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# DISCUSSION PAPER

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## Do People Really Want a Simple Tax System? Evidence on Preferences Towards Income Tax Simplification

# Do people really want a simple tax system? Evidence on preferences towards income tax simplification \*

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## Abstract

Using new survey and experimental data for a representative sample of the German population, we study preferences for tax simplification. The general wisdom seems to suggest that most tax systems are overly complex and that tax simplification is generally desirable. Consistent with this general wisdom, we find that more than 90% of our sample believe that the tax system needs to be simplified. However, there also are efficiency and equity arguments in support of a certain degree of tax complexity and it is puzzling why tax systems remain highly complex despite the conventional view in favor of more simplification. The main purpose of our study then is to investigate if the high support for tax simplification is driven by a lack of awareness about the trade-offs behind simple and complex tax systems. Our data show that the support for simplification decreases as we randomly provide economic arguments against simplification and as we ask respondents if the tax system should account for specific differences in living situations (such as costly care of elderly family members). Overall, our findings suggest that the high support for simpler taxes is to some extent driven by a lack of awareness about the implications of tax simplification.

**JEL Classification:** H2, D72, C9

**Keywords:** Tax Complexity, Preferences Towards Tax Simplification, Randomized Survey Experiment

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# 1 Introduction

Should tax systems be simplified? The conventional wisdom seems to be: *yes*, tax systems should be simpler! As the literature shows, there are indeed many good reasons for supporting tax simplification. For example, recent studies show that the self-employed value tax simplicity and leave money on the table because of complex tax schedules (Aghion et al. 2017; Benzarti 2017), that taxpayers underreact to complex tax incentives (Abeler and Jaeger 2014), that the existence of complexity-adding tax expenditures facilitates tax evasion (Kleven et al. 2011; Paetzold and Winner 2016), and that tax complexity reduces the take up of tax refunds by firms (Zwick 2018). Complex tax systems also lend scope to lobby groups to achieve beneficial tax treatment for the groups they represent (Brusco et al. 2014), have negative effects on income inequality (Aghion et al. 2017), and possibly come with substantial resource costs (Pitt and Slemrod 1989). It is therefore maybe not surprising that many economists propose implementing tax reforms that make the system less complex, for example through lower rates and broader bases.<sup>1</sup> Not only many economists and academics support a simpler tax system; the conventional wisdom among policy makers and journalists also seems to hold that simplifying tax systems is generally desirable.<sup>2</sup>

However, despite many arguments in favor of tax simplicity, there are also economic arguments in support of a certain degree of tax complexity (see, e.g., OECD 2010b, Hines 2016, and Hines 2019). For example, a fairly complex tax system with a certain amount of tax expenditures i) makes it possible to tailor taxes to individual situations and to use 'tagging' components,<sup>3</sup> ii) allows to tax highly elastic goods at effectively lower rates, iii) avoids tax compounding (e.g., favorable tax treatment of pensions and retirement savings), and iv) enables to include Pigouvian elements into the tax system that correct for market failures or internalize negative externalities, e.g. research tax credits (Hines 2016; Hines 2019). These elements of a complex tax system can contribute to making the tax system more efficient. Complex components of the tax system potentially also have redistributive purposes – think for example of deducting the costs of elderly care of family members or allowances for dependent children – and might therefore be viewed as

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<sup>1</sup>The simplification of the tax system is a key objective of many income-tax reform proposals by economists in various countries. For example, Gale (2001), Rohaly and Gale (2004) and Gravelle and Hungerford (2012) for the US, James et al. (1997) for Australia, New Zealand and the United Kingdom, Tran-Nam (2000) for Australia, and Fuest et al. (2008) and Wagner (2006) for Germany.

<sup>2</sup>See newspaper coverage for the US showing that many politicians and journalists make a case for a simplified tax system: e.g., Economist (2005), Economist (2013), NYT (2015), NPR (2015), Forbes (2017), as well as Vox (2017).

<sup>3</sup>Tagging is for example studied in Cremer et al. (2010). Gordon and Kopczuk (2014) study the selection of the income tax base and show that it is advantageous (in the sense of approximating a tax on ability as good as possible) to allow for particular tax expenditures (such as the dependents' deduction). Thus, there is an implicit rationale for not having the simplest possible tax system with a broad base and without any tax expenditures.

equity enhancing and fair.<sup>4</sup>

The arguments in support of tax complexity do not feature prominently in the debate about tax complexity. The general-wisdom support of simple tax systems might therefore miss out some of the efficiency and redistribution aspects of tax simplification. In addition, the data show that most tax systems remain very complex and are characterized by the presence of a large amount of tax expenditures (e.g., OECD 2010b). Figure 1 shows for the US that there is an upward sloping trend in the growth of tax expenditures, suggesting that the tax system tends to get even more complex over time. It is thus a puzzle why most tax systems remain so complex although the general wisdom seems to hold that substantial tax simplification is desirable.

Considering important arguments both in favor and against simplification, and in light of lasting complexity of real-world tax systems, attitudes towards tax simplification among the public may be more nuanced than they seem on first glance. In this paper, we aim to shed light on the debate about tax complexity and collect new survey and experimental data to study preferences for tax simplicity among a representative sample of the German population.<sup>5</sup>

Our paper has two main objectives: First, we document preferences for tax simplicity and report which fraction of the population supports a simplified tax system. This first part of the paper particularly investigates if public support for tax simplicity is indeed consistent with the conventional wisdom and consensus that apparently exist in academic and public-press debates. Second, we investigate if preferences for tax simplification are driven by a lack of awareness about the implications and consequences of tax simplification. In other words: Is the general wisdom regarding tax simplicity driven by awareness and information deficits? Do individuals frequently express desires for tax simplification without appreciating the implications of tax simplification? To address these questions, we i) elicit if people are in favor of specific tax expenditures which add complexity to the tax system, and we ii) implement two randomized experiments to study if preferences for tax simplicity are elastic to information in favor and against tax simplification. That is, we study if preferences are shifted once people are made aware of the trade-offs behind complexity and simplicity.

The working hypothesis throughout our paper is that preferences for tax simplification are possibly shifted once individuals are explicitly forced to think about their simplicity preferences in concrete applications or if they are made aware of information

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<sup>4</sup>The role of economic theory in this discussion is addressed by Hines (2016) who concludes that: "Economic theory does not say that an efficient and equitable income tax system has a broad base and a low rate, and in fact the theory has never said that." (Abstract).

<sup>5</sup>Germany has a considerably complex tax system with many tax expenditures. In addition, the simplification of the tax system is a frequently debated issue in the media and among politicians. The case of Germany might therefore be a well suited case to study preferences for tax complexity. See Section 2.2 for more details on tax complexity in Germany.

and aspects of tax complexity that are new to them. Presumably, such a shift in preferences is greater in response to information *against* tax simplicity than to information *in favor of* simplicity, because pro-simplicity arguments play a more prominent role in the public debate and misperceptions are thus likely to be less prevailing with regard to pro-simplicity arguments.

We included a set of questions in the context of tax simplification into the *German Internet Panel*, a representative survey of the German population ( $N = 2464$ ). The survey questions are tailor-made and designed to speak to the two objectives of our paper. The concept of tax complexity is complex in itself, and for the purpose of the survey we decided to focus on one particular dimension of tax complexity: the number of tax expenditures.<sup>6</sup> While there are clearly more dimensions of tax complexity (e.g., documentation requirements, etc.), tax expenditures are a main source of tax complexity and a major issue in the debate about complexity; moving to a system without any tax expenditures would clearly make any existing tax system simpler, easier and more comprehensible. This definition of tax complexity is consistent with Slemrod and Kopczuk (2002) and Kopczuk (2005) who characterize an income tax system as complex when it features many deductions (also see the discussion about tax-complexity measurement in Abeler and Jaeger 2014). We further focus on the case of the personal income tax (PIT) which appears to be the natural choice for a survey on tax attitudes among the general public.

Our survey reveals the following main results. First, more than 90% of the participants have a preference for tax simplification. We survey this question on a scale from 1 to 6, where 6 means strong support for tax simplification, and find an average of 5.2. This result confirms that the prevailing view indeed holds that tax simplification is desirable. Apparently, supporting tax simplification seems to be the obvious choice and general-wisdom reply for the large majority of respondents. This finding is the starting point of our analysis, in which we aim to investigate if the high support for tax simplification persists as we make people aware of the trade-offs between tax simplicity and complexity. In other words, we move on from the finding that tax simplification is the obvious choice in the survey and study if the matter becomes less obvious as we highlight the trade-offs behind this choice.<sup>7</sup>

Second, we then dig deeper into preferences for tax simplicity and study if the large support for simplicity holds as we ask for the preferred tax system in particular contexts. For this purpose, we have a series of questions in which we present participants with

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<sup>6</sup>A straight forward definition of tax expenditures is provided by the Tax Policy Center (2019): 'Tax expenditures are special provisions of the tax code such as exclusions, deductions, deferrals, credits, and tax rates that benefit specific activities or groups of taxpayers.'

<sup>7</sup>An analysis of the anatomy of simplification preferences shows that age, gender and the perceived difficulty of filing a tax return are the strongest correlates of simplification preferences.

the living situations of two fictitious taxpayers,<sup>8</sup> and then survey if these two taxpayers should pay the same amount of taxes or if any of the two should pay less in taxes than the other person. We designed the questions in a way where the two fictitious persons are similar in all tax-relevant means except for one particular aspect of their living situation. In particular, the two fictitious taxpayers were different with respect to i) the necessity to spend money on the elderly care of a family member, ii) the amount they donate for charity, and iii) the distance between their home and work place.

The results show that in all three scenarios – i) to iii) – a considerable fraction of respondents indicate that the two persons should *not* pay the same amount of taxes and that the taxpayer with the additional cost burden should pay less. In particular, more than 60% of respondents think that the tax system should account for elderly-care costs. In the case of the other two scenarios, roughly 40% and 30%, respectively, believe that the tax system should account for the respective difference between the taxpayers.<sup>9</sup> Importantly, the share of people who indicate that the tax system should *not* account for certain differences in living situation (and thus be as simple as possible) is in all three scenarios considerably smaller than the 90%-share of people who generally support to have a simpler tax system.

These results are thus evidence that many people prefer a tax system which allows for a differential tax treatment of taxpayers in different living situations. Obviously, such a differential treatment of two otherwise identical taxpayers can only be achieved through tax expenditures, and thus through a substantial degree of tax complexity. The survey respondents might not even realize that their choices imply tax complexity. However, the exercise provides evidence that people implicitly have preferences for a tax system that is more complex than a system without any tax expenditures. As we force participants to think about specific complexity-adding expenditures, many indicate that they wish a tax system that differentiates between taxpayers in different situations.

We are able to show that the answers to these questions are not solely driven by self interest; the result picture remains as we condition on *not* benefiting personally from the respective tax expenditure. Our findings thus show that preferences for having certain tax expenditures in the tax system are not (only) driven by the desire to keep those tax expenditures from which someone benefits personally. In other words, preferences for a certain degree of complexity are beyond pure payoff-maximizing considerations.

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<sup>8</sup>This survey question technique is similar to some of the survey question types used by Weinzierl (2014), Saez and Stantcheva (2016) and Weinzierl (2017). These studies are not in the context of tax complexity though.

<sup>9</sup>The observation that the 'elderly care' scenario induces more participants to vote for differential taxation than the other two scenarios is interesting in light of the fact that the costs for elderly care are circumstantial (outside control of taxpayers) while the other two are choices. Our respondents thus exhibit preferences that are consistent with arguments in the literature strands of optimal taxation and equality opportunity according to which circumstantial differences should be accounted for in the tax system while choices should not.

Third, we implement two randomized survey experiments to study the causal effect of information about the implications and consequences of tax simplification on preferences for tax simplification. These experiments are directly linked to our previous results, according to which a large majority indicate that they support tax simplification, but, at the same time, a large fraction of respondents prefer to account for the living situation of taxpayers through the tax system. The randomized experiments shed light on this puzzle and investigate if preferences for tax simplicity are elastic to information about the implications of tax simplicity. Eventually, the experiments have the objective of understanding if the high support for tax complexity is partly driven by a lack of awareness regarding what it possibly means to simplify taxes (i.e., the trade-off between arguments pro and con simplification).

To maximize power, we have one experimental intervention at the beginning of the survey and one experimental intervention towards the end. In each of the two experiments, we have a neutral control group, one group in which preferences are possibly shifted towards stronger support for tax simplification, and one group in which preferences are possibly shifted towards less support for tax simplification. This set up thus allows us to study if preferences for tax simplicity are elastic at all, and if yes, if they are elastic in both directions (the experimental groups are described in more detail in Section 3). The information and arguments that we use to shift preferences in the four treatment groups are inspired by some of the most debated issues in the context of tax complexity (see beginning of this Introduction): i) redistribution and social-policy aspects, ii) tax avoidance and evasion, iii) efficiency and iv) lobbyism and special-interest groups.

The first experiment includes three randomly assigned groups. A control group which is exposed to a neutral statement about the fact that there is an ongoing debate about whether the tax system is too complex because of various tax expenditures. The second group, labeled *Redistribution* group, is exposed to a statement highlighting that tax deductions can be used to reduce the tax burden for taxpayers which are disadvantaged by exogenous circumstances. A third experimental group, labeled *Avoidance* group, is exposed to an argument in favor of tax simplification, namely that a complex system with many deductions offers possibilities to avoid taxes and manipulate taxable income.<sup>10</sup>

The *Redistribution*-treatment significantly reduces the general support of tax simplification relative to the control group. This is evidence that preferences for tax simplicity are elastic to information about the potentially undesirable implications of tax simplicity. The *Avoidance*-treatment did not have any significant effects; coefficients

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<sup>10</sup>Respondents in all three experimental groups see the neutral statement. Respondents in the two treatment groups are thus exposed to the respective treatment in addition to the neutral statement, while control-group participants only see the neutral statement. The neutral statement in the control group serves the purpose of making the topic itself equally salient to respondents in all groups.

are much smaller than the effects of treatment *Redistribution* and the standard errors are larger than the coefficients. This null-result is potentially explained by the more prominent role of arguments in favor of simplification in the public debate, and thus less misperceptions regarding arguments that support more simplification. However, while the *Avoidance* treatment did not affect preferences for tax simplicity, it did affect how people think about the distributional aspects of tax complexity: it increased agreement with the statement that tax expenditures benefit the rich more.

The second experiment also includes three groups. We again have a control group with a neutral statement. We then have a group in which we highlight that a system with deductions and exemptions provides better opportunities to tax individual capacities and ability; we label this group the *Efficiency* group. Participants in the third group, labeled *Special Interest Group*, are made aware that tax expenditures are potentially used by lobby and special interest groups to bargain tax exemptions for their clientele.<sup>11</sup>

The results of this second experiment show that the *Efficiency* argument significantly lowers the support for tax simplification, relative to the control group. This suggests that participants are not aware of the potential efficiency implications of tax complexity and confirms the finding of the first experiment that preferences for simpler taxes are elastic to information *against* simplification. The *Special Interest Group* treatment did not have an effect, relative to the control group. This is also consistent with the findings of the first experiment; arguments *in favor* of more simplicity do not have an effect on preferences for simplification. For both experiments, we observe that treatment effects are homogenous across different demographic groups.<sup>12</sup>

Fourth, we aimed at eliciting which type of simplifying tax reforms respondents prefer. We offered a choice of different reform approaches towards simplification and asked respondents to decide which ones they prefer (under the assumption that each of the offered approaches is revenue neutral). The most preferred reform (chosen by about 1/3 of the respondents) entails an increase in the degree of progressivity, but eliminates all deductions and tax expenditures. Overall, however, we observe that there is no consensus among respondents w.r.t. the type of tax-simplifying tax reform. These preferred policy choices are also not affected by the first experimental treatment.<sup>13</sup>

*Contribution.* We identify the following main contributions of our paper and its empirical findings (see section 2.1 for an overview of the literature to which we con-

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<sup>11</sup>As in the first experiment, respondents in all three experimental groups are exposed to the neutral statement.

<sup>12</sup>The experimental intervention also did not have an effect on the previously mentioned questions regarding the tax burdens of two similar taxpayers that differ w.r.t. one particular dimension.

<sup>13</sup>The question was asked before the second experiment, implying that we cannot test the effect of the second experiment on policy choices. The statistical inference of both experiments' results are robust to standard errors that are adjusted to multiple hypothesis testing and exact significance tests (see results section 4).

tribute). First, we implement the first nuanced survey in the context of tax complexity and integrate our questions into an established representative survey. The survey design itself therefore stands as a contribution. To this end, we add to a recent literature using tailor-made surveys to study specific research topics. Second, we document in a representative sample of the population that a large majority of individuals has strong preferences for tax simplification. These preferences in support of tax simplification are consistent with the large literature showing that complexity is costly. Third, we study if the large support for tax simplification depends on the extent of awareness about the consequences and implications of tax simplification. In particular, we show that the support for simplification weakens as respondents are confronted with scenarios and information which present potential arguments in support of a certain degree of complexity. This shows that preferences for simplification are elastic to information and context, and suggests that the debate about complexity could potentially benefit from a more nuanced discussion of the pros and cons of complexity. Fourth, we speak to the puzzle that tax complexity keeps increasing despite the largely prevailing view that tax systems should be simplified. In addition, we document that a large fraction of people would prefer a type of tax-simplifying reform that maintains the degree of redistribution/progressivity or even increases it. These two latter points relate to the literature on the political economy of taxes and tax complexity.

The remainder of the paper is organized as follows. Section 2 summarizes the related literature (2.1), elaborates on the German case of tax complexity (2.2), and derives the paper’s working hypotheses (2.3). Section 3 provides an overview of the survey (incl. the randomized components) and its implementation. Section 4 presents the survey results. We conclude the paper in Section 5.

## **2 Related Literature and Tax Complexity in Germany**

### **2.1 Related Literature**

We relate to the following strands of literature. First, we speak to the literature on the consequences of tax complexity. Several papers show that tax complexity comes with resource costs and foregone money for firms and individuals (e.g., Pitt and Slemrod 1989, Aghion et al. 2017, Benzarti 2017, Zwick 2018). In addition, tax complexity has been shown to affect inequality (Aghion et al. 2017), and it facilitates lobbying for beneficial tax treatment by special-interest groups (Brusco et al. 2014) as well as tax evasion (Kleven et al. 2011; Paetzold and Winner 2016; Tsankova et al. 2019). Kopczuk (2012) shows that the introduction of a flat-tax reform with lower rates and less tax expenditures

increases tax revenues.<sup>14</sup>

Second, we contribute to a related strand of literature showing that the complexity of taxes and other policy-measures distorts the responses to these government interventions and reduces their take-up. For example, Abeler and Jaeger (2014) study the causal effect of tax complexity on tax responses in a lab-experimental situation, and find that people underreact to complex tax incentives. Saez (2010), along with the survey evidence of Fujii and Hawley (1988), suggests that individuals do not respond optimally to the incentives of the EITC. The complex structure of the EITC also seems to drive its low take-up (Kopczuk and Pop-Eleches 2007; Chetty and Saez 2013; Bhargava and Manoli 2015). Blaufus and Ortlieb (2009) show that complexity systematically distorts the decision to invest in retirement plans. A further set of papers shows that people systematically misperceive tax incentives – presumably due to tax complexity (de Bartolome 1995; Liebman and Zeckhauser 2004; Blumkin et al. 2012; Blaufus et al. 2013; Ito 2014; Feldman et al. 2016; Rees-Jones and Taubinsky 2016; Gideon 2017; Ballard et al. 2018). Furthermore, a simplified filing of the tax return affects filing and compliance behavior (Kotakorpi and Laamanen 2016; Fochmann et al. 2018). Tax complexity is also likely to be related to the established finding that tax salience is relevant for tax responses (Chetty et al. 2009; Finkelstein 2009; Goldin and Homonoff 2013; Feldman and Ruffle 2015). Tax responses also depend on the existence of complexity-adding deductions (Neisser 2017; Doerrenberg et al. 2017; Paetzold 2019).<sup>15</sup>

Third, we relate to (rarely made) arguments that highlight some potential upsides of tax complexity and express a rationale for the implementation of tax expenditures. James Hines discusses why it is not necessarily desirable to have the simplest tax system with a broad base and low rates (Hines 2016; Hines 2019). He particularly focuses on tax expenditures and provides efficiency and equity arguments for why it is costly to reduce or eliminate tax expenditures (see points i) to iv) above on potential arguments in favor of some degree of complexity). He also discusses several potential justifications to have a comprehensive and simple system with a broad base and low rates, and elaborates that many of these justifications for simplicity do not withstand economic reasoning. OECD (2010a) also discuss the rationale for implementing tax expenditures. They particularly point out arguments of i) tax administration costs (costs of broadening the base might exceed the corresponding efficiency gains), ii) equity and social-policy considerations (tax provisions might have the same purposes as social benefits), iii) correcting of market failures (internalize positive external effects), and iv) a political-economy argument, that they borrow from Hettich and Winer (1999), according to which the elimination of tax expenditures possibly reduces tax revenues (abolishing tax expenditures implies that

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<sup>14</sup>See the first paragraph of the Introduction for more context for some of these papers.

<sup>15</sup>Somewhat related also is the finding by Brown et al. (2017) that complexity complicates the ability of consumers to value life annuities (such as social security benefits).

government will be less able to discriminate among heterogeneous taxpayers and voters, which will lead to an increased overall opposition to taxation). Given that the existence of tax expenditures adds complexity to the tax system, Hines (2016), Hines (2019) and OECD (2010a) thus provide arguments for keeping a certain degree of complexity and not move to the simplest possible system. As discussed in footnote 3, Gordon and Kopczuk (2014) also provide a rationale for not having the simplest possible tax system.

Fourth, we touch upon a literature on the political economy of taxes and tax reforms (e.g., Brennan and Buchanan 1980; Meltzer and Richard 1981; Bierbrauer et al. 2018; Bierbrauer and Boyer 2018). We point to an apparent puzzle that tax complexity remains high in the real-world despite the seemingly wide support for tax simplification. To this end, we for example relate to Hettich and Winer (1988) who model the existing tax system with several expenditures as the result of a political process and a government that maximizes political support. A few papers explicitly study tax complexity in a political-economy set-up and investigate how tax complexity arises in the interaction between voters and politicians (Warskett et al. 1998; Galli and Profeta 2009). Our paper speaks to these papers as it suggests that arguments against tax simplicity could play a more prominent role in the voting process if voters were more aware of the trade-offs behind tax complexity and simplicity. To the extent that our paper shows that individuals have misleading information regarding taxes, we also relate to literature showing that such information frictions induces the government to implement inefficient tax policy (Boccanfuso and Ferey 2019).

Fifth, we join a set of papers that set up tailor-made surveys with randomized components to study a particular research topic. Topics that were investigated in such tailor-made surveys include preferences for redistribution (Cruces et al. 2013; Kuziemko et al. 2015; Alesina et al. 2018; Roth and Wohlfart 2018), beliefs about behavioral responses to taxes (Cappelen et al. 2018), immigration (Alesina et al. 2018), social preferences (Kerschbamer and Müller 2017), inheritance taxation (Bastani and Waldenstroem 2019), reforms in the Euro area (Dolls and Wehrhoefer 2018), tax-compliance attitudes (Doerrenberg and Peichl 2018), education (Lergetporer et al. 2018; Lergetporer et al. 2018), road mileage user fees (Duncan et al. 2014), and macro-economic expectations (Roth and Wohlfart 2019). As we do, the randomized components in these surveys show that information can have an effect on attitudes and preferences. Several of these studies rely on commercial providers who conduct the surveys online and establish representativity through a reweighting of the initially non-representative sample. We implement our questions within the GIP, an established survey with a representative sample of the German population that was explicitly build up for research purposes.

