduced Form - Effects of Information on the Support for Inheritance Taxation

Outcome:	Abolish inh. taxation		Increase inh. tax rates	
	(1)	(2)	(3)	(4)
Informed tax allowance (E1)	-.060*** (.018)	-.062*** (.018)	.034** (.015)	.036** (.014)
Informed inheritance share (E2)	-.024 (.018)	-.027 (.018)	.023 (.015)	.025* (.014)
Informed combined treatment (E3)	-.049*** (.018)	-.049*** (.018)	.040*** (.015)	.039*** (.014)
Controls		✓		✓
Control mean	.410	.410	.174	.174
Observations	6,178	6,178	6,178	6,178

Notes: Linear probability models as specified in Equation (1). Table displays estimates of α_1 for experimental groups E1 through E3, with the uninformed control group E0 serving as the reference category. Outcomes are binary variables indicating support for the abolishment of inheritance taxes in columns (1) and (2) and a binary variable indicating support for increasing inheritance tax rates in columns (3) and (4). Full sample including all experimental groups E1 to E3 and the uninformed control group E0. Control variables, incorporated in columns (2) and (4), are detailed in Table 1. Estimations use sampling weights. Robust standard errors in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Data source: Own survey conducted in 2020.

Table 4: Belief Updating - Effect of Information on Tax Allowance by Prior Belief

Outcome:	Abolish inh. taxation		Increase inh. tax rates	
	(1)	(2)	(3)	(4)
Informed (E1)	-.060*** (.018)	-.000 (.037)	.036** (.014)	-.010 (.032)
Informed (E1) × Underestimator		-.076* (.042)		.059* (.036)
Underestimator		.046 (.030)		-.057** (.026)
Controls	✓	✓	✓	✓
Control mean	.410	.410	.174	.174
Observations	3,110	3,110	3,110	3,110

Notes: Linear probability models as specified in Equation (2). Table displays estimates of β_1 , β_2 , and β_3 . *Informed* refers to the information treatment on the actual level of the tax allowance (E1). *Underestimator* identifies respondents who initially believed the tax allowance to be 300,000 euros or less. Outcomes are binary variables indicating support for the abolishment of inheritance taxes in columns (1) to (2) and a binary variable indicating support for increasing inheritance tax rates in columns (3) to (4). Sample includes only experimental groups E1 and the uninformed control group E0. Control variables are detailed in Table 1. Estimations use sampling weights. Robust standard errors in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Data source: Own survey conducted in 2020.

Table 5: Policy Spillovers - Effect of Information on Tax Allowance on Other Policies

Outcome:	Abolish exemptions	wealth tax	Introduction of	
	for family firms		tuition fees	carbon tax
	(1)	(2)	(3)	(4)
Informed (E1)	-.031* (.018)	-.019 (.017)	-.034* (.018)	-.013 (.014)
Controls	✓	✓	✓	✓
Control mean	.367	.319	.381	.218
Observations	6,178	6,178	6,178	6,178

Notes: Linear probability models as specified in Equation (1). Table displays estimates of α_1 . *Informed (E1)* refers to the information treatment on the actual level of the tax allowance. Outcomes are binary variables indicating support for the policy reform proposals indicated in the top row. Full sample including all experimental groups E1 to E3 and the uninformed control group E0. Control variables are detailed in Table 1. Estimations use sampling weights. Robust standard errors in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Data source: Own survey conducted in 2020.

