



Working Paper Series

**How does Information about Inequality
Shape Voting Intentions and Preferences
for Redistribution? Evidence from a Ran-
domized Survey Experiment in Indonesia**

Christopher Hoy
Russell Toth
Nurina Merdikawati

ECINEQ WP 2020 - 517

How does Information about Inequality Shape Voting Intentions and Preferences for Redistribution? Evidence from a Randomized Survey Experiment in Indonesia †

Christopher Hoy

Australian National University

Russell Toth

University of Sydney

Nurina Merdikawati

Australian National University

Abstract

We test the elasticity of people's voting intentions and preferences for redistribution to information about inequality through a large-scale, randomized survey experiment in Indonesia. Respondents received information about either the level of national inequality, their position in the national income distribution or no information. The first treatment raised people's concern about inequality and substantially increased the likelihood they would vote against the President. The second treatment lowered richer respondents' support for redistribution. These results provide empirical support from a significantly different political and economic context for seminal theories that predict voting intentions and preferences for redistribution are influenced by inequality.

Keywords: Inequality, Redistribution, Voting, Political Economy.

JEL Classification: D31, D63, D72, D83, P16.

1 Introduction

Seminal theories of preferences for redistribution predict people's voting intentions and support for redistribution are influenced by inequality (Alesina and Giuliano 2011). For example, the Meltzer-Richard Hypothesis suggests that high levels of inequality should result in relatively poor people demanding greater redistribution from rich to poor and they will vote for this to take place (Meltzer and Richard 1981). However, there is limited empirical support for this relationship (e.g. Borge and Rattso 2004) and this may be due to people having inaccurate information about inequality (Gimpelson and Treisman 2018; Hauser and Norton 2017). Recent studies in a variety of contexts have shown that on average people underestimate the level of national inequality and tend to believe they are in the middle of the national income distribution regardless of whether they are rich or poor (e.g. Norton and Ariely 2011; Indrakesuma, Janz and Wai-Poi 2015; Hoy and Mager 2019). As a result, people's preferences for redistribution and their voting intentions may be distorted and accurate information about inequality could build public support for redistributive policies (especially among the relatively poor). This is particularly relevant in middle-income countries where many national governments are transitioning from having little to no widespread redistribution from rich to poor, towards a setting where social protection payments and income taxation reach large shares of the population (World Bank 2018; Lustig 2016). Hence it is important to examine in a middle-income country that is undergoing this transition whether correcting misperceptions about inequality would impact public opinion in line with what seminal theories predict.

We test whether this is the case by conducting the first large-scale, broadly representative, randomized survey experiment in a middle-income country that examines the elasticity of people's voting intentions and preferences for redistribution to information about inequality. Our study took place in Indonesia, which is the world's third largest democracy, has experienced a dramatic increase in inequality over the past two decades, and in recent years the government has prioritized redistribution. At the time of the survey a first-term incumbent President who had campaigned on reducing inequality was soon to run for re-election. During his time in office, the government aimed to build a

stronger “social contract” with its citizens by increasing the amount of taxes collected from richer Indonesians and using these funds to increase the number of poorer Indonesian households that receive social protection (Muhtadi, Waburton and Dewayanti 2019; Yusuf and Sumner 2015).

We build on recent research in Indonesia that shows large misperceptions about inequality exist that are similar to the case in other countries, whereby most Indonesians underestimate the level of national inequality and think they are in the middle of the national income distribution regardless of their actual position (Indrakesuma, Janz and Wai-Poi 2015). To address these misperceptions, we provide two randomized information treatments, about the level of national inequality (Inequality treatment) or a respondent’s position in the national income distribution (Position treatment). Following the treatments, respondents answered a range of questions about their voting intentions, concern about inequality and support for redistribution that were sourced from prior studies on this topic in high-income countries (e.g. Alesina, Stantcheva and Teso 2018).

Seminal theories of preferences for redistribution suggest high levels of inequality should lead people to be more in favor of redistribution from the rich to the poor and relatively poor people should be more supportive of redistribution than relatively rich people (e.g. Meltzer and Richard 1981; Alesina and Giuliano 2011). If we apply the predictions of these theories directly, in light of the stylized facts from existing research on misperceptions of inequality in Indonesia, we would expect that the Inequality treatment should raise people’s concern about inequality and support for redistribution, while the Position treatment would have the same effect on poorer respondents and the opposite effect on richer respondents.

There is limited guidance from previous studies as to how the treatments would impact people’s voting intentions. On the one hand there may be no effect as empirical research shows people often vote primarily on the personal characteristics of candidates, such as their ethnicity or religion, in a middle-income country context (e.g. Berge et al. 2019). However, theoretical work on voting would suggest that the treatments, especially the Inequality treatment, could change people’s satisfaction with the status quo and their views about the performance of the incumbent President (Manin, Przeworski, and Stokes 1999; Lassen 2005; De Neve 2014). If this were the case, we would expect that providing

information that a higher level of inequality exists in Indonesia than most people believe, would increase people's concern about inequality and in turn increase opposition to the President.

We find that even in the absence of the information treatments there was a strong correlation between being concerned about inequality and intending to vote against the President. The Inequality treatment led to even greater polarization, whereby people became more concerned about inequality and more likely to vote against the incumbent President by 20 per cent. This result is consistent with theoretical predictions that the more discontent people are with the status quo, the more likely they are to vote against an incumbent (Manin, Przeworski, and Stokes 1999). Despite this treatment increasing concern about inequality, it did not impact people's preferences for redistribution. As has been shown to be the case in high-income countries, this can be explained by the fact that support for redistribution may be weakened by people's views about the capability of the government (Kuziemko et al. 2015), which may only be heightened in a middle-income country context.

In contrast to what existing theory would predict (Alesina and Giuliano 2011), relatively poor people were not more supportive of redistribution than relatively rich people in the control group. The Position treatment partly changed this in the expected direction, as it resulted in relatively rich people becoming less supportive of redistribution across a range of measures. However, there was no impact on the relatively poor. This is likely due to the fact poorer people do not see themselves as benefiting significantly from greater redistribution, while richer people realize they would be worse off (Holland 2018; Lustig 2016). There was no effect from this treatment on people's voting intentions, which may be because the incumbent President was not viewed as overly pro-rich or pro-poor (Mujani, Liddle, and Ambardi 2018).

Our study makes three novel contributions to the existing literature on this topic. Firstly, previous randomized survey experiments have not tested the elasticity of people's voting intentions for the leader of their country to information about inequality. In fact, they have typically taken people's voting intentions as given and tested heterogeneous treatment effects from information about inequality, assuming the treatment would not have impacted the former (e.g. Alesina, Stantcheva and Teso 2018). We show that

voting intentions are highly elastic to information about inequality and the channel for this effect is by changing people's concern about inequality. This provides empirical support from a broadly representative, large-scale survey experiment for the longstanding hypothesis that the level of national inequality impacts voting intentions (Meltzer and Richard 1981), in particular by increasing opposition for the incumbent when people tend to underestimate the level of national inequality.

Secondly, this is the first broadly representative randomized survey experiment that tests the effect of information about inequality on preferences for redistribution in a middle-income country (Hauser and Norton 2017). Existing research along these lines in middle-income countries have only been conducted in a small number of neighborhoods in a large city (Cruces, Perez-Truglia and Tetaz 2013; Pellicer, Piraino and Wegner 2019). By doing so we extend two stylized facts from previous studies on representative samples of the population in high-income countries to a significantly different political and economic context. Specifically, our results are consistent with existing research that illustrates it is easier to increase people's concern about inequality than their support for redistribution (Kuziemko et al. 2015), and that informing people of their actual position in the national income distribution tends to lower support for redistribution among the rich (Karadja, Mollerstrom and Seim 2017).

Thirdly, we simultaneously examine which types of information about inequality have the largest impact on people's preferences for redistribution. Previous studies on this topic have only included one treatment group (e.g. Alesina, Stantcheva and Teso 2018), which means they were unable to test whether the elasticity of preferences for redistribution varies by the type of information about inequality provided. We show that among relatively rich respondents there is a significant difference between providing information about the level of inequality (Inequality treatment) and a respondent's position in the distribution (Position treatment). Their preferences for redistribution are more elastic to information about their own circumstances as opposed to the macro situation (i.e. level of inequality) within their country, however the opposite is the case in terms of the elasticity of their concern about inequality and voting intentions. In contrast, there is little to no effect from either treatment on relatively poor respondents.

The rest of this paper is structured as follows. In the second section, we present a

theoretical model to frame our interpretation of the effects of the information treatments. This is followed by information about the setting of this study, a description of the methodology we used and an overview of the descriptive findings from the survey. We then present the results of the randomized survey experiment and a discussion of the implications.