## 2.2 Tax Complexity in Germany

Our survey is conducted in a country with a fairly complex income-tax system. For example, Germany's tax schedule presumably includes more than 500 deduction possibilities, according to Kirchhof (2011). A study by Blaufus et al. (2014) finds that the large number of tax expenditures along with other particularities of the German tax system translate into considerable income-tax compliance costs of filing taxes. Using survey data, the study estimates aggregate compliance costs for Germany of 6-9 billion EUR, corresponding to 3.1-4.7% of total 2007 tax revenues. Blaufus et al. (2017) show that expenses for a professional tax preparer are smaller than the savings in tax liability that are due to the tax preparer. In other words, it pays off to have a professional tax preparer. This is a further indication that the system is complex; in a world with the easiest possible tax system it would most likely not pay off to have the tax return filed by a professional. Overall, studying the topic of tax complexity in the context of Germany thus appears a sensible choice given its complex income tax system. In light of the large number of tax expenditures, studying complexity through its dimension of the number of tax expenditures is also reasonable.

A further reason for why Germany is an interesting case to study complexity is that there are frequently returning debates about tax simplification in the public, media and among politicians. One prominent example of this debate is the proposal by prominent politicians (particularly in the conservative center-right party) to simplify the tax system in a way that makes it possible to file the income-tax return on a sheet of paper that is not larger than a usual German beer coaster (such proposals were originally made in 2003 and kept coming back ever since; see FAZ 2004 or Goettinger Tageblatt 2018). Another salient example is the proposal of a prominent academic tax lawyer (Paul Kirchhof) during election campaigns to introduce an income-tax system with a flat rate of 25% and considerably less tax expenditures (see e.g., FAZ 2005).

## 2.3 Main Objectives and Hypotheses

As sketched in the Introduction, our paper has two main objectives. Based on the related literature and the public discussion about tax complexity (as described above), we derive the following hypotheses regarding these two objectives.

Our first objective is to document preferences for tax simplification among a representative sample of the population and to understand related aspects of tax simplification. Our expectation with respect to this objective is that the support for tax simplification is very high. This expectation builds on the observation that both the public debate and the professional discussion (in academic literature and press) are centered around critiques about overly complex tax systems and proposals to simplify taxes. Important

economic arguments in support of a certain degree of tax complexity play a considerably less prominent role. In light of the debates, asking people about their desire to simplify taxes then presumably triggers a natural and obvious reply, namely that the tax system needs simplification.<sup>16</sup> We provide first survey evidence documenting if the support for tax simplification is as high as we would expect in light of the debates about this topic.

Our second objective immediately builds on the first objective. We aim to understand if the (presumably large) overall support for tax simplicity is to some extent driven by a lack of awareness about the trade-offs behind complex and simple tax systems. Our first strategy towards this objective is forcing people to think about tax-relevant situations that are potentially familiar to them and then let them decide how the tax system, in their view, should deal with these situations. Because the debate about complexity is leaning towards simplification, we deliberately confront individuals with scenarios which they do not immediately relate to the debate about complexity and deliberately do not mention to them that their decisions could have implications for tax complexity. This allows us to investigate individuals' preferences towards complexity-adding components in the tax system in the absence of the public-discussion-induced prejudices towards more tax simplicity. Our expectation for this part of the paper is that the share of people who indicate that the tax system should *not* account for certain differences in living situation (and thus be as simple as possible) is considerably smaller than the share of people who generally support to have a simpler tax system. It is of course possible to believe that the system should account for the described differences in living situations and at the same time think that the overall tax system should be somewhat simpler. However, if the general support for simplification is considerably higher than the share of people who think that the system should not account for differences across people, then this could point in the direction that some people are indeed not aware of certain aspects of tax complexity.

The three scenarios that we present to respondents differ with respect to their degree of being circumstantial (exogenous) to taxpayers or the result of a choice. Building on the literature on optimal taxation and equality of opportunity (e.g., Alesina and Angeletos 2005; Durante et al. 2014; Ooghe and Peichl 2015), we further hypothesize that the share of people who believe that circumstantial living situations should be accounted for in the tax system, is higher than the share of people who believe that chosen living situations should be accounted for.

The second strategy in the context of our second objective builds on randomized survey components that expose participants to information/arguments against and in support of tax simplification. The rationale for this approach is simple: if the provided

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<sup>16</sup>To some extent (and certainly exaggerated), asking for general simplification preferences could turn out to be similar to asking people if they wish to have a higher disposable income.

information shift individuals' preferences, then individuals are indeed not aware of certain aspects of tax simplification. We hypothesize that misperceptions and a lack of awareness are less prevalent when it comes to information against tax simplification. As a result, shifts in preferences are presumably larger in response to information against simplification than to responses in support of simplification. This hypothesis (again) builds on the observation that both the public debate and the professional discussion are centered around tax simplification.

Overall, our paper and the hypotheses relate to papers that emphasize the importance of the public opinion and the role of taxpayers as voters for the design of the tax system (e.g., Hettich and Winer 1988). We expect that the public opinion is dependent on context and information, and that attitudes towards tax simplicity of taxpayers/voters are more nuanced than it apparently seems on first glance.

## 3 The Survey

### 3.1 German Internet Panel

Our questions are embedded in the *German Internet Panel* (henceforth: GIP).<sup>17</sup> The GIP is a longitudinal survey that is operated and administered at the University of Mannheim in Germany.<sup>18</sup> The main purpose of the panel survey is to collect 'data on individual attitudes and preferences relevant in political and economic decision making processes'. GIP data are collected online on a bi-monthly basis. The survey is representative for the German population aged 16 to 75 (see Blom et al. 2015 for more details on its representativity). Recruitment was conducted offline with face-to-face interviews, during which respondents were invited to the online panel. To ensure the representativeness of the sample, the GIP includes respondents without prior computer or Internet access by providing them with the necessary equipment and training (Blom et al. 2017).

The survey includes repeated questions (included in every wave) as well as questions only included in single waves. We included a block of questions in wave 36, which went to the field in July 2018 and included 2464 participants (summary statistics below).

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<sup>17</sup>The background information about the GIP in this subsection are partly based on the respective subsection in Doerrenberg and Peichl (2018).

<sup>18</sup>To be more precise, the survey is based at the "Collaborative Research Center 884 on Political Economy of Reforms", which is funded by the German Science Foundation (*Deutsche Forschungsgemeinschaft*, SFB 884). See <http://reforms.uni-mannheim.de/> for background information on the research center. Also see the general survey description in Blom et al. (2015) and at [http://reforms.uni-mannheim.de/internet\\_panel/home/](http://reforms.uni-mannheim.de/internet_panel/home/). Examples of GIP-based papers include Kerschbamer and Müller (2017), Müller and Renes (2017), Dolls and Wehrhoefer (2018), Engelmann et al. (2018), Doerrenberg and Peichl (2018) and Blesse and Heinemann (2019).

## 3.2 Survey Structure and Questions

We designed a block of 10 survey questions and integrated these questions into the GIP. Our question block focuses on matters of tax simplicity and for our analysis we can complement the results from our questions with the results from other questions in the same wave and other waves of the GIP (for example, background characteristics of the participants are available although they are not surveyed in our question block). Our questions were embedded in a regular wave of the GIP (wave 36, July 2018) and were surrounded by other GIP questions.

Our survey questions and the respective reply categories are shown in full in the Appendix.<sup>19</sup> The GIP has a professional and experienced team of survey experts who supported us in developing and formulating our survey questions. Our questions therefore meet up-to-date standards of survey methodology. The survey and its structure (in chronological order) are summarized in the following.

- **Introduction:** Opener stating that the next set of questions will be about the tax system in Germany and in particular about whether the German income-tax system is complicated or easy to understand. The opener also includes a general statement that the degree of complexity particularly depends on the number of possible tax expenditures. This latter statement thus explains to participants which dimension of complexity we are particularly interested in. The opener also makes all respondents, independent of treatment status, aware of the topic and ensures that the topic is made equally salient to all respondents.
- **Q1: Difficulty of filing a tax return:** We ask participants how difficult they find it to file their tax return. We use this question to derive a proxy for the perceived difficulty of the tax system and to investigate whether other questions and treatment responses depend on the degree of perceived tax complexity.
- **Randomized Experiment 1:** Participants are randomly assigned to three groups that are exposed to different information and arguments in the context of tax simplification. See below for more info.
- **Q2: Preferences for tax simplification:** We ask participants if they think whether the income-tax system in Germany generally needs to be simplified. This question elicits preferences for tax simplification and also is a potential outcome variable in the analysis of the effects of the randomized information.

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<sup>19</sup>These are the translated survey questions. The original German questions are available upon request from the authors and will also be available on the GIP website ([https://reforms.uni-mannheim.de/internet\\_panel/Questionnaires/](https://reforms.uni-mannheim.de/internet_panel/Questionnaires/)).

- **Q3: General need for tax reform:** The question surveys if participants in general think that the German tax system is in need of reform.
- **Q4: Distributional implications of tax expenditures:** The question measures participants' beliefs about the distributional effects of tax expenditures. We particularly survey whether someone believes that tax expenditures contribute to a fairer distribution of income or if they tend to benefit high-income taxpayers.
- **Q5: Which type of tax-simplifying reform:** We offer different types of tax reforms that potentially contribute to simplification of the tax system. Participants are asked to indicate which type of reform they prefer under the assumption that all the listed reforms are revenue neutral.
- **Q6-Q8: Should the tax system account for differences in living situations?:** In each of these three questions, we present to the survey respondents the living situations of two fictitious taxpayers *A* and *B* (see Weinzierl 2014, Saez and Stantcheva 2016 and Weinzierl 2017 for similar survey question techniques). Respondents are told that *A* and *B* earn the same gross income and are very similar in all other (tax relevant) means, but only differ in one particular dimension. We have three different scenarios of varying living situations, and for each scenario we ask participants if *A* and *B* should pay the same amount of taxes or if any of the two should pay more. In the three presented scenarios, *A* and *B* differ with respect to i) the amount that has to be paid for elderly care of a poor mother, ii) the amount that is given to charity, and iii) the distance they commute to work. The three scenarios are presented in random order to avoid any order effects.

The choice of these three type of tax expenditures is motivated by their economic importance and real-world prevalence. Tax expenditures for commuting, charitable giving and elderly care are substantial and large in size, with commuting expenditures being the largest income related expense recognized by tax authorities in Germany; in 2017, tax expenditures related to commuting alone amounted to about 5 billion Euro (WiWo 2017). Moreover, these items are used by many taxpayers; about 35 percent of the taxpayers use the commuting expenditure, about 24 percent of the taxpayers deduct charitable contributions from their tax base, and approximately 8 percent of the taxpayers use the elderly care deductions (own calculations based on German administrative tax records (FAST); see FAST 2010).<sup>20</sup> Overall,

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<sup>20</sup>The Factually Anonymous Income Tax Statistic (FAST) is a 10% stratified random sample of the German Income Tax Statistics, comprising information about taxable income, family situation, income sources, granted deductions and exemptions, revenues and sources of revenues, income tax burden, etc. The data are available as cross-section scientific use files. For the tax-expenditure calculations here we use the most recent available year of 2010. See Boenke and Schroeder (2017) for more information.

the tax expenditures that we chose to rely on in these questions are very important, salient and likely to be familiar to most of our survey respondents.

In addition, these three tax expenditures represent three different rationales for tax expenditures, namely i) circumstances that are outside of the control of the respective taxpayer (elderly care), ii) positive externalities associated with the (self chosen) expenditure (charitable giving) and iii) items representing job-related choices of taxpayers (commuting).

- **Randomized Experiment 2:** Participants are again randomly assigned to three groups that see different information and arguments in the context of tax simplification (renewed randomization). See below for more info.
- **Q9: Preferences for tax simplification:** We again elicit preferences for tax simplification (as in Q2). We explain to participants that we ask the same question again because the topic was subject of some of the previous questions and participants might have developed a different view on it in the course of the survey questions. The question primarily serves as an outcome variable for the second set of experiments.
- **Q10: Own use of tax expenditures:** We survey which tax expenditures participants usually make use of in their annual income tax declaration.

### 3.3 Randomized Survey Experiments

We include two randomized components into our survey block on tax simplification (see the survey structure above). The two experiments are preceded by separate randomization processes. In both experiments, respondents are randomly assigned to either a control group or one of two treatment groups (i.e. between-subjects design with three groups). An alternative to having two separate experiments would have been one single experiment with more treatment groups. However, in light of the number of participants and the rather subtle experimental interventions, we decided to choose to include two randomized components in order to maximize statistical power.

Both experiments are structured in the same way: i) We first have a short opener that serves as a connecting passage to the subsequently provided information. The opener again explains that tax expenditures potentially contribute to the complexity of the tax system. All participants (control group and treatment groups) see this opener. The opener therefore ensures that the issues of tax expenditures and complexity are made equally aware to control-group participants and treatment-group participants. Any treatment effects are therefor not driven by differences in the extent of topic awareness across the groups. ii) After the opener, respondents in the two treatment groups are provided

short information/arguments in the context of tax simplification. iii) Respondents in all three groups move on to the next survey question.

The information that we provide in the treatments pick up some of the most frequently debated issues and empirical findings in the context of tax simplification; the treatments are all reflected in the cited literature and presented arguments in section 1 and 2.1. In each of the two experiments, one treatment aims to shift preferences towards tax simplification and the other one aims to shift preferences away from tax simplification. Our treatments thus reflect that there are arguments both against and in support of tax simplification. In addition, we are able to investigate if preferences for tax simplification are more elastic with respect to arguments in support or against tax simplification.<sup>21</sup> We describe and motivate the two experiments in the following.

**Experiment 1.** The first experiment includes two treatments which we label *Redistribution* treatment and *Avoidance* treatment. The two treatments are preceded by an opener that is shown to all respondents (i.e., both treatment groups and control group). The opener is everything that control-group respondents see in the context of the first experiment before they move to the next survey question. It ensures that respondents in all treatment groups are made equally aware of the topic of tax complexity. The opener reads as follows:

*In Germany there is an ongoing debate on whether the income tax system is too complicated because of many possible deductions and allowances.*

The *Redistribution* treatment highlights that tax expenditures, which add to tax complexity, potentially have redistributive effects and can be used to reduce the tax liability of taxpayers who are disadvantaged by circumstances. The treatment addresses the point that tax expenditures can serve as a social-policy measure and presents a potential argument in support of a certain degree of complexity. Those respondents who are initially not aware of the link between tax expenditures and social-policy aspects might reconsider their tax-simplicity preferences in response to the treatment and become less supportive of tax simplification. The treatment text follows directly after the opener and reads as follows:

*However, it is sometimes also argued that a tax system with many possible deductions and allowances has an important social-policy role, particularly in relation to income redistribution. For example, tax deductions can be used to reduce the tax burden of taxpayers who are disadvantaged by circumstances.*

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<sup>21</sup>The treatment structure is *not* augmented, meaning that respondents in the second treatment group do not see both the information in the first treatment group and the information from the second treatment group, but only see the information from the second treatment group.

The *Avoidance* treatment highlights the frequently debated point that the existence of many complexity-adding tax expenditures potentially facilitates tax avoidance and tax evasion. Assuming that most people disapprove tax avoidance and evasion, respondents who were initially not fully aware of the potential link between tax complexity and avoidance/evasion might shift their preferences towards more simplification in response to being exposed to this treatment. The treatment text follows directly after the opener and reads as follows:

*In this context, one argument is that a tax system with many possible deductions and allowances offers greater opportunity for tax avoidance and tax adjustment. For example, when individuals have a better knowledge of the tax system or make unjustified declarations, they can reduce their tax burden by taking advantage of certain allowances or deductions.*

**Experiment 2.** The second experiment includes two treatments, labeled *Efficiency* treatment and *Special interest* treatment. The two treatments are preceded by an opener that is shown to all respondents (i.e., both treatment groups and control group). As before in the first experiment, this opener is everything that control-group respondents see in the context of this second experiment. It ensures that respondents in all treatment groups are equally aware of the general topic, tax complexity. The opener reads as follows:

*We would like to once again address the ongoing debate concerning whether the income tax system is too complicated due to the many possible deductions and allowances.*

The *Efficiency* treatment highlights the argument that efficiency is potentially higher in a complex system with many tax expenditures because such a system provides the opportunity to tailor taxes to individual situations and, thus, to tax individual capacity and ability. The treatment therefore increases awareness for a potential argument against tax simplification, and potentially shifts preferences away from tax simplification – at least among those respondents who did not consider this argument initially. The treatment is presented immediately after the opener and reads as follows:

*One argument that is often used against tax simplification and that has not been addressed so far is that a tax system with many deductions and allowances provides better opportunities to tax individuals in accordance with their ability to pay and is therefore economically more efficient.*

The *Special Interest* treatment highlights that a complex system with many tax expenditures is more vulnerable to the lobbying activities of special interest groups. The

argument is that special interest groups try to bargain favorable tax treatment and the existence of many complexity-adding exemptions facilitates the groups' efforts; a system with a narrow tax base and without tax expenditures would make it more difficult to implement special interests in the tax system. Provided that most people agree that special interests should not be accounted for in the tax system, this second treatment provides an argument in support of tax simplification. The treatment text, that follows right after the opener, is formulated as follows:

*One argument that is often used in favor of tax simplification and that has not been addressed so far is that a tax system with many deductions and allowances offers special interest groups greater opportunity for obtaining exemptions for their clientele.*

**Discussion of Experimenter Demand Effects and Power Analyses.** One frequently raised concern with survey experiments (and surveys in general) is that experimenter demand effects drive the survey responses and results. A recent study by Mummolo and Peterson (2019) presents a large and carefully conducted test of experimenter demand effects in the context of survey experiments. They run online survey experiments with more than 12,000 participants and randomly assign information about experimenter intent. They find that providing this information does not affect treatment effects; even financial incentives to respond in line with experimenters' intent did not trigger any demand effects. These findings provide evidence that survey experiments are on average robust to experimenter demand effects. The findings are consistent with the results of de Quidt et al. (2018). They use a similar approach in online experiments and find that experimenter demand effects are 'small'.

The main survey question in our paper, preferences for tax simplicity, asks respondents for their view on a specific aspect of policy. There is neither a correct or false answer to this question nor is it in any way ethically critical. Participants are therefore not under the impression that they must provide a particular answer and social-desirability bias should thus not matter here. In addition, the question is very similar to the questions that GIP-participants are used to. The information that treatment participants receive prior to replying to the tax-simplicity preferences are provided in a very neutral and objective way, and thus do not induce subjects to provide a certain answer. Overall, the intention behind our survey question and experimental interventions was certainly considerably more subtle than in the above described two studies in the literature. In light of the findings in the literature and the nature of our questions, we argue that experimenter demand is not a critical concern in our survey experiment.

Note that performing ex-ante power analyses during the design stage of our survey experiment was very difficult. The main survey question, preferences for tax simplicity,

has neither been included in the GIP before nor are we aware of any other survey that includes a similar question. It was therefore not possible to rely on any reliable predictions regarding the standard deviation (and mean) for our main survey question at the point of time when we designed the survey experiment. In light of a lack of comparable studies, we could neither form any good expectations regarding the effect sizes that would occur from our treatment interventions. However, these parameters are of course crucial for a meaningful power analysis. In addition, we faced a given number of participants in the GIP and it would have been difficult to adjust the sample size in response to the results of an ex-ante power analysis. We therefore do not present the results of any ex-ante power analyses.

### 3.4 Sample Characteristics

Table 1 provides descriptive statistics with respect to the demographics of our survey participants.<sup>22</sup> Most demographics in Table 1 were not surveyed in the context of our specific survey block on tax simplification, but in other parts of the same wave or in other waves (some variables that do not change over time are linked to the current survey wave through the panel character of the GIP). The descriptive results for the questions of our survey block are not in this table, but are instead presented further below in the results section 4.

The table shows that we have a survey sample with balanced gender composition (48% female) and that we cover all age categories (with 36% of the participants being older than 58, and 23% retired). 61% of the respondents are married. 17% of the sample participants live in single households, 46% in 2-person households and 18% in households with three people. The distribution of education levels is also very reasonable. We split participants in different income categories and see that 11% are quite poor (net monthly income less than 1500 EUR) and 15% are relatively rich (net monthly income greater than 4500 EUR). The share of people in the three income classes in between poor and rich are quite balanced.

Corresponding with low current unemployment rates in Germany, only about 2% of the survey participants are unemployed. In terms of political affiliations, we see that about 38% of the sample are in the rather conservative political spectrum and 47% are rather left-wing. 8% indicate that they do not have any partisan preferences (left-right preferences are elicited on a 11-point scale from right to left, where we classify 'conservative' as  $\leq 5$  on this scale).

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<sup>22</sup>Note that the GIP is designed to be representative of the German population, which is why it is not necessary to compare the summary statistics of our sample with statistics from other representative data, such as census data (see Blom et al. 2015 for more details on the GIP's representativeness).

### 3.5 Balancedness across Experimental Groups

Table 6 presents the results of balancing checks for our first experiment. Following the strategy in Alesina et al. (2018), we test balance across groups as follows: For each covariate, we run three OLS regressions of the form  $y_i = \beta \text{Covariate}_i + \epsilon_i$ , where *Covariate* is the respective covariate that we test. The three dependent variables for which we run the regressions are dummies indicating the treatment groups – redistribution, avoidance, and control group. As a result of this procedure, we have the results of 30 OLS regressions (one regression for each combination of 10 covariates and 3 outcome dummies). Reassuringly, we find strong evidence that randomization worked well and our covariates do not predict treatment status. Out of 60 estimated coefficients, only 5 are significant at the 10% level and only one is statistically significant at the 5% and 1% level, respectively. This is well in line with these coefficients being significant by chance within their margin of error.<sup>23</sup>

The equivalent strategy was used for testing balancedness of the second experiment; see Table 7 which is structured just as the corresponding table for the first experiment (Table 6). We here restrict the sample to respondents who were in the control group of the first experiment (because we are interested in the effect of the second experiment for this ‘unencumbered’ group; see 4.4 for a more detailed explanation). The results are again quite reassuring. Out of 60 coefficients, 7 are significant at conventional levels of significance (10% or lower). Overall, randomization apparently worked out well, which is not surprising given that the GIP computer system assigned respondents randomly to treatment groups and selection into groups was not possible. Further below in our regressions, we present specifications that condition on all observable covariates to mitigate all remaining concerns regarding balancedness.

## 4 Results

This section presents the results of our survey on tax complexity. We proceed as follows. First, we document in subsection 4.1 the preferences for tax simplification (Q2) and then investigate the ‘anatomy’ of these preferences (i.e., which observable characteristics are correlated with the preferences). Second, in subsection 4.2, we report the results for further survey questions on the topic of tax complexity. In particular, we document the results for our survey questions w.r.t. difficulty of filing a return (Q1), general need for tax reform (Q3), distributional aspects of simplification (Q4), and which tax expenditures the participants use themselves (Q10). We then go and explore in steps 3 and 4 of our analysis to which extent preferences for tax simplification are affected by awareness

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<sup>23</sup>With 60 estimated coefficients, one would expect six coefficients with a significance level of 10% even in the absence of any systematic differences between groups.

w.r.t. the pros and cons of tax simplification; in particular: Third, we document in subsection 4.3 if participants believe that the tax system should account for differences in the living situations of taxpayers (Q6-Q8). Fourth, we present the results of the two randomized survey experiments in subsection 4.4. Therein, we are particularly interested in the experimental effects on preferences for tax simplification. Fifth, subsection 4.5 documents which type of tax-simplifying reform the survey respondents favor (Q5).

