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Aligning preferences for redistribution of right and left wing voters by correcting their beliefs about inequality: Evidence from a randomized survey experiment in Australia.

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Abstract

Are differences in preferences for redistribution between right and left wing voters amplified because of misperceptions of inequality? To answer this question, we conduct a nationally representative, randomized survey experiment of 2,584 Australians in which respondents either received information about the level of national inequality and economic mobility, their position in the national income distribution, or no information. We show that both types of information about inequality lead to convergence in preferences for redistribution and charitable giving between right and left wing voters. The effect from the treatments are predominantly due to right wing voters becoming more progressive in their views.

JEL Codes: D31, D63, D72, D83, O50, P16, H23

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1 Introduction

The government's role in reducing inequality is one of the most divisive economic issues across the political spectrum. Right wing voters tend to believe that there is a limited role for the government in redistributing income across society for a range of reasons, such as believing that individuals have the capacity to work hard to improve their own living standards. In contrast, left wing voters tend to be more in favour of government led redistribution, which is motivated by a number of factors such as being more pessimistic about the ability of individuals to change the circumstances they are born into on their own. In light of increasing political polarization across a number of countries, it is important to distinguish to what extent these divisions are a result of fundamental ideological differences in preferences for redistribution between right and left wing voters, versus differences in perceptions about the extent of inequality in society.

Recent research across countries suggests that differences in preferences for redistribution are based on several misperceptions about inequality (Gimpelson and Treisman 2018, Hauser and Norton 2017). People tend to (1) underestimate the level of inequality in their country, (2) overestimate the degree of upward mobility, and (3) believe they are in the middle of the national income distribution regardless of whether they are rich or poor (Gimpelson and Treisman 2018, Hauser and Norton 2017). This raises the question: how would peoples' preferences for redistribution change if their underlying misperceptions were corrected? And would this increase or reduce polarization between right and left wing voters' preferences for redistribution?

To develop a better understanding of how information about inequality shifts peoples' support for redistribution, and whether this effect varies between right and left wing voters, we conduct a nationally representative¹, randomized survey experiment of 2,584 people in Australia. Respondents are randomly allocated to either receive information about the level of inequality and mobility in Australia (Treatment A), their position in the national income distribution (Treatment B), or no information (Control). This allows us to test whether the elasticity of peoples' preferences for redistribution varies by the kind of misperception of inequality that the treatment tries to correct. Prior to

¹Based on age, gender and location.

receiving the treatment, respondents provide information about their voting preferences (along with other background characteristics) and their existing perceptions of inequality. Following the treatment, respondents answer a range of questions on their beliefs about inequality, their support for redistribution, and policy preferences². As an alternative, real-stakes measure of willingness to redistribute wealth to address inequality, we also examine how the treatments affected peoples' willingness to make a financial contribution towards a large charity working to address inequality in Australia.

Conventional economic theory suggests that informing people that inequality is worse than they expected, upward mobility is more limited than they expected, or letting people know they are relatively poorer than they expected, increases their support for redistribution (the opposite is true for letting people know they are relatively richer than they expected) (e.g., Meltzer and Richard 1981, Benabou and Ok 2001, Piketty 1995, Fehr and Schmidt 1999). However, there is limited guidance from existing studies to date as to whether right wing or left wing voters preferences' for redistribution are more elastic to information and if correcting misperceptions about inequality would increase or reduce polarization across the political spectrum (Hauser and Norton 2017). Among the small number of randomised survey experiments on this topic, only two have detected differences between respondents based on their political views (Alesina et al 2018A, Karadja et al 2018). Alesina et al (2018A) show that correcting typically overly optimistic views about economic mobility in the United States only leads left wing respondents to become more supportive of redistribution, whereas Karadja et al (2018) show that informing right wing respondents in Sweden they are richer than they expected reduces their support for redistribution. Most of the previous survey experiments on this topic lack adequate statistical power to explore these kinds of heterogeneous treatment effects due to small sample sizes and none of them tested the elasticity of preferences for redistribution to different types of information.

We show that the two key determinants of people's support for redistribution are their existing perceptions of inequality and their voting preferences. The provision of information that aims to correct these misperceptions tends to boost respondents' support

²These questions are based on an approach that has been used in a number of prior studies in the area, e.g., ISSP 2009, Indrakesuma et al 2015, Alesina et al 2018A, Koziol 2018.

for redistribution. This treatment effect is largely driven by right wing voters. Hence correcting people's misperceptions of inequality leads to convergence between right and left wing respondents' preferences for redistribution. Respondents who are told about the level of inequality and economic mobility in Australia become more pessimistic about upward mobility, more likely to desire urgent action from the government to reduce inequality, and less supportive of traditionally right wing policies (such as cutting corporate taxes). With regards to correcting beliefs about respondents' own position in the national income distribution, respondents who are told they are poorer than they expected are less likely to attribute being rich to hard work and more supportive of urgent action by the government to address inequality. There is no meaningful impact from informing people they are richer than they expected, except that they are more likely to state that people are rich primarily due to hard work. In addition, there are very few statistically significant differences in effects between the two treatment groups, suggesting that respondents preferences are not finely attuned to different forms of inequality.

We also show that information about inequality leads to convergence between the level of charitable giving provided by right and left wing voters. However, unlike the level of support for government-led redistribution, right wing voters in the control group are more likely to donate than left wing voters (even after controlling for background characteristics). Both of the treatments lower the propensity of right wing voters to be less likely to donate to a large charity working to reduce inequality in Australia. The effect of the information is large enough to close the pre-existing difference in charitable giving between right wing and other types of voters.

While based on a representative sample of Australian respondents, our study makes three significant contributions to the global literature on this topic, both in scope, and in leveraging unique features of the Australian political system. Firstly, the combination of our survey design and unique features of the political system in Australia delivers substantially more statistical power to test heterogeneous treatment effects between right and left wing voters. This allows us to show that preferences of right wing voters preferences are more elastic to information and that correcting misperceptions of inequality leads to convergence across the political spectrum. Previous studies on this topic conducted in other countries only have around 1,000 respondents (split evenly between a

treatment and control groups) (Karajda et al 2018, Cruces et al 2013, Bublitiz 2016), and only a much smaller share actually votes in national elections (as voting is not mandatory). In contrast, in our study the sample size in each treatment group is considerably larger (around 860 respondents in each group) and all survey respondents are voters (as voting is compulsory).

Secondly, beyond measuring respondents' preferences, we test the effect of the treatments on a real-stakes measure of charitable giving and also find convergence between right and left wing voters. However behaviour changes in the opposite direction, i.e. right wing voters become less generous despite becoming more supportive of redistribution. Our analysis adds to a literature that solely focuses on changes in preferences, which may be different from changes in behavior. Related research suggests that peoples' views about the role of the government and charitable giving tend to align (Nair 2018, Alesina et al 2018B), but these studies do not include treatments related to national inequality.

Thirdly, we test the effect of correcting two different types of existing misperceptions of inequality and we show that both treatments have similar effects on preferences to redistribution. This is the first study to rigorously test the elasticity of people's preferences for redistribution to different types of information about inequality. Previous studies only included one treatment group, which means that it is difficult to infer whether peoples' preferences are more elastic to information about the macro situation (i.e. level of inequality and mobility) or their own circumstances within their country.

The rest of this paper is structured as follows. In the second section, we outline the context of the study and the related literature on this topic. This is followed by a description of the methodology and some stylized facts that emerged from the survey data. We then outline the findings of the randomised survey experiment and discuss the implications.

2 Background

2.1 Background on the political context in Australia

Studying the current political context and voters' preferences for redistribution in Australia is relevant for an Australian and international audience for a number of reasons. Firstly, the democratic political system is comparable to that of the United States and the United Kingdom, where only two parties have ever formed national governments since the Second World War (a right wing leaning party and a left wing leaning party). A relatively unique feature of Australian politics is that voting is compulsory, which we leverage to address the research question about differences between right and left wing voters.

Secondly, similar to the case in most high-income countries, the state of the economy is the consistently the number one issue that voters consistently mention to be the deciding factor when casting their vote. For example, in the lead up to the most recent national election where there was a change in government the economy outperformed the second most popular issue (immigration) that voters mentioned as deciding their vote by more than 200 per cent (ABC 2013).