Table 6: Effect Heterogeneity - Reduced Form Estimates by Subgroup

Outcome:	Abolish inh. taxation		Increase inh. tax rates	
	(1)	(2)	(3)	(4)
Baseline	-.060*** (.018)	-.062*** (.018)	.034** (.015)	.036** (.014)
<i>Income (quartiles)</i>				
< 1900 EUR	-.098*** (.036)	-.099*** (.036)	.028 (.029)	.026 (.028)
1901 - 2500 EUR	-.074* (.045)	-.086** (.044)	.061 (.038)	.057 (.037)
2501 - 3500 EUR	-.023 (.031)	-.032 (.030)	.026 (.025)	.043* (.024)
> 3500 EUR	-.061 (.040)	-.049 (.038)	.030 (.030)	.023 (.029)
<i>Wealth at death</i>				
≤ 400000 EUR	-.072*** (.021)	-.073*** (.021)	.039** (.018)	.038** (.018)
> 400000 EUR	.081 (.063)	.062 (.060)	.007 (.045)	.024 (.041)
<i>Political orientation</i>				
Left	-.057* (.031)	-.046 (.030)	.066** (.030)	.055* (.029)
Center	-.071** (.031)	-.075** (.030)	.006 (.022)	.014 (.022)
Right	-.032 (.041)	-.024 (.041)	.070** (.031)	.063** (.031)
Controls		✓		✓

Notes: Linear probability models as specified in Equation (1) for the subgroup indicated in the first column. Table displays in each cell estimates of being informed about actual level of the tax allowance (E1) from separate regressions. Outcomes are binary variables indicating support for the policy reform proposals indicated in the top row. Full sample including all experimental groups E1 to E3 and the uninformed control group E0. Control variables, incorporated in columns (2) and (4), are detailed in Table 1. Estimations use sampling weights. Robust standard errors in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Data source: Own survey conducted in 2020.

Table 7: Manipulation Checks - Effect of Information on Perceptions

Outcome:	Expectation to be affected by inheritance tax	High wealth is mainly inherited	Wealth differences are a big problem	High wealth is mainly result of luck
	(1)	(2)	(3)	(4)
Informed (E1)	-.165*** (.017)	-.013 (.018)	-.007 (.018)	-.023 (.018)
Controls	✓	✓	✓	✓
Control mean	.441	.605	.654	.614
Observations	6,178	6,178	6,178	6,178

Notes: Linear probability models as specified in Equation (1). Table displays estimates of α_1 . *Informed* refers to the information treatment on the actual level of the tax allowance (T1). Outcomes are binary variables indicating the perceptual determinants of policy support indicated in the top row. Full sample including all experimental groups E1 to E3 and the uninformed control group E0. Control variables, incorporated in columns (2) and (4), are detailed in Table 1. Estimations use sampling weights. Robust standard errors in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Data source: Own survey conducted in 2020.

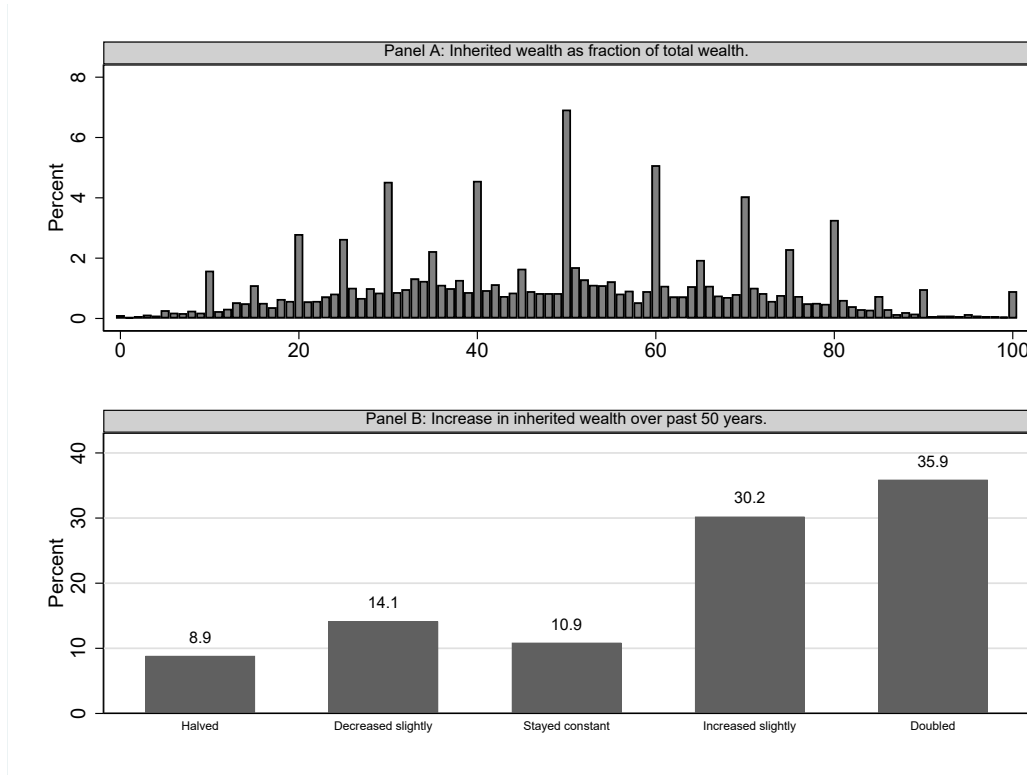
Table 8: Pocketbook Effect - Instrumental Variable Estimates