## 4.1 Preferences for Tax Simplification

**Preferences Across all Respondents.** We elicit preferences for tax simplicity using a question which surveys whether people believe that the income-tax system in Germany needs to be simplified (Q2 in the survey structure above). The reply categories were on a 6-point scale from 1 'Absolutely not' to 6 'Absolutely'.

Figure 2 presents the share of respondents in each reply category across all survey respondents. A large majority believes that the tax system needs to be simplified: About 47% of the respondents checked reply category six, meaning that the system 'absolutely' needs to be simplified. Another 20% of the respondents chose the second highest category 5. This then implies that about 2/3 of the respondents have strong (either category 5 or 6) preferences for tax simplification. 14.4% are in the middle category 4, and only about 7% of the respondents chose categories 1, 2 or 3, which indicate rather weak preferences for tax simplification. The mean response across all respondents is 5.16.

The replies of respondents who are in one of our information treatments might be affected by the treatment information. However, the support for tax simplification is also very high among respondents in the control group who did not receive any information; the mean reply in the control group was 5.22.

Overall, the results provide clear evidence that preferences for tax simplicity in the German population are very strong. We are able to confirm that the prevailing view indeed is in strong favor of tax simplification. As a matter of fact, the strong preferences for simplifications suggest that the support of simplification is the obvious choice for participants as they fill out this survey question. We investigate further below if this choice becomes less obvious as we increase awareness w.r.t. the trade-offs behind tax complexity and tax simplification.

**Anatomy of Preferences for Tax Simplification.** In a next step, we study the 'anatomy' of simplification preferences and investigate which groups (in terms of observable characteristics) are more likely to have strong preferences for tax simplification. For this purpose, we simply regress (using OLS) our measure of simplification preferences on a wide set of observable characteristics. These characteristics comprise demographic factors, including gender, age, marital status, household size, employment status, retirement

status and education, as well as a measure of perceived tax difficulty, household income and political preferences. We report results with robust standard errors. The coefficients in this regression are (conditional) correlations and should not be given a causal interpretation. However, they nevertheless shed light on the heterogeneity of preferences and allow us to gain a more nuanced picture.

The results for this anatomy analysis are presented in Table 2. Important demographic correlates of simplification preferences are age and gender. Older people tend to have stronger preferences for simplification, and women have weaker preferences. Age and gender differences are further investigated in Figures 14 and 15 which illustrate unconditional differences between age groups and between men and women, respectively. Figure 14 shows that the average support for simplification steadily increases in age; the support is 16% higher among respondents older than 58, relative to respondents younger than 29. As illustrated in Figure 15, the support for simplification among men is roughly 3% greater than among women.

Another important correlate of simplification preferences is the perceived difficulty of filing a tax return. Respondents who find it easy to file a tax return have lower simplification preferences than respondents who find it difficult. The unconditional relationship between simplification preferences and perceived filing difficulty are displayed in Figure 16. The Figure confirms the intuitive result that the perceived difficulty to declare income taxes is positively associated with support for tax simplification.

Interestingly, respondents who do not file their tax return themselves or employ a tax preparer are more supportive of simplification than those who file themselves and find it easy. These non-filers, however, have lower support for simplification than self-filers who find it difficult to prepare the tax return.

## 4.2 Further Survey Questions

We surveyed further aspects in the context of tax complexity in order to learn more how respondents think about the topic. We present the results question by question in the following.

**Difficulty of Filing a Return.** We survey the perceived difficulty of filing a tax return on a 5-point scale from 1 'Very Easy' to 5 'Very Difficult' (Q1). This question particularly allows us to investigate if the substantially high preferences for tax simplification correspond with the perceived difficulty to file a return.<sup>24</sup> The results for this survey question are summarized in Figure 3, which, again, presents the share of respondents in each reply category.

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<sup>24</sup>Recall that the question of perceived difficulty of filing a tax return was asked before treatment information were presented.

The right part of the Figure shows that more than 1/3 (34.7%) of the respondents did not indicate their perceived difficulty, either because they do not file a return or because they have their return filed by someone else (e.g., a tax preparer, spouse). Among all respondents who file a return (i.e., the other 61.9%), about 18% (11.1/61.9) find it 'very difficult' to file their return and 32% (19.6/61.9) checked category 4, which also indicates a fair degree of difficulty. The medium category 3 was checked by about 28% (17.5/61.9). About 22% ((10.8 + 2.9)/61.9) of the respondents find it rather easy to file the return. The mean reply for this question is 3.41 (on a scale of 1-5) among all respondents who file a tax return.

Overall, there is a tendency that tax returns are perceived to be fairly difficult, but the picture is not as strong as in the case of preferences for tax simplification. This corresponds with the 'anatomy' result above: the positive correlation between simplification preferences and perceived difficulty to file a return is not perfectly linear. This suggests that the strong preference for tax simplification is not entirely motivated by own experiences with too-difficult tax returns.

**General Need for Tax Reforms.** We also surveyed if participants believe that the German tax system generally needs to be reformed (Q3). The question was asked on a scale from 1 'Absolutely not' to 6 'Absolutely'. Figure 4 shows that a large fraction (39.4%) of survey respondents think that the tax system 'absolutely' (reply category 6) needs to be reformed. Another 23.4% also have a strong preference for reforming the system (reply category 5). A negligible share of people do not see a need to implement reforms; only about 7% of the respondents checked reply categories 1, 2 or 3. The mean reply for this question is 5.06. The mean response in the control group is similar (5.09) to the overall mean. Overall, this part of the survey provides clear evidence that Germans believe that the tax system in their country is in strong need of reform.

**Distributional Implications of Tax Expenditures.** One frequently raised concern in the context of tax complexity is that the rich are able to exploit tax expenditures better than low-income taxpayers; for example, because they afford professional tax advisors or because they have income sources with more possibilities for tax planning. However, given that many tax expenditures also have a redistributive purpose, it is interesting to survey the public opinion in this context. We therefore survey beliefs about the distributional implications of tax expenditures. In particular, we ask if deductions and allowances contribute to equality or if high-income taxpayers tend to benefit from them (Q4). The reply categories are 1 'Equality' to 6 'High Incomes Benefit' and the question results are summarized in Figure 5.

The results are unambiguous: the majority of respondents believe that allowances and deductions benefit high-income taxpayers, rather than contributing to equality. 27.3%

were in the corner category 6 and another 17% are in the second-largest reply category 5. That is, almost 50 percent of the respondents were in those two categories which indicate the highest beliefs that high-income taxpayers benefit from deductions and allowances. Only about 24% of all respondents checked reply categories 1, 2 or 3. The mean reply for this question is 4.33. This mean response for the overall sample is very similar to the mean response in the control group (4.28). Overall, the large majority beliefs that tax expenditures mostly benefit richer taxpayers.

**Which Tax Expenditures are Used?** We also survey which type of tax expenditures respondents use regularly (Q10). This survey question mainly serves the purpose of evaluating if survey answers about particular type of expenditures (see below section 4.3) are driven by self-interest. The question, however, is also interesting in itself and we therefore briefly summarize the results in Figure 6. The Figure presents the share of people who use particular tax expenditures (note that multiple answers were possible so the shares do not add up to 100). The list of itemized deductions is, of course, not exhaustive. The most frequently used tax expenditures in our sample are the commuting-to-work allowance, the deduction of other type of work expenses (e.g., work-related costs for books, clothes, etc.), charitable donations, and deductible expenses for pension and retirement savings. Child allowances and so-called 'standard deductions'<sup>25</sup> are also quite frequently used.

### 4.3 Different Tax Burden for Taxpayers in Different Living Situations?

In the next set of questions (Q6-Q8), we face respondents with two fictitious taxpayers who differ in one aspect of their living situation, and then ask if these two taxpayers should pay the same amount of taxes. While a differential tax treatment of the two fictitious taxpayers would add complexity to the tax system, we do not mention this complexity aspect of the presented scenario explicitly to respondents. These questions allow us to evaluate if respondents prefer to account for different living situations through the tax system at the cost of adding complexity to the tax system. In other words, if people indicated that specific differences in living situations should matter for the tax burden, this would imply that they do not desire the simplest possible tax system and are willing to accept a certain degree of tax complexity.

All three questions are structured in the same way. We ask respondents to imagine two fictitious taxpayers, *A* and *B*, who are comparable in all tax relevant aspects, and only differ along one of the following dimensions:

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<sup>25</sup>This represents the lump sum deduction amount for taxpayers who do not exceed the thresholds in other deduction categories.

- i) Person *A* has to spend a considerable amount for the elderly care of her mother, while Person *B* does not have to bear such costs.
- ii) Person *A* spends a considerable amount of income on charitable giving, while Person *B* does not donate.
- iii) Person *A* has to travel a considerable distance to work, while Person *B* lives close to work.

We then ask who of the two persons, *A* or *B*, should pay more taxes (where the order of reply categories and the order of presented scenarios was randomized). The results are presented in Figures 7 to 9.<sup>26</sup>

Figure 7 shows that a majority of about 60% of the survey respondents believe that the costs for elderly care should reduce the tax burden. In other words, a majority of about approximately 2/3 of respondents think that the tax system should account for this difference in living situation, and that Person *B* should pay more taxes. Almost 40% indicate that taxpayers with and without costs for elderly care should pay the same amount of taxes, and almost nobody thinks that *A* should pay more in taxes.

Figure 10 shows that these effects are not driven by self-interest. We split the sample into those who make use of deductions for care costs themselves and those who do not. The survey responses among these two groups look very similar. Even among those who do not use care deductions themselves, a majority of almost 60% believes that Person *B*, who does not have care costs, should pay more taxes. Among those who use the deduction themselves, a little bit more than 60% think that Person *B* should pay more.<sup>27</sup> Overall, these survey responses provide clear evidence that people favor a system in which the costs for elderly care are deductible from the tax base.

For the survey questions regarding charitable donations (Figure 8) and expenses for commuting (Figure 9) we see that a majority of about 66% and 59% of the respondents think that both persons, *A* and *B*, should pay the same amounts of taxes, respectively. That is, about 2/3 think that differences in charitable donations and commuting expenses should not imply differential tax payments.

However, a fraction of 32% and 39% of all respondents yet think that higher donations and commuting costs should imply lower tax burdens. That is, roughly 1/3 of the respondents believe that differential expenses in these areas should result in a reduced tax burden. This is a considerably smaller share than in the case of elderly care, but 1/3 of respondents still is a substantial fraction that is in favor of accounting for these living situations in the tax system.

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<sup>26</sup>Note that the responses here were not affected by the randomized interventions.

<sup>27</sup>We acknowledge that it might be possible that a few taxpayers, who do not currently use this tax expenditure, expect to use it in the future. A support of this tax expenditure might then be driven by self-interest, even if they do not currently make use of the tax expenditure.

The difference between the 'elderly care' situation and the other two situations is interesting: Costs for elderly care are circumstantial and outside the control of the respective taxpayer, while donations and commuting distance are choices of the taxpayer. Consistent with the literature on optimal taxation and equality of opportunity (e.g., Alesina and Angeletos 2005; Durante et al. 2014; Ooghe and Peichl 2015), our survey respondents have the intuition that circumstantial differences should be accounted for to a larger extent by the tax system than deliberate and self-chosen differences.

In line with this, the responses for donations and commuting expenses are more affected by self-interest, as compared to the responses for elderly care. Figures 11 and 12 present the results separately for those who use the respective tax expenditure themselves and those who do not. In the case of donations, a quarter of those respondents who do not use the donation expenditure themselves think that donations should reduce the tax burden, while the share is 45% among those who do use the donation expenditure. The pattern is similar for the case of commuting expenditures: among those who do not use the commuting expenditure, 34% believe that it should reduce in a lower tax burden. Among those who do use the commuting expenditure, the share of people who believe commuting should reduce tax payments stands at 47%.

Overall, the differences between those who use the respective tax expenditure and those who do not are thus larger in the case of donations and commuting than for the case of elderly care. However, even for donations and commuting we still see that a large share of those who do not use the expenditure support the notion that the tax system should account for the respective living situation. This suggests that the result for none of the three different tax expenditures is entirely driven by self-interest.

## 4.4 Randomized Survey Experiments

**Empirical Strategy.** We now present the results of the two randomized survey experiments. In case of the first experiment, we use OLS regressions (with robust standard errors) in which we regress the respective outcome variable on dummy variables indicating the two information treatments. The resulting coefficients then present the effect of the respective treatment relative to the omitted control group. In our preferred specification, we include control variables to improve precision of the treatment effects.

In case of the second experiment, we expect that the treatments of the first experiment impact the treatment effects of the second experiment. For example, consider a respondent who was assigned to the con-simplification treatment in the first experiment and to the pro-simplification treatment in the second experiment. A positive effect of the pro-argument in the second experiment might then cancel out with the negative effect of the con-argument of the first experiment and, as a result, we see no effect in the second experiment, although there actually is a positive effect. We circumvent this concern as

follows: We first fully interact dummies indicating treatment status of the second experiment with dummies indicating treatment status of the first experiment (the control group always being the reference category), and then use OLS (with robust standard errors) to regress the outcome variable of interest on the full set of interactions. We only report the coefficients of the treatment dummies of the second experiment (and not the interactions). These reported coefficients then present the effects of the second experiment for those respondents who were in the control group of the first experiment. These respondents have not received any prior treatment in the context of simplification and therefore are 'unencumbered' when they enter the second experiment.<sup>28</sup> As with the first experiment, our preferred specifications include control variables which improve precision of the treatment coefficient of interest.

The main outcome variables are the responses to the question of whether the tax system should be simplified; i.e., Q2 in the case of the first experiment and Q9 in case of the second experiment. These are the variables that follow immediately after the respective randomized intervention. The variable that we use in the regressions is coded just as the original survey question, on a six-point scale, in order to not throw away any information. In the context of the first experiment, we further study the treatment effects on the survey question regarding the perceived distributional effects of expenditures (Q4). This variable is also coded as the original survey variable (on a 6-point scale). We also looked at the effects of the experimental intervention on the question about the general need to reform the tax system (Q3). However, we did not detect any effects for this question and therefore do not report the results.

We use OLS for reasons of eased interpretation. Ordered probit models, which account for the discrete and ordered nature of the outcome variables, are presented in robustness checks.

#### 4.4.1 Experiment 1

**Main Effects.** Table 3 presents the main results for the first experiment, in which we provide information about the social-policy role of tax expenditures (*Redistribution* group) and about expenditure-induced tax avoidance opportunities (*Avoidance* group) in complex tax systems. Preferences for tax simplicity (Q2) is the outcome variable in all specifications of the table.

Column (1) of the table shows the effects of the treatment dummies in a regression specification without conditioning on any additional covariates. The other columns

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<sup>28</sup>The coefficients that we report for the second experiment are identical to coefficients that are estimated in regressions in which the sample is restricted to respondents who were in the control group in the first experiment. We use the full interaction model, and not the sample-split variant, because this approach improves precision and the resulting coefficients are based on the same sample that is used for the regressions for the first experiment.

gradually add further variables in order to increase efficiency and test the sensitivity with respect to covariates. Column (2) adds several demographic control variables, and Columns (3), (4) and (5) additionally condition on the perceived difficulty to file a tax return, household income and political preferences, respectively.

The regression results in all specifications show negative effects of the *Redistribution* treatment on preferences for tax simplification (all estimates statistically significant at the 5% level). The coefficients are remarkably stable across the five different specifications. In Column (5), our preferred specification where we include all covariates, the support for tax simplification is reduced by about 2.6% ( $-0.133/5.22 = \text{coefficient/control-group average}$ ), relative to the control-group average. The regressions thus provide evidence that preferences for tax simplicity are elastic to information *against* tax simplification.

The effect size is not very large, but it has to be considered in light of the fact that the overall support for tax simplification is substantial and, given the debate in the public and press outlets, presumably is strongly anchored among respondents. Our treatment thus affects preferences for tax simplification *although* the conventional wisdom on the topic is very clear and strong. For these reasons, we argue, the effect size should be interpreted as non-negligible.

The *Avoidance*-treatment does not have a significant effect on simplification preferences. The coefficients are small and not statistically significant throughout the five specifications. The standard errors in all five specifications are considerably greater than the respective coefficient. Statistical precision is thus much weaker than in the case of the *Redistribution*-treatment. The coefficients are also considerably different: across all specifications, the coefficients of the *Redistribution*-treatment are at least 2.7 times larger than the coefficients of the *Avoidance*-treatment, and the difference between the two is statistically significant throughout specifications (3) to (5) (with p-values in the range of 0.064 to 0.057).<sup>29</sup> We also tried different specifications of the outcome variable (e.g., a dummy variable indicating very high support for simplification) but never find a significant effect of the *Avoidance*-treatment.

The results thus show that preferences for simplification are not elastic to the information *in support of* tax simplification. This null-result might be explained with the very prominent role of arguments in favor of simplification in the public debate. As a result of these salient arguments, participants presumably have less misperceptions regarding information that support simplification. The high initial support for tax simplicity among participants (which does not leave much room for even more support) might also play a role.<sup>30</sup>

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<sup>29</sup>Negative coefficients of the *Avoidance*-treatment are consistent with the treatment having no effect. If two independent samples are drawn from the same population, it is very likely that one sample is smaller than the other one.

<sup>30</sup>Note that the constant decreases as we subsequently add control variables across the regression

We also investigated the effect of the first experimental intervention on respondents' views about the distributional implications of tax complexity (Q4). The results of this exercise are presented in Table 4, which is structured like the previously discussed Table 3. The *Redistribution*-treatment does not affect these beliefs (relative to the control group). The coefficients are close to zero and not significantly different from zero. However, the information about possible complexity-induced avoidance possibilities in the *Avoidance*-group somewhat affect the distributional beliefs. The treatment coefficient is statistically significant in specifications (3) to (5), and indicates that the treatment increases beliefs that tax expenditures add to income inequality (the coefficients in specifications (1) and (2) are imprecisely measured). Considering the specification in column (5), which includes all covariates, the treatment increased the distributional-beliefs variable by about 4% ( $0.169/4.285$ ), relative to the control-group average. Comparing the coefficients of the *Redistribution*-treatment and the *Avoidance*-treatment, we find statistical significant differences for specifications (3) to (5) with p-values ranging from 0.09 to 0.064.

Results for the experimental effects on both tax simplification attitudes and distributional views are robust to using Ordered Probit regressions that account for the discrete nature of the outcome variables; the respective results are shown in Tables 8 and 9.

**Randomization Tests and Multiple Hypothesis Testing.** In a next step, we investigate if the (robust) OLS standard errors that we reported above are robust to other ways of computing standard errors. In particular, we adjust standard errors using i) randomization tests in the spirit of Fisher (1935) and ii) tests for multiple comparisons that follow the procedure proposed by Westfall and Young (1993). Note that the coefficients are not affected by the alternative types of statistical inference that we present in the following.

First, we perform randomization tests following Young (2018). The Young (2018)-procedure performs exact tests which test the sharp null hypothesis that the effect of the information treatment is zero for all individuals receiving our treatment. That is, it does not test whether the average treatment effect is zero (which is what we tested in our main analysis), but whether the treatment effects are zero across all respondents. The randomization-test procedure, which is in the spirit of Fisher (1935), is more conservative in computing standard errors: Young (2018) reports that, using his approach, the number of significant results of randomized experiments is considerably reduced relative to conventional tests of individual treatment effects. Compared to classical asymptotic-based testing procedures, these randomization tests have the advantage that they are robust against concentrated leverage and do not rely on sample size or the characteristics of the

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specifications. This suggests that our control variables can explain a considerable part of the high baseline support for simplification.

error (Young 2018).<sup>31</sup>

Using the Young (2018)-procedure with 5000 draws (to approximate the p-value of the Fisher distribution), the effect of the *Redistribution*-treatment on preferences for simplification yields a p-value of 0.015 (in our preferred specification with the full set of controls). The coefficients are thus statistically significant and the levels of significance of the classical testing method – as reported above – are confirmed. This stricter procedure for computing p-values also confirms the insignificant effect of our *Avoidance*-treatment on preferences for tax simplicity; the p-value for the *Avoidance*-dummy is computed to be 0.6 and thus far off conventional levels of statistical significance.

Overall, all p-values based on the randomization tests are very similar to the ones obtained by ordinary OLS with robust standard errors. This is reassuring and lends credibility to the inference used in our main analyses above (which used classical hypothesis testing). The similarity between p-values might be interpreted as an indication that the treatment effects in our setting are constant among individuals; as noted by Ding (2017), the sharp-null hypothesis and the null hypothesis of zero average causal effect are equivalent in the case of constant causal effects.

Second, we use the method proposed by Westfall and Young (1993), and for example recently applied by Blattman et al. (2017), to adjust standard errors for multiple comparisons. As Blattman et al. (2017), we take a rather conservative approach that adjusts for comparisons across treatments and outcomes: in our first experiment, the combination of three outcome variables and two treatments implies that six hypothesis are tested (i.e., for each outcome variable, two treatment effects are tested relative to the control group). We tested the effect of our information treatments on the following three outcome variables: preferences for tax simplification (Q2), general need for tax reform (Q3), distributional implications of tax expenditures (Q4). Note that we only reported in detail the results for outcomes Q2 and Q4 because we did not find any effects of the treatment on Q3. However, since we initially intended to study the effect on all three outcome variables, the correct procedure here requires that we adjust standard errors to the case with three outcomes and two treatments.

Using the Westfall and Young (1993)-procedure to adjust standard errors for multiple comparisons, we find a standard error of 0.083 for the effect of the *Redistribution*-treatment on preferences for tax simplification (based on our preferred specification with the full set of control variables). The effect of the *Avoidance*-treatment on preferences for tax simplification is insignificant with a p-value of 0.84. We thus confirm the classical p-values regarding the treatment effects on our main outcome variable, preferences for tax simplification. The p-value of *Avoidance* on the perceived distributional implications,

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<sup>31</sup>We implement the randomization tests using the ado file provided by Alwyn Young on his website; the exact testing procedure is described in (Young 2018). We report randomization-t tests since the author finds in practice “randomization-t to be superior to the -c”.

which is significant in the classical inference approach, stands at 0.24 with this method and therefore turns insignificant. All other hypotheses are insignificant with p-values greater than 0.7.

**Heterogenous Treatment Effects.** In a next step of the analysis, we investigate if particular groups of respondents respond differently to the treatments of the first experiment than other groups of respondents. For this purpose, we interact the treatment-group dummies with the observable characteristics of the sample population; in particular we test if there are heterogenous effects with respect to the following variables: age, gender, marital status, household size, income, education, political preferences, difficulty of filing a tax return, trust in government, the perceived quality of tax use for public spending, taste for redistribution (from wave 34 of the GIP), beliefs in luck or effort, and social mobility perceptions (from wave 33 of the GIP). Overall, the effects of the treatments seem to be very homogenous. We mostly do not see any significant interactions. For reasons of brevity and given these results, we do not report the regression results. We acknowledge that it is possible that the interaction models for detecting heterogeneity lack statistical power, rather than providing evidence of homogenous treatment effects. The finding that treatment effects seem to be rather constant across observable characteristics is consistent with the above finding that the classical standard errors and the adjusted standard errors using the Young (2018)-procedure are very similar.

#### 4.4.2 Experiment 2

**Main Effects.** The main results for our second randomized intervention are presented in Table 5, which is organized as the corresponding table for the first experiment. This second experiment includes a control group, a group that is presented an *Efficiency* argument against tax simplification, and a group that is presented a *Special interest group* argument in favor of tax simplicity. The dependent variable is the question surveying tax-simplicity preferences (note that Q9 is the dependent variable here, not Q2 which we use for the first experiment). Consistent with the results from the first experiment, we observe that preferences for tax simplicity are elastic towards information against tax simplification, and not elastic to information in favor of simplification.