Thirdly, one of the most divisive economic policies in 2018, where the two main parties differ, is whether tax cuts should be given to large corporations³. This contentious issue also exists in a number of other large Western democracies like the United States (e.g. see Alesina et al. 2018A). A nationally representative survey that was conducted three months prior to this study shows that over 70 per cent of right wing voters in Australia support corporate tax cuts, while only around a third of other types of voters are supportive of corporate tax cuts (Koziol 2018).

For the purposes of this study, respondents that intend to vote for the Liberal Party of Australia at the next federal election are considered to be right wing ⁴, while respondents that intend to vote for the Labour Party of Australia are considered to be left wing voters. It is important to note that despite the name, the Liberal party is actually considered

³Corporations with a revenue of over 50 million Australian dollars a year.

⁴We also include respondents who would vote for the National Party of Australia as right wing voters because they are part of a coalition government with the Liberal party. The National party only receives around three per cent of the primarily vote among respondents in our survey.

to be relevantly conservative by international standards. The name originates from a common goal among its members of achieving "economic liberalism"⁵. The characteristics associated with being a right wing voter in Australia are shown in Table A1 in the Appendix. On average, they are more likely to be richer, older and have received a tertiary education than other types of voters.

2.2 Background information about inequality in Australia

Over the last 27 years, Australia has been experiencing the longest consecutive period of economic growth for any OECD country and income inequality has only risen slightly (ABS 2019). According to the Australian Bureau of Statistics, the GINI coefficient of equivalised disposable household income has ranged from a low of 0.30 to a high of 0.34 over this period (ABS 2019). This means income inequality (measured by the GINI coefficient) in Australia is slightly above the average of OECD countries (OECD 2019). However the degree of economic mobility, measured in terms of the intergenerational earnings elasticity, is slightly higher than the typical OECD country (Corak, 2016).

The composition of the Australian population in the different quintiles of the national income distribution varies considerably. People who are sole parents, aged above 65 years old, unemployed, from non-English speaking countries or those living outside capital cities are substantially more likely to be in the poorest quintile of the national income distribution than the rest of the population (ACOSS 2018). While people who are of working age, couples without children, work full-time or those in Sydney, Perth, Canberra or the Northern Territory are much more likely to be in the richest quintile of the national income distribution than the rest of the population (ACOSS 2018).

2.3 Background literature to how inequality relates to preferences for redistribution

Conventional theories of preferences for redistribution predict that countries with higher levels of inequality and lower levels of upward economic mobility should have greater sup-

 $^{^5\}mathrm{More}$ information about the name of the party can be found at: https://www.liberal.org.au/our-history

port for redistribution (e.g., Meltzer and Richard 1981, Benabou and Ok 2001, Piketty 1995, Fehr and Schmidt 1999). In addition, these theories assume that relatively poor people are the most in favour of redistribution because they are more likely to benefit (e.g., through the provision of welfare), whereas richer people are less in favour of redistribution because they are less likely to benefit (e.g., such as having to pay higher taxes) (e.g., Meltzer and Richard 1981). Both of these aspects of existing theory can be seen in the Meltzer-Richard Hypothesis (1981), which theorizes that the greater the difference between the median and mean income in a country, the greater the support for redistribution.

Recent evidence suggests that these conventional theories of preferences for redistribution need to be updated to account for a number of misperceptions about inequality (Gimpelson and Treisman 2018, Hauser and Norton 2017). For example, Norton et al (2011 and 2014) shows that Americans and Australians tend to dramatically underestimate the level of wealth inequality in their country. Similarly, Davadi (2015) and Alesina et al (2018A) provide evidence that Americans tend to overestimate the degree of upward mobility. In addition, Gimpelson and Treisman (2018) and Hoy and Mager (2019) illustrate that a "median bias" is prevalent in a range of countries (including Australia), which means most people think they are in the middle of the income distribution regardless of their actual position.

Collectively, the existing theoretical research on preferences for redistribution and misperceptions of inequality hypothesizes that:

- If people knew about the actual level of inequality and mobility in their country, they would be more supportive of redistribution.
- If people knew that they are relatively poorer (richer) than they expected, they would be more (less) supportive of redistribution

Only a relatively small number of randomized survey experiments tests the hypothesises above and the findings are mixed. Studies that have informed people of their position in the national income distribution often find an effect. Cruces et al (2013) show that informing people in Buenos Aires they are relatively poorer than they expected leads to greater support for redistribution. In contrast, Karajda et al (2018) and

Bublitiz (2016) show that informing people that they are richer than they expected in Northern Europe (Karajda in Sweden and Bublitz in Germany and Russia) reduces their support for redistribution. Interestingly, Karajda et al (2018) finds that the reduction in support is primarily driven by conservative voters.

Survey experiments that test how preferences for redistribution change when people are informed about the overall level of inequality or about limited mobility rarely find an effect. The exception is Alesina et al (2018A) who shows that providing left wing respondents with pessimistic information about mobility increases their support for redistribution in the United States, the United Kingdom and a number of countries in Western Europe. In contrast, a seminal study by Kuzimeko et al (2015) in the United States shows that providing detailed information about the level of inequality does not affect people's preferences for redistribution regardless of whether they state they are a Democrat or a Republican.

3 Methodology

3.1 Survey design

The randomized survey experiment was conducted with 2,584 respondents that make up a nationally representative sample of the Australian population (on the dimensions of age, gender and location). Data was collected using the survey firm IPSOS Mori, which regularly conducts online surveys to measure the Australian population's views on a range of political and social issues. On average, respondents are very similar to the Australian population across a broader range of characteristics, but the sample includes a disproportionate share of poorer households (see Table A2 in Appendix). The survey was in the field for approximately two weeks in late July and early August, 2018.

The survey consists of two sections; the first collects information about people's existing perceptions of inequality and demographic characteristics, while the second includes questions about people's beliefs about the causes of inequality and desire for government action. The demographic characteristics section (see Appendix for details) includes questions about who the respondent would vote for if there was an election today, their total household income, and the number of people in their household, so that the position of each respondent's household in the national income distribution can be determined.

To measure respondents' perception of the level of national inequality, previous studies have used a range of techniques, such as stylized distributions (ISSP 2009) or asking respondents to estimate the share of wealth in each quintile of the wealth distribution (Norton et al. 2011). We follow the rationale behind existing approaches, but we minimize measurement error by gathering people's perceptions on an ordinal scale (Kuhn 2015). Namely, respondents were asked to select one of six options that represented the distribution of income in their country, ranging from perfectly equal to extremely unequal (Figure 1).

[Insert Figure 1 here]

Respondents were also asked about which quintile they perceived their household to fall into in the national income distribution (Figure 2). This approach of using a limited number of options for respondents to select from is similar to other studies (e.g., Cruces et al. 2013 and Karadja et al. 2017), as asking respondents their exact percentile or rank in the distribution is likely to have a large margin of error. We compare respondents' perceived quintile in the national income distribution to their actual quintile in the national income distribution to determine if they accurately, under- (relatively richer than they expected) or overestimated (relatively poorer than they expected) their position.

[Insert Figure 2 here]

The second part of the survey includes questions on respondents' beliefs about the causes of inequality and their support for redistribution. These questions were sourced from previous studies, specifically the International Social Survey Programme (ISSP) (2009), Alesina et al. (2018A), Indrakesuma et al (2015) and Koziol (2018). A list of the questions that were asked is provided in the Appendix.

In addition, we measure respondents' willingness to make a financial contribution to a charity that works to address inequality in Australia. We do this by providing all respondents an extra Australian dollar for completing the survey (i.e., this is beyond their standard reimbursement) that they could keep for themselves or give to one of two charities (a social justice charity or a health-related charity). This is based on a similar question in Nair (2018) and Alesina et al (2018B).

3.2 Information treatments

Prior to answering the second section of the survey, respondents were randomly allocated to either receive information about the level of inequality and mobility in Australia (Treatment A; see Figure 3), their position in the income distribution (Treatment B; see Figure 4) or no information (the control group). Randomization ensures that the effect of Treatment A or B can be determined by comparing averages of answers to questions between the treatment and control groups. The randomization was successful, as there was only one statistically significant difference between treatment and control groups across demographic characteristics, with regards to the gender of the respondent (see Table A3 in Appendix). We control for this difference in our analysis.