2 Theoretical Model and Related Literature

2.1 How information about inequality relates to people's utility

To illustrate how the level of national inequality and person's position in the national income distribution relates to their preferences for redistribution and voting intentions, we start with a seminal model of other-regarding preferences by Fehr and Schmidt (1999). In a simple setting where there are three people and person A consumes between the other two, person A 's utility function can be expressed as follows:

$$U(c_a, c_p, c_r) = U(c_a) - \beta U(c_a - c_p) - \gamma U(c_r - c_a) \quad (1)$$

In this model an individual's utility ($U(c_a, c_p, c_r)$) depends on their own consumption (c_a) as well as the direction and size of the weighting they place on their consumption relative to people poorer (c_p) than them (β) and richer (c_r) than them (γ).

Fehr and Schmidt argue that on average people tend to be averse to inequality (i.e. $\beta > 0$, $\gamma > 0$) and they are more concerned about the difference between their consumption and the richest in society as opposed to the difference between their consumption and the poorest (i.e. $\gamma > \beta$).

We modify this model to reflect recent research across countries and in Indonesia that indicates people's perceptions of inequality (both in terms of the level and their position in the distribution) are typically not the same as what is actually the case (Gimpelson and Treisman 2018; Hauser and Norton 2017; Indrakesuma, Janz and Wai-Poi 2015). Specifically, these studies reveal that most people underestimate the level of inequality ($c_r - c_p$) and tend to perceive themselves in the middle of the income distribution regardless of their actual place ($(c_r - c_a) \approx (c_a - c_p)$). As such we modify

the model so that person A 's utility is dependent on how they perceive the consumption of the other two individuals, as opposed to those individuals' actual level of consumption. The simple three-person model becomes:

$$U(c_a, c_p(p), c_r(p)) = U(c_a) - \beta U(c_a - c_p(p)) - \gamma U(c_r(p) - c_a) \quad (2)$$

where $c_p(p)$ is the perceived consumption of the individual poorer than c_a and $c_r(p)$ is the perceived consumption of the individual richer than c_a .

This revised model provides a framework to illustrate directly how information about inequality is likely to impact people's utility and this in turn provides guidance as to how this information may impact people's preferences for redistribution and voting intentions. The following two propositions emerge regarding people's utility:

Proposition 1: Informing people of the actual level of inequality will lower their utility, as on average people underestimate the level of inequality

$$(c_r - c_p) > (c_r(p) - c_p(p)) \quad (3)$$

Informing people of the actual level of inequality should increase the value of $(c_r(p) - c_p(p))$ by increasing the value of $c_r(p)$ and/or decreasing the value of $c_p(p)$. In equation 2 above, this will increase the values of $U(c_a - c_p(p))$ and $U(c_r(p) - c_a)$, directly lowering overall utility.

Proposition 2: Informing people they are relatively rich [poor] will increase [decrease] their utility, as most people perceive themselves to be in the middle of the income distribution

$$\begin{aligned} (c_r(p) - c_a) &> (c_r - c_a) \\ [(c_a - c_p(p)) &< (c_a - c_p)] \end{aligned} \quad (4)$$

Informing people they are relatively rich [poor] should decrease [increase] the value of $(c_r(p) - c_a)$. In equation 2 above, this will decrease [increase] the value of $U(c_r(p) - c_a)$,

directly increasing [decreasing] overall utility.

These results capture the effect of information about inequality on utility. The extent to which this information will also impact preferences for redistribution and voting intentions, and in what direction, will be moderated by the presence of a number of other potential factors that are discussed in the following subsections. It is beyond the scope of this paper to explore formally how these potential factors could be captured in a single model, however we highlight how prior literature provides guidance on what effects we might expect to see.

2.2 How information about inequality relates to people's preferences for redistribution

Conventional theories of preferences for redistribution suggest that people in countries with higher levels of inequality will be more supportive of redistribution than people in countries with lower levels of inequality (e.g. Meltzer and Richard 1981) and relatively poor people should be more supportive of redistribution than relatively rich people (e.g. Alesina and Giuliano 2011). The latter is based on the premise that poor people are more likely to benefit from redistribution (e.g. through the provision of social protection), whereas richer people are more likely to lose out (e.g. such as having to pay higher taxes).

The extent that changes in people's utility from information about inequality will also lead to changes in preferences for redistribution is dependent on whether respondents see greater government led redistribution as a way to actually reduce the gap between the rich and poor in their country. Specifically, in terms of proposition 1, raising people's concern about inequality will only lead to greater support for redistribution if people see the government as being capable of reducing inequality. Evidence from the United States by Kuziemko et al. (2015) would suggest this is not the case. They show that providing detailed information about the level of inequality does not impact people's preferences for redistribution, even though it makes them considerably more concerned about inequality. In terms of proposition 2, informing people they are relatively rich may lower support for redistribution if they view the rich as net contributors to the

government budget and conversely informing people they are relatively poor is only likely to increase support for redistribution if they view the poor as net beneficiaries. Randomized survey experiments in Northern Europe indicate that rich people recognize they will be more likely to be worse off from greater redistribution, however the opposite is not the case for poorer people (Karadja, Mollerstrom and Seim (2017) in Sweden and Bublitz (2016) in Germany and Russia).

2.3 How information about inequality relates to people's voting intentions

Existing theories of voting behavior typically depend on the extent that people view themselves as being more likely to benefit from a particular electoral outcome (Lassen 2005). For example, Manin, Przeworski, and Stokes (1999) develop a model to illustrate that people decide to vote for or against an incumbent politician based on their satisfaction with the status quo. In this framework, people punish the incumbent if they feel the status quo has not been adequately improved during their time in office. Meltzer and Richard (1981) relate inequality to voting behavior by arguing that the higher the level of inequality in a democracy the more likely it is that the majority of people will vote for greater redistribution. Combining these two strands of the literature would suggest that on average people will be more likely to vote against the incumbent when they perceive there are high levels of inequality in their country.

The extent that information about inequality will actually shift people's voting intentions is dependent on how relatively large a consideration inequality is in terms of how people vote. Information about the level of inequality may impact people's utility (i.e. Proposition 1 above), but not change their voting intentions if they vote primarily on other factors, such the personal characteristics of candidates (e.g. Berge et al. 2019). However following the logic of Manin, Przeworski, and Stokes (1999) if information about inequality lowers utility by making people more discontent with the status quo this may translate into greater opposition to the incumbent President. In terms of Proposition 2 above, information about a respondent's position in the national income distribution is only likely to impact voting intentions if respondents believe that the

incumbent President is particularly favorable towards rich or poor people (Lassen 2005).

Prior to this study, there has not been a randomized survey experiment that tests the elasticity of people's voting intentions for the leader of their country to information about inequality. Existing experimental work on this topic has typically taken people's voting intentions as given and tested heterogeneous treatment effects from information about inequality, assuming the treatment would not have impacted the former (e.g. Alesina, Stantcheva and Teso 2018). Empirical research about how information affects voting behavior has often focused on voter turnout and/or political accountability as the main outcome of interest (e.g. De Neve 2014; Besley and Burgess 2002; Gentzkow 2006; Ferraz and Finan 2008). The study that is most similar to ours is by Karadja, Mollerstrom and Seim (2017), who illustrate that informing people they are richer than they thought increases the likelihood they intend to vote for a conservative party in Sweden.

3 Setting of the study

3.1 Political context in Indonesia

Indonesia transitioned to multi-party, competitive elections in 1998 under a republican political system, after the fall of President Suharto's New Order government. Under the New Order government, which had been in power since 1966, some legislative elections were held, however various procedures were set up to significantly limit opponents to Suharto's Golkar party (Evans, 2003). At the beginning of the post-New Order Reformation period, Indonesia was led by transitional presidents, selected by the national assembly, until it held its first direct presidential election in 2004. Since then new presidents have been directly elected every 5 years, with a 2-term limit. Indonesian democracy has become somewhat robust in a relatively short amount of time with over two-thirds of registered voters participating in every Presidential election and a President from origins outside the elite classes, Joko Widodo, winning the election in 2014 and being re-elected in 2019. The 2019 Presidential election was contested between Joko Widodo and the candidate that he defeated in the 2014 Presidential election, Prabowo Subianto. The randomized survey experiment discussed in this paper was held 16 months prior to the

2019 election, as such this was before the incumbent President and other candidates began their election campaigns. In fact, it was still not known who was likely to run against Joko Widodo in the 2019 Presidential election.

Similar to the case in many other middle-income countries, political parties and candidates tend to be distinguished more by the interest groups they represent, than a particular political philosophy (e.g. right- or left-leaning). This often means that there are not tremendous differences between party platforms on detailed policy issues, and party coalitions can evolve based on particular alliances between key individuals (Kawamura 2019). The plight of low income people is a common election theme, with poverty reduction, social welfare and distribution of benefits through government programs typically receiving attention from all candidates (Kawamura 2019). Hence, some have argued that voting often comes down to one's beliefs in the ability of a particular candidate to deliver on commonly-shared policy positions, along with one's alignment with the candidate on other dimensions (e.g. religion, background and professional experience, such as in business or the military etc.) (e.g. Power 2018). However other research suggests that the deciding factor for most voters is their perceived performance of the incumbent government and their satisfaction with the status quo (Mujani, Liddle, and Ambardi 2018). As such there was no clear consensus as to whether issues like inequality actually even factor into people's decision about who to vote for.