The estimated coefficient for the *Efficiency*-treatment is negative and statistically significant throughout all five specifications of the regression table. Column 5, our preferred specification with all covariates, shows that the efficiency argument reduced support for tax simplicity by about 5% ( $= 0.240/5.084$ ), relative to the control-group average. The effect size should again be considered in light of the fact that the general wisdom clearly holds that tax simplification is desirable; we therefore consider a 5% effect size to be non-negligible.

The estimates for the effect of the *Special interest group* argument in favor of tax simplicity are very close to zero and non-significant in all of the regression specifications. Notably, the coefficient of the *Efficiency*-treatment is at least three times larger than the coefficient of the *Special interest group*-treatment across the five specifications. However, these differences between the two treatment estimates are not statistically significant, presumably due to power reasons since we only compare reactions for participants who have been in the control group in the first experiment. The null result of the *Special interest group*-treatment is, again, likely to be driven by the more prominent role of arguments in favor of simplification in the public debate, which reduce misperceptions regarding pro-simplification arguments.

As shown in Table 10, these results are robust to using ordered probit models.

**Randomization Tests and Multiple Hypothesis Testing.** As with the first experiment, we again adjust standard errors using Young (2018)-type randomization tests and Westfall and Young (1993)-type tests for multiple comparisons. Note that we only have one outcome variable (preferences for tax simplicity) and two treatment groups here, implying that we test only two hypotheses in the context of this second experiment.

First, the randomization tests come with a p-value for the effect of the *Efficiency*-treatment on preferences for tax simplification of 0.019 (in our preferred specification with full set of controls). That is, the previously reported significance for the *Efficiency*-treatment is confirmed. The effect of the *Special interest group*-treatment remains insignificant with a p-value above 0.5. As with the first experiment, the p-values are remarkably similar to the p-values from classical testing methods. This is reassuring and again indicates that our treatment effects are constant across participants.

Second, the Westfall and Young (1993) method finds adjusted p-values of 0.043 for the *Efficiency*-treatment and 0.48 for the *Special interest group*-treatment (both in specifications with the full set of control variables). The procedure thus confirms the classical inference procedure that treatment *Efficiency* has a significant effect, while treatment *Special interest group* does not.

**Heterogenous Treatment Effects.** As in the case of the first experiment, we investigate if particular groups of respondents respond differently to the treatments of the first experiment than other groups. We run the same interaction models as in the case of the first experiment (with the same interacted observable variables) and again find that effects of the treatments are very homogenous across different demographic groups; we mostly do not detect any significant interactions. For reasons of brevity and given these results, we again do not report the regression results. We acknowledge, again, that it is possible that the interaction models for detecting heterogeneity lack statistical power, rather than providing evidence of homogenous effects. However, the lack of heterogeneity

is consistent with the finding that exact p-values following Young (2018) are very similar to the classical p-values.

## 4.5 Which Simplifying Tax Reform?

In light of the conventional wisdom that tax simplification is desirable, we included a question to survey *how* policy should reform the tax system in order to make it simpler. For the purpose of this question, we provided respondents with a list of potential tax-simplifying reforms and they could chose which of the offered alternatives they prefer. This list is of course not exhaustive, it yet features some of the most debated type of reforms. Respondents are explicitly informed that they should consider each of the reforms under the assumption of tax-revenue neutrality (i.e., no effects on tax revenues through the respective reforms) in order to abstract from revenue considerations.<sup>32</sup>

The results for this question are summarized in Figure 13. The most frequently chosen type of reform (33%) increases the progressivity of the tax system and abolishes all types of tax expenditures. About 20% of the respondents would prefer a flat-rate system which features the same amount of tax expenditures as in the status quo. 15% of respondents also want a flat-rate system, but without any possibilities for deductions or allowances.

About 18% of the respondents prefer a different type of tax simplification. Instead of reforming rates or the amount of tax expenditures, they prefer to change the tax-filing process through pre-filled tax returns that require less effort to file a return. 6% of our respondents have a preference for keeping the status-quo and do not implement any tax reform.

These results are evidence for heterogeneity in the preferred approach for moving towards a simplified tax system. While the results from the Taxpayer-A-vs-B part of our survey and the randomized experiments show that there is a lack of awareness about the trade-offs behind complexity and simplicity, the results here suggest that, in addition, there is no consensus w.r.t. the tax simplifying reform to be implemented. Both of these empirical observations add to an explanation for the puzzle that real-world tax systems are so complex although the conventional wisdom holds that simplicity is strongly desirable.

We also investigated if the policy-reform preferences are affected by our experimental intervention, i.e. the first experiment as the second experiment was implemented after the reform survey question. We do not find any evidence that this is the case. This is somewhat in line with other recent survey experiments finding that policy preferences are often relatively inelastic to information treatments (e.g., Kuziemko et al. 2015; Alesina et al. 2018).

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<sup>32</sup>See Q5 in Appendix for the detailed question design.

## 5 Conclusion

The prevailing view in the academic literature and public debate seems to be that most tax systems are too complex and should be simplified. However, there also are economic arguments in support of a certain degree of tax complexity and it is puzzling why tax systems remain highly complex despite the conventional view in favor of more simplification. Using new experimental and survey data for a representative sample of the German population, we shed light on preferences for tax simplification. We find that most people are indeed in favor of a simpler tax system. However, once we make people aware of the trade-offs between simplicity and complexity, preferences for simplicity are reduced. For example, a large share of respondents believes that the tax system should account for different circumstances in living situations (such as costly care of elderly family members). This suggests that respondents implicitly favor to add complexity to the tax system by allowing to deduct the associated costs from the tax base.

Our survey also includes two randomized experiments in which we make respondents aware of the possible consequences of tax simplification. Both randomized experiments consistently provide evidence that the support for tax simplification is elastic to information *against* tax simplification, while arguments *in support of* simplification do not impact preferences for simplification. The results thus suggest that misperceptions are more relevant in the context of arguments against simplification, which, in turn, is consistent with the observation that arguments in favor of simplicity are more prominent in the debates and that the general wisdom holds that simplicity is desirable. Overall, we show that the high support for simpler taxes is to some extent driven by a lack of awareness about the implications of tax simplification. Individuals apparently frequently express desires for tax simplification without appreciating the implications of tax simplification.

Overall, our findings suggest that the (policy, academic, and public) debate about tax simplification potentially benefits from a more nuanced discussion of the pros and cons of tax simplification. As a result of more nuanced discussion, the matter would not be dominated by a general wisdom view anymore and instead potentially gain objectivity. Recent work shows that information deficits among individuals in the context of taxation can induce governments to implement inefficient tax policy (Boccanfuso and Ferey 2019). More nuanced discussions and better information could also mitigate this source of inefficiency.

## References

- Abeler, J. and S. Jaeger (2014). Complex Tax Incentives. *American Economic Journal: Economic Policy* 7(3), 1–28.

- Aghion, P., U. Akcigit, M. Lequien, and S. Stantcheva (2017). Tax simplicity and heterogeneous learning. NBER working paper no 24049.
- Alesina, A. and G.-M. Angeletos (2005). Fairness and redistribution. *The American Economic Review* 95(4), 960 – 980.
- Alesina, A., A. Miano, and S. Stantcheva (2018). Immigration and redistribution. NBER working paper no 24733.
- Alesina, A., S. Stantcheva, and E. Teso (2018). Intergenerational mobility and support for redistribution. *American Economic Review* 108(2), 521 – 554.
- Ballard, C. L., S. Gupta, et al. (2018). Perceptions and realities of average tax rates in the federal income tax: Evidence from michigan. *National Tax Journal* 71(2), 263–294.
- Bastani, S. and D. Waldenstroem (2019). Salience of inherited wealth and the support for inheritance taxation. mimeo, online at [http://spencerbastani.com/Bastani\\_Waldenstrom\\_inheritancetax\\_experiment.pdf](http://spencerbastani.com/Bastani_Waldenstrom_inheritancetax_experiment.pdf).
- Benzarti, Y. (2017). How taxing is tax filing? using revealed preferences to estimate compliance costs. NBER working paper no 23903.
- Bhargava, S. and D. Manoli (2015). Psychological frictions and the incomplete take-up of social benefits: Evidence from an irs field experiment. *American Economic Review* 105(11), 3489–3529.
- Bierbrauer, F. and P. Boyer (2018). Politically feasible reforms of non-linear tax systems. *Working Paper*.
- Bierbrauer, F., P. Boyer, and A. Raj (2018). On the political economy of the income-tax threshold. *Working Paper*.
- Blattman, C., J. C. Jamison, and M. Sheridan (2017). Reducing crime and violence: Experimental evidence from cognitive behavioral therapy in liberia. *American Economic Review* 107(4), 1165–1206.
- Blaufus, K., J. Bob, J. Hundsdoerfer, D. Kiesewetter, and J. Weimann (2013). Decision heuristics and tax perception—an analysis of a tax-cut-cum-base-broadening policy. *Journal of Economic Psychology* 35, 1–16.
- Blaufus, K., S. Eichfelder, and J. Hundsdoerfer (2014). Income tax compliance costs of working individuals: Empirical evidence from germany. *Public Finance Review* 42(6), 800–829.
- Blaufus, K., F. Hechtner, and A. Moehlmann (2017). The effect of tax preparation expenses for employees: Evidence from germany. *Contemporary Accounting Research* 34(1), 525–554.

- Blaufus, K. and R. Ortlieb (2009). Is simple better? a conjoint analysis of the effects of tax complexity on employee preferences concerning company pension plans. *Schmalenbach Business Review* 61(1), 60–83.
- Blesse, S. and F. Heinemann (2019). Citizens’ trade-offs in state merger decisions: Evidence from a randomized survey experiment. Technical report, ZEW Discussion Papers.
- Blom, A. G., C. Gathmann, and U. Krieger (2015). Setting up an online panel representative of the general population: The German Internet Panel. *Field Methods* 27(4), 391–408.
- Blom, A. G., J. M. Herzing, C. Cornesse, J. W. Sakshaug, U. Krieger, and D. Bossert (2017). Does the recruitment of offline households increase the sample representativeness of probability-based online panels? evidence from the german internet panel. *Social Science Computer Review* 35(4), 498–520.
- Blumkin, T., B. J. Ruffle, and Y. Ganun (2012). Are income and consumption taxes ever really equivalent? Evidence from a real-effort experiment with real goods. *European Economic Review* 56(6), 1200–1219.
- Boccanfuso, J. and A. Ferey (2019). Inattention and the taxation bias. mimeo, online at <https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbmxmZXJleWFudG9pbmV8Z3g6NTRlZThiM2UwOWJmYTRhNQ>.
- Boenke, Tim, J. B. and C. Schroeder (2017). Fiscal federalism and tax administration: Evidence from germany. *German Economic Review* 18(3), 337–409.
- Brennan, G. and J. M. Buchanan (1980). *The Power to Tax*. Cambridge University Press.
- Brown, J. R., A. Kapteyn, E. F. Luttmer, and O. S. Mitchell (2017). Cognitive Constraints on Valuing Annuities. *Journal of the European Economic Association* 15(2), 429–462.
- Brusco, S., L. Colombo, and U. Galmarini (2014). Tax differentiation, lobbying, and welfare. *Social Choice and Welfare* 42(4), 977–1006.
- Cappelen, A. W., I. K. Haaland, and B. Tungodden (2018). Beliefs about behavioral responses to taxation. mimeo.
- Chetty, R., A. Looney, and K. Kroft (2009). Salience and taxation: Theory and evidence. *American Economic Review* 99(4), 1145–1177.
- Chetty, R. and E. Saez (2013). Teaching the tax code: Earnings responses to an experiment with EITC recipients. *American Economic Journal: Applied Economics* 5(1), 1–31.

- Cremer, H., F. Gahvari, and J.-M. Lozachmeur (2010). Tagging and income taxation: theory and an application. *American Economic Journal: Economic Policy* 2(1), 31–50.
- 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.
- de Bartolome, C. (1995). Which tax rate do people use: Average or marginal? *Journal of Public Economics* 56(1), 79–96.
- de Quidt, J., J. Haushofer, and C. Roth (2018). Measuring and bounding experimenter demand. *American Economic Review* 108(11), 3266–3302.
- Ding, P. (2017). A paradox from randomization-based causal inference. *Statistical science* 32(3), 331–345.
- Doerrenberg, P. and A. Peichl (2018). Tax morale and the role of social norms and reciprocity. evidence from a randomized survey experiment. Cesifo working paper no. 7149.
- Doerrenberg, P., A. Peichl, and S. Siegloch (2017). The elasticity of taxable income in the presence of deduction possibilities. *Journal of Public Economics* 151, 41–55.
- Dolls, M. and N. Wehrhoefer (2018). Attitudes towards euro area reforms: Evidence from a randomized survey experiment. CESifo working paper series no. 7141.
- Duncan, D., V. Nadella, A. Bowers, S. Giroux, and J. D. Graham (2014). Bumpy designs: Impact of privacy and technology costs on support for road mileage user fees. *National Tax Journal* 67(3), 505–530.
- 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.
- Economist (2005). Simplifying tax systems. the case for flat taxes. The Economist article, online at <https://www.economist.com/special-report/2005/04/14/the-case-for-flat-taxes>.
- Economist (2013). Tax reform in america. simpler, fairer, possible. The Economist article, online at <https://www.economist.com/leaders/2013/07/13/simpler-fairer-possible>.
- Engelmann, D., E. Janeba, L. Mechtenberg, and N. Wehrhoefer (2018). Preferences over taxation of high income individuals: Evidence from survey and laboratory experiments. mimeo.
- FAST (2010). *Faktisch anonymisierte Lohn- und Einkommensteuerstatistik by the Federal Statistical Office*. Wiesbaden, Germany.

- FAZ (2004). Der steuermann. Frankfurter Allgemeine Zeitung (FAZ) article, online at <https://www.faz.net/aktuell/wirtschaft/reformer-merz-der-steuermann-1192866.html>.
- FAZ (2005). Kirchhof-modell: Die reichen profitieren am meisten. Frankfurter Allgemeine Zeitung (FAZ) article, online at <https://www.faz.net/aktuell/wirtschaft/wirtschaftspolitik/steuern-kirchhof-modell-die-reichen-profitieren-am-meisten-1260403.html>.
- Feldman, N. E., P. Katusčák, and L. Kawano (2016). Taxpayer confusion: Evidence from the child tax credit. *American Economic Review* 106(3), 807–35.
- Feldman, N. E. and B. J. Ruffle (2015). The impact of including, adding, and subtracting a tax on demand. *American Economic Journal: Economic Policy* 7(1), 95–118.
- Finkelstein, A. (2009). E-ztax: Tax salience and tax rates. *Quarterly Journal of Economics* 124(3), 969–1010.
- Fisher, R. A. (1935). *The Design of Experiments*. Oliver and Boyd, Ltd.
- Fochmann, M., N. Müller, and M. Overesch (2018). Less cheating? the effects of prefilled forms on compliance behavior.
- Forbes (2017). Trump wants a simple tax system – history says he won’t get it. Forbes article, online at <https://www.forbes.com/sites/taxanalysts/2017/09/11/trump-wants-a-simple-tax-system-history-says-he-wont-get-it/#4c3b63e27c1c>.
- Fuest, C., A. Peichl, and T. Schaefer (2008). Does Tax Simplification Yield more Equity and Efficiency? An empirical analysis for Germany. *CESifo Economic Studies* 54(1), 73–97.
- Fujii, E. T. and C. B. Hawley (1988). On the accuracy of tax perceptions. *The Review of Economics and Statistics* 70(2), 344–347.
- Gale, W. (2001). Tax simplification: Issues and option. mimeo.
- Galli, E. and P. Profeta (2009). Tax complexity with heterogeneous voters. *Public Finance and Management* 9(2), 1–35.
- Gideon, M. (2017). Do individuals perceive income tax rates correctly? *Public Finance Review* 45(1), 97–117.
- Goettinger Tageblatt (2018). Friedrich Merz’ erster tweet – ein bierdeckel, online at: <http://www.goettinger-tageblatt.de/Nachrichten/Politik/Deutschland-Welt/Friedrich-Merz-erster-Tweet-ein-Bierdeckel>. Technical report.

- Goldin, J. and T. Homonoff (2013). Smoke gets in your eyes: Cigarette tax salience and regressivity. *American Economic Journal: Economic Policy* 5(1), 302–36.
- Gordon, R. H. and W. Kopczuk (2014). The choice of the personal income tax base. *Journal of Public Economics* 118, 97 – 110.
- Gravelle, J. G. and T. L. Hungerford (2012). The challenge of individual income tax reform: An economic analysis of tax base broadening. Congressional research service. washington, dc.
- Hettich, W. and S. Winer (1999). *Democratic Choice and Taxation*. Cambridge University Press.
- Hettich, W. and S. L. Winer (1988). Economic and political foundations of tax structure. *American Economic Review* 78(4), 701–712.
- Hines, J. R. (2016). High tax heresy. Working paper, available online: <https://pdfs.semanticscholar.org/2fc7/1dfd009ab42b5899815fe75cda368bdc178a.pdf>.
- Hines, J. R. (2019). *Sensible taxes and practical policitcs*. Oxford University Press. Forthcoming 2020.
- Ito, K. (2014). Do consumers respond to marginal or average price? evidence from nonlinear electricity pricing. *American Economic Review* 104(2), 537–63.
- James, S., A. Sawyer, and I. Wallschutzky (1997). Tax simplifications - a tale of three countries. *Bulletin for International Fiscal Documentation* 51(11), 493–503.
- Kerschbamer, R. and D. Müller (2017). Social preferences and political attitudes: An online experiment on a large heterogeneous sample. University of insbruck working paper 2017-16.
- Kirchhof, P. (2011). *Bundessteuergesetzbuch. Ein Reformentwurf zur Erneuerung des Steuerrechts*. Heidelberg: C.F. Müller Wissenschaft.
- Kleven, H. J., M. B. Knudsen, C. T. Kreiner, S. Pedersen, and E. Saez (2011). Unwilling or unable to cheat? Evidence from a tax audit experiment in Denmark. *Econometrica* 79(3), 651 – 692.
- Kopczuk, W. (2005). Tax bases, tax rates and the elasticity of reported income. *Journal of Public Economics* 89(11-12), 2093–2119.
- Kopczuk, W. (2012). The polish business "flat" tax and its effect on reported incomes: a pareto improving tax reform? mimeo, online at <http://www.columbia.edu/~wk2110/bin/PolishFlatTax.pdf>.
- Kopczuk, W. and C. Pop-Eleches (2007). Electronic filing, tax preparers and participation in the earned income tax credit. *Journal of Public Economics* 91(7-8), 1351–1367.

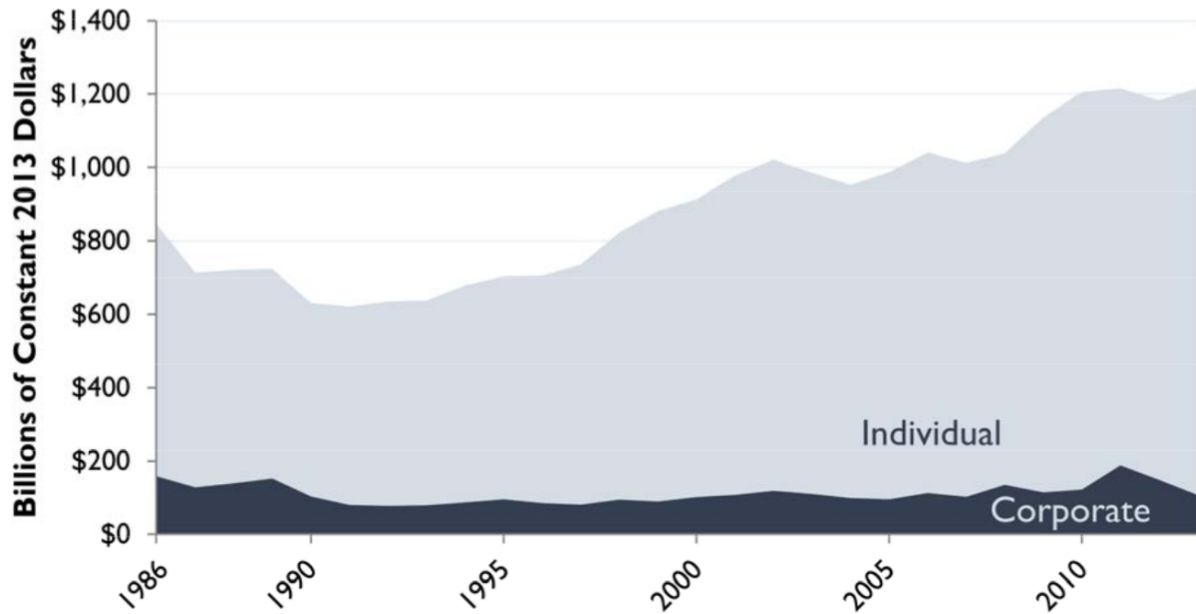
- Kotakorpi, K. and J.-P. Laamanen (2016). Prefilled income tax returns and tax compliance: Evidence from a natural experiment. University of tampere, school of management, economics.
- Kuziemko, I., M. I. Norton, E. Saez, and S. Stantcheva (2015). How elastic are preferences for redistribution? evidence 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.
- Lergetporer, P., K. Werner, and L. Woessmann (2018). Educational inequality and public policy preferences: Evidence from representative survey experiments. CESifo working paper no. 7192.
- Liebman, J. B. and R. J. Zeckhauser (2004). Schmeduling. mimeo, Harvard Kennedy School.
- Meltzer, A. H. and S. F. Richard (1981). A rational theory of the size of government. *Journal of political Economy* 89(5), 914–927.
- Müller, D. and S. Renes (2017). Fairness views and political preferences - evidence from a large online experiment. University of insbruck working paper 2017-10.
- Mummolo, J. and E. Peterson (2019). Demand effects in survey experiments: An empirical assessment. *American Political Science Review*. forthcoming.
- Neisser, C. (2017). The elasticity of taxable income: A meta-regression analysis.
- NPR (2015). Lots of candidates want to simplify tax code; here’s what they get wrong. National Public Radio (NPR) online article. <https://www.npr.org/sections/itsallpolitics/2015/09/28/443203910/lots-of-candidates-want-to-simplify-the-tax-code-heres-what-they-get-wrong?t=1551777844261>.
- NYT (2015). The tax code can be simpler. but not three pages. New York Times (NYT) article, online at <https://www.nytimes.com/2015/11/15/upshot/a-three-page-tax-code-not-exactly-simple.html>.
- OECD (2010a). Tax design considerations. in *Tax Policy Reform and Economic Growth*, oecd publishing, paris. doi: <https://doi.org/10.1787/9789264091085-7-en>.
- OECD (2010b). Tax expenditures in OECD countries. Oecd publishing, paris. doi: <https://doi.org/10.1787/9789264076907-en>.