The information treatments provided to respondents are similar to what was used in previous studies. Treatment B is almost identical to what was provided in studies by Cruces et al (2013) and Karadja et al (2017). In the case of Treatment A, we follow Alesina et al (2018A) and provide people with accurate, but pessimistic information about inequality and economic mobility as this simplifies the interpretation of the treatment effect (Alesina et al, 2018A). Specifically, we provide information about economic mobility in the same form as Alesina et al (2018A), who outline qualitatively the lack of economic mobility that exists in the United States. We use the same qualitative information since a similar situation of limited economic mobility exists in Australia (albeit not as extreme) (Corak, 2016). In regards to the level of inequality, we provide respondents with information about the level of wealth inequality in Australia. This is likely to exceed most people's perceptions about the level of wealth inequality, as reported in a study by Norton et al (2014).

[Insert Figure 3 here]

[Insert Figure 4 here]

3.3 Empirical model

We capture the effect of information by comparing average responses to the questions discussed above between each of the treatment groups relative to the control group. We pre-registered this study with the American Economic Association RCT registry (ID number AEARCTR-0002614) (Hoy 2017). We estimate a linear probability model using binary dependent variables (a linear probability model). This involves creating a dummy variable for each treatment group (T_A and T_B), which takes on the value 1 if the respondent belongs to the respective treatment group and the value 0 if the respondent belongs to the control group. We also create a dummy variable for the responses to each question in the Appendix, which takes on the value 1 if the respondent selects the outcome of interest in question j and the value 0 if the respondent does not select this option (Y_i). Our linear probability model regression can be written as follows:

$$Y_i = \beta_0 + \beta_1 T_A + \beta_2 T_B + X\gamma + \varepsilon,$$

where β_1 captures the average difference in the share of respondents in treatment group A and the control group that selected the outcome of interest in question j. β_2 captures the average difference in the share of respondents in treatment group B and the control group that selected the outcome of interest in question j. β_0 captures the share of respondents in the control group that selected the outcome of interest in question j. X is a set of control variables and ε is the model error term.

We estimate heterogeneous treatment effects from information in regards to people's perceived position in the distribution and their voting preferences. To do so we create a dummy variable for a given characteristic (A) that takes on the value of 1 if the respondents has characteristic A and the value of 0 if the respondent does not have characteristic A.

4 Descriptive analysis of study data

Almost 95 per cent of respondents misperceive either the level of inequality in Australia and/or their position in the national income distribution and these misperceptions are strongly correlated with respondents' voting preferences. Right wing voters are significantly more likely to underestimate the extent of inequality and state they belong to the middle quintile of the income distribution. We show the two key determinants of people's beliefs about inequality and support for redistribution are their existing perceptions of inequality as well as their voting preferences.

4.1 Right wing voters tend to perceive lower levels of income inequality

Around half of the Australian population perceive that the current level of income is extremely or very unequally distributed. Only 43 per cent of right wing voters perceive this is the case compared to 59 per cent of other types of voters (see Figure 5). Even after controlling for a range of background characteristics, being a right wing voter is still strongly correlated with perceiving lower levels of inequality (see Table A4 in the Appendix).

[Insert Figure 5 here]

4.2 Right wing voters are more likely to overestimate their relative position in the national income distribution

As has been documented in existing studies (e.g., Hoy and Mager 2019), people tend to perceive themselves to be in the middle of the income distribution regardless of their actual income percentile. This means that poorer individuals tend to overestimate their position and richer individuals tend to underestimate their position. Right wing voters in the poorest two quintiles of the national income distribution are more than 8 percentage points more likely to overestimate their position than other types of voters (see Figure

6) (this difference is over 10 percentage points after controlling for actual income levels as well as other background characteristics see Table A5 in the Appendix).

[Insert Figure 6 here]

4.3 Right wing voters are considerably less supportive of governmentled redistribution

The stylized facts above show that right wing voters tend to hold misperceptions about inequality that would make them less likely to support redistribution according to conventional economic theory. We show in Table 1 that even after controlling for these perceptions of inequality, right wing voters are still less likely to support redistribution. The results illustrate that the two key determinants of people's beliefs about inequality and support for redistribution would appear to be their existing perceptions of inequality as well as their voting preferences.

[Insert Table 1 here]

4.4 Right wing voters are more likely to give to charity, even after controlling for differences in the level of income between voters

To explore heterogeneity between types of voters beyond what the government should do to address inequality, all respondents are provided with an extra Australian dollar for completing the survey that they can keep for themselves or give to one of two charities (a social justice charity that aims to reduce inequality in Australia, or a health related charity). In contrast to support for redistribution, right wing voters are more likely to give to charity than other types of voters (including the social justice charity), even after controlling for background characteristics (see Table 2 below).

[Insert Table 2 here]

We show right wing voters are more likely to have pre-existing perceptions about inequality that economic theory predicts would make them less supportive of redistribution. This raises the question, if these misperceptions are corrected, does the gap between right wing and other voters remain? The survey experiment that follows tests whether this is the case and the extent to which correcting misperceptions closes this gap.

5 Results of the randomized survey experiment

We present the results of the survey experiment for each treatment group compared to the control group one by one below. In the Appendix, we show that there are almost no statistically significant differences in responses between the two treatment groups (see Tables A6-A8).

5.1 Information about the overall level of inequality and the degree of mobility increases support for redistribution by right wing voters

Respondents in the treatment group are substantially more likely to agree that people are poor due to being born in a poor family, desire urgent action by the government to reduce inequality, more likely to select providing free access to education and health care as the key policy the government should prioritise to reduce inequality in Australia, and are less likely to support tax cuts for large corporations compared to respondents in the control group (see Table 3).

[Insert Table 3 here]

These treatment effects are predominantly driven by right wing voters becoming more

progressive in their views (see Table 4). For example, right wing voters in the treatment group are 10.5 percentage points more likely to agree urgent action is required by the government to address inequality. This is more than twice as large as the treatment effect across all respondents (5.2 percentage points).

[Insert Table 4 here]

The size of the treatment effect, in terms of agreement that urgent action is required by the government to address inequality, is almost half of the pre-existing gap between right wing and other voters (see Figure 7). The difference between right wing and other voters in the control group is 22.2 percentage points, while the treatment effect is over 10 percentage points (10.5 percentage points with controls and 10.1 percentage points without controls).

[Insert Figure 7 here]

5.2 Information about a respondents' position in the income distribution makes right wing voters more likely to desire urgent action by the government to address inequality

This section presents the effect of information on respondents who overestimated their position in the income distribution, because there was little effect from the treatment on people who accurately or underestimate their position (see Tables A9-A12 in the Appendix). Respondents who are told that they are poorer than they expected are less likely to attribute wealth to hard work and more supportive of urgent action by the government (see Table 5). Similar to the case above, the effect of the treatment is twice as large among right wing voters as it is across all respondents (see Table 6). For example, while the treatment results in a 6.7 percentage point increase in the share of all respondents who agree urgent action is required by the government, there is a 13.3 percentage point increase in the share of right wing voters who agree.

[Insert Table 5 here]

[Insert Table 6 here]

The size of the treatment effect in terms of agreement that urgent action is required by the government to address inequality is more than half of the pre-existing gap between right wing and other voters (see Figure 8). The difference between right wing and other types of voters in the control group is 24.1 percentage points, while the treatment effect is over 13 percentage points (13.3 percentage points with controls and 13.4 percentage points without controls).

[Insert Figure 8 here]

5.3 The treatments also lead to convergence between types of voters in terms of charitable giving

Informing respondents about the level of inequality and mobility reduces the likelihood of right wing voters to give to the social justice related charity and increases their likelihood of keeping the money for themselves (see Table 7). The treatment closed the entire gap in existing differences in generosity between right wing and other types of voters (see Figure 9).

[Insert Table 7 here]

[Insert Figure 9 here]

Informing respondents that they are poorer than they expected (i.e., that they had overestimated their quintile in the distribution) results in right wing voters becoming less likely to donate to the social justice charity, but it does not change their likelihood

of keeping the money (see Table 8). Similar to the case above, the treatment closed the entire gap in existing differences in generosity between right wing and other types of voters (see Figure 10).

[Insert Table 8 here]

[Insert Figure 10 here]

6 Discussion

Collectively, our findings illustrate that existing misperceptions of inequality in Australia cause greater polarisation across the political spectrum than would be the case if people had accurate information. We show that simply presenting basic information about inequality leads to convergence in preferences and behavior between right wing and other types of voters. By doing so our study makes three substantive contributions to the existing literature on beliefs about inequality and preferences for redistribution.