3.2 Inequality in Indonesia

Income inequality increased considerably in Indonesia from 2000 to 2013 (the GINI Index rose from below 30 to around 40) and peaked in 2013 (World Bank 2019). Figure 1 shows how the rapid increase in the GINI Index following the Asian Financial Crisis took place prior to Joko Widodo (commonly referred to as "Jokowi") taking office and fell slightly following his election. However, wealth inequality has remained very high with the richest 20 per cent of Indonesians owning 87 per cent of the country's wealth (Credit Suisse 2019). Across both of these measures, the level of inequality in Indonesia is comparable to that of the United States (World Bank 2019; Credit Suisse 2019).

[Insert Figure 1]

The Indonesian government's focus on addressing inequality can be seen by the fact that following his election in 2014, the President included in the five-year national development plan a target to reduce the GINI Index by one percentage point per year (Government of Indonesia 2015). Two of the key policies that aimed to achieve this were increasing the roll-out of social protection programs targeted towards the poorest Indonesian households (particularly the conditional cash transfer program) and increasing the amount of tax paid by rich Indonesians (through strategies such as offering a temporary tax amnesty) (Suryahadi and Al Izzati 2019, Abraham 2019). As can be seen in Figure 1, the President was somewhat successful in pursuing this goal from his inauguration in 2014 up until the time of our survey in late 2017, as the GINI index decreased by around half a percentage point each year over this period.

3.3 Perceptions of inequality in Indonesia

A study by the World Bank involving a nationally representative survey of 3,080 households in Indonesia illustrated that two large misperceptions of inequality exist (Indrake-suma, Janz and Wai-Poi 2015). Firstly, Indonesians tend to dramatically underestimate the level of national inequality and want it to be lower than what they perceive it to be. While the richest 20 per cent of the income distribution have as much income as the poorest 80 per cent, on average people only thought they had about as much income as the poorest 60 per cent and would prefer if they only had as much income as the poorest 40 per cent.

Secondly, Indonesians tend to think they are in the middle of the national income distribution regardless of their actual position. This can be seen in Figure 2 below, whereby almost 50 per cent of respondents thought they were in the middle quintile of the distribution and less than 2 per cent of respondents thought they were in the richest two quintiles (in reality, respondents were drawn evenly from across the distribution). In addition, there is only a relatively low correlation co-efficient (0.3) between people's perceived and actual position in the national income distribution.

[Insert Figure 2]

The design of the survey questionnaire in this World Bank study, including how respondents' perceptions of the level of inequality were solicited, is very similar to seminal research by Norton et al. (2011, 2014) in the United States and Australia. They also find people tend to dramatically underestimate the level of national inequality and perceive themselves to be in the middle of the national income distribution regardless of their actual position.

4 Methodology

4.1 Survey design

The randomized survey experiment was conducted with 2,764 respondents that make up a broadly representative sample of the Indonesian population with access to the internet (see Table 1). More than one-third of Indonesians had regular access to the internet at the time of the survey according to the 2017 National Socioeconomic Survey (SUSENAS) (BPS, 2017) and on average, respondents that participated in the study had somewhat similar background characteristics to the national population. However, they tended to have higher levels of education, were younger, more concentrated in urban areas, less likely to be married and more likely to use social media. These characteristics are also more common among the general population of Indonesians who have access to the internet. Data was collected using the survey firm YouGov, which regularly conducts online surveys to measure the Indonesian population's views on a range of issues. Most respondents used a smart phone to access the survey and the equivalent of around US\$1.50 was provided to respondents in phone credit upon completion of the survey. In total, 92.5 per cent of respondents that were invited to participate completed the survey. There was no meaningful differential attrition between the treatment and control groups. A short preamble was included at the start of the survey to explain that participation was voluntary and responses would be used solely for research purposes. The survey was in

the field for approximately two weeks in November, 2017.

[Insert Table 1]

The survey consists of two sections; the first collects information about people's demographic characteristics, including information about respondents' 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 could be determined¹. These questions were very similar to those collected by Alesina, Stantcheva and Teso (2018) but adjusted to reflect the Indonesian income distribution. The second section included questions about people's concern about inequality, their desire for government-led redistribution and their voting intentions. These questions were sourced from previous studies, specifically the International Social Survey Program (ISSP) (2009), Alesina, Stantcheva and Teso (2018), Indrakesuma, Janz and Wai-Poi (2015) and Karadja, Mollerstrom and Seim (2017). Following Alesina, Stantcheva and Teso (2018) and Karadja, Mollerstrom and Seim (2017), we create a Redistribution Index, which is the unweighted average of the z-scores of the answers to all questions about preferences for redistribution, oriented so that a higher index means more support for redistribution. We present both the answers to each question and the Redistribution Index in the tables of results. Similarly, we create a "Concern about Inequality" Index based on the questions we ask about people's views about the extent of inequality and degree of mobility in the country. Respondents were also asked about who they would vote for if there was a presidential election today, which is identical to the approach taken by Karadja, Mollerstrom and Seim (2017) except they measure people's support for a variety of political parties. A list of the questions that were asked following the treatments is provided in English in Appendix B, however the survey provided to respondents was in Bahasa (the most widely spoken language in Indonesia).

¹We conduct a robustness check whereby we exclude households that report only having one person or more than 5 people in their household (see Appendix Table A1). The main results are qualitatively similar.

4.2 Information treatments

Prior to answering the second section of the survey, respondents were randomly allocated to either receive information about the level of inequality (Inequality treatment; see Figure 3), their position in the national income distribution (Position treatment; see Figure 4) or no information (the control group). By providing two distinct treatments we were able to measure the effect of correcting each of the misperceptions about inequality discussed above (the level of inequality and people's position in the distribution) separately. In addition, this allowed for a comparison to be made as to which type of information treatment has the largest impact on the outcomes of interest.

Randomization ensures that the impact of each treatment can be determined by comparing averages of answers to questions between the treatment and control groups. The randomization was successful, as there are no statistically significant differences between treatment and control groups across demographic characteristics (see Table 2). Even though there is no statistically significant imbalance, we still control for these variables in our regressions.

[Insert Table 2]

The information treatments are similar to what was used in previous studies on this topic in high-income countries (see Figures 3 and 4). In the case of the Inequality treatment, we provide respondents with information about the level of wealth inequality in Indonesia (Credit Suisse 2019). This is likely to exceed most respondents' perceptions as the study by Indrakesuma, Janz and Wai-Poi (2015) shows most people already underestimate the level of income inequality (which is less severe than wealth inequality). We choose to use wealth inequality to follow the rationale presented by Alesina, Stantcheva and Teso (2018) whereby to simplify the interpretation of the treatment effect we wanted to be confident that the information would have the same direction of effect across most respondents (i.e. make them more pessimistic about the level of inequality). The Position treatment is almost identical to what was provided in studies by Cruces, Perez-Truglia and Tetaz (2013) and Karadja, Mollerstrom and Seim (2017). The only difference is we

use quintiles as opposed to deciles because this is simpler for respondents with lower levels of education to interpret.

[Insert Figure 3 and 4]

These information treatments (and the survey instrument) were fine-tuned through focus group discussions and piloting that took place in Jakarta in September 2017. Participants from a wide range of socio-economic backgrounds, from MBA students to people living in informal settlements near the University of Indonesia, were part of this process. This helped to inform the design of the treatments by illustrating that more sophisticated forms of information, such as how the GINI index changed over time, were unlikely to be well understood by respondents with varying degrees of income and levels of education. As such we choose to provide relatively straightforward treatments that we were confident would be adequately comprehensible.

4.3 Empirical model

We capture the effect of the information treatments by comparing average responses to the questions discussed above between each of the treatment groups relative to the control group, using a linear probability model with binary dependent variables². We pre-registered this study with the American Economic Association RCT registry (ID number AEARCTR-0002571) (Hoy 2017). We estimate separate regression models to compare the members of one of the two treatment groups to the control group. Given this setup, the general strategy for studying the impact of each treatment (T) on an outcome measure of interest is to estimate the following model:

$$Y_i = \beta_0 + \beta_1 T_i + X_i \gamma + \varepsilon_i, \quad (5)$$

where Y_i is an indicator variable for the responses from individual i to each question in the Appendix, which takes on the value 1 if the respondent selects the outcome of interest

²As a robustness check we ran the regressions as a binary logit model and find all results are qualitative similar to those presented using OLS in this paper.

in the respective survey question, and the value 0 if the respondent does not select this option. β_1 captures the average difference in the share of respondents in the treatment group and the control group who selected the outcome of interest in the respective survey question. X_i is a vector of variables that controls for potential imbalance in background characteristics of individual i (age, gender, education level, location, household income, use of social media, relationship status and participation in the workforce) between the treatment and control groups. β_0 is the intercept term and ε_i is the error term.