- Ooghe, E. and A. Peichl (2015). Fair and efficient taxation under partial control. *The Economic Journal* 125(589), 2024–2051.
- Paetzold, J. (2019). How do taxpayers respond to a large kink? evidence on earnings and deduction behavior from austria. *International Tax and Public Finance*, 1–31.
- Paetzold, J. and H. Winner (2016). Taking the high road? compliance with commuter tax allowances and the role of evasion spillovers. *Journal of Public Economics* 143, 1 – 14.
- Pitt, M. and J. Slemrod (1989). The compliance cost of itemizing deductions: Evidence from individual tax returns. *American Economic Review* 79(5), 1224–32.
- Rees-Jones, A. and D. Taubinsky (2016). Measuring ”schmeduling”. NBER working paper no. 22884r.
- Rohaly, J. and W. G. Gale (2004). Effects of tax simplification options on equity, efficiency, and simplicity: A quantitative analysis. In H. J. Aaron and J. Slemrod (Eds.), *The Crisis in Tax Administration*. Washington D.C.: Brookings Institution Pres.
- Roth, C. and J. Wohlfart (2018). Experienced inequality and preferences for redistribution. *Journal of Public Economics* 167, 251 – 262.
- Roth, C. and J. Wohlfart (2019). How do expectations about the macroeconomy affect personal expectations and behavior? Working paper, available at <http://dx.doi.org/10.2139/ssrn.3016052>.
- Saez, E. (2010). Do taxpayers bunch at kink points? *American Economic Journal: Economic Policy* 2(3), 180–212.
- Saez, E. and S. Stantcheva (2016). Generalized social marginal welfare weights for optimal tax theory. *American Economic Review* 106(1), 24–45.
- Slemrod, J. and W. Kopczuk (2002). The optimal elasticity of taxable income. *Journal of Public Economics* 84(1), 91–112.
- Tax Policy Center (2019). What are tax expenditures and how are they structured? The Tax Policy Center’s Briefing Book. a citizen’s guide to the fascinating (though often complex) elements of the federal tax system, online at [https://www.taxpolicycenter.org/sites/default/files/briefing-book/bb\\_full\\_2018\\_1.pdf](https://www.taxpolicycenter.org/sites/default/files/briefing-book/bb_full_2018_1.pdf).
- Tran-Nam, B. (2000). Tax reform and tax simplicity: A new and ’simpler’ tax system? *University of New South Wales Law Journal, The* 23(2), 241–251.
- Tsankova, T., C. Imbert, M. Luts, and J. Spinnewijn (2019). ’how to improve tax compliance? evidence from countrywide experiments in belgium.

- Vox (2017). Why democrats should support radically simpler taxes. Vox article, online at <https://www.vox.com/policy-and-politics/2017/5/8/15442172/democrats-tax-plan-return-free-filing-trump-ambitious>.
- Wagner, F. W. (2006). Was bedeutet Steuervereinfachung wirklich? *Perspektiven der Wirtschaftspolitik* 7(1), 19–33.
- Warskett, G., S. L. Winer, and W. Hettich (1998). The complexity of tax structure in competitive political systems. *International Tax and Public Finance* 5, 123–151.
- Weinzierl, M. (2014). The promise of positive optimal taxation: normative diversity and a role for equal sacrifice. *Journal of Public Economics* 118, 128 – 142.
- Weinzierl, M. (2017). Popular acceptance of inequality due to innate brute luck and support for classical benefit-based taxation. *Journal of Public Economics* 155, 54 – 63.
- Westfall, P. H. and S. S. Young (1993). *Resampling-based multiple testing: Examples and methods for p-value adjustment*. John Wiley & Sons.
- WiWo (2017). Pendler kosten den fiskus fuenf milliarden euro. WirtschaftsWoche (WiWo) article, online at <https://www.wiwo.de/politik/deutschland/berufspendler-pendler-kosten-den-fiskus-fuenf-milliarden-euro/20654060.html>.
- Young, A. (2018). Channeling fisher: Randomization tests and the statistical insignificance of seemingly significant experimental results. *The Quarterly Journal of Economics* 134(2), 557–598.
- Zwick, E. (2018). The costs of corporate tax complexity. NBER working paper no 24382.

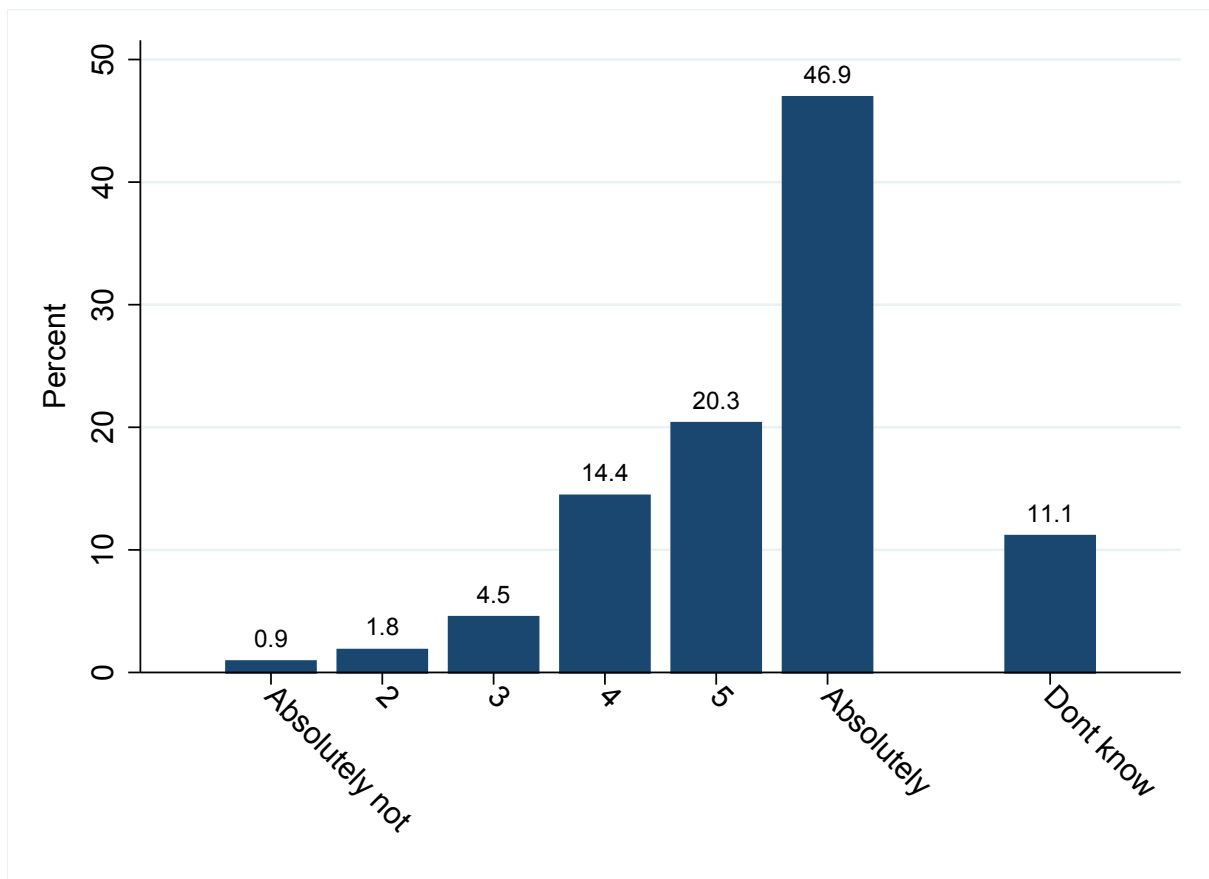
## Figures and Tables

Figure 1: Growth of Tax Expenditures over Time in the US



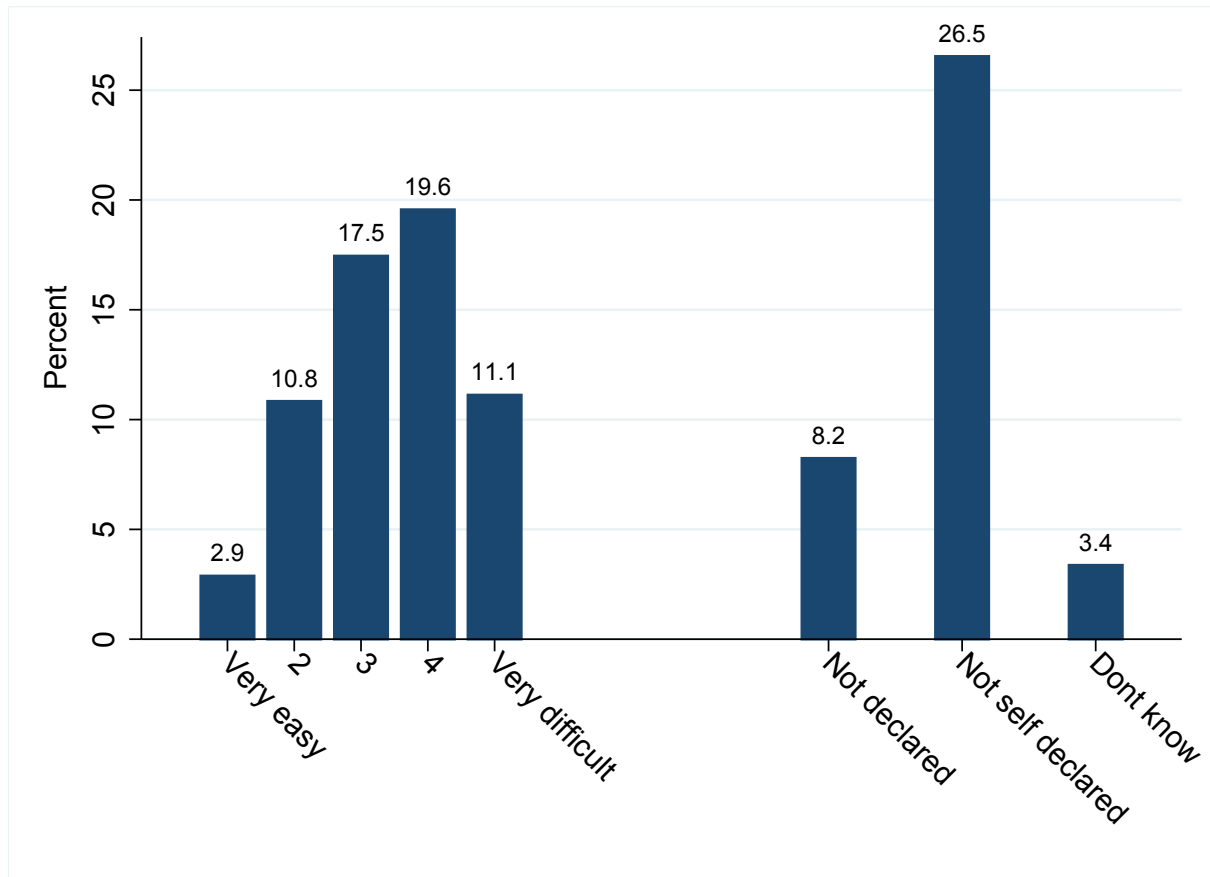
Notes: US Treasury estimates of tax expenditures, 1986-2013, adjusted for inflation to 2013 dollars.  
Source: Tax Foundation, Fiscal Fact, A Brief History of Tax Expenditures. Available online: <https://files.taxfoundation.org/legacy/docs/ff391.pdf>.

Figure 2: Preferences for Tax Simplification



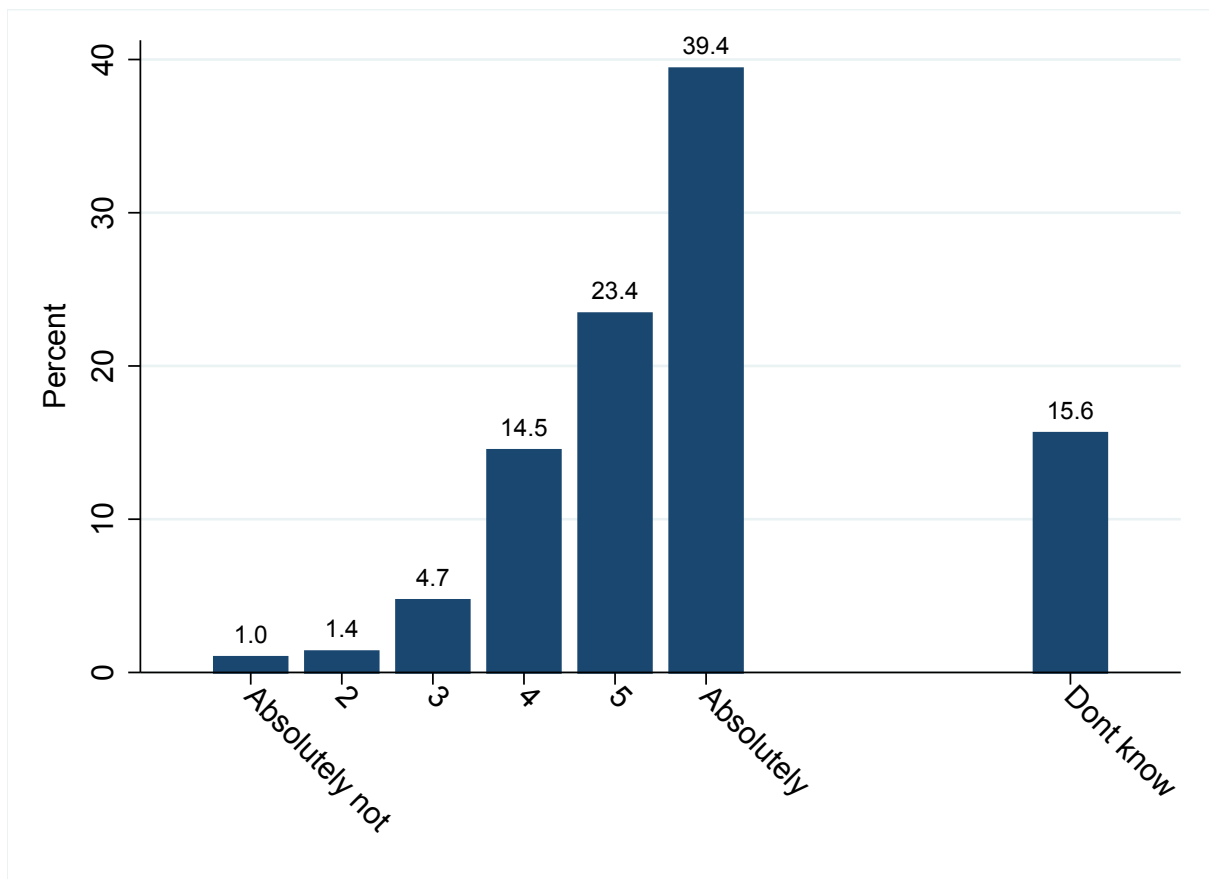
Notes: This figure depicts the percentage share of respondents in the respective categories of the question “Do you generally think that the income tax system in Germany needs to be simplified?” Respondents could pick one of the following categories: 1 Absolutely not; ... ; 6 Absolutely; I do not know. The figure is based on 2,423 non missing observations. The mean answer is 5.16. Source: Own calculations based on German Internet Panel.

Figure 3: Perceived Difficulty of Filing a Tax Return



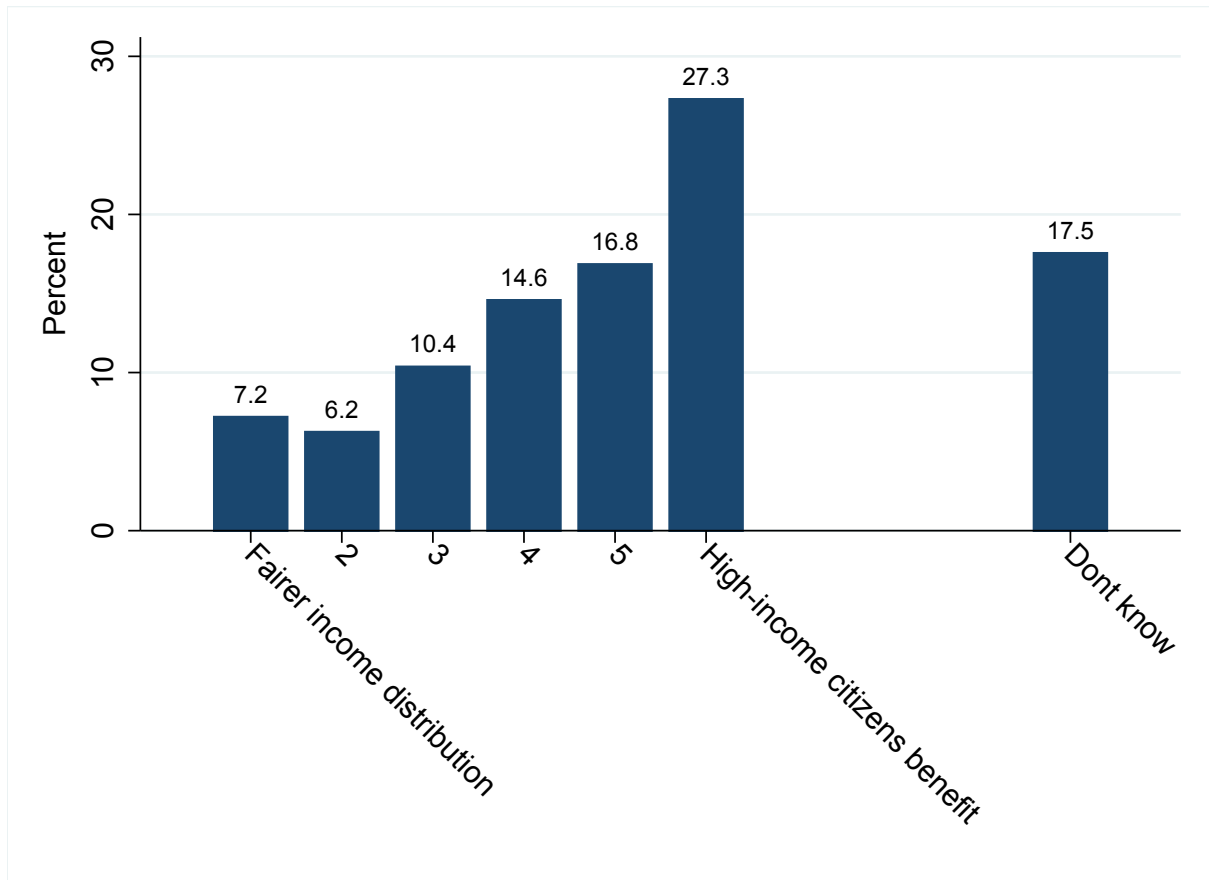
Notes: This figure depicts the percentage share of respondents in the respective categories of the question “How difficult is it for you to fill out your tax return?” Respondents could pick one of the following categories: 1 Very easy; ... ; 5 Very difficult; I do not know because no taxes are declared in my name; I do not know because I do not declare taxes myself (rather, my partner or a tax consultant, etc. does this); I do not know. The figure is based on 2,424 non missing observations. The mean answer for categories 1 to 5 is 3.41. Source: Own calculations based on German Internet Panel.

Figure 4: Need for Tax Reform



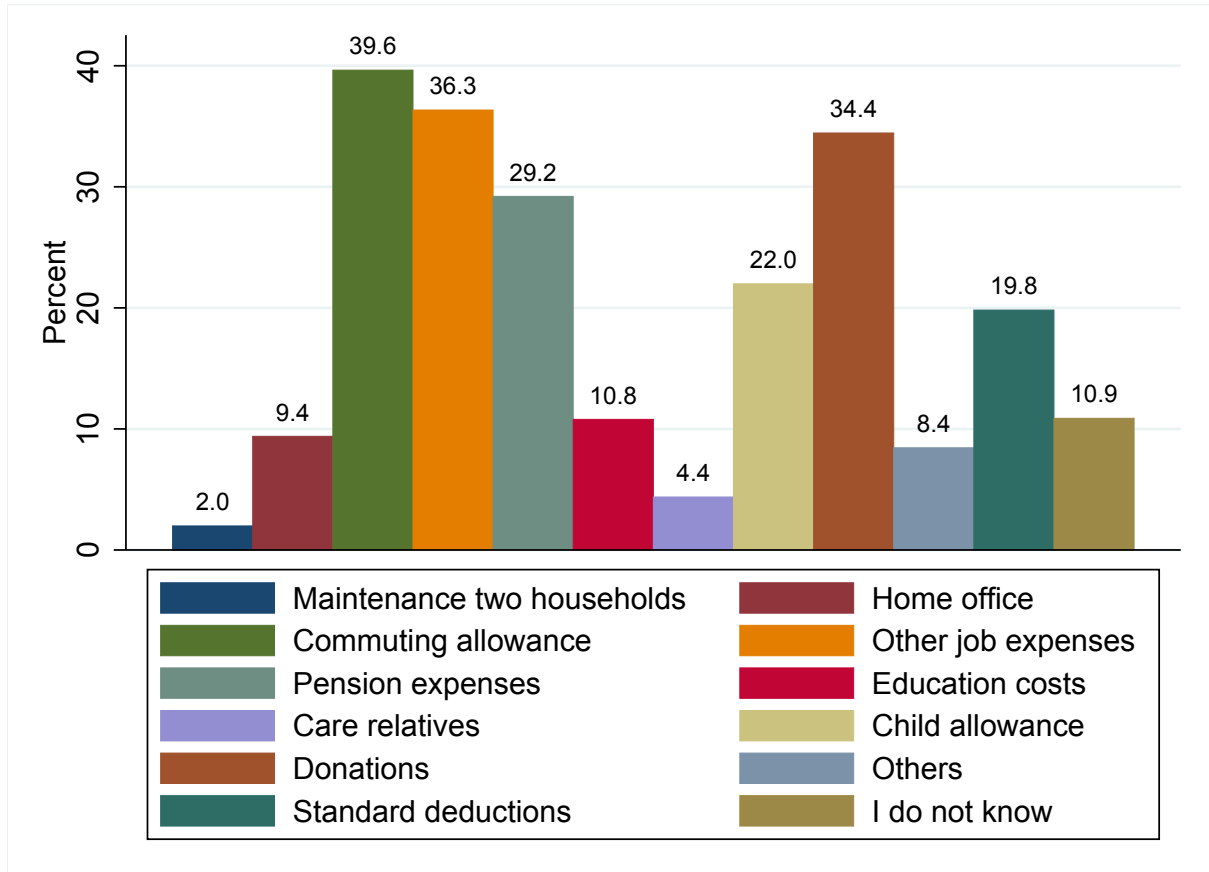
Notes: This figure depicts the percentage share of respondents in the respective categories of the question “Do you generally believe that the income tax system in Germany is in need of reform?” Respondents could pick one of the following categories: 1 Absolutely not; ... ; 6 Absolutely; I do not know. The figure is based on 2,423 non missing observations. The mean answer is 5.06. Source: Own calculations based on German Internet Panel.