Firstly, we show that right wing voters are more likely to have perceptions about inequality that economic theory predicts would make them less supportive of redistribution and their preferences for redistribution are more elastic to information than other types of voters. Therefore, correcting misperceptions about inequality led to convergence across the political spectrum in terms of preferences for redistribution. In addition, our results suggest that a lack of accurate information about the current distribution of income in Australia partly contributes to right wing voters preferring lower levels of government-led redistribution. Our findings are in contrast to the few studies to date, which suggest that these same types of information lead to greater polarization (Alesina et al 2018A, Karajda et al 2018).

Secondly, we show in the appendix that either providing information about the level of inequality and mobility or informing people that they are poorer than what they expected has similar effects on preferences for redistribution. This result is particularly striking as our study has greater power to detect differences between these treatment arms than prior

studies. This finding suggests that there is some degree of substitutability between the different treatments among the sub-population of people who overestimate their position in the national income distribution. As such it is possible that simply providing people with either of the two key types of information about inequality, which conventional theories of preferences for redistribution would imply should result in increased support of redistribution, is enough to change their views, as opposed to the exact content of the information. This is a considerable contribution to the existing literature, as previous survey experiments only included one treatment group and are left to speculate as to whether peoples' preferences are more elastic to information about the macro situation (i.e. level of inequality and mobility) or their own circumstances within their country (Hauser and Norton 2017).

Thirdly, we show that the treatments also lead to convergence between right and left wing voters in terms of charitable giving but the effect is in the opposite direction. Namely, right wing voters are more generous than other types of voters ex ante in terms of charitable giving and the treatments make them less generous, even though right wing voters are less supportive of government-led redistribution than other types of voters and the treatments make them more supportive. This suggests that differences in preferences for redistribution between right wing and other types of voters cannot be simply dismissed as differences in levels of compassion or empathy (or more formally differences in other regarding preferences). It also highlights that information about inequality may change people's views about the relative responsibility of the government in addressing inequality compared to non-state actors. This finding is in contrast to the limited related research to date that suggests alignment between how information effects people's views about government policies and their own charitable giving (Nair 2018, Alesina et al 2018B).

7 Conclusion

This study shows that information about inequality can reduce differences in preferences for redistribution between right and left wing voters. Ex ante, right wing voters are more likely to have perceptions about inequality, which economic theory predicts would

make them less supportive of redistribution. We show that information that tries to correct these misperceptions increases right wing voters' desire for urgent action by the government to reduce inequality and makes them more pessimistic about upward mobility. In addition, we show that the same information reduces charitable giving by right wing voters, but they were more generous in the first place.

Future research on perceptions of inequality and support for redistribution could focus on three main areas. Firstly, survey experiments could be conducted to tease out the substitutability of different types of information about inequality and to propose a theoretical framework for the pattern that we observe. Secondly, additional analysis is required about the relationship between people's preferences for government-led redistribution and non-state actors' role in redistribution. Finally, further research could be conducted to explore how the dissemination of information about inequality effects peoples' voting behavior.

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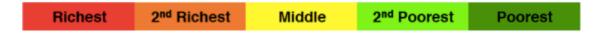
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9 Tables and figures

FIGURE 1: QUESTION ABOUT RESPONDENTS' PERCEPTION OF THE EXISTING LEVEL OF INEQUALITY

Assume the Australian population is broken into 5 income groups from richest to poorest, each with the same number of people.



Given the Australian population is around 25 million people, each of the groups consists of 5 million people.

Q1. How is income CURRENTLY distributed between these groups



Note: The most unequal distribution option is based upon the actual level of income inequality in South Africa. This is followed by the distribution in Indonesia, the United Kingdom and Norway. The two most equal distribution options are more equitable than what exists in any country in the world.

FIGURE 2: QUESTION ABOUT RESPONDENTS' PERCEIVED QUINTILE IN THE NATIONAL INCOME DISTRIBUTION

Q2. In which of these income groups would you place your household?

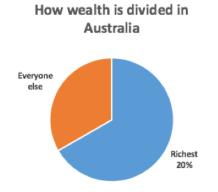


Note: This question was asked immediately following Q1 shown in Figure 1 above.

FIGURE 3: TREATMENT A: INFORMATION ABOUT THE LEVEL OF INEQUALITY AND DEGREE OF MOBILITY

The richest 20% of people in Australia have two-thirds of the country's wealth.

This leaves around 20 million people with only one-third of the country's wealth.



Recent research shows:

<u>FACT1</u> – Only very few children from poor Australian families ever become rich, the vast majority **stay poor** throughout their life.

<u>FACT2</u> – Children born into rich Australian families are extremely likely to **remain rich** when they grow up.

FIGURE 4: EXAMPLE OF TREATMENT B: INFORMATION ABOUT POSITION IN INCOME DISTRIBUTION

Based upon your reported income, your household is in the 'Poorest 20%'. This means around 20 million Australians are richer than you

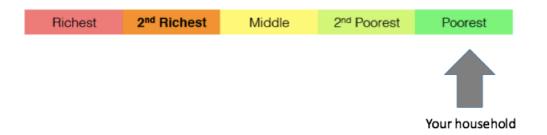
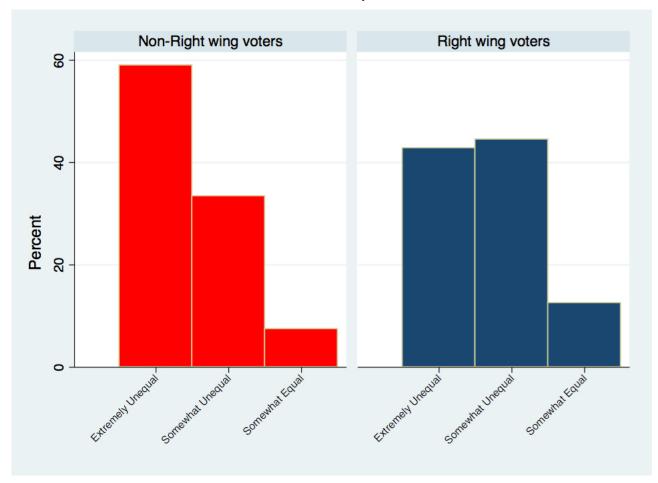