We estimate the heterogeneous treatment effects from information based on the income level of respondents, educational background, participation in the workforce and use of Facebook. To examine the heterogeneous treatment effects by income we create dummy variables that take on the value 1 if the respondent is from the poorest (richest) two quintiles in the national income distribution and the value 0 if the respondent is not from the poorest (richest) two quintiles in the national income distribution³. We also use a similar approach in terms of whether a respondent has received tertiary education, whether they participate fulltime in the workforce (measured in terms of 30 or more hours a week) and if they use Facebook (the most popular form of social media in Indonesia).

In addition to our intention-to-treat (ITT) regression analysis, we follow Alesina, Stantcheva and Teso (2018) and calculate instrumental variable estimates of the effect of the treatments on people's voting intentions and preferences for redistribution, conditional on being treated. By doing so we calculate the treatment-on-the-treated (ToT) effects (also known as the complier average causal effect). We define being treated as becoming more concerned about inequality, which is very similar to Alesina, Stantcheva and Teso (2018)'s measure of being treated (which is becoming more pessimistic about mobility). In other words, the effect of the treatment on people's concern about inequality serves as the first stage in our instrument variable regression.

³As a robustness check we calculate the results for each quintile and present the results in Appendix Table A2. The impact of the Position treatment on the richest two quintiles is primarily driven by people in the richest quintile. Similarly, the impact of the Position treatment on the poorest two quintiles is primarily driven by people in the poorest quintile.

5 Descriptive analysis of study data

5.1 Concern about inequality

Our survey revealed that Indonesians tend to be quite concerned about inequality. Almost 80 per cent of respondents either strongly agree or agree that the gap between the rich and poor is too large in Indonesia. Almost half of respondents thought it is difficult or impossible to increase the amount of money people had through hard work alone. Both of these measures of concern about inequality are positively correlated with respondents intending to vote against the President. For example, see Figure 5 below that examines how the characteristics of respondents relate to the likelihood they agree the gap between the rich and poor is too large. Responses did not vary considerably for most characteristics, except in the case of voting against the President. Around 90 per cent of respondents that intended to vote against the President agree the gap between the rich and poor is too large, while only 75 per cent of the rest of respondents agree with this. After controlling for voting intentions, no other background characteristics had a statistically significant association with expressing concern about inequality except for using social media (see Appendix Tables A3 and A4).

[Insert Figure 5]

5.2 Voting intentions

Our survey indicated that almost 60 per cent of Indonesians intended to vote for the incumbent President, which is consistent with other opinion polls that were conducted in the lead up to the Presidential election in April 2019 (Muhtadi, Waburton and Dewayanti 2019) and within four percentage points of the share of the Indonesian population that actually voted for the President. Respondents who were in the bottom 40 per cent of the national income distribution, male and from larger households were more likely to vote against the President (see Appendix Table A5).

5.3 Preferences for redistribution

In the absence of the treatments, Indonesians tend to be very supportive of government-led redistribution. For example, over 90 per cent of respondents want urgent action by the government to reduce inequality, over 70 per cent of respondents agree it is the government's responsibility to reduce the gap in incomes between the rich and poor and 70 per cent of respondents believe the government has the tools and ability to address inequality. These measures of support for redistribution are positively correlated with respondents intending to vote against the President. An illustration of this can be seen in Figure 6 below that examines how the characteristics of respondents relate to the likelihood they agree the government is responsible for closing the gap between the rich and poor. Responses did not vary considerably for many characteristics, except in the case of voting against the President. Around 87 per cent of respondents that intended to vote against the President agree the government is responsible for closing the gap between the rich and poor, while only 67 per cent of the rest of respondents agree with this. After controlling for all background characteristics, supporting greater redistribution was positively related to voting against the President, along with being married, participating in social media and being over 35 years old (see Appendix Tables A6 and A7).

[Insert Figure 6]

6 Results of the randomized survey experiment

6.1 Concern about inequality

Respondents who received the Inequality treatment were 3.6 percentage points more likely to state the gap between the rich and poor is too large in Indonesia and 8.0 percentage points more likely to report it is difficult or impossible for people to increase the amount of money they have despite working hard (see the first row, columns (1) and (2) in Table 3). This effect was primarily driven by richer respondents and those

that use Facebook (see Appendix Table A8). Respondents in the bottom 40 per cent of the income distribution who received the Position treatment were 8.4 percentage points more likely to state it is difficult or impossible for Indonesians to increase the amount of money they have through hard work alone (see the second row, column (2) in Table 3). There was no impact on concern about inequality from informing relatively rich respondents of their position in the national income distribution.

[Insert Table 3]

6.2 Voting intentions

The Inequality treatment increased the share of respondents that would vote against the President by 4.0 percentage points, which is around 20 per cent higher than the control group (see the first row, column (1) in Table 4). As is the case in terms of people's concern about inequality, the overall treatment effect was primarily driven by richer respondents and those that use Facebook (see Appendix Table A8). The IV estimates also provide evidence that the channel through which this treatment is impacting people's intention to vote against the President is by making them more concerned about inequality (see the fourth row, column (1) in Table 4). The Position treatment did not lead to statistically significant shifts in people's voting intentions.

[Insert Table 4]

6.3 Preferences for redistribution

Informing respondents about the level of national inequality (i.e. the Inequality treatment) or letting people know they are in the bottom 40 poorest of the national income distribution did not have a meaningful effect on their support for redistribution (see the first two rows of Table 5). However, informing people they are in the top 40 per cent of the national income distribution made them considerably less supportive of redistri-

bution (see the third row of Table 5). For example, they became 6.7 percentage points less likely to agree that the government is responsible for closing the gap between the rich and poor. On average, the Position treatment reduced support for redistribution by over 10 per cent for respondents from the top two quintiles of the national income distribution across all of our measures of preferences for redistribution.

[Insert Table 5]

There are noteworthy heterogeneous effects from this treatment based on whether respondents work full-time or not. The negative effect on support for redistribution among richer respondents was primarily driven by people who do not work full-time (see Appendix Tables A9 and A10). In contrast, there was a positive treatment effect on support for redistribution among poorer respondents that report working full-time.

6.4 Relative elasticity of preferences to different treatments

We also analyze the effect of the treatments compared to one another to measure the relative elasticity of the outcomes of interest to different types of information. We did this by creating an indicator variable (IP) that takes on the value 0 if the respondent received the Inequality treatment, and the value 1 if the respondent received the Position treatment. We re-ran our main analysis using the regression described in equation 5 in Section 4.3 but replaced the treatment variable with this newly created variable (IP).

On average, the impact of the Position treatment on relatively rich respondent's preferences for redistribution is not only statistically significantly larger than in the absence of a treatment as seen in Table 5 (i.e. the control group), it is also larger than the impact of the Inequality treatment. In fact, there are statistically significant differences between the impact of the Position and Inequality treatments for respondents in the top two quintiles across all the outcomes we measure in the experiment (see the first row in Table 6). Interestingly, these differences are driven by the Inequality treatment making richer respondents more concerned about inequality and more likely to vote against the President, while the Position treatment did not impact these outcomes. In contrast, the

difference in terms of support for redistribution is entirely due to the Position treatment lowering support as the Inequality treatment had no effect. Among relatively poor respondents, there were no differences between the treatments as both the Inequality and Position treatment tended to have a negligible impact on any of the outcomes (see the second row in Table 6).

[Insert Table 6]

7 Discussion

The findings from our randomized survey experiment shed important insights about the propositions derived from existing research that are discussed in Section 2. We find evidence in favor of Proposition 1⁴ as the Inequality treatment increased people's concern about inequality. In addition, we show that this treatment increased opposition to the incumbent President, which is in line with the predictions of theoretical work by Manin, Przeworski, and Stokes (1999). The information about the level of inequality appears to have bred discontent with the status quo and led people to become less confident in the ability of the incumbent President to address this issue. Further evidence that this mechanism explains our results can be seen by our IV estimates in Table 4 and the fact the treatment effect for concern about inequality and voting intentions was driven by similar sub-groups of the population as can be seen in Table A8 (e.g. those who are relatively richer and use Facebook). This relationship between voting behavior and inequality was not lost on the opposition Presidential candidate, Prabowo Subianto, in the 2019 Indonesian election campaign. He appealed to this on multiple occasions, even posting on social media that he was the candidate for the poorest 99 per cent of Indonesians (Muhtadi, Waburton and Dewayanti 2019).