Figure 5: Perceived Distributional Implications of Complexity



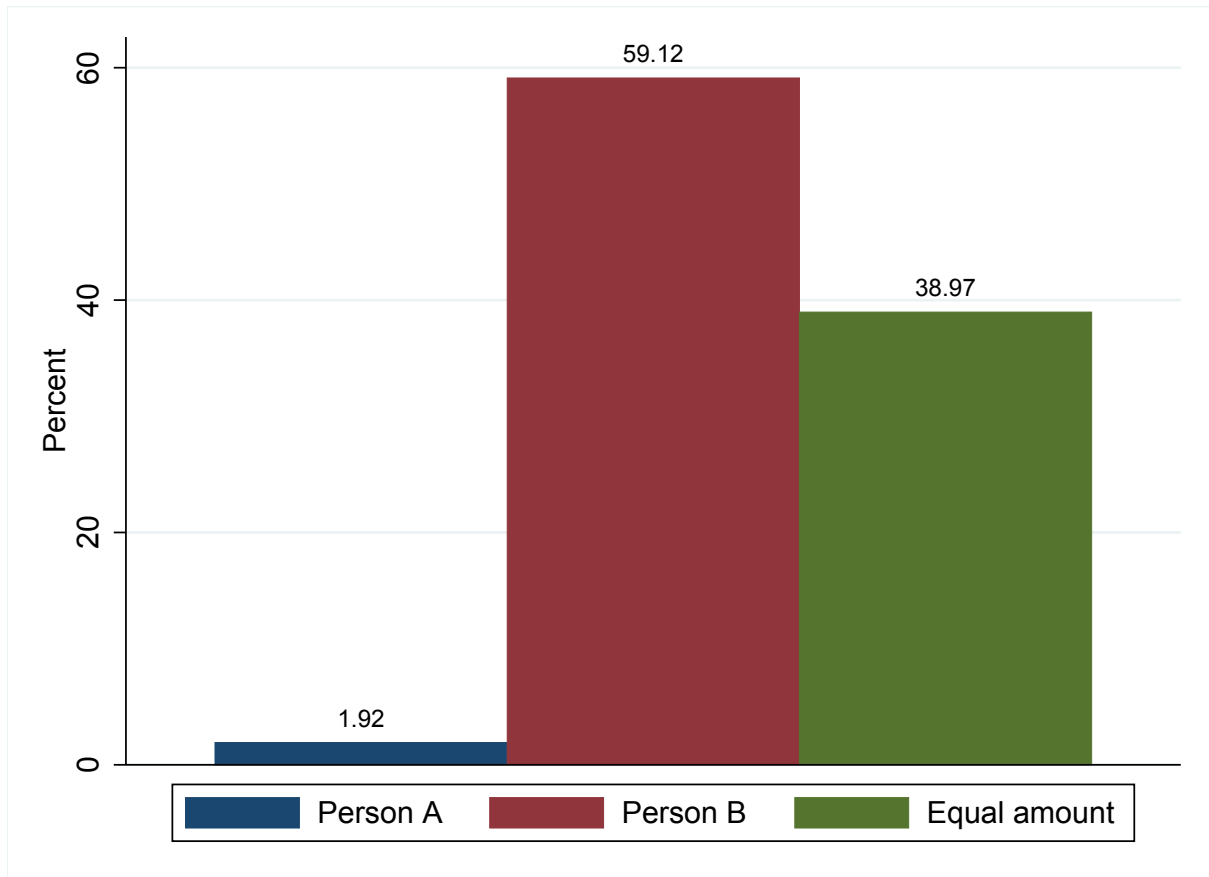
Notes: This figure depicts the percentage share of respondents in the respective categories of the question “Do you think that numerous deductions and allowances contribute to a fairer distribution of income, or do you believe that high-income citizens benefit more from these deductions and allowances?” Respondents could pick one of the following categories: 1 They contribute to fairer income distribution; ... ; 6 High-income citizens benefit; I do not know. The figure is based on 2,423 non missing observations. The mean answer is 4.33. Source: Own calculations based on German Internet Panel.

Figure 6: Which Deductions and Allowances are used?



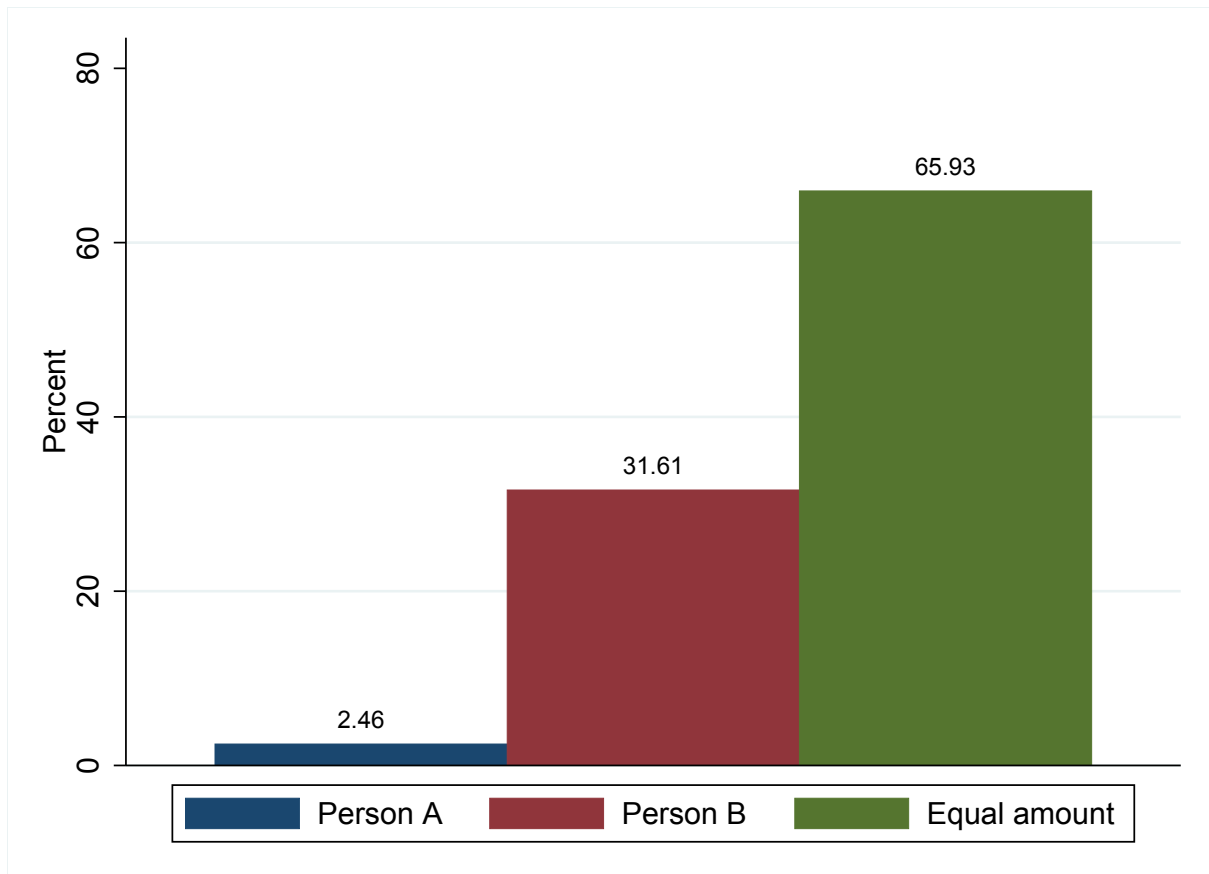
Notes: This figure depicts the percentage share of respondents in the respective categories of the question: “Which of the following deductions and/or allowances do you usually use when filing your income tax?” Respondents could pick one of the following categories: Maintenance of two households; Home office; Commuting allowance; Other job related expenditures; Pension expenses; Education costs; Care relatives; Child allowance, childcare; Donations; Others [insert text]; No deductions; I do not know. The figure is based on 2,215 non missing observations. Note shares do not add up to one because respondents could check multiple items. Source: Own calculations based on German Internet Panel.

Figure 7: Who should pay more taxes? Elderly Care



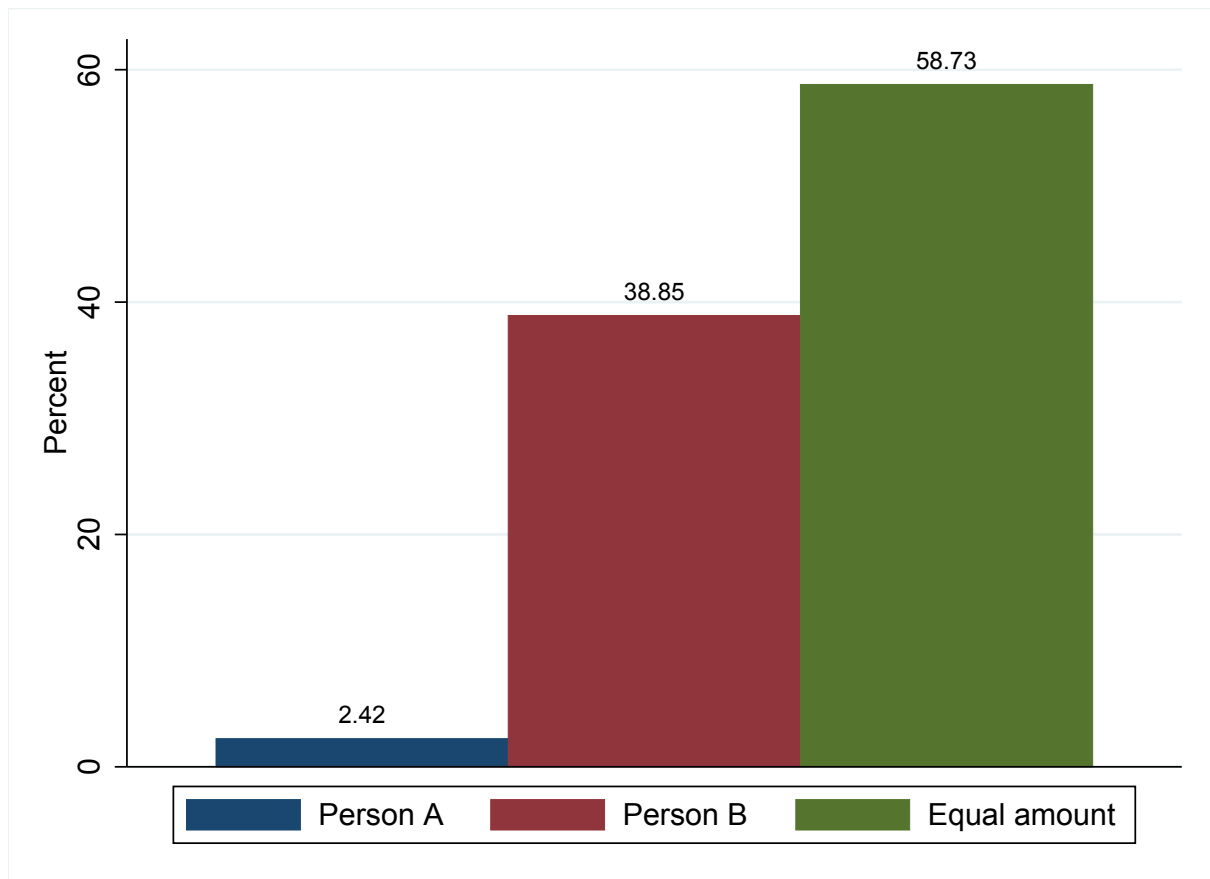
Notes: This figure depicts the percentage share of respondents in the respective categories of the question: “In contrast to Person B, Person A has a poor mother in need of elderly care and has to spend a considerable amount of her income for the care of her mother. Person A and B have the same gross income and are very similar in all other respects.” Respondents could pick one of the following categories (order of answer categories was randomized): Person A should pay higher taxes; Person B should pay higher taxes; Person A and B should pay equal tax amounts. The figure is based on 2,397 non missing observations. Source: Own calculations based on German Internet Panel.

Figure 8: Who should pay more taxes? Donations



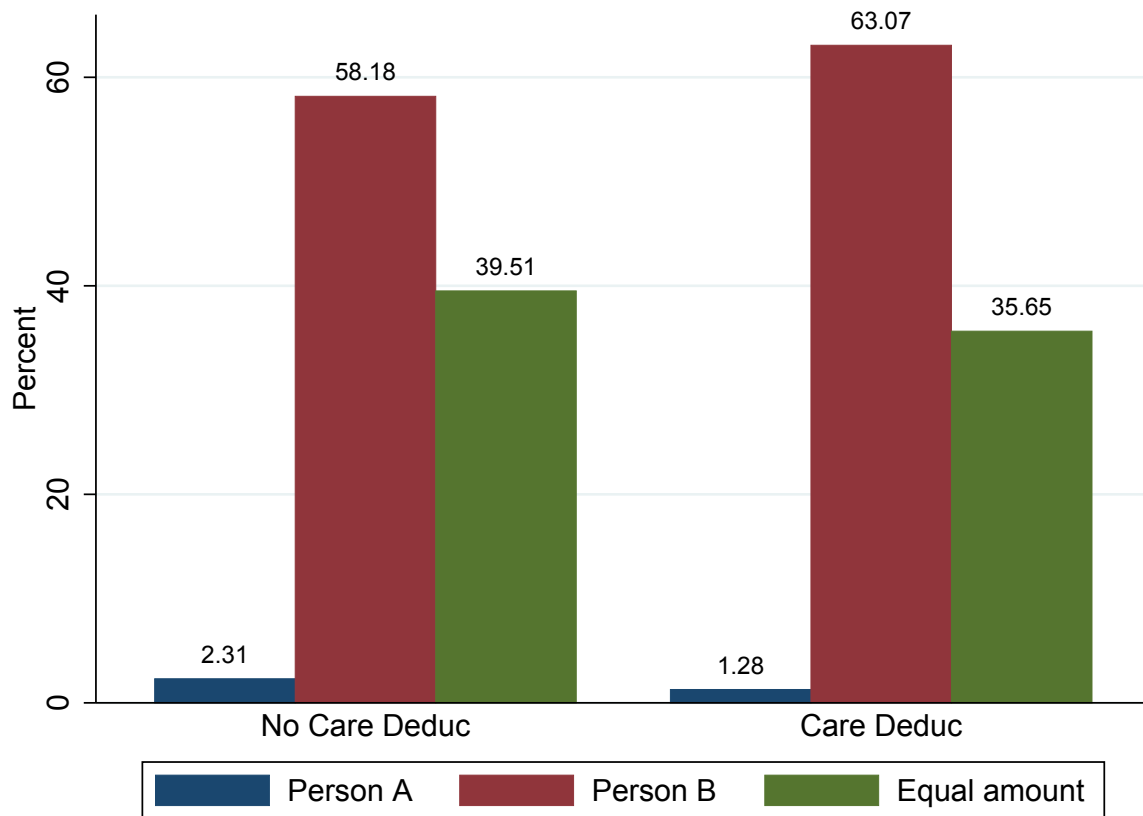
Notes: This figure depicts the percentage share of respondents in the respective categories of the question: “Person A spends a considerable amount of her income on charitable giving. Person B does no such thing. Both Person A and B have the same gross income and are very similar in all other respects.” Respondents could pick one of the following categories (order of answer categories was randomized): Person A should pay higher taxes; Person B should pay higher taxes; Person A and B should pay equal tax amounts. The figure is based on 2,398 non missing observations. Source: Own calculations based on German Internet Panel.

Figure 9: Who should pay more taxes? Commuting To Work



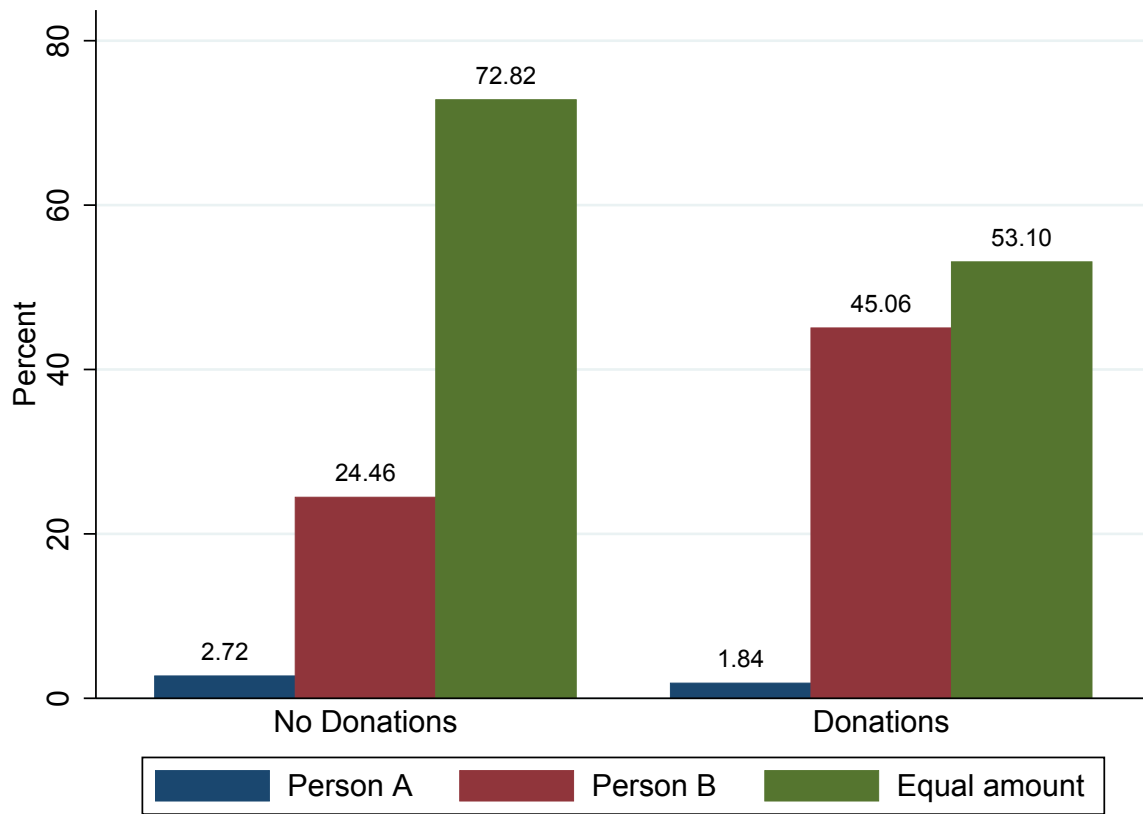
Notes: This figure depicts the percentage share of respondents in the respective categories of the question: “Person A has to travel a considerable distance to work. Person B lives very close to work. Both Person A and B have the same gross income and are very similar in all other respects.” Respondents could pick one of the following categories (order of answer categories was randomized): Person A should pay higher taxes; Person B should pay higher taxes; Person A and B should pay equal tax amounts. The figure is based on 2,394 non missing observations. Source: Own calculations based on German Internet Panel.

Figure 10: Driven by self interest? Elderly Care



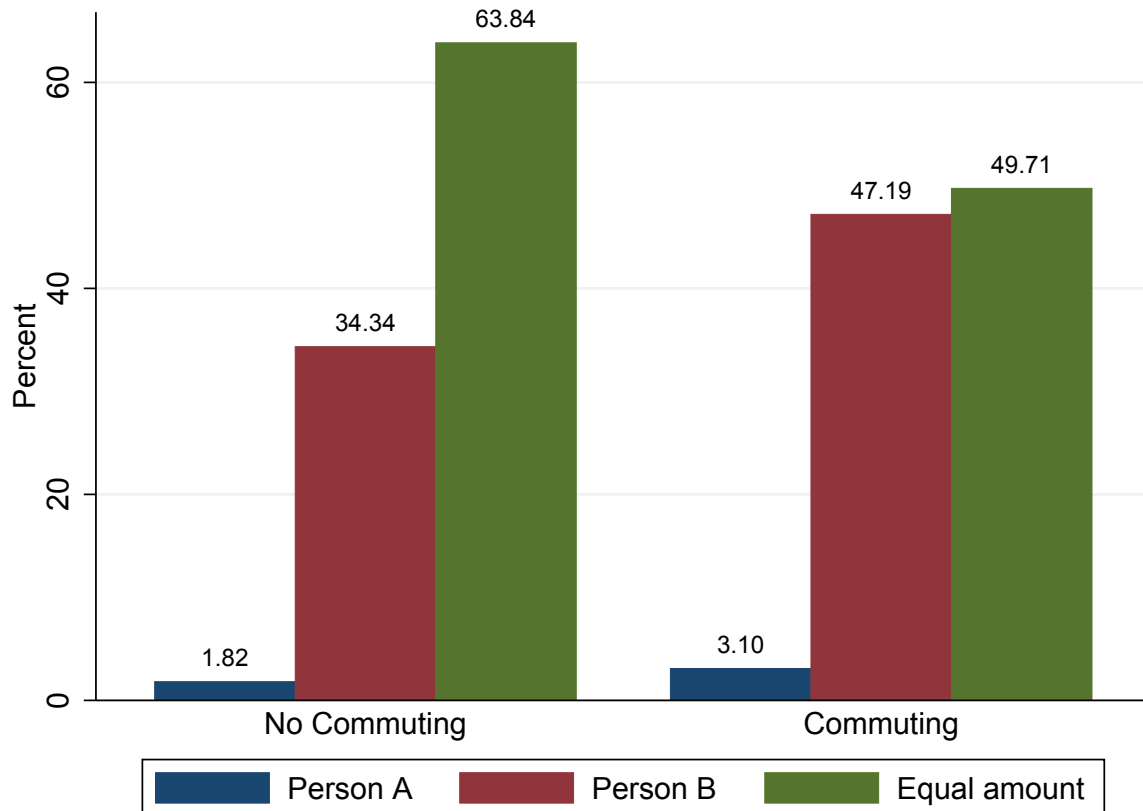
Notes: This figure depicts the percentage share of respondents in the respective categories by respondents claiming care deductions. Since only few people claim deductions for elderly care we consider the broader category of care deductions. Care deductions include deductions for elderly and child care. Question: “In contrast to Person B, Person A has a poor mother in need of elderly care and has to spend a considerable amount of her income for the care of her mother. Person A and B have the same gross income and are very similar in all other respects.” Respondents could pick one of the following categories (order of answer categories was randomized): Person A should pay higher taxes; Person B should pay higher taxes; Person A and B should pay equal tax amounts. The left part shows replies for respondents who do not use the deduction for elderly care. The right part shows replies of respondents who do use the deduction for elderly care. The figure is based on 2,397 non missing observations. Source: Own calculations based on German Internet Panel.

Figure 11: Driven by self interest? Donations



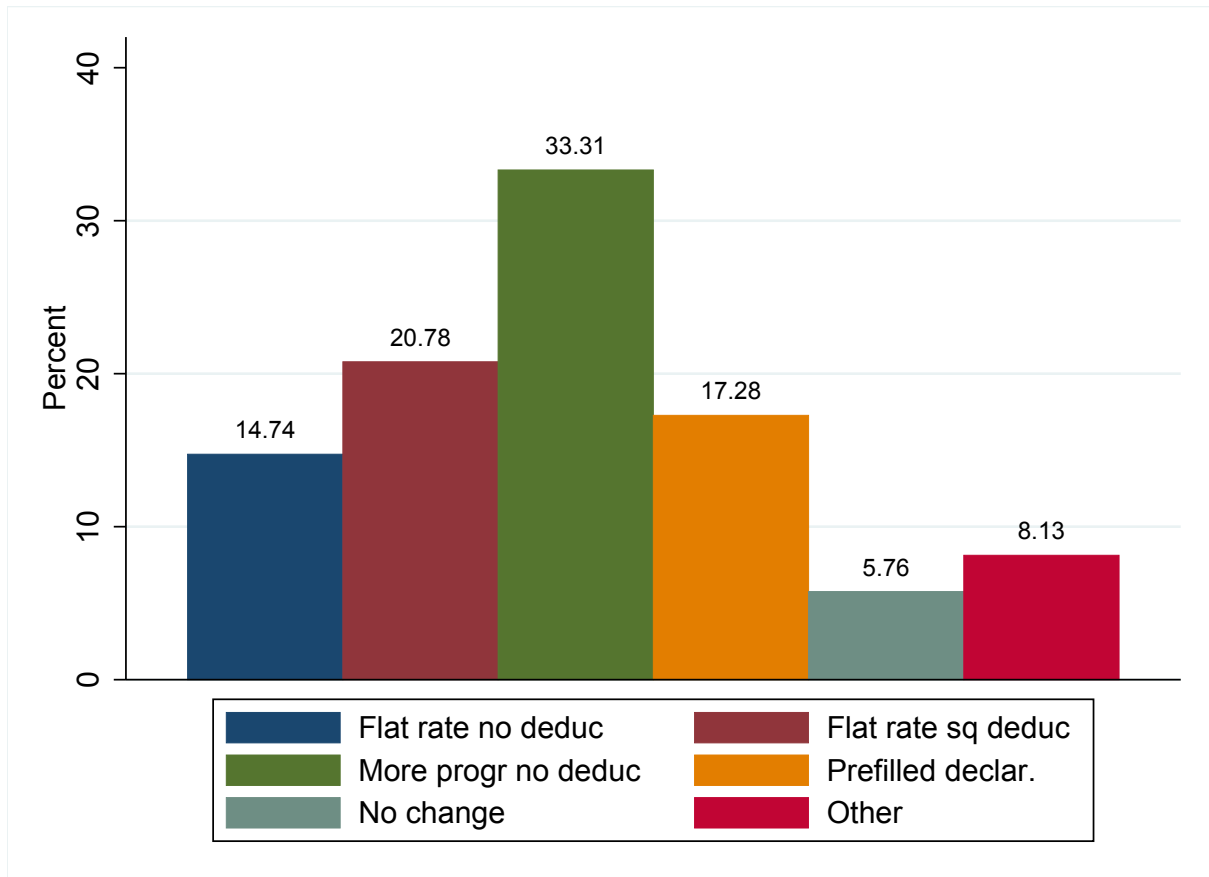
Notes: This figure depicts the percentage share of respondents in the respective categories by respondents claiming the deduction. Question: “Person A spends a considerable amount of her income on charitable giving. Person B does no such thing. Both Person A and B have the same gross income and are very similar in all other respects.” Respondents could pick one of the following categories (order of answer categories was randomized): Person A should pay higher taxes; Person B should pay higher taxes; Person A and B should pay equal tax amounts. The left part shows replies for respondents who do not have deductible donations. The right part shows replies of respondents who do have deductible donations. The figure is based on 2,398 non missing observations. Source: Own calculations based on German Internet Panel.