FIGURE 5: PERCEIVED LEVEL OF INEQUALITY BY TYPE OF VOTER



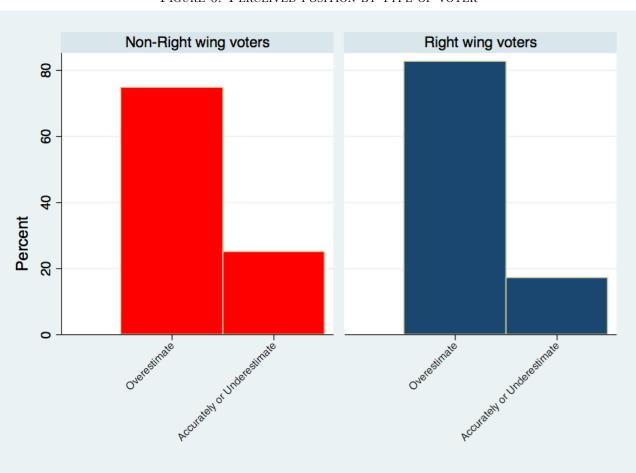


FIGURE 6: PERCEIVED POSITION BY TYPE OF VOTER

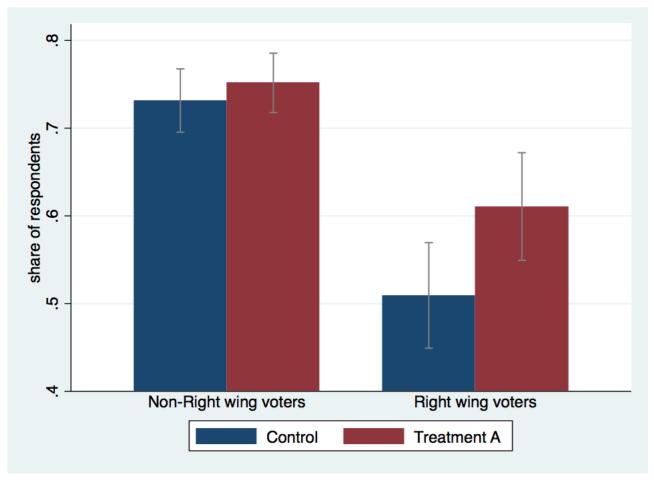
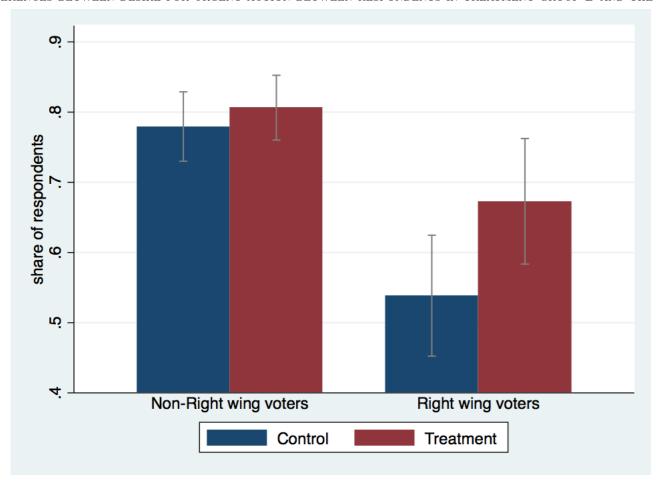


FIGURE 8: DIFFERENCES BETWEEN DESIRE FOR URGENT ACTION BETWEEN RESPONDENTS IN TREATMENT GROUP B AND THE CONTROL GROUP



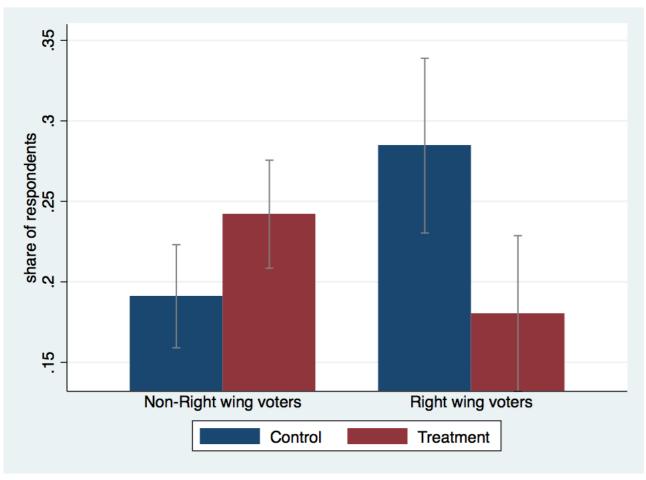


FIGURE 10: DIFFERENCES IN THE EFFECT OF TREATMENT B ON CHARITABLE GIVING BETWEEN TYPES OF RESPONDENTS

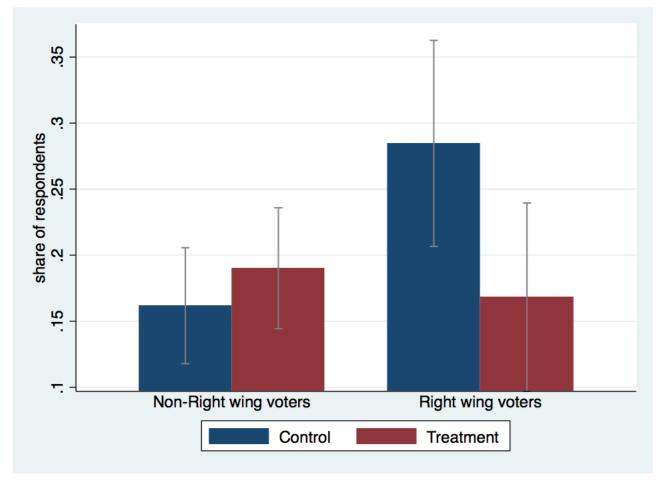


Table 1: Correlation between policy preferences and voting behaviour

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
Right wing voter	0.136***	-0.027	-0.186***	-0.095***	-0.045	0.354***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Bottom 40 per cent	-0.083*	-0.111**	0.120**	-0.009	0.008	-0.013
	(0.04)	(0.05)	(0.05)	(0.05)	(0.04)	(0.06)
Over 50 years old	0.039	0.004	-0.008	0.084***	-0.053*	-0.057
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Capital City	-0.026	0.095^{***}	-0.016	-0.056*	-0.008	-0.036
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Tertiary Education	0.031	-0.053	-0.003	-0.011	0.045	0.017
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Male	-0.015	-0.095***	-0.025	-0.006	-0.028	0.026
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Perceive High Inequality	-0.098***	0.030	0.195^{***}	0.267^{***}	0.027	-0.275***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Overestimate Position	0.114^{***}	0.086^{*}	-0.001	-0.030	-0.026	0.101^*
	(0.04)	(0.05)	(0.05)	(0.05)	(0.04)	(0.06)
Constant	0.197^{***}	0.311***	0.569***	0.594***	0.212***	0.520***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.06)
Observations	848	848	848	848	848	594 #

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

Note: this table is based on responses provided by the control group

Rich Hard Work - defined as respondent selecting hard work as the main reason why rich people are rich, Poor Family - defined as respondent selecting being born into a poor family as main reason why poor people are poor, Urgent Action - defined as respondent selecting they would like very urgent or urgent action by the government to reduce inequality, Tax Top 1% - defined as respondent preferring taxes to be increased on the richest one per cent of individuals as opposed to public services being cut, Education - defined as respondent selecting free and high quality education and medical care for all people as the main policies the government should prioritise to reduce inequality, Support Tax Cuts - defined as respondent selecting they support the lowering of corporate tax from 30 per cent to 25 per cent over the next 10 years.

Table 2: Correlation between policy preferences and charitable giving

	(1)	(2)	(3)
	Give to social justice charity	Give to health charity	Keep for yourself
Right wing voter	0.095***	0.037	-0.133***
	(0.03)	(0.04)	(0.04)
Bottom 40 per cent	-0.024	-0.054	0.078
	(0.05)	(0.05)	(0.05)
Over 50 years old	0.039	0.054	-0.094***
	(0.03)	(0.03)	(0.04)
Capital City	0.053^{*}	0.001	-0.054
	(0.03)	(0.03)	(0.03)
Tertiary Education	0.054^{*}	-0.043	-0.011
	(0.03)	(0.03)	(0.04)
Male	-0.092***	-0.024	0.116^{***}
	(0.03)	(0.03)	(0.03)
Perceive High Inequality	0.054^{*}	-0.001	-0.052
	(0.03)	(0.03)	(0.03)
Overestimate Position	-0.004	0.055	-0.050
	(0.04)	(0.05)	(0.05)
Constant	0.147***	0.340***	0.512***
	(0.04)	(0.05)	(0.05)
Observations	848	848	848

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

Note: this table is based on responses provided by the control group

The outcomes in the table above are based on answers provided by respondents to the following question: In addition, to your usual reimbursement for completing this survey, there is a bonus of \$1, which you can choose to do one of the following (Select one): 1. Donate to Cancer Council of Australia (Health Charity) 2. Donate to Smith family (Social Justice Charity) 3. Keep for yourself. Give to social justice charity is defined as the respondent selecting option 2 to the question above (this charity works to reduce inequality in Australia). Keep for yourself is defined as the respondent selecting option 3 to the question above.

Table 3: Effect of Treatment A on all respondents

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
Treatment A	-0.017	0.181***	0.052**	0.026	0.053***	-0.059**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
Bottom 40 per cent	-0.003	-0.022	0.130^{***}	-0.008	-0.048**	-0.028
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
Over 50 years old	0.023	0.008	0.002	0.109^{***}	-0.038*	-0.031
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
Capital City	-0.017	0.048**	0.003	-0.031	-0.015	-0.020
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
Tertiary Education	0.025	-0.016	-0.005	-0.034	0.062***	0.046
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
Male	0.019	-0.054**	-0.020	-0.014	-0.030	0.095^{***}
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
Constant	0.182^{***}	0.294***	0.593***	0.685^{***}	0.224***	0.466^{***}
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Observations	1720	1720	1720	1720	1720	1215#

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

Rich Hard Work - defined as respondent selecting hard work as the main reason why rich people are rich, Poor Family - defined as respondent selecting being born into a poor family as main reason why poor people are poor, Urgent Action - defined as respondent selecting they would like very urgent or urgent action by the government to reduce inequality, Tax Top 1% - defined as respondent preferring taxes to be increased on the richest one per cent of individuals as opposed to public services being cut, Education - defined as respondent selecting free and high quality education and medical care for all people as the main policies the government should prioritise to reduce inequality, Support Tax Cuts - defined as respondent selecting they support the lowering of corporate tax from 30 per cent to 25 per cent over the next 10 years.