Despite the impact of the Inequality treatment on people's concern about inequality this did not flow through to increasing people's support for redistribution. This pattern

⁴**Proposition 1:** Informing people of the actual level of inequality will lower their utility, as on average people underestimate the level of inequality.

has also been observed in studies in high-income countries and it has been argued that raising people's concern about inequality will only lead to greater support for redistribution if people see the government as being capable of reducing inequality (Kuziemko et al. 2015). The results of this treatment serve as a warning for policy makers who often provide information about inequality to try to justify and build public support for redistributive policies, however this information may actually undermine support for the government.

We find mixed results for Proposition 2⁵ that the treatment should lead richer people to become less concerned about inequality and the opposite should be the case for poorer people. We find no effect from the Position treatment on richer respondents' concern about inequality and only a weak effect on poorer respondents (see Table 3). However we find that letting people know they are relatively rich reduces their support for redistribution and there is no effect on relatively poor people (see Table 5). This is consistent with the explanation richer individuals recognize they are net contributors to the national budget, but poorer people do not necessarily see themselves as net beneficiaries of government transfers (Holland 2018; Lustig 2016).

These results from the Position treatment are in line with previous studies in high-income countries that also find informing people they are relatively rich lowers their support for redistribution, but the opposite is not the case (Karadja, Mollerstrom and Seim 2017; Bublitz 2016). This could also potentially be due to the information campaigns run by the government throughout 2016 to 2018 (including during the time of the survey) that encouraged richer Indonesians to pay more tax by participating in a tax amnesty (Abraham 2019). As such, one would expect a reasonable level of understanding in the general public that richer people are expected to pay more tax, and therefore when respondents were told they were relatively rich they realized that they would be worse off from greater redistribution.

The fact the overall effects for this treatment were primarily driven by richer people not working full-time becoming less supportive of redistribution (see Table A9) and

⁵**Proposition 2:** Informing people they are relatively rich [poor] will increase [decrease] their utility, as most people perceive themselves to be in the middle of the income distribution.

poorer full-time workers becoming more supportive of redistribution (see Table A10) points to the existence of a relationship between people's ability to increase their participation in the labor market and their preferences for redistribution. People who are already working as many hours as they can that are informed they are relatively poor would seem to view support from the government as a more necessary way to increase their income. In contrast, respondents who are not working full-time that are informed they are relatively rich appear to view redistribution as being less required potentially because they believe people can increase their living standard through working more.

We find no effect from the Position treatment on voting behavior (see Table 4). This is despite the fact that in the absence of the treatment there is a weak positive correlation between being relatively rich and intending to vote for the President. This may well be because people do not necessarily associate being poor or rich with being more likely to benefit from the incumbent President remaining in power (Kawamura 2018).

By testing the theoretical propositions in the same experiment using different treatments, we have also been able to examine which types of information about inequality have the largest impact on people's preferences. Previous studies on this topic were unable to do this as they only included one treatment group. We show that among relatively rich respondents there is a significant difference between providing information about the level of inequality (Inequality treatment) and a respondent's position in the distribution (Position treatment). Their preferences for redistribution are more elastic to information about their own circumstances as opposed to the macro situation (i.e. level of inequality) within their country, however the opposite is the case in terms of the elasticity of their concern about inequality and voting intentions. In contrast, there is little to no effect from either treatment on relatively poor respondents.

8 Conclusion

This study has shown that the provision of information about inequality in Indonesia, where people tend to underestimate the extent of inequality, may do little to boost public support for redistributive policies and, in some cases, may have a negative effect. We show that information about the level of national inequality increased people's con-

cern about inequality and opposition to the President. The only effect on preferences for redistribution from the treatments was that informing people they are rich lowered their support for redistribution and higher taxes. Even informing people that they are relatively poor did not lead them to desire greater redistribution, which illustrates just how challenging it is to increase public support for the government to address inequality. Future research could explore what types of information would lead poorer people to become more supportive of redistribution, why information about inequality is able to raise people's concerns and change their voting behavior but fail to alter their preferences for redistribution and examine how beliefs about the capability of the government shape preferences.

9 References

Abraham, Thomas. 2019. "The Policies That Will Decide Who Wins Indonesia's Election." <https://www.bloomberg.com/news/articles/2019-02-20/the-policies-that-will-decide-who-wins-indonesia-s-election> (Accessed 31 July 2019)

Alesina, Alberto, Stefanie Stantcheva, and Edoardo Teso. 2018. "Intergenerational Mobility and Preferences for Redistribution." *American Economic Review*. vol. 108, no. 2:521-554.

Alesina, Alberto, and Paola Giuliano. 2011. "Preferences for Redistribution." In *Handbook of Social Economics*, edited by Jess Benhabib, Alberto Bisin, and Matthew Jackson, 93-131. North Holland: Elsevier.

Badan Pusat Statistik (BPS). 2019. "National Socioeconomic Survey." <https://mikrodata.bps.go.id/mikrodata/index.php/catalog/814> (Accessed 31 July 2017)

Berge, Lars, Kjetil Bjorvatn, Simon Galle, Edward Miguel, Daniel Posner, Bertil Tungodden, and Kelly Zhang. 2019. "Ethnically Biased? Experimental Evidence from Kenya." *Journal of the European Economic Association*. jvz003.

Besley, Timothy, and Robin Burgess. 2002. "The Political Economy of Government Responsiveness: Theory and Evidence from India." *Quarterly Journal of Economics* vol. 117, no. 4:1415-1452.

Borge, Lars-Erik, and Jorn Rattso. 2004. "Income distribution and tax structure: Empirical test of the Meltzer-Richard hypothesis." *European Economic Review*. vol 48:805-826.

Bublitz, Elisabeth. 2016. "Misperceptions of income distributions: Cross-country evidence from a randomised survey experiment." *Mimeo*.

Credit Suisse. 2019. "Global Wealth Report." <https://www.credit-suisse.com/corporate/en/research/research-institute/global-wealth-report.html> (Accessed 15 July 2019)

Cruces, Guillermo, Ricardo Perez-Truglia, and Martin Tetaz. 2013. "Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment." *Journal of Public Economics*. vol. 98:100-112.

De Neve, Jan-Emmanuel. 2014. "Ideological change and the economics of voting behaviour in the US, 1920-2008." *Electoral Studies*. vol. 34:27-38.

Evans, Kevin. 2003. *The History of Political Parties and General Elections in Indonesia*. Arise Consultancies, Jakarta.

Fehr, Ernst, and Klaus Schmidt. 1999. "A Theory of Fairness, Competition and Cooperation." *Quarterly Journal of Economics*. vol. 114, no. 3:817-868.

Ferraz, Claudio, and Frederico Finan. 2008. "Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes." *Quarterly Journal of Economics*. vol. 123, no. 2:703-745.

Gentzkow, Matthew. 2006. "Television and Voter Turnout." *Quarterly Journal of Economics*. vol. 121, no. 3:931-72.

Gimpelson, Vladmir, and Daniel Treisman. 2018. "Misperceiving Inequality." *Economics and Politics*. vol. 30, no. 1:27-54.

Government of Indonesia. 2015. "Medium-Term National Development Plan (RPJMN) 2015-2019" <https://policy.asiapacificenergy.org/node/3364> (Accessed 31 July 2019).

Hauser, Oliver, and Micahel Norton. 2017. "(Mis)perceptions of Inequality." *Current*

Opinion in Psychology. vol. 18:21-25.

Holland, Alisha. 2018. "Diminished Expectations: Redistributive Politics in Truncated Welfare States." *World Politics*. vol. 70, no. 2:555-594.

Hoy, Christopher, and Franziska Mager. 2019. "Why are relatively poor people not more supportive of redistribution? Evidence from a survey experiment across 10 countries." *ECINEQ Working Paper 489*.

Hoy, Christopher. 2017. "AEA trial registration: Preferences for redistribution and perceptions of inequality in Indonesia." <https://www.socialscisearch.org/trials/2571> (Accessed 30 September 2017)

Indrakesuma, Taufik, Edgar Janz, and Matthew Wai-Poi. 2015. "A Perceived Divide: How Indonesians perceive inequality and what they want done about it." *World Bank Working Paper 101664*.

International Social Survey Programme (ISSP). 2009. <https://www.gesis.org/issp/modules/issp-modules-by-topic/social-inequality/2009/> (Accessed 31 July 2017)

Karadja, Mounir, Johanna Mollerstrom and David Seim. 2017. "Richer (and Holier) than Thou? The Effect of Relative Income Improvement on Demand for Redistribution." *Review of Economics and Statistics*. vol. 99, no. 2:201-212.

Kawamura Koichi. 2019. "Politics of Inequality in Indonesia: Does Democracy Matter?" In *Emerging States at Crossroads*, edited by Tsunekawa Keiichi and Yasuyuki Todo. Emerging-Economy State and International Policy Studies. Springer, Singapore.