Figure 12: Driven by self interest? Commuting



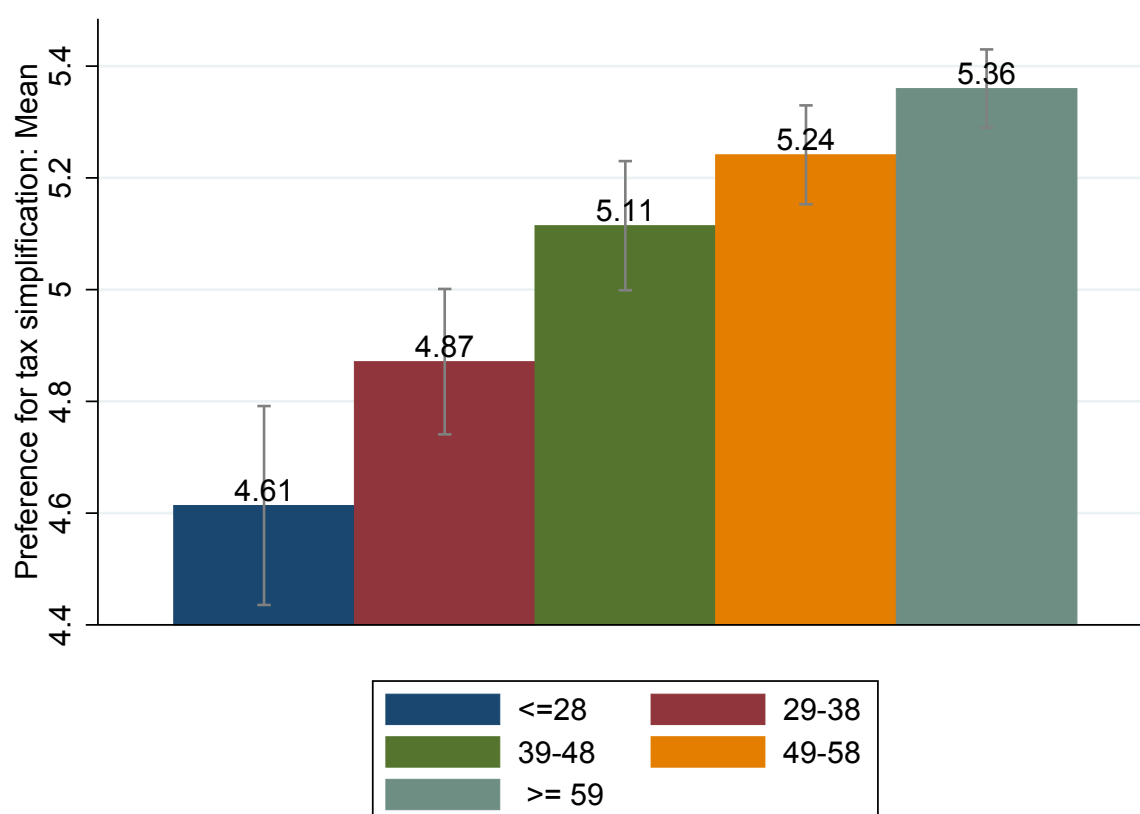
Notes: This figure depicts the percentage share of respondents in the respective categories by respondents claiming the deduction. Question: “Person A has to travel a considerable distance to work. Person B lives very close to work. Both Person A and B have the same gross income and are very similar in all other respects.” Respondents could pick one of the following categories (order of answer categories was randomized): Person A should pay higher taxes; Person B should pay higher taxes; Person A and B should pay equal tax amounts. The left part shows replies for respondents who do not use the deduction for commuting to work. The right part shows replies of respondents who do use the deduction for commuting to work. The figure is based on 2,394 non missing observations. Source: Own calculations based on German Internet Panel.

Figure 13: Which Revenue-Neutral Reform?



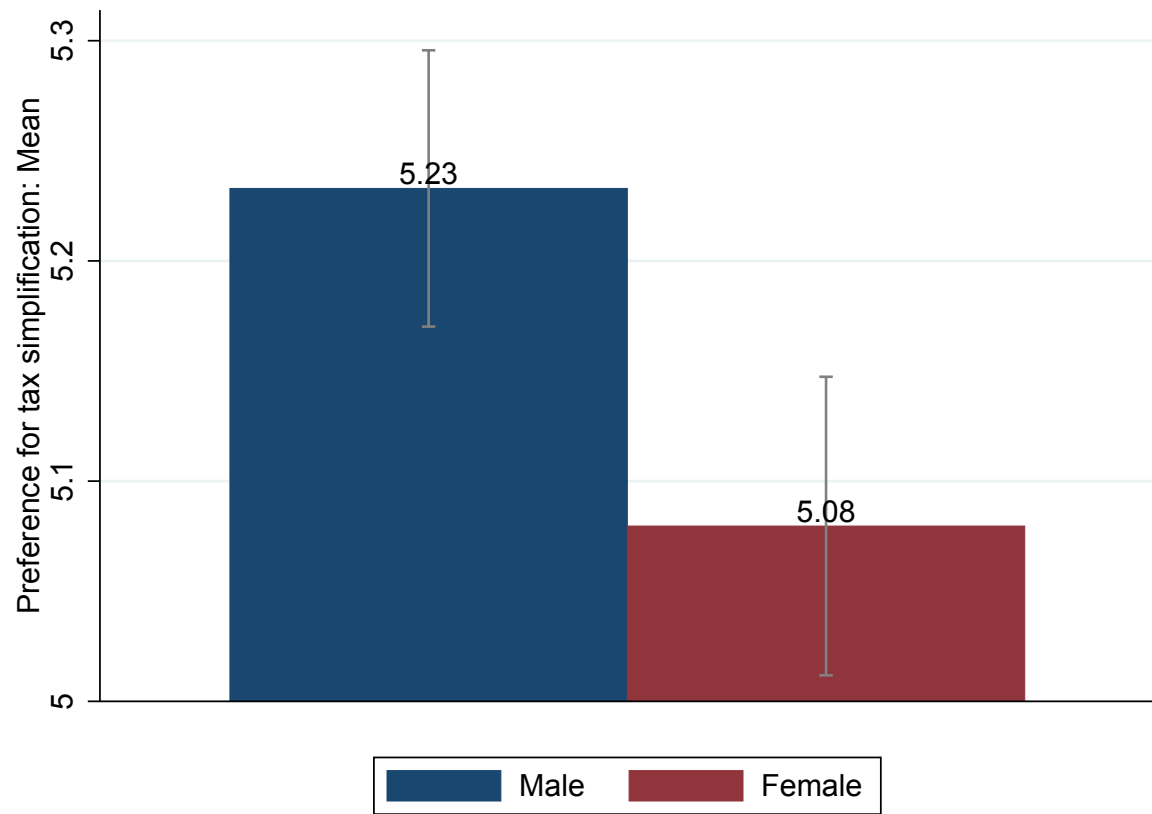
Notes: This figure depicts the percentage share of respondents in the respective categories of the question: “Which of the following measures to simplify the income tax system would you like the most? Assume the proposed measures will lead to unchanged tax revenues in each case.” Respondents could pick one of the following categories: Same rate for all but no deductions and allowances; Same rate for all and same deductions and allowances as under current system; More progressive tax rates and no deductions and allowances; Automatic determination of amounts in income tax declaration; No change; Other measure [insert text]; I do not know. The figure is based on 1,771 non missing observations. Source: Own calculations based on German Internet Panel.

Figure 14: Preferences for Tax Simplification by Age Categories



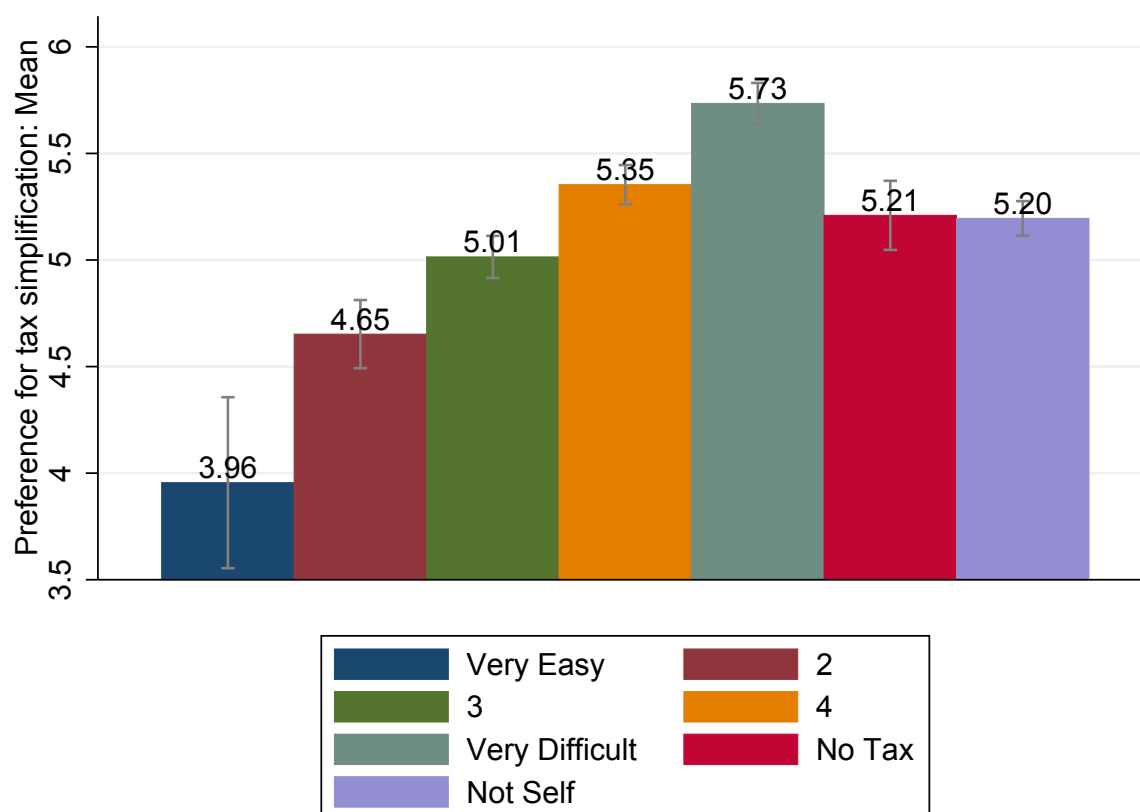
Notes: Average preference for tax simplification by age categories. The outcome variable is the survey-based preference for tax simplification as described in Section 3. The figure is based on 2,189 non missing observations. Source: Own calculations based on German Internet Panel.

Figure 15: Preferences for Tax Simplification by Sex



Notes: Average preference for tax simplification by sex. The outcome variable is the survey-based preference for tax simplification as described in Section 3. The figure is based on 2,190 non missing observations. Source: Own calculations based on German Internet Panel.

Figure 16: Preferences for Tax Simplification by Perceived Difficulty to File a Return



Notes: Average preference for tax simplification by perceived difficulty. The outcome variable is the survey-based preference for tax simplification as described in Section 3. The figure is based on 2,164 non missing observations. Source: Own calculations based on German Internet Panel

Table 1: Descriptive Statistics

	N	Mean	Std.Dev.	Min	Max
<b><i>Experiment 1</i></b>					
Redistribution	2424	0.33	0.47	0	1
Avoidance	2424	0.33	0.47	0	1
Control	2424	0.33	0.47	0	1
<b><i>Experiment 2</i></b>					
Efficiency	2419	0.33	0.47	0	1
Special interest	2419	0.33	0.47	0	1
Control	2419	0.33	0.47	0	1
<b><i>Demographics</i></b>					
Single households	2463	0.17	0.38	0	1
2	2463	0.46	0.50	0	1
3	2463	0.18	0.38	0	1
4	2463	0.14	0.35	0	1
5+	2463	0.05	0.22	0	1
Age <=28	2461	0.09	0.29	0	1
Age 29-38	2461	0.15	0.36	0	1
Age 39-48	2461	0.15	0.36	0	1
Age 49-58	2461	0.24	0.43	0	1
Age >=59	2461	0.36	0.48	0	1
Married	2464	0.61	0.49	0	1
Female	2463	0.48	0.50	0	1
Unemployed	2463	0.02	0.13	0	1
Retired	2463	0.23	0.42	0	1
Low education	2401	0.03	0.17	0	1
Low-med education	2401	0.45	0.50	0	1
High-med education	2401	0.23	0.42	0	1
High education	2401	0.30	0.46	0	1
<b><i>Difficulty in declaring taxes</i></b>					
No difficulty	2381	0.03	0.17	0	1
2	2381	0.11	0.32	0	1

3	2381	0.18	0.38	0	1
4	2381	0.20	0.40	0	1
Very difficult	2381	0.12	0.32	0	1
No taxes declared	2381	0.09	0.28	0	1
Not self declared	2381	0.27	0.45	0	1
<b><i>Household net income</i></b>					
Poor	2464	0.11	0.32	0	1
2	2464	0.19	0.39	0	1
3	2464	0.20	0.40	0	1
4	2464	0.16	0.37	0	1
Rich	2464	0.15	0.36	0	1
No income stated	2464	0.11	0.32	0	1
Not merged	2464	0.07	0.26	0	1
<b><i>Political orientation</i></b>					
Conservatives	2464	0.38	0.48	0	1
Left-wing	2464	0.47	0.50	0	1
Non partisans	2464	0.08	0.27	0	1
Not merged	2464	0.07	0.26	0	1

Notes: The table depicts the summary statistics for all treatment group dummies and all variables in our tailored survey block on tax complexity. Variables are defined as follows: experiment 1 and experiment 2 realizations represent the respective group allocations of respondents in either experiment; household size comprises single households and household with 2, 3, 4 and 5+ members; age categories are  $\leq 28$ , 29-38, 39-48, 49-55 and  $\geq 59$ ; Married equals 1 if respondent is married, 0 otherwise; Female equals 1 if respondent is female, 0 otherwise; Unemployed equals 1 if respondent is unemployed, 0 otherwise; Retired equals 1 if respondent is retired, 0 otherwise; education categories comprise low (secondary schooling, no job training), low to medium education (upper secondary schooling or finished job training), high to medium education (upper secondary schooling and finished job training) and high education (tertiary education); household income variables define net monthly household incomes on a 5-point scale from poor, i.e. 1 ( $\leq 1500$  Euro), 2 ( $1500 \leq x < 2500$  Euro), 3 ( $2500 \leq x < 3500$  Euro), 4 ( $3500 \leq x < 4500$  Euro) to 5 being rich ( $\geq 4500$  Euro) as well as a dummy for no answers (No income stated) and a dummy for those observations which had not been in the GIP wave where the income question was asked; conservatives equals  $\leq 5$  on a 11-scale left-right placement variable, for  $> 5$  left-wing equals 1. Non partisans did not report a score for the left-right placement variable and a dummy for those observations which had not been in the GIP Wave where the political preference question was asked. Data comes from German Internet Panel (GIP) wave 36, except for the following items: political preferences derived from variable left-right placement (wave 31) as well as household incomes (wave 31).

Table 2: Anatomy of tax simplification preferences

	(1)	(2)	(3)	(4)	(5)
Household size	0.030 (0.026)	0.021 (0.024)	0.021 (0.024)	0.021 (0.024)	0.021 (0.024)
Age	0.180*** (0.025)	0.168*** (0.024)	0.168*** (0.024)	0.167*** (0.024)	0.169*** (0.024)
Married	-0.054 (0.058)	-0.087 (0.056)	-0.092 (0.057)	-0.093 (0.057)	-0.093 (0.057)
Female	-0.128*** (0.047)	-0.135*** (0.045)	-0.134*** (0.046)	-0.140*** (0.046)	-0.138*** (0.046)
Unemployed	0.137 (0.199)	-0.046 (0.201)	-0.038 (0.204)	-0.042 (0.204)	-0.034 (0.203)
Retired	-0.003 (0.063)	0.023 (0.063)	0.025 (0.063)	0.025 (0.063)	0.030 (0.063)
Education	-0.017 (0.027)	0.006 (0.026)	0.004 (0.027)	0.003 (0.027)	0.005 (0.027)
Difficulty 2		0.690*** (0.212)	0.686*** (0.213)	0.682*** (0.213)	0.675*** (0.214)
Difficulty 3		1.033*** (0.204)	1.033*** (0.204)	1.034*** (0.204)	1.028*** (0.205)
Difficulty 4		1.375*** (0.203)	1.373*** (0.203)	1.370*** (0.203)	1.364*** (0.204)
Very difficult		1.725*** (0.204)	1.722*** (0.204)	1.721*** (0.204)	1.720*** (0.206)
No taxes declared		1.251*** (0.214)	1.253*** (0.215)	1.245*** (0.215)	1.242*** (0.216)
Taxes not self declared		1.209*** (0.202)	1.206*** (0.202)	1.205*** (0.202)	1.203*** (0.203)
Income gr 2			-0.031 (0.100)	-0.030 (0.100)	-0.034 (0.100)
Income gr 3			-0.018 (0.101)	-0.016 (0.101)	-0.019 (0.100)
Income gr 4			0.059 (0.103)	0.061 (0.103)	0.056 (0.102)
Rich			-0.016 (0.110)	-0.011 (0.111)	-0.014 (0.110)
No income stated			0.036 (0.109)	0.035 (0.109)	0.032 (0.109)

Not merged	-0.050	-0.912***	-0.938***		
	(0.125)	(0.124)	(0.125)		
Conservative		-0.039	-0.039		
		(0.048)	(0.048)		
Non partisans		0.028	0.025		
		(0.103)	(0.103)		
Not merged		0.850***	0.863***		
		(0.119)	(0.120)		
Redistribution			-0.133**		
			(0.055)		
Avoidance			-0.029		
			(0.053)		
Constant	4.566***	3.407***	3.419***	3.406***	3.456***
	(0.145)	(0.239)	(0.246)	(0.246)	(0.249)
N	2132.000	2109.000	2109.000	2109.000	2109.000
R2	0.046	0.146	0.147	0.148	0.150

Notes: The table presents the determinants of Preferences for Tax Simplicity using OLS regressions of preferences for tax simplicity on various covariates. Each column (1)-(5) presents the results of one regression with different sets of covariates. Robust standard errors are in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Variables are defined as follows: experiment 1 and experiment 2 realizations represent the respective group allocations of respondents in either experiment; household size comprises single households and household with 2, 3, 4 and 5+ members; age categories are  $\leq 28$ , 29-38, 39-48, 49-55 and  $\geq 59$ ; Married equals 1 if respondent is married, 0 otherwise; Female equals 1 if respondent is female, 0 otherwise; Unemployed equals 1 if respondent is unemployed, 0 otherwise; Retired equals 1 if respondent is retired, 0 otherwise; education categories comprise low (secondary schooling, no job training), low to medium education (upper secondary schooling or finished job training), high to medium education (upper secondary schooling and finished job training) and high education (tertiary education); household income variables define net monthly household incomes on a 5-point scale from poor, i.e. 1 ( $\leq 1500$  Euro), 2 ( $1500 \leq x < 2500$  Euro), 3 ( $2500 \leq x < 3500$  Euro), 4 ( $3500 \leq x < 4500$  Euro) to 5 being rich ( $\geq 4500$  Euro) as well as a dummy for no answers (No income stated) and a dummy for those observations which had not been in the GIP Wave where the income question was asked; conservatives equals 1 if  $\leq 5$  on a 11-scale left-right placement variable, for  $> 5$  left-wing equals 1. Non partisans did not report a score for the left-right placement variable and a dummy for those observations which had not been in the GIP Wave where the political preference question was asked. Data comes from German Internet Panel (GIP) wave 36, except for the following items: political preferences derived from variable left-right placement (wave 31) as well as household incomes (wave 31).