Table 4: Effect of Treatment A on right wing respondents

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
Treatment A	-0.022	0.137***	0.105**	0.011	0.095***	-0.072
	(0.04)	(0.04)	(0.04)	(0.04)	(0.03)	(0.05)
Bottom 40 per cent	0.012	-0.015	0.079*	-0.067	-0.016	0.038
	(0.04)	(0.04)	(0.05)	(0.05)	(0.04)	(0.05)
Over 50 years old	0.034	-0.019	-0.047	0.072	-0.130***	0.093*
	(0.04)	(0.04)	(0.05)	(0.05)	(0.04)	(0.05)
Capital City	-0.065	0.074*	0.024	-0.019	-0.027	0.085^{*}
	(0.04)	(0.04)	(0.05)	(0.05)	(0.04)	(0.05)
Tertiary Education	0.048	-0.026	-0.004	-0.112**	0.041	0.015
	(0.04)	(0.04)	(0.05)	(0.05)	(0.04)	(0.05)
Male	0.031	-0.038	0.045	-0.045	-0.068*	0.085^{*}
	(0.04)	(0.04)	(0.04)	(0.04)	(0.03)	(0.05)
Constant	0.285^{***}	0.270^{***}	0.454^{***}	0.696***	0.250^{***}	0.592^{***}
	(0.06)	(0.06)	(0.06)	(0.06)	(0.05)	(0.07)
Observations	511	511	511	511	511	382#

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

Table 5: Effect of Treatment B on all respondents

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
Treatment A	-0.064**	-0.043	0.067**	0.043	-0.024	-0.047
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Bottom 40 per cent	-0.125	-0.254**	-0.025	0.144	0.167^{*}	-0.041
	(0.10)	(0.11)	(0.11)	(0.12)	(0.09)	(0.13)
Over 50 years old	0.005	-0.058*	-0.015	0.134^{***}	0.012	-0.111**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Capital City	0.008	0.089***	-0.061*	-0.031	0.007	0.035
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Tertiary Education	-0.013	-0.072**	0.019	-0.037	0.041	0.018
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.05)
Male	-0.023	-0.026	-0.064**	-0.035	-0.017	0.012
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Constant	0.367^{***}	0.551^{***}	0.785^{***}	0.511***	-0.011	0.613***
	(0.11)	(0.12)	(0.12)	(0.12)	(0.10)	(0.14)
Observations	793	793	793	793	793	557#

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

Table 6: Effect of Treatment B on right wing respondents

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
Treatment A	-0.130**	-0.111**	0.133**	0.040	0.014	-0.085
	(0.06)	(0.05)	(0.06)	(0.06)	(0.04)	(0.06)
Bottom 40 per cent	-0.042	-0.169	-0.129	0.114	0.127	0.052
	(0.17)	(0.16)	(0.19)	(0.18)	(0.13)	(0.17)
Over 50 years old	0.026	-0.117**	-0.038	0.099	-0.027	0.019
	(0.06)	(0.06)	(0.07)	(0.07)	(0.05)	(0.07)
Capital City	-0.011	0.105^{*}	-0.064	-0.097	-0.031	0.088
	(0.06)	(0.05)	(0.06)	(0.06)	(0.04)	(0.07)
Tertiary Education	-0.096	-0.037	0.040	-0.108	0.046	-0.040
	(0.06)	(0.06)	(0.07)	(0.07)	(0.05)	(0.07)
Male	-0.039	-0.019	-0.069	-0.058	-0.095**	-0.022
	(0.06)	(0.05)	(0.06)	(0.06)	(0.04)	(0.06)
Constant	0.438**	0.474^{***}	0.734^{***}	0.571^{***}	0.059	0.727^{***}
	(0.19)	(0.17)	(0.21)	(0.20)	(0.14)	(0.19)
Observations	237	237	237	237	237	183#

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

Table 7: Effect of Treatment A on Charitable giving

	(1)	(2)	(3)	(4)	(5)	(6)
	Give SJ charity	Give SJ charity (RW)	Give SJ charity (nRW)	Keep	Keep (RW)	Keep (nRW)
Treatment A	0.010	-0.099***	0.056**	0.008	0.106**	-0.036
	(0.02)	(0.04)	(0.02)	(0.02)	(0.04)	(0.03)
Bottom 40 per cent	-0.015	-0.013	-0.016	0.051**	0.061	0.042
	(0.02)	(0.04)	(0.03)	(0.03)	(0.05)	(0.03)
Over 50 years old	0.060***	0.072^{*}	0.052**	-0.149***	-0.200***	-0.118***
	(0.02)	(0.04)	(0.02)	(0.02)	(0.04)	(0.03)
Capital City	0.044**	0.084**	0.025	-0.014	-0.035	-0.003
	(0.02)	(0.04)	(0.02)	(0.02)	(0.04)	(0.03)
Tertiary Education	0.037^{*}	0.029	0.041*	0.003	0.000	0.004
	(0.02)	(0.04)	(0.02)	(0.03)	(0.05)	(0.03)
Male	-0.066***	-0.087**	-0.060**	0.059**	0.083^{*}	0.052*
	(0.02)	(0.04)	(0.02)	(0.02)	(0.04)	(0.03)
Constant	0.192^{***}	0.236***	0.174***	0.455***	0.391^{***}	0.484^{***}
	(0.03)	(0.05)	(0.03)	(0.03)	(0.06)	(0.04)
Observations	1720	511	1209	1720	511	1209

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

The outcomes in the table above are based on answers provided by respondents to the following question: In addition, to your usual reimbursement for completing this survey, there is a bonus of \$1, which you can choose to do one of the following (Select one): 1. Donate to Cancer Council of Australia (Health Charity) 2. Donate to Smith family (Social Justice Charity) 3. Keep for yourself. Give SJ charity is defined as the respondent selecting option 2 to the question above (this charity works to reduce inequality in Australia). Keep is defined as the respondent selecting option 3 to the question above.

RW stands for right wing voters. nRW stands for non-right wing voters.

Table 8: Effect of Treatment B on Charitable giving

	(1)	(2)	(3)	(4)	(5)	(6)
	Give SJ charity	Give SJ charity (RW)	Give SJ charity (nRW)	Keep	Keep (RW)	Keep (nRW)
Treatment B	-0.019	-0.119**	0.029	0.012	0.065	-0.020
	(0.03)	(0.05)	(0.03)	(0.04)	(0.06)	(0.04)
Bottom 40 per cent	-0.072	-0.205	0.062	0.054	0.250	-0.142
	(0.10)	(0.16)	(0.13)	(0.13)	(0.18)	(0.17)
Over 50 years old	0.045	0.064	0.024	-0.147***	-0.178***	-0.113**
	(0.03)	(0.06)	(0.03)	(0.04)	(0.07)	(0.04)
Capital City	0.012	0.069	-0.011	-0.005	-0.048	0.012
	(0.03)	(0.06)	(0.03)	(0.04)	(0.06)	(0.04)
Tertiary Education	0.044	0.047	0.045	-0.053	-0.094	-0.032
	(0.03)	(0.06)	(0.03)	(0.04)	(0.07)	(0.05)
Male	-0.075***	-0.083	-0.071**	0.088**	0.083	0.093**
	(0.03)	(0.06)	(0.03)	(0.04)	(0.06)	(0.04)
Constant	0.262**	0.438**	0.111	0.446***	0.208	0.657***
	(0.10)	(0.18)	(0.13)	(0.13)	(0.20)	(0.17)
Observations	793	237	556	793	237	556

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

The outcomes in the table above are based on answers provided by respondents to the following question: In addition, to your usual reimbursement for completing this survey, there is a bonus of \$1, which you can choose to do one of the following (Select one): 1. Donate to Cancer Council of Australia (Health Charity) 2. Donate to Smith family (Social Justice Charity) 3. Keep for yourself. Give SJ charity is defined as the respondent selecting option 2 to the question above (this charity works to reduce inequality in Australia). Keep is defined as the respondent selecting option 3 to the question above.