Kuziemko, Ilyana, Michael I. Norton, Emmanuel Saez, and Stefanie Stantcheva. 2015. "How Elastic are Preferences for Redistribution? Evidence from Randomized Survey Experiments." *American Economic Review*. vol. 105, no. 4:1478-1508.

Lassen, David. 2005. "The effect of information on voter turnout: Evidence from a natural experiment." *American Journal of Political Association*. vol. 49, no. 1:103-118.

Lustig, Nora. 2016. "Inequality and Fiscal Redistribution in Middle Income Countries: Brazil, Chile, Colombia, Indonesia, Mexico, Peru and South Africa." *Journal of Globalization and Development*. vol. 7, no. 1:17-60.

Manin, Bernard, Adam Przeworski, and Susan Stokes. 1999. "Elections and Representation." In *Democracy, Accountability, and Representation*, edited by Przeworski, Adam, Susan Stokes, and Bernard Manin. Cambridge, MA: Cambridge University Press.

Meltzer, Allan, and Scott Richard. 1981. "A Rational Theory of the Size of Government." *The Journal of Political Economy*. vol. 89, no. 5:914-927.

Muhtadi, Burhanuddin, Eve Warburton, and Aninda Dewayanti. 2019. "Perceptions of Inequality in Indonesia: A Matter of Partisan Politics." *ISEAS Perspective*. 2019:10.

Mujani, Saiful, William Liddle, and Kuskridho Ambardi. 2018. *Voting Behavior in Indonesia since Democratization: Critical Democrats*. Cambridge, MA: Cambridge University Press.

Norton, Michael, and Dan Ariely. 2011. "Building a Better America - One Wealth Quintile at a Time." *Perspectives on Psychological Science*. vol. 6, no. 9:9-12.

Norton, Michael, David Neal, Cassanda Govan, Dan Ariely, and Elise Holland. 2014. "The Not so Commonwealth of Australia: Evidence for a Cross Cultural Desire for a More Equal Distribution of Wealth." *Analyses of Social Issues and Public Policy*. vol. 14, no. 1:339-351.

Pellicer, Miquel, Patrizio Piraino, and Eva Wegner. 2019. "Perceptions of inevitabil-

ity and demand for redistribution: Evidence from a survey experiment.” *Journal of Economic Behavior and Organization*. vol. 159:274-288.

Power, Thomas. 2018. “Jokowi’s authoritarian turn and Indonesia’s democratic decline.” *Bulletin of Indonesian Economic Studies*. vol. 54, no. 3:307-338.

Suryahadi, Asep, and Ridho Al Izzati. 2019. “East Asia Forum: Middle class the winners of economic growth under Jokowi.” <https://www.eastasiaforum.org/2019/02/19/economic-growth-under-jokowi-benefits-the-middle-class-more-than-the-poor/> (Accessed 31 July 2019)

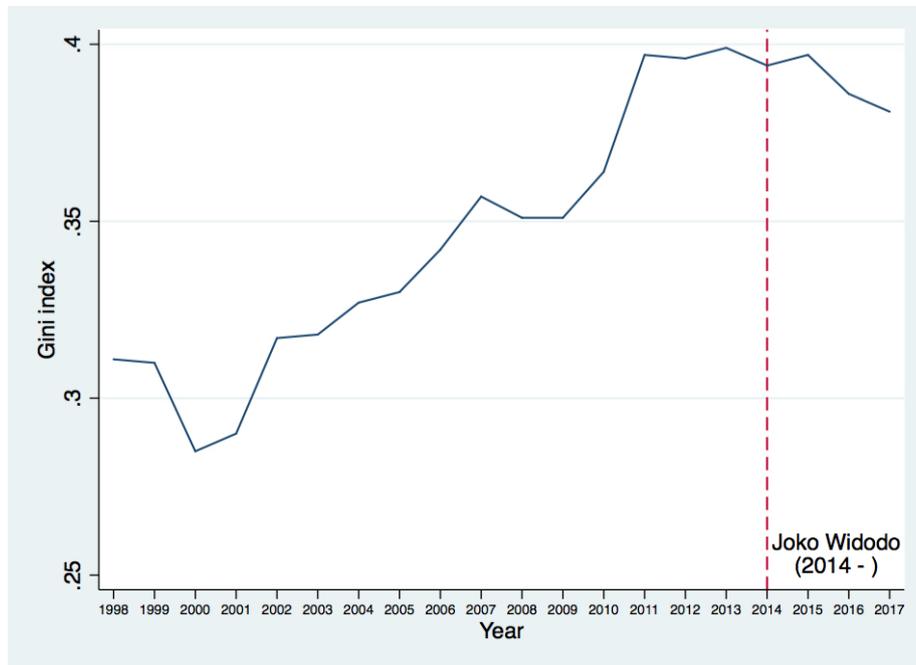
World Bank. 2018. *The State of Social Safety Nets 2018*. Washington, DC. World Bank.

World Bank. 2019. “World Development Indicators.” <https://data.worldbank.org/data-catalog/world-development-indicators> (Accessed 31 July 2017)

Yusuf, Arief, and Andy Sumner. 2015. “Growth, Poverty and Inequality under Jokowi.” *Bulletin of Indonesian Economic Studies*. vol. 51, no. 3:323-348.

10 Tables and figures

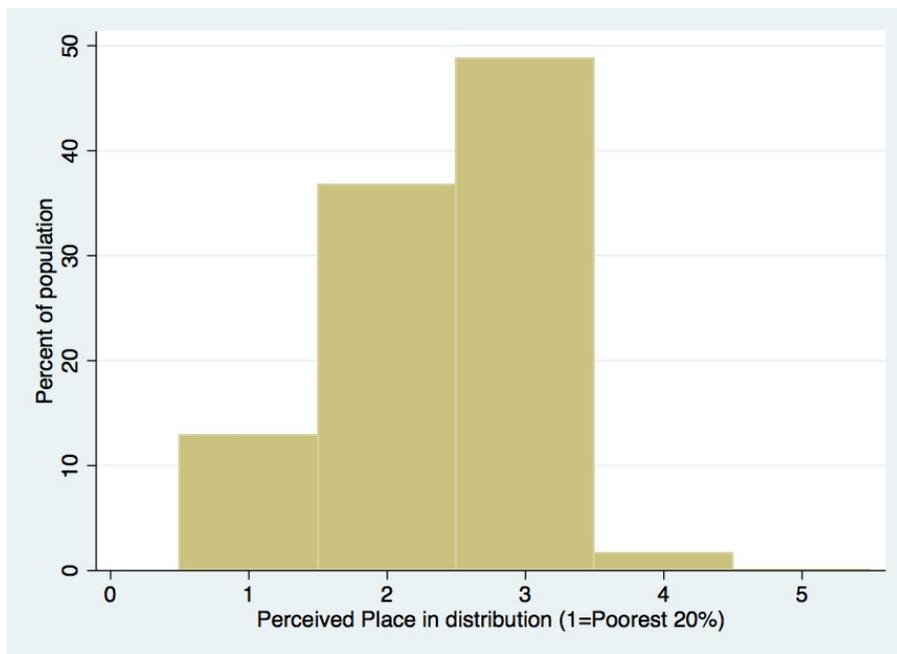
FIGURE 1: GINI INDEX IN INDONESIA (1998 TO 2017)



This figure displays how the GINI Index has changed from 1998 to 2017 in Indonesia and illustrates that inequality has fallen slightly since Joko Widodo became President in 2014.

Source: World Bank (2019)

FIGURE 2: RESPONDENTS' PERCEIVED POSITION IN NATIONAL INCOME DISTRIBUTION



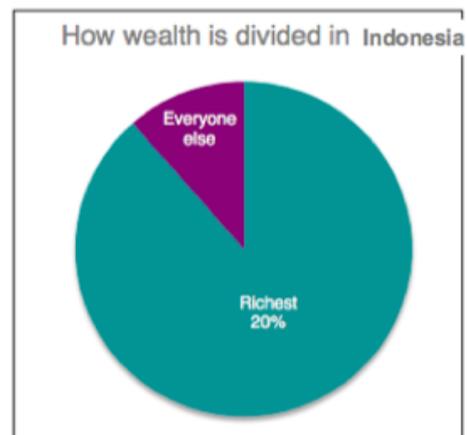
This figure displays that almost half of respondents to a 2014 nationally representative survey of Indonesians perceived they were in the middle of the national income distribution.