Outcome:	Abolish inh. taxation				Increase inh. tax rates			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Pocketbook effect	.354*** (.112)	.375*** (.114)	.389*** (.114)	.453*** (.118)	-.201** (.091)	-.220** (.091)	-.244*** (.090)	-.296*** (.091)
Controls		✓	✓	✓		✓	✓	✓
Perceptions			✓	✓			✓	✓
Prior belief	all	all	all	$\leq 400k$	all	all	all	$\leq 400k$
Observations	6,178	6,178	6,178	5,618	6,178	6,178	6,178	5,618

Notes: Instrumental variable estimations of the effect of expecting to be affected by inheritance taxation on policy demand. The instrument is an indicator for being informed about the inheritance tax allowance (experimental group E1). Outcomes are binary variables indicating support for the abolishment of inheritance taxes in columns (1) to (4) and a binary variable indicating support for increasing inheritance tax rates in columns (5) to (8). Estimation sample is restricted in columns (4) and (8) to survey participants who believed the inheritance tax allowance to be 400,000 euros or less. Control variables, included all columns except columns (1) and (5), are detailed in Table 1. Additional controls, included in columns (3), (4), (7), and (8), include empirical measures of perceptions about the intergenerational transmission of wealth, inequality concerns, and meritocratic beliefs. Estimations use sampling weights. Robust standard errors in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Data source: Own survey conducted in 2020.