Table 3: Exp 1: Effect on Preferences for Tax Simplification

	(1)	(2)	(3)	(4)	(5)
<b>Experimental Group Reference category: Control</b>					
Redistribution	-0.115** (0.058)	-0.123** (0.058)	-0.133** (0.055)	-0.134** (0.055)	-0.133** (0.055)
Avoidance	-0.042 (0.057)	-0.039 (0.056)	-0.032 (0.053)	-0.032 (0.053)	-0.029 (0.053)
Constant	5.215*** (0.040)	4.610*** (0.149)	3.453*** (0.242)	3.469*** (0.248)	3.456*** (0.249)
N	2190	2132	2109	2109	2109
Demographics	No	Yes	Yes	Yes	Yes
Tax difficulty	No	No	Yes	Yes	Yes
Household Income	No	No	No	Yes	Yes
Political Preference	No	No	No	No	Yes

Notes: The table presents the effects of the randomized treatment interventions on preferences for tax simplification. This is estimated by OLS regressions of preferences for tax simplification on treatment dummies. Tax simplification is measured on a 6 point scale based on the question: “Do you generally think that the income tax system in Germany needs to be simplified?” The experimental groups are: Control group, Redistribution group and Avoidance group. Control is omitted, implying that the effects are relative to the Control Group. All participants receive the following information: “In Germany there is an ongoing debate on whether the income tax system is too complicated because of many deduction possibilities and allowances.” Participants in the Redistribution group receive the following information: “However, it is sometimes also argued that a tax system with many deduction possibilities and allowances has a social-policy and redistributive compensation role. For example, tax deductions can be used to reduce the tax burden of taxpayers who are disadvantaged by circumstances.” Participants in the Avoidance group receive the following information: “In this context, one argument is that a tax system with many deduction possibilities and allowances offers more scope for tax avoidance and tax adjustment. For example, tax deductions can be used to reduce one’s own tax burden through better knowledge of the tax system or through unjustified specifications in the tax return.” Columns (1)-(5) differ in the included sets of covariates. (1): no covariates, (2): gender, age, marital status, household size, employment status, retirement status, and education, (3): (2) plus perceived difficulty to declare taxes, (4): (3) plus net household income, (5): (4) plus political preferences. Robust The scale of the outcome variable is 1 (absolutely not) to 6 (absolutely). Robust standard errors are in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 4: Exp 1: Effect on Perceived Distributional Effects of Complexity

	(1)	(2)	(3)	(4)	(5)
<b>Experimental Group Reference category: Control</b>					
Redistribution	0.009 (0.090)	0.005 (0.090)	0.001 (0.090)	0.009 (0.090)	0.007 (0.089)
Avoidance	0.118 (0.089)	0.137 (0.090)	0.157* (0.091)	0.158* (0.091)	0.169* (0.090)
Constant	4.285*** (0.065)	3.506*** (0.215)	3.136*** (0.295)	3.127*** (0.315)	3.126*** (0.314)
N	1998	1946	1931	1931	1931
Demographics	No	Yes	Yes	Yes	Yes
Tax difficulty	No	No	Yes	Yes	Yes
Household Income	No	No	No	Yes	Yes
Political Preference	No	No	No	No	Yes

Notes: The table presents the effects of the randomized treatment interventions on beliefs about whether people think that deductions work in favor of the rich. This is estimated by OLS regressions of beliefs on treatment dummies. The outcome is measured on a 6 point scale based on the question: ‘Do you think that numerous deductions and allowances contribute to a fairer distribution of income, or do you believe that high-income citizens benefit more from these deductions and allowances?’ The experimental groups are: Control group, Redistribution group and Avoidance group. Control is omitted, implying that the effects are relative to the Control Group. All participants receive the following information: “In Germany there is an ongoing debate on whether the income tax system is too complicated because of many possible deductions and allowances.” Participants in the Redistribution group receive the following information: “However, it is sometimes also argued that a tax system with many possible deductions and allowances has an important social-policy role, particularly in relation to income redistribution. For example, tax deductions can be used to reduce the tax burden of taxpayers who are disadvantaged by circumstances” Participants in the Avoidance group receive the following information: “In this context, one argument is that a tax system with many possible deductions and allowances offers greater opportunity for tax avoidance . For example, when individuals have a better knowledge of the tax system or make unjustified declarations, they can reduce their tax burden by taking advantage of certain allowances or deductions.” Columns (1)-(5) differ in the included sets of covariates. (1): no covariates, (2): gender, age, marital status, household size, employment status, retirement status, and education, (3): (2) plus perceived difficulty to declare taxes, (4): (3) plus net household income, (5): (4) plus political preferences. The scale of the outcome variable is 1 (add to a fair income distribution) to 6 (higher incomes benefit). Robust standard errors are in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 5: Exp 2: Effect on Preferences for Tax Simplification

	(1)	(2)	(3)	(4)	(5)
<b>Experimental Group Reference category: Control</b>					
Economic Efficiency	-0.197* (0.109)	-0.216** (0.109)	-0.229** (0.105)	-0.237** (0.105)	-0.240** (0.105)
Special Interest	-0.064 (0.097)	-0.062 (0.097)	-0.055 (0.094)	-0.068 (0.095)	-0.067 (0.095)
Constant	5.084*** (0.066)	4.588*** (0.160)	3.928*** (0.222)	3.993*** (0.232)	3.960*** (0.232)
N	2187	2134	2114	2114	2114
Demographics	No	Yes	Yes	Yes	Yes
Tax difficulty	No	No	Yes	Yes	Yes
Household Income	No	No	No	Yes	Yes
Political Preference	No	No	No	No	Yes

Notes: The table presents the effects of the randomized treatment interventions of the second experiment on preferences for tax simplification. This is estimated by OLS regressions of preferences for tax simplification on treatment dummies and a full set of interactions of the treatment groups of the first and second experiment. Tax simplification is measured on a 6 point scale based on the question: “Now that we have dealt extensively with various aspects of the German tax system in this survey, we would like to ask again: do you generally believe that the income tax system should be simplified in Germany?” The experimental groups are: Control group, Economic efficiency group and Special interest group. Control is omitted, implying that the effects are relative to the Control Group. All participants receive the following information: “We would like to once again address the ongoing debate concerning whether the income tax system is too complicated due to the many possible deductions and allowances.” Participants in the Economic efficiency group receive the following information: “One argument that is often used against tax simplification and that has not been addressed so far is that a tax system with many deductions and allowances provides better opportunities to tax individuals in accordance with their ability to pay and is therefore economically more efficient.” Participants in the Special interest group receive the following information: “One argument that is often used against tax simplification and that has not been addressed so far is that a tax system with many deductions and allowances offers special interest groups greater opportunity for obtaining exemptions.” Columns (1)-(5) all include a full set of interactions of the treatment groups of the first and second experiment, they differ in the additionally included sets of covariates. (1): no additional covariates, (2): gender, age, marital status, household size, employment status, retirement status, and education, (3): (2) plus perceived difficulty to declare taxes, (4): (3) plus net household income, (5): (4) plus political preferences. The scale of the outcome variable is 1 (absolutely not) to 6 (absolutely). Robust standard errors are in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

# Appendix

## Additional Figures and Tables

Table 6: Balancing Tests First Experiment

Variable	Redistribution	Avoidance	Control
<b>Gender: Reference category Male</b>			
Sex	0.022 (0.019)	-0.029 (0.019)	0.002 (0.019)
<b>Marital status: Reference category: Not married</b>			
Married	0.013 (0.019)	0.029 (0.019)	-0.036* (0.019)
<b>Unemployed: Reference category: Employed</b>			
Unemployed	-0.011 (0.074)	-0.061 (0.074)	0.063 (0.074)
<b>Retirement status: Reference category: Not retired</b>			
Retired	0.042* (0.023)	0.016 (0.023)	-0.042* (0.023)
<b>Household size:</b>			
HH-size	-0.007 (0.009)	0.012 (0.009)	-0.008 (0.009)
<b>Education:</b>			
Education	-0.010 (0.011)	-0.011 (0.011)	0.002 (0.011)
<b>Household net income: Reference category poor</b>			
2	-0.006 (0.036)	0.031 (0.035)	-0.016 (0.036)
3	-0.030 (0.036)	0.065* (0.035)	-0.032 (0.035)
4	-0.032 (0.037)	0.047 (0.037)	-0.010 (0.037)
Rich	-0.020	0.041	-0.014

	(0.038)	(0.037)	(0.037)
No income stated	-0.033	0.053	-0.001
	(0.040)	(0.040)	(0.040)
<hr/>			
<b>Age category:</b>			
Age	0.017**	-0.004	-0.007
	(0.007)	(0.007)	(0.007)
<hr/>			
<b>Political orientation: Reference category: Left-wing</b>			
Conservative	-0.022	-0.056***	-0.033
	(0.021)	(0.021)	(0.021)
Non partisans	-0.051	-0.003	0.050
	(0.037)	(0.037)	(0.037)
<hr/>			
<b>Difficulty in declaring taxes: Reference category: No difficulty</b>			
2	0.022	0.099	-0.022
	(0.063)	(0.063)	(0.063)
3	-0.066	0.116*	-0.050
	(0.060)	(0.060)	(0.060)
4	-0.059	0.064	-0.005
	(0.060)	(0.060)	(0.060)
Very difficult	-0.012	0.020	-0.009
	(0.063)	(0.063)	(0.063)
No taxes declared	-0.055	0.086	-0.031
	(0.065)	(0.065)	(0.065)
Taxes not self declared	-0.030	0.089	-0.059
	(0.059)	(0.059)	(0.059)
<hr/>			

Notes: Randomization checks for the first experiment. The table shows the coefficients and standard errors (in parentheses) from a series of regressions of the form:  $y_i = \beta Covariate_i + \epsilon_i$ . Where  $Covariate_i$  is the respective covariate listed above. In Column (1)  $y_i$  equals 1 if participant  $i$  is in the redistribution group and 0 otherwise. In Column (2),  $y_i$  equals 1 if participant  $i$  is in the avoidance group and 0 otherwise. In Column (3),  $y_i$  equals 1 if participant  $i$  is in the control group and 0 otherwise. Standard errors are in parentheses \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table 7: Balancing Tests Second Experiment

Variable	Economic efficiency	Special interest	Control
<b>Gender. Reference category Male</b>			
Sex	-0.025 (0.033)	0.021 (0.034)	-0.001 (0.033)
<b>Marital status: Reference category: Not married</b>			
Married	-0.038 (0.034)	0.032 (0.034)	0.012 (0.033)
<b>Unemployed: Reference category: Employed</b>			
Unemployed	0.302** (0.118)	-0.165 (0.120)	-0.134 (0.118)
<b>Retirement status: Reference category: Not retired</b>			
Retired	0.031 (0.041)	-0.002 (0.042)	-0.026 (0.041)
<b>Household size:</b>			
HH-size	-0.01 (0.016)	0.009 (0.016)	-0.002 (0.015)
<b>Education:</b>			
Education	-0.018 (0.019)	0.011 (0.019)	0.009 (0.019)
<b>Household net income: Reference category poor</b>			
2	-0.069 (0.061)	0.027 (0.062)	0.043 (0.062)
3	-0.012 (0.061)	-0.008 (0.062)	0.020 (0.062)
4	-0.138** (0.063)	0.063 (0.064)	0.075 (0.063)
Rich	-0.092 (0.064)	-0.004 (0.065)	0.088 (0.065)
No income stated	-0.014 (0.068)	0.090 (0.069)	-0.086 (0.067)

<b>Age category:</b>			
Age	-0.004 (0.012)	0.014 (0.013)	-0.008 (0.012)
<b>Political orientation: Reference category: Left-wing</b>			
Conservative	-0.007 (0.036)	-0.019 (0.037)	0.026 (0.036)
Non partisans	0.141** (0.059)	-0.160*** (0.060)	0.022 (0.059)
<b>Difficulty in declaring taxes: Reference category: No difficulty</b>			
2	-0.025 (0.104)	-0.009 (0.106)	-0.125 (0.103)
3	0.117 (0.101)	0.021 (0.102)	-0.145 (0.100)
4	0.135 (0.099)	0.050 (0.101)	-0.191* (0.098)
Very difficult	0.206** (0.104)	-0.091 (0.106)	-0.115 (0.103)
No taxes declared	0.175 (0.108)	0.021 (0.110)	-0.197* (0.107)
Taxes not self declared	0.116 (0.098)	0.012 (0.100)	-0.128 (0.097)

Notes: Randomization checks for the second experiment. The table shows the coefficients and standard errors (in parentheses) from a series of regressions of the form:  $y_i = \beta Covariate_i + \epsilon_i$ . Where  $Covariate_i$  is the respective covariate listed above. Sample restricted to those participants who were in the control group in the first experiment. In Column (1)  $y_i$  equals 1 if participant i is in the economic efficiency group and 0 otherwise. In Column (2),  $y_i$  equals 1 if participant i is in the special interest group and 0 otherwise. In Column (3),  $y_i$  equals 1 if participant i is in the control group and 0 otherwise. Standard errors are in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 8: Exp 1: Effect on Preferences for Tax Simplification. Ordered Probit

	(1)	(2)	(3)	(4)	(5)
<b>Experimental Group Reference category: Control</b>					
Redistribution	-0.109*	-0.123**	-0.144**	-0.146**	-0.144**
	(0.060)	(0.061)	(0.062)	(0.062)	(0.062)
Avoidance	-0.041	-0.038	-0.024	-0.024	-0.019
	(0.059)	(0.060)	(0.061)	(0.061)	(0.061)
Constant	-0.120***	0.482***	1.537***	1.499***	1.516***
	(0.043)	(0.150)	(0.216)	(0.227)	(0.228)
N	2190	2132	2109	2109	2109
Demographics	No	Yes	Yes	Yes	Yes
Tax difficulty	No	No	Yes	Yes	Yes
Household Income	No	No	No	Yes	Yes
Political Preference	No	No	No	No	Yes

Notes: The table presents the effects of the randomized treatment interventions on preferences for tax simplification. Estimated by an ordered probit regressions of preferences for tax simplification on treatment dummies. Tax simplification is measured on a 6 point scale based on the question: “Do you generally think that the income tax system in Germany needs to be simplified?” The experimental groups are: Control group, Redistribution group and Avoidance group. Control is omitted, implying that the effects are relative to the Control Group. All participants receive the following information: “In Germany there is an ongoing debate on whether the income tax system is too complicated because of many deduction possibilities and allowances.” Participants in the Redistribution group receive the following information: “However, it is sometimes also argued that a tax system with many deduction possibilities and allowances has a social-policy and redistributive compensation role. For example, tax deductions can be used to reduce the tax burden of taxpayers who are disadvantaged by circumstances.” Participants in the Avoidance group receive the following information: “In this context, one argument is that a tax system with many deduction possibilities and allowances offers more scope for tax avoidance and tax adjustment. For example, tax deductions can be used to reduce one’s own tax burden through better knowledge of the tax system or through unjustified specifications in the tax return.” Columns (1)-(5) differ in the included sets of covariates. (1): no covariates, (2): gender, age, marital status, household size, employment status, retirement status, and education, (3): (2) plus perceived difficulty to declare taxes, (4): (3) plus net household income, (5): (4) plus political preferences. Robust The scale of the outcome variable is 1 (absolutely not) to 6 (absolutely). Robust standard errors are in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 9: Exp 1: Effect on Distributional Effects of Complexity. Ordered Probit

	(1)	(2)	(3)	(4)	(5)
<b>Experimental Group Reference category: Control</b>					
Redistribution	-0.004 (0.058)	-0.007 (0.059)	-0.010 (0.059)	-0.004 (0.059)	-0.004 (0.060)
Avoidance	0.079 (0.059)	0.092 (0.060)	0.109* (0.061)	0.110* (0.061)	0.120** (0.061)
Constant	0.463*** (0.046)	0.976*** (0.142)	1.216*** (0.195)	1.229*** (0.211)	1.238*** (0.211)
N	1998	1946	1931	1931	1931
Demographics	No	Yes	Yes	Yes	Yes
Tax difficulty	No	No	Yes	Yes	Yes
Household Income	No	No	No	Yes	Yes
Political Preference	No	No	No	No	Yes

Notes: The table presents the effects of the randomized treatment interventions on beliefs about whether people think that deductions work in favor of the rich. Estimated by an ordered probit Regressions of believes on treatment dummies. The outcome is measured on a 6 point scale based on the question: ‘Do you think that numerous deductions and allowances contribute to a fairer distribution of income, or do you believe that high-income citizens benefit more from these deductions and allowances?’ The experimental groups are: Control group, Redistribution group and Avoidance group. Control is omitted, implying that the effects are relative to the Control Group. All participants receive the following information: “In Germany there is an ongoing debate on whether the income tax system is too complicated because of many possible deductions and allowances.” Participants in the Redistribution group receive the following information: “However, it is sometimes also argued that a tax system with many possible deductions and allowances has an important social-policy role, particularly in relation to income redistribution. For example, tax deductions can be used to reduce the tax burden of taxpayers who are disadvantaged by circumstances” Participants in the Avoidance group receive the following information: “In this context, one argument is that a tax system with many possible deductions and allowances offers greater opportunity for tax avoidance . For example, when individuals have a better knowledge of the tax system or make unjustified declarations, they can reduce their tax burden by taking advantage of certain allowances or deductions.” Columns (1)-(5) differ in the included sets of covariates. (1): no covariates, (2): gender, age, marital status, household size, employment status, retirement status, and education, (3): (2) plus perceived difficulty to declare taxes, (4): (3) plus net household income, (5): (4) plus political preferences. Robust The scale of the outcome variable 1 (add to a fair income distribution) to 6 (higher incomes benefit). Robust standard errors are in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 10: Exp 2: Effect on Preferences for Tax Simplification. Ordered Probit


	(1)	(2)	(3)	(4)	(5)
<b>Experimental Group Reference category: Control</b>					
Economic Efficiency	-0.153 (0.102)	-0.182* (0.105)	-0.210** (0.108)	-0.220** (0.108)	-0.224** (0.108)
Special Interest	-0.041 (0.096)	-0.037 (0.098)	-0.023 (0.101)	-0.038 (0.101)	-0.035 (0.101)
Constant	0.048 (0.068)	0.527*** (0.155)	1.145*** (0.205)	1.066*** (0.218)	1.107*** (0.219)
N	2187	2134	2114	2114	2114
Demographics	No	Yes	Yes	Yes	Yes
Tax difficulty	No	No	Yes	Yes	Yes
Household Income	No	No	No	Yes	Yes
Political Preference	No	No	No	No	Yes

Notes: The table presents the effects of the randomized treatment interventions of the second experiment on preferences for tax simplification. Estimated by an ordered probit regressions of preferences for tax simplification on treatment dummies and a full set of interactions of the treatment groups of the first and second experiment. Tax simplification is measured on a 6 point scale based on the question: “Now that we have dealt extensively with various aspects of the German tax system in this survey, we would like to ask again: do you generally believe that the income tax system should be simplified in Germany?” The experimental groups are: Control group, Economic efficiency group and Special interest group. Control is omitted, implying that the effects are relative to the Control Group. All participants receive the following information: “We would like to once again address the ongoing debate concerning whether the income tax system is too complicated due to the many possible deductions and allowances.” Participants in the Economic efficiency group receive the following information: “One argument that is often used against tax simplification and that has not been addressed so far is that a tax system with many deductions and allowances provides better opportunities to tax individuals in accordance with their ability to pay and is therefore economically more efficient.” Participants in the Special interest group receive the following information: “One argument that is often used against tax simplification and that has not been addressed so far is that a tax system with many deductions and allowances offers special interest groups greater opportunity for obtaining exemptions ” Columns (1)-(5) differ in the included sets of covariates. (1): no covariates, (2): gender, age, marital status, household size, employment status, retirement status, and education, (3): (2) plus perceived difficulty to declare taxes, (4): (3) plus net household income, (5): (4) plus political preferences. The scale of the outcome variable is 1 (absolutely not) to 6 (absolutely). Robust standard errors are in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

# Illustration of treatment conditions

## First experiment

Figure 17: Redistribution treatment

 Gesellschaft im Wandel


Hilfe

In Deutschland wird immer wieder diskutiert, ob das Einkommensteuersystem wegen vielfacher Abzugsmöglichkeiten und Freibeträgen zu kompliziert ist.

Andererseits wird auch argumentiert, dass ein Steuersystem mit vielen Abzugsmöglichkeiten und Freibeträgen eine sozial- und verteilungspolitische Ausgleichsfunktion hat. Zum Beispiel können Steuerabzugsmöglichkeiten eingesetzt werden, um Steuerzahler, die aus unverschuldeten Gründen benachteiligt sind, steuerlich besser zu stellen.

Weiter >

Figure 18: Avoidance treatment

 Gesellschaft im Wandel

Hilfe


In Deutschland wird immer wieder diskutiert, ob das Einkommensteuersystem wegen vielfacher Abzugsmöglichkeiten und Freibeträgen zu kompliziert ist.

Dabei wird unter anderem argumentiert, dass ein Steuersystem mit vielen Abzugsmöglichkeiten und Freibeträgen mehr Raum für Steuerumgehungen und -anpassungen bietet. Zum Beispiel können Steuerabzugsmöglichkeiten genutzt werden, um die eigene Steuerzahlung, aufgrund besserer Kenntnis des Steuersystems oder aufgrund ungerechtfertigter Angaben in der Steuererklärung, zu reduzieren.

Weiter >

## Second experiment

Figure 19: Economic efficiency treatment

 Gesellschaft im Wandel


Hilfe

Wir würden gerne erneut die Diskussion ansprechen, ob das deutsche Einkommensteuersystem wegen vielfacher Abzugsmöglichkeiten und Freibeträgen zu kompliziert ist.

Ein bisher noch nicht behandeltes Argument, das oft **gegen** Steuervereinfachung angebracht wird, ist, dass ein Steuersystem mit vielen Abzugsmöglichkeiten und Freibeträgen bessere Möglichkeiten bietet, entsprechend der persönlichen Leistungsfähigkeit zu besteuern und dadurch ökonomisch effizienter ist.

Weiter >

Figure 20: Special interest group treatment


Gesellschaft  
im Wandel

Hilfe

Wir würden gerne erneut die Diskussion ansprechen, ob das deutsche Einkommensteuersystem wegen vielfacher Abzugsfähigkeiten und Freibeträgen zu kompliziert ist.

Ein bisher noch nicht behandeltes Argument, das oft **für** eine Steuervereinfachung angebracht wird, ist, dass ein Steuersystem mit vielen Abzugsmöglichkeiten und Freibeträgen Interessensgruppen mehr Spielraum bietet, Ausnahmen für die eigene Klientel auszuhandeln.

Weiter >

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## Detailed Questionnaire

This appendix section presents the translated survey questions including reply categories. The order of presentation and the numbering of the question corresponds with the description of the survey structure in section 3.2.

- **Introduction:** *In the following, we would like to ask you some questions about the tax system in Germany. We will focus in particular on rules surrounding the income tax and whether they are complicated or easy to understand. Whether a tax system is generally complicated or easy to understand depends in particular on the number of possible deductions and allowances.*
- **Q1:** How difficult is it for you to fill out your tax return?  
*1 Very easy;...; 5 Very difficult; I do not know because no taxes are declared in my name; I do not know because I do not declare taxes myself (rather, my partner or a tax consultant, etc. does this); I do not know*
- **Randomized Experiment 1:** See body of the text (section 3.3) and section 5 above.
- **Q2:** Do you generally think that the income tax system in Germany needs to be simplified?  
*1 Absolutely not;...; 6 Absolutely; I do not know*
- **Q3:** Do you generally believe that the income tax system in Germany is in need of reform?  
*1 Absolutely not;...; 6 Absolutely; I do not know*
- **Q4:** Do you think that numerous deductions and allowances contribute to a fairer distribution of income, or do you believe that high-income citizens benefit more from these deductions and allowances?  
*1 They contribute to fairer income distribution;...; 6 High-income citizens benefit; I do not know*

- **Q5:** Which of the following measures to simplify the income tax system would you like the most? Assume the proposed measures will lead to unchanged tax revenues in each case.

*Same rate for all but no deductions and allowances; Same rate for all and same deductions and allowances as under current system; More progressive tax rates and no deductions and allowances; Automatic determination of amounts in income tax declaration; No change; Other measure [insert text]; I do not know*

- **Introduction for Q6-8** Imagine two persons, A and B. Which person do you think should pay more taxes in the following situation?

- **Q6:** In contrast to Person B, Person A has a poor mother in need of elderly care and has to spend a considerable amount of her income for the care of her mother. Person A and B have the same gross income and are very similar in all other respects. (randomize order of answer categories)

*Person A should pay higher taxes; Person B should pay higher taxes; Person A and B should pay equal tax amounts*

- **Q7:** Person A spends a considerable amount of her income on charitable giving. Person B does no such thing. Both Person A and B have the same gross income and are very similar in all other respects. (randomize order of answer categories)

*Person A should pay higher taxes; Person B should pay higher taxes; Person A and B should pay equal tax amounts*

- **Q8:** Person A has to travel a considerable distance to work. Person B lives very close to work. Both Person A and B have the same gross income and are very similar in all other respects.(randomize order of answer categories)

*Person A should pay higher taxes; Person B should pay higher taxes; Person A and B should pay equal tax amounts*

- **Randomized Experiment 2:** See body of the text (section 3.3) and section 5 above.

- **Q9:** Now that we have dealt extensively with various aspects of the German tax system in this survey, we would like to ask again: do you generally believe that the income tax system should be simplified in Germany?

*1 Absolutely not;...; 6 Absolutely; I do not know*

- **Q10:** Which of the following deductions and/or allowances do you usually use when filing your income tax?

*Maintenance of two households; Home office; Commuting allowance; Other job*

*related expenditures; Pension expenses; Education costs; Care relatives; Child allowance, childcare; Donations; Others [insert text]; No deductions; I do not know*



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