Source: *Indrakesuma, Janz and Wai-Poi (2015)*

FIGURE 3: INEQUALITY TREATMENT: INFORMATION ABOUT THE LEVEL OF WEALTH INEQUALITY

**The richest 20% of people in Indonesia have 85% of the country's wealth
(wealth= total value of assets such as savings, house etc.)**

This leaves over 200 Million people with only 15% of the country's wealth

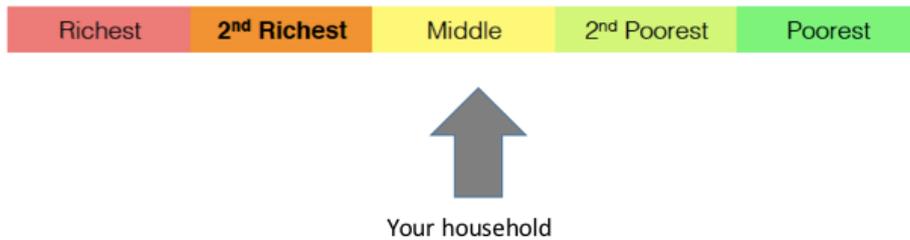


This figure displays the information that was provided to respondents who were randomly allocated to the Inequality treatment group.

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

Assume the total Indonesian population is broken into 5 income groups, each with the same number of people

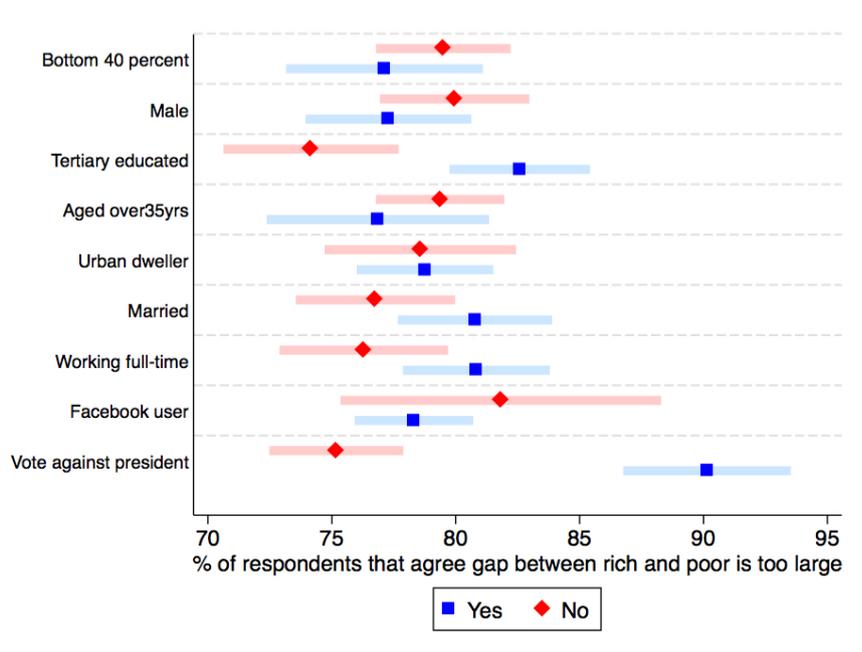
Based upon your reported income, your household is in the **'Middle'**. This means around 100 million Indonesians are richer than you and 100 million Indonesians are poorer than you.



33

This figure displays the information that was provided to respondents in the middle quintile of the national income distribution who were randomly allocated to the Position treatment group.

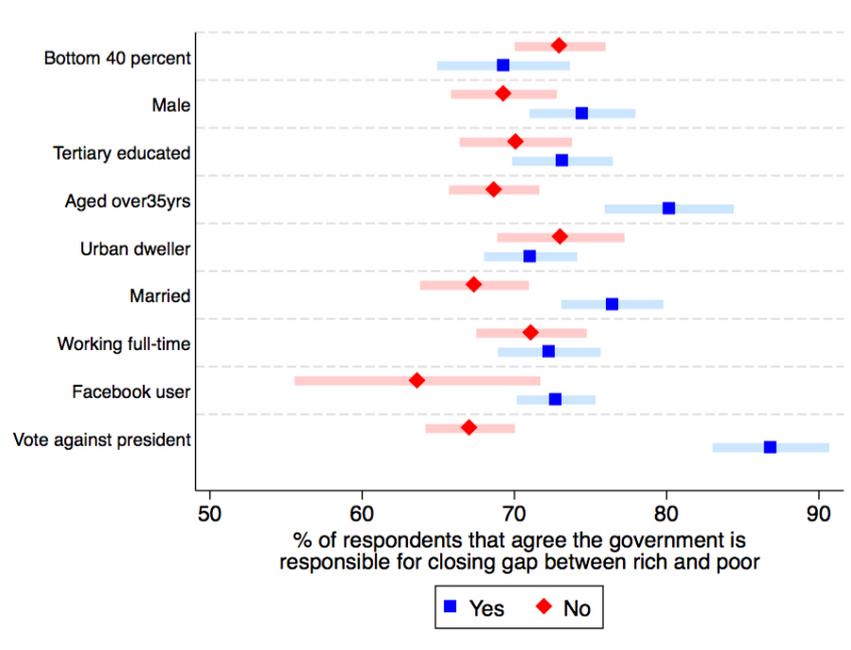
FIGURE 5: DIFFERENCES IN THE SHARE OF RESPONDENTS THAT AGREE THE GAP BETWEEN RICH AND POOR IS TOO LARGE BY BACKGROUND CHARACTERISTICS



Male: Dummy equal to one if the respondent is male and zero otherwise. *Aged over 35 yrs*: Dummy equal to one if the respondent's age is 35 years old or above and zero otherwise. *Urban dweller*: Dummy equal to one if the respondent resides in urban areas and zero otherwise. *Household members*: Respondent's number of household members. *Tertiary educated*: Dummy equal to one if the respondent's education level is at least Bachelor's degree and zero otherwise. *Married*: Dummy equal to one if the respondent is married and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Facebook user*: Dummy equal to one if the respondent uses Facebook and zero otherwise. *Bottom 40 percent*: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise.

This figure displays how the share of respondents that agree the gap between the rich and poor is too large varies by background characteristics. This is based only on responses provided by the control group.

FIGURE 6: DIFFERENCES IN THE SHARE OF RESPONDENTS THAT AGREE THE GOVERNMENT IS RESPONSIBLE FOR CLOSING THE GAP BETWEEN RICH AND POOR BY BACKGROUND CHARACTERISTICS



Male: Dummy equal to one if the respondent is male and zero otherwise. *Aged over 35 yrs:* Dummy equal to one if the respondent's age is 35 years old or above and zero otherwise. *Urban dweller:* Dummy equal to one if the respondent resides in urban areas and zero otherwise. *Household members:* Respondent's number of household members. *Tertiary educated:* Dummy equal to one if the respondent's education level is at least Bachelor's degree and zero otherwise. *Married:* Dummy equal to one if the respondent is married and zero otherwise. *Working full-time:* Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Facebook user:* Dummy equal to one if the respondent uses Facebook and zero otherwise. *Bottom 40 percent:* Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise.

This figure displays how the share of respondents that agree the government is responsible for closing the gap between rich and poor varies by background characteristics. This is based only on responses provided by the control group.

TABLE 1: REPRESENTATIVENESS OF SURVEY

	SURVEY SAMPLE	INTERNET POPULATION	NATIONAL POPULATION
Male	0.48	0.55	0.50
Urban dweller	0.65	0.73	0.54
Aged over35yrs old	0.26	0.31	0.58
Completed secondary education	0.98	0.70	0.37
Household members	4.2	3.8	3.9
Bottom 40 percent	0.34	0.21	0.4
Regular participation in social media	0.68	0.83	0.29
Married	0.49	0.57	0.73
Work full-time	0.52	0.63	0.58

Male: Dummy equal to one if the respondent is male and zero otherwise. *Aged over35yrs*: Dummy equal to one if the respondent's age is 35 years old or above and zero otherwise. *Urban dweller*: Dummy equal to one if the respondent resides in urban areas and zero otherwise. *Household members*: Respondent's number of household members. *Completed secondary education*: Dummy equal to one if the respondent completed secondary education and zero otherwise. *Married*: Dummy equal to one if the respondent is married and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Regular participation in social media*: Dummy equal to one if the respondent participates in at least three of the five widely used social media platforms in Indonesia (e.g. Facebook, Twitter, Line, Instagram, and Google Plus) and zero otherwise. *Bottom 40 percent*: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise. *Internet population*: the national population between the ages of 18-70 years old that regularly accesses the internet. *National population*: the entire population between the ages of 18-70 years old.

This table shows on average respondents to our survey share very similar background characteristics to the Indonesian population with access to the internet and tend to have higher levels of education, were younger, more concentrated in urban areas, less likely to be married and more likely to use social media than the entire population of Indonesia.