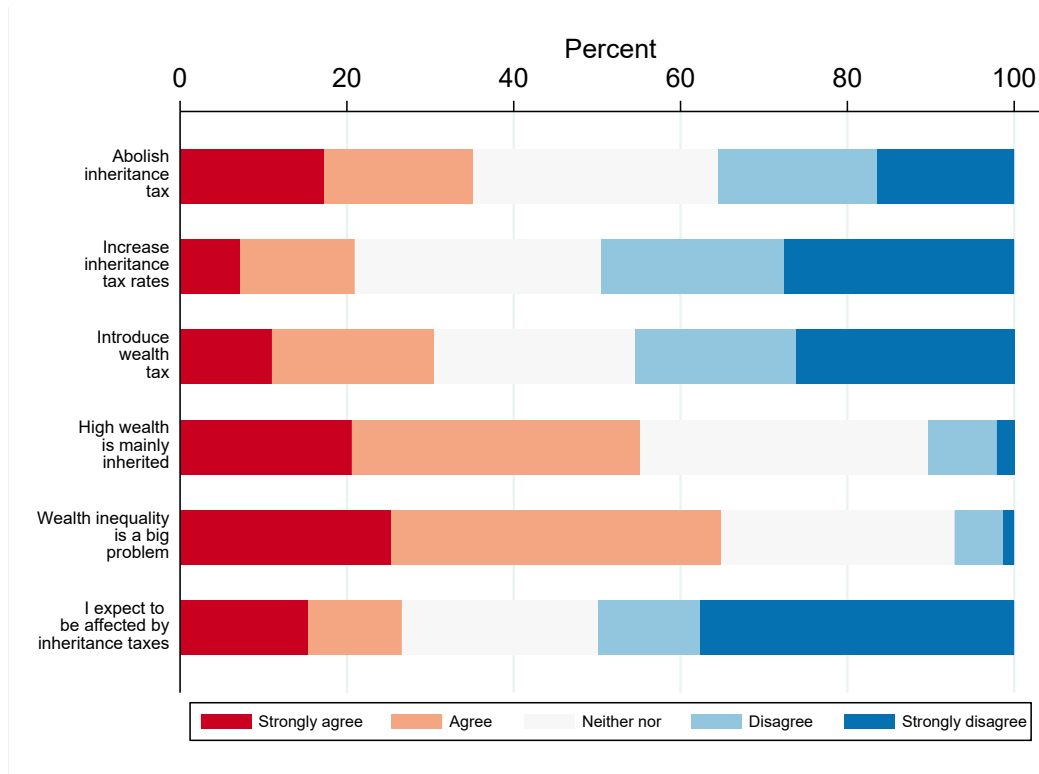
Appendix

Figure A1: Distribution of Prior Beliefs about Importance of Inherited Wealth



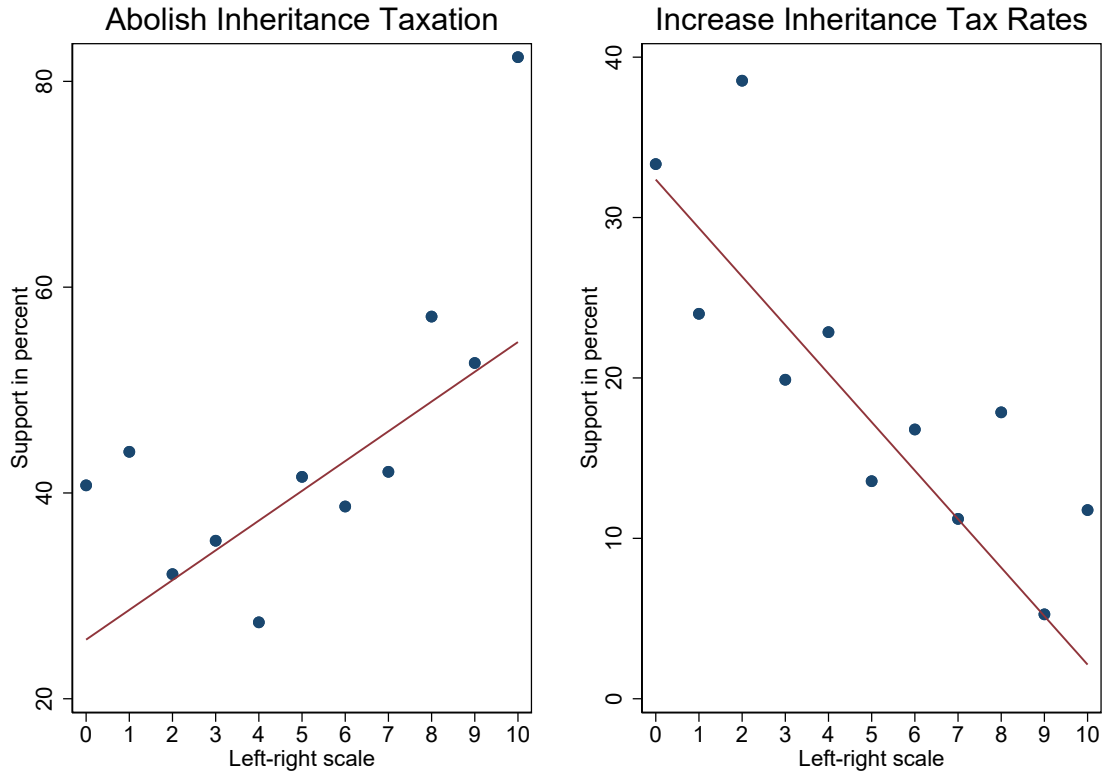
Notes: Figure illustrates the distribution of prior beliefs concerning the proportion of inherited wealth to total wealth in Germany. In Panel A, respondents were asked: “What do you estimate is the share of inherited wealth to total wealth in Germany?” The correct response for Panel A is 50 percent. For Panel B, the question was: “How do you estimate the change in the share of inherited wealth of total wealth over the past 50 years?” The accurate answer for Panel B is “Doubled.” Data source: Own survey conducted in 2020.