RW stands for right wing voters. nRW stands for non-right wing voters.

10 Appendix - Supplementary Tables

TABLE A1: CORRELATION BETWEEN BACKGROUND CHARACTERISTICS AND BEING A RIGHT WING VOTER

	Vote for right wing party
Bottom 40 per cent	-0.088***
	(0.02)
Over 50 years old	0.115***
	(0.02)
Capital City	0.000
	(0.02)
Tertiary Education	0.048**
	(0.02)
Male	0.028
	(0.02)
Constant	0.260***
	(0.02)
Observations	2584

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

TABLE A2: COMPARISON OF SURVEY RESPONDENTS TO AUSTRALIAN POPULATION

	Survey	Census 2016
	(percent)	(percent)
50 years old or over	43	43
Female	49	51
City	81	87
Attended a university	51	51
Bottom 40 percent	59	40

TABLE A3: BALANCE TABLE ACROSS TREATMENT AND CONTROL GROUPS

		(1)		(2)		(3)	t-test	t-test	t-test
		TREATMENT		TREATMENT		CONTROL	Difference	Difference	Difference
		GROUP A		GROUP B		GROUP			
Variable	N	Mean/SE	N	Mean/SE	N	Mean/SE	(1)- (2)	(1)- (3)	(2)- (3)
Bottom 40 per cent	872	0.594	864	0.582	848	0.597	0.012	-0.003	-0.015
		[0.017]		[0.017]		[0.017]			
Over 50 years old	872	0.423	864	0.435	848	0.422	-0.012	0.001	0.013
		[0.017]		[0.017]		[0.017]			
Capital City	872	0.529	864	0.564	848	0.561	-0.035	-0.033	0.002
		[0.017]		[0.017]		[0.017]			
Tertiary Education	872	0.497	864	0.475	848	0.494	0.022	0.002	-0.020
		[0.017]		[0.017]		[0.017]			
Male	872	0.529	864	0.506	848	0.466	0.023	0.063***	0.040*
		[0.017]		[0.017]		[0.017]			

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

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Table A4: Correlation between background characteristics and perception of levels of inequality

(1)
Perceive extreme or very high level of inequality
0.026
(0.02)
0.096***
(0.02)
-0.057***
(0.02)
0.030
(0.02)
0.028
(0.02)
-0.162***
(0.02)
0.532***
(0.03)
2584

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

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Table A5 - Correlation between background characteristics and overestimating position in distribution

	(1)	(2)
	Overestimate position	Overestimate position (B40 Only)
Bottom 40 per cent	0.770***	N/A
	(0.01)	
Over 50 years old	-0.056***	-0.087***
	(0.01)	(0.02)
Capital City	0.006	0.010
	(0.01)	(0.02)
Tertiary Education	0.029^{**}	0.046**
	(0.01)	(0.02)
Male	0.006	-0.001
	(0.01)	(0.02)
Right wing	0.055***	0.104***
	(0.01)	(0.02)
Constant	-0.004	0.763***
	(0.02)	(0.02)
Observations	2584	1527

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

B40 refers to respondents in Bottom 40 per cent of distribution

Table A6 - Difference between the effect of treatments on respondents that overestimated their position

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
AvsB	0.043	0.196***	-0.028	-0.003	0.056**	-0.050
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Bottom 40 per cent	-0.138	-0.147	-0.076	0.069	0.116	-0.073
	(0.10)	(0.12)	(0.11)	(0.12)	(0.10)	(0.13)
Over 50 years old	0.012	-0.067**	-0.023	0.125^{***}	-0.009	-0.075*
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Capital City	-0.001	0.012	-0.038	-0.004	-0.015	0.005
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Tertiary Education	-0.015	0.027	0.025	-0.037	0.038	0.033
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Male	-0.005	-0.007	-0.076**	-0.061*	-0.028	0.031
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Constant	0.309***	0.397^{***}	0.898^{***}	0.630^{***}	0.043	0.579^{***}
	(0.11)	(0.12)	(0.12)	(0.12)	(0.10)	(0.14)
Observations	796	796	796	796	796	558#

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

AvsB is a dummy variable that compares the difference in the effect of the two treatments

Table A7 - Difference between the effect of treatments on respondents that underestimated their position

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
AvsB	-0.113***	0.224***	-0.004	0.041	0.028	0.027
	(0.04)	(0.04)	(0.05)	(0.04)	(0.04)	(0.06)
Bottom 40 per cent	-0.171	-0.040	0.044	0.120	0.065	-0.286*
	(0.11)	(0.12)	(0.13)	(0.12)	(0.11)	(0.15)
Over 50 years old	-0.005	-0.019	-0.029	0.047	-0.022	0.100^*
	(0.04)	(0.05)	(0.05)	(0.05)	(0.04)	(0.06)
Capital City	-0.022	-0.018	0.017	-0.099**	0.060	-0.001
	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)	(0.06)
Tertiary Education	0.001	-0.003	-0.087*	-0.074	0.001	0.003
	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)	(0.06)
Male	0.066*	-0.014	-0.014	-0.044	-0.001	0.099*
	(0.04)	(0.05)	(0.05)	(0.04)	(0.04)	(0.06)
Constant	0.271***	0.304***	0.691***	0.800***	0.215***	0.383***
	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)	(0.08)
Observations	455	455	455	455	455	327 #

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

AvsB is a dummy variable that compares the difference in the effect of the two treatments

Table A8 - Difference between the effect of treatments on respondents that accurately estimated their position

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
AvsB	-0.002	0.189***	0.034	-0.060	0.072^*	-0.089*
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)
Bottom 40 per cent	-0.112***	0.043	0.185^{***}	0.081*	-0.148***	-0.154***
	(0.03)	(0.05)	(0.04)	(0.04)	(0.04)	(0.06)
Over 50 years old	0.018	0.011	-0.009	0.075^{*}	0.003	-0.080
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.06)
Capital City	-0.005	-0.005	0.052	0.019	-0.045	0.027
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)
Tertiary Education	-0.005	0.030	-0.014	0.010	0.099**	-0.050
	(0.04)	(0.05)	(0.04)	(0.04)	(0.04)	(0.06)
Male	0.059^{*}	-0.041	0.037	0.025	0.029	0.051
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)
Constant	0.179***	0.245***	0.597***	0.674^{***}	0.223***	0.553***
	(0.05)	(0.06)	(0.06)	(0.06)	(0.05)	(0.08)
Observations	485	485	485	485	485	354 #

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

AvsB is a dummy variable that compares the difference in the effect of the two treatments

Table A9 - Effect of Treatment B on all respondents that underestimated their position

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
Treatment B	0.068*	-0.009	0.034	-0.009	0.046	-0.013
	(0.04)	(0.04)	(0.05)	(0.04)	(0.04)	(0.06)
Bottom 40 per cent	-0.094	-0.199	0.217	0.057	0.030	-0.332
	(0.13)	(0.13)	(0.14)	(0.14)	(0.12)	(0.21)
Over 50 years old	0.090**	-0.067	-0.093*	0.051	-0.084*	0.054
	(0.04)	(0.05)	(0.05)	(0.05)	(0.04)	(0.06)
Capital City	-0.018	0.017	-0.020	-0.084*	0.008	-0.018
	(0.04)	(0.05)	(0.05)	(0.05)	(0.04)	(0.06)
Tertiary Education	0.026	0.008	-0.081	-0.006	0.003	-0.009
	(0.04)	(0.05)	(0.05)	(0.05)	(0.04)	(0.06)
Male	0.011	-0.103**	0.011	-0.070	-0.021	0.001
	(0.04)	(0.04)	(0.05)	(0.04)	(0.04)	(0.06)
Constant	0.184***	0.352^{***}	0.680***	0.770^{***}	0.235^{***}	0.495^{***}
	(0.05)	(0.05)	(0.06)	(0.06)	(0.05)	(0.08)
Observations	449	449	449	449	449	312#

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

Table A10 - Effect of Treatment B on right wing respondents that underestimated their position

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
Treatment B	-0.095	0.065	0.081	0.004	0.025	0.078
	(0.07)	(0.07)	(0.08)	(0.08)	(0.06)	(0.08)
Bottom 40 per cent	0.058	-0.255	0.587^{*}	-0.150	0.394	-0.316
	(0.33)	(0.31)	(0.35)	(0.36)	(0.28)	(0.31)
Over 50 years old	0.225***	-0.065	-0.205**	0.070	-0.134**	0.128
	(0.08)	(0.07)	(0.08)	(0.09)	(0.07)	(0.08)
Capital City	-0.063	0.095	-0.119	-0.098	-0.064	0.026
	(0.08)	(0.08)	(0.09)	(0.09)	(0.07)	(0.09)
Tertiary Education	0.053	-0.097	-0.109	0.012	0.032	0.116
	(0.08)	(0.08)	(0.09)	(0.09)	(0.07)	(0.09)
Male	0.059	-0.235***	0.047	-0.045	0.059	-0.123
	(0.08)	(0.07)	(0.08)	(0.08)	(0.06)	(0.08)
Constant	0.240^{**}	0.406^{***}	0.667^{***}	0.644^{***}	0.213^{**}	0.640^{***}
	(0.11)	(0.10)	(0.12)	(0.12)	(0.09)	(0.12)
Observations	158	158	158	158	158	123#

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

Table A11 - Effect of Treatment B on all respondents that accurately estimated their position

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
Treatment B	0.035	-0.002	0.071*	0.066*	-0.008	0.041
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)
Bottom 40 per cent	-0.135***	-0.050	0.214^{***}	0.117^{***}	-0.072*	-0.178***
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.06)
Over 50 years old	-0.000	0.005	0.001	0.048	-0.019	-0.079
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.06)
Capital City	-0.033	-0.001	0.021	-0.061	-0.038	-0.012
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.06)
Tertiary Education	0.003	0.058	-0.026	0.046	0.038	-0.066
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.06)
Male	0.044	-0.067	-0.048	0.022	0.034	0.034
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)
Constant	0.185^{***}	0.291^{***}	0.576^{***}	0.637^{***}	0.228^{***}	0.563^{***}
	(0.04)	(0.06)	(0.06)	(0.06)	(0.05)	(0.08)
Observations	470	470	470	470	470	343#

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

Table A12 - Effect of Treatment B on right wing respondents that accurately estimated their position

	(1)	(2)	(3)	(4)	(5)	(6)
	Rich Hard Work	Poor Family	Urgent Action	Tax Top 1%	Education	Support Tax Cuts
Treatment B	0.112	0.099	0.025	0.083	0.004	-0.045
	(0.08)	(0.08)	(0.09)	(0.09)	(0.07)	(0.09)
Bottom 40 per cent	-0.081	-0.025	0.156	0.126	-0.036	-0.139
	(0.09)	(0.10)	(0.11)	(0.10)	(0.08)	(0.10)
Over 50 years old	0.004	0.016	-0.110	-0.115	-0.202**	0.005
	(0.09)	(0.09)	(0.10)	(0.10)	(0.08)	(0.10)
Capital City	-0.044	-0.071	0.004	0.065	-0.049	0.144
	(0.09)	(0.09)	(0.10)	(0.10)	(0.08)	(0.10)
Tertiary Education	-0.082	0.119	0.002	-0.020	-0.064	-0.344***
	(0.09)	(0.10)	(0.11)	(0.10)	(0.08)	(0.11)
Male	0.028	-0.056	-0.084	0.044	-0.057	0.117
	(0.08)	(0.08)	(0.09)	(0.09)	(0.07)	(0.09)
Constant	0.248^{**}	0.238^{**}	0.574^{***}	0.563^{***}	0.391^{***}	0.855^{***}
	(0.11)	(0.11)	(0.13)	(0.12)	(0.10)	(0.14)
Observations	123	123	123	123	123	95#

^{*} p < 0.1, ** p < 0.05, *** p < 0.01 # Respondents' that answered do not know were excluded from this question.

11.1 Questions about respondents' background characteristics

Which of these would best describe the area in which you live?

Within a capital city, Within a major Regional city, Within a rural town or its surrounds, More than 5km from the nearest town

Which of the following age groups do you belong to?

18 to 34, 35 to 49, 50 to 64, 65 years or older

Are you?

Male, Female

52

What is the highest level of formal education that you have completed?

Higher degree or post graduate diploma, Bachelor degree, Undergraduate diploma, Associate diploma, Skilled vocational, Basic vocational, Completed highest level of school, Did not complete highest level of school, Prefer not to say

Which of the following best describes your annual household income?

Less than \$5,000, \$5,000-\$9,999, \$10,000-\$14,999, \$15,000-\$19,999, \$20,000-\$24,999, \$25,000-\$29,999, \$30,000-\$34,999, \$35,000-\$39,999, \$40,000-\$44,999, \$45,000-\$49,999, \$50,000-\$54,999, \$55,000-\$59,999, \$60,000-\$64,999, \$65,000-\$69,999, \$70,000-\$74,999, \$60,000-\$64,999, \$65,000-\$69,999, \$70,000-\$74,990, \$70,000-\$74,990, \$70,000-\$74,990, \$70,000-\$74,990, \$70,000-\$74,990, \$70,

\$75,000-\$79,999, \$80,000-\$84,999, \$85,000-\$89,999, \$90,000-\$94,999, \$95,000-\$99,999, \$100,000-\$124,999, \$125,000-\$149,999, \$150,000-\$199,999, \$200,000-\$249,999, \$250,000 or more

How many people including yourself, are currently living in your household? One, Two, Three, Four, Five, Six, Seven, Eight, Nine

At the next Federal election, who would you be most likely to vote for?

Labor party, Liberal party, The Nationals, The Greens, Other/Independent, Don't know, I'm ineligible to vote

11.2 Questions about the outcomes of interest

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The following questions were asked immediately following the questions in Figures 1 and 2.

Let's talk about people in the richest group. In your opinion, which of the following is the most important reason why they are rich? (Select one)

1. Talented, 2. Work hard, 3. Lucky, 4. Come from a wealthy family, 5. Have a lot of connections (friends, colleagues, relatives, etc.), 6. Avoiding paying taxes, 97. Other (please specify):

Dummy variable was created that takes the value of 1 if respondent selected option 2, otherwise it takes a value of 0.

Now, let's talk about people in the poorest group. In your opinion, which of the following is the most important reason why they are poor? (Select one)

1. Lack talent, 2. Don?t work hard, 3. Unlucky, 4. Come from poor families, 5. Disability or Illness, 97. Other (please specify):

Dummy variable was created that takes the value of 1 if respondent selected option 4, otherwise it takes a value of 0.

How urgently should the Australian government act to address the difference in income between the rich and poor? (Select one)

1. Very urgently, 2. Urgently, 3. Less urgently, 4. Not urgent at all, 99. Don't know

Dummy variable was created that takes the value of 1 if respondent selected options 1 or 2, otherwise it takes a value of 0.

The government is faced with the choice of reducing debt by either increasing income taxes on the richest 1% or by cutting public services. Do you think income taxes on the richest 1% of people should be:

1. Increased, 2. Stay the same, 3. Decreased, 99. Don't know

Dummy variable was created that takes the value of 1 if respondent selected option 1, otherwise it takes a value of 0.

Which one of the following is MOST important for the Australian Government to do to reduce income inequality?

1. Provide free and high quality education and medical care for all people, 2. Raise the minimum wage, 3. Provide more social protection for poor and vulnerable people, 4. Increase the amount of spending on welfare programs (e.g. Newstart, Old Age pension, Disability Pension etc), 5. Provide jobs for the unemployed, 6. Raise taxes on the rich, 97. Other (please specify):, 99.

Don't know

55

Dummy variable was created that takes the value of 1 if respondent selected option 1, otherwise it takes a value of 0.

Do you support or oppose the proposal to cut the company tax rate from 30% to 25% over the next ten years?

a) Support, b) Oppose, c) Don't know

Dummy variable was created that takes the value of 1 if respondent selected option 1, otherwise it takes a value of 0.

In addition, to your usual reimbursement for completing this survey, there is a bonus of one Australian dollar, which you can choose to do one of the following (Select one):

1. Donate to Cancer Council of Australia, 2. Donate to Smith family, 3. Keep for yourself

Dummy variable was created that takes the value of 1 if respondent selected option 1, otherwise it takes a value of 0. Dummy variable was created that takes the value of 1 if respondent selected option 2, otherwise it takes a value of 0. Dummy variable was created that takes the value of 1 if respondent selected option 3, otherwise it takes a value of 0