Figure A2: Perceptions and Policy Preferences in the Treatment Group



Notes: Figure represents the response shares in the treatment group (E1), distributed across five answer categories for the survey item specified in each row. The shares have been adjusted using sample weights. Data source: Own survey conducted in 2020.

Figure A3: Left-Right Divide in the Attitudes towards Inheritance Taxation



Notes: Scatter plots of the relationship between self-placement on a left-right scale and attitudes towards inheritance taxation in the uninformed control group. Left (right) panel displays the relationship with the support for abolishing inheritance taxation (increasing inheritance tax rates). Fitted line based on bivariate OLS regression. Data source: Own survey conducted in 2020.

Table A1: Effect of Information Treatments (Interactions)

Outcome:	Abolish inh. taxation		Increase inh. tax rates	
	(1)	(2)	(3)	(4)
Informed tax allowance (T1)	-.060*** (.018)	-.062*** (.018)	.034** (.015)	.036** (.014)
Informed inheritance share (T2)	-.024 (.018)	-.027 (.018)	.023 (.015)	.025* (.014)
Interaction T1 \times T2	.034 (.026)	.040 (.025)	-.017 (.022)	-.022 (.021)
Controls		✓		✓
Control mean	.410	.410	.174	.174
Observations	6,178	6,178	6,178	6,178

Notes: Linear probability models as specified in Equation (1). Specifically, the table presents estimates of α_1 for a vector of indicator variables, $Treatment_i$, encompassing a dummy variable for the tax allowance treatment (T1), another for the inheritance share treatment (T2), and their interaction term (T1 \times T2). Outcomes are binary variables indicating support for the abolishment of inheritance taxes in columns (1) and (2) and a binary variable indicating support for increasing inheritance tax rates in columns (3) and (4). Full sample including all experimental groups E1 to E3 and the uninformed control group E0. Control variables, incorporated in columns (2) and (4), are detailed in Table 1. Estimations use sampling weights. Robust standard errors in parentheses. Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Data source: Own survey conducted in 2020.

Table A2: Characterizing compliers

Population:	Whole sample (1)	Complier (2)	Never-taker (3)	Always-taker (4)
<i>Basic demographics</i>				
Female	.52	.54	.55	.47
Age	49.04	44.12	52.15	45.94
Married	.46	.41	.48	.44
Children living at home	.22	.28	.19	.24
Migration background	.14	.14	.15	.14
East Germany	.17	.17	.17	.17
No degree/basic degree	.37	.24	.42	.34
Middle school degree	.31	.28	.32	.33
Univ entrance degree	.32	.48	.26	.34
University degree	.28	.32	.25	.31
Academic family background	.16	.15	.14	.18
Household size	2.25	2.26	2.20	2.34
<i>Political orientation</i>				
Left	.32	.34	.32	.31
Center	.35	.38	.34	.35
Right	.21	.23	.20	.23
<i>Economic status</i>				
Employed	.62	.71	.56	.68
Monthly household income (/100)	31.75	33.88	28.73	36.17
Expected wealth at death > 400k	.06	.01	.05	.11
<i>Prior guesses</i>				
Tax allowance (/1000)	13.68	9.96	14.95	13.36

Notes: Means by population group. Complier analysis follows [Marbach and Hangartner \(2020\)](#). Data source: Own survey conducted in 2020.

Table A3: Variable Descriptions

Variable	Description
<i>Prior Beliefs</i>	
Tax allowance	Entered guess, tax allowance of a child in Germany, slider from 0 <i>euros</i> to 500,000 <i>euros</i>
Share of inherited wealth	Entered guess, share of inherited wealth in Germany, slider from 0% - 100%
Inheritance share has doubled	Entered guess, increase in the share of inherited wealth in Germany from 1 (halved) to 5 (doubled)
<i>Perceptions</i>	
Expects to be affected by inh. tax	1=respondent expects to be affected by inheritance tax, 0=otherwise
Perceives high wealth as mainly inherited	1=respondent perceives wealth as mainly inherited, 0=otherwise
Perceives wealth inequality as a problem	1=respondent perceives wealth inequality as either a “small problem”, “a medium problem”, “a serious problem” or a “very serious problem”, 0=otherwise
Perceives high wealth as a result of luck	1=respondent perceives luck or injustice in society as main reason why some people become rich, 0=otherwise
<i>Policy Attitudes</i>	
Abolish inheritance tax	1=respondent expresses any degree of support (“agree” or “strongly agree”) for abolishing the inheritance tax in Germany, 0=otherwise
Increase inheritance tax rates	1=respondent expresses any degree of support (“agree” or “strongly agree”)for increasing inheritance tax rates in Germany, 0=otherwise
Introduce wealth tax	1=respondent expresses any degree of support (“agree” or “strongly agree”) for introducing a wealth tax in Germany, 0=otherwise
Abolish tax exemptions for family firms	1=respondent expresses any degree of support (“agree” or “strongly agree”) for abolishing tax exemptions for the inheritance of family-owned business in Germany, 0=otherwise

(continued on next page)

Table A3: Variable Descriptions (Continued)

Variable	Description
<i>Basic Demographics</i>	
Female	1=female, 0=otherwise
Age	Age of respondent at time of survey (in years)
Married	1=married, 0=otherwise
Children living at home	Number of children living in respondent's household
Migration background	1=respondent is not born in Germany, 0=otherwise
East Germany	1=living in a federal state formerly part of the German Democratic Republic (GDR), 0=otherwise
No degree/basic degree	1=general school degree (Hauptschulabschluss) , no school-leaving certificate or item non-response, 0=otherwise
Middle school degree	1=secondary school degree or equivalent, 0=otherwise
Univ. entrance degree	1=high-school degree or equivalent, 0=otherwise
University degree	1=degree from university, university of applied sciences, cooperative state university (<i>Duale Hochschule</i>), master craftsman (<i>Meister</i>) or technician (<i>Techniker</i>), 0=otherwise
Academic family	1=at least one parent has a university degree, 0=otherwise
Household size	Number of people living in the respondent's household
<i>Political Orientation</i>	
Left	1=self-placement on 11-point left-right scale for political ideology between 0 and 4, 0=otherwise
Center	1=self-placement on 11-point left-right scale for political ideology equal to 5, 0=otherwise
Right	1=self-placement on 11-point left-right scale for political ideology between 6 and 10, 0=otherwise
<i>Economic Status</i>	
Employed	1=respondent is working full-time, part-time, marginally, or short-time (<i>Kurzarbeit</i>), 0=otherwise
Monthly household income	Household net monthly income, in 100 <i>euros</i> . Missing values in numeric income are filled with responses of categorical income question. Missing values in numeric and categorical income are filled by mean imputation.
Expected wealth at death	1=expected wealth at death greater than 400,000 <i>euros</i> , 0=otherwise

Notes: Variable labels and operationalization of key variables.