Source: BPS (2019)

TABLE 2: BALANCE TABLE ACROSS TREATMENT AND CONTROL GROUPS

Variable	(1)	(2)	(3)	t-test	t-test
	Inequality Treatment Mean/SE	Position Treatment Mean/SE	Control Mean/SE	Difference (1)-(3)	Difference (2)-(3)
Male	0.477 [0.016]	0.496 [0.016]	0.471 [0.017]	0.006	0.024
Tertiary educated	0.540 [0.016]	0.504 [0.016]	0.539 [0.017]	0.001	-0.034
Urban dweller	0.655 [0.016]	0.629 [0.016]	0.660 [0.016]	-0.005	-0.031
Aged over35yrs	0.267 [0.015]	0.257 [0.014]	0.267 [0.015]	-0.000	-0.010
Household members	4.207 [0.064]	4.107 [0.060]	4.161 [0.067]	0.046	-0.054
Bottom 40 percent	0.338 [0.016]	0.338 [0.015]	0.338 [0.016]	0.001	-0.000
Regular participation in social media	0.695 [0.015]	0.672 [0.015]	0.672 [0.016]	0.023	-0.000
Married	0.482 [0.016]	0.493 [0.016]	0.482 [0.017]	-0.001	0.010
Work fulltime	0.535 [0.016]	0.495 [0.016]	0.530 [0.017]	0.005	-0.035
Observations	922	936	906		

The value displayed for t-tests are the differences in the means across the groups. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level. *Male*: Dummy equal to one if the respondent is male and zero otherwise. *Aged over35yrs*: Dummy equal to one if the respondent's age is 35 years old or above and zero otherwise. *Urban dweller*: Dummy equal to one if the respondent resides in urban areas and zero otherwise. *Household members*: Respondent's number of household members. *Tertiary educated*: Dummy equal to one if the respondent's education level is at least a Bachelor's degree and zero otherwise. *Married*: Dummy equal to one if the respondent is married and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Regular participation in social media*: Dummy equal to one if the respondent participates in at least three of the five widely used social media platforms in Indonesia (e.g. Facebook, Twitter, Line, Instagram, and Google Plus) and zero otherwise. *Bottom 40 percent*: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise.

This table shows there are no statistically significant differences in background characteristics between the treatment and control groups.

TABLE 3: EFFECT OF THE TREATMENTS ON PEOPLE'S CONCERN ABOUT INEQUALITY

	(1) GAP	(2) MOBILITY	(3) CONCERN INDEX
Inequality	0.036** (0.02)	0.080*** (0.02)	0.126*** (0.04)
Controls	Y	Y	Y
Mean dep. var.	0.787	0.459	
Obs.	1828	1828	
Position (Bottom40%)	0.037 (0.03)	0.084** (0.04)	0.131** (0.06)
Controls	Y	Y	Y
Mean dep. var.	0.771	0.484	
Obs.	622	622	
Position (Top40%)	-0.010 (0.03)	-0.000 (0.04)	-0.014 (0.06)
Controls	Y	Y	Y
Mean dep. var.	0.813	0.451	
Obs.	769	769	

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *GAP*: Share of respondents that agree the gap between the rich and the poor is too large in Indonesia. *MOBILITY*: Share of respondents that agree it is difficult or impossible for people to increase the money they have through hard work alone. *CONCERN INDEX*: is the unweighted average of the z-scores of columns (1) and (2), oriented so that a higher index means more concern about inequality. *Inequality*: Information about the share of wealth held by the richest 20 percent of Indonesians. *Position (Bottom40%)*: Information that informs respondents they are among the poorest 40 percent of Indonesians. *Position (Top40%)*: Information that informs respondents they are among the richest 40 percent of Indonesians.

This table shows the Inequality treatment increased the likelihood respondents would be concerned about inequality. The Position treatment led relatively poor respondents to become slightly more concerned about inequality and had no impact on relatively rich respondents.

TABLE 4: EFFECT OF THE TREATMENTS ON PEOPLE'S VOTING INTENTIONS

	(1)	(2)	(3)
	VOTE AGAINST PRESIDENT	VOTE FOR PRESIDENT	OTHER
<i>Panel A: Treatment Effects</i>			
Inequality	0.040** (0.02)	-0.029 (0.02)	-0.011 (0.02)
Controls	Y	Y	Y
Mean dep. var.	0.235	0.596	0.169
Obs.	1828	1828	1828
Position (Bottom40%)	-0.046 (0.03)	0.019 (0.04)	0.027 (0.03)
Controls	Y	Y	Y
Mean dep. var.	0.275	0.559	0.167
Obs.	622	622	622
Position (Top40%)	0.000 (0.03)	0.021 (0.04)	-0.021 (0.03)
Controls	Y	Y	Y
Mean dep. var.	0.245	0.600	0.165
Obs.	769	769	769
<i>Panel B: IV Estimates</i>			
Inequality	0.318* (0.16)	-0.229 (0.18)	-0.089 (0.14)
Controls	Y	Y	Y
Obs.	1828	1828	1828
Position (Bottom40%)	-0.351 (0.34)	0.145 (0.33)	0.205 (0.26)
Controls	Y	Y	Y
Obs.	622	622	622
Position (Top40%)	-0.011 (2.28)	-1.538 (6.18)	1.549 (6.54)
Controls	Y	Y	Y
Obs.	769	769	769

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *VOTE AGAINST PRESIDENT*: Share of respondents that would vote against the current President if there was an election today. *VOTE FOR PRESIDENT*: Share of respondents that would vote for the current President if there was an election today. *OTHER*: Share of respondents that do not know or would not vote. *Inequality*: Information about the share of wealth held by the richest 20 percent of Indonesians. *Position (Bottom40%)*: Information that informs respondents they are among the poorest 40 percent of Indonesians. *Position (Top40%)*: Information that informs respondents they are among the richest 40 percent of Indonesians. *IV estimates*: This is determined using the CONCERN INDEX variable in Table 3 in the first stage of the IV analysis.

This table shows the Inequality treatment increased the likelihood respondents would vote against the President. In addition, the IV estimates in Panel B illustrate that the impact of the Inequality treatment was partly driven by respondents becoming more concerned about inequality. The Position treatment did not have a statistically significant impact on voting intentions.

TABLE 5: EFFECT OF THE TREATMENTS ON PEOPLE'S SUPPORT FOR REDISTRIBUTION

	(1)	(2)	(3)	(4)	(5)	(6)
	URGENT	RESPONSIBILITY	TOOLS	TAXESLOW	TAXTOP1%	INDEX
<i>Panel A: Treatment Effects</i>						
Inequality	0.022** (0.01)	-0.007 (0.02)	-0.012 (0.02)	0.029 (0.02)	0.026 (0.02)	0.035 (0.03)
Controls	Y	Y	Y	Y	Y	Y
Mean dep. var.	0.929	0.717	0.698	0.332	0.786	
Obs.	1828	1828	1828	1828	1828	
Position (Bottom40%)	0.040* (0.02)	0.000 (0.04)	0.015 (0.04)	0.029 (0.04)	0.042 (0.03)	0.073 (0.04)
Controls	Y	Y	Y	Y	Y	Y
Mean dep. var.	0.902	0.693	0.644	0.297	0.765	
Obs.	622	622	622	622	622	
Position (Top40%)	-0.027 (0.02)	-0.067** (0.03)	-0.045 (0.03)	-0.080** (0.03)	-0.097*** (0.03)	-0.153*** (0.04)
Controls	Y	Y	Y	Y	Y	Y
Mean dep. var.	0.952	0.757	0.736	0.36	0.811	
Obs.	769	769	769	769	769	
<i>Panel B: IV Estimates</i>						
Inequality	0.172* (0.10)	-0.057 (0.17)	-0.097 (0.18)	0.234 (0.18)	0.204 (0.15)	0.276 (0.20)
Controls	Y	Y	Y	Y	Y	Y
Obs.	1828	1828	1828	1828	1828	
Position (Bottom40%)	0.309 (0.20)	0.001 (0.28)	0.113 (0.29)	0.222 (0.29)	0.320 (0.29)	0.559 (0.38)
Controls	Y	Y	Y	Y	Y	Y
Obs.	622	622	622	622	622	
Position (Top40%)	1.959 (7.90)	4.954 (19.62)	3.288 (13.20)	5.868 (23.81)	7.143 (29.00)	11.251 (45.10)
Controls	Y	Y	Y	Y	Y	Y
Obs.	769	769	769	769	769	

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *URGENT*: Share of respondents that believe urgent action is required from the government to reduce inequality. *RESPONSIBILITY*: Share of respondents that agree the government is responsible for closing the gap between the rich and the poor in Indonesia. *TOOLS*: Share of respondents that agree the government has the ability and the tools to reduce the inequality of opportunities between children born in poor and rich families. *TAXES LOW*: Share of respondents that describe taxes in Indonesia today for those with high incomes as too low. *TAX TOP 1%*: Share of respondents that would rather the government raise income taxes on the richest 1% of people as opposed to cut public services to decrease government debt. *INDEX*: is the unweighted average of the z-scores of all variables from columns (1) to (5), oriented so that a higher index means more support for redistribution. *Inequality*: Information about the share of wealth held by the richest 20 percent of Indonesians. *Position (Bottom40%)*: Information that informs respondents they are among the poorest 40 percent of Indonesians. *Position (Top40%)*: Information that informs respondents they are among the richest 40 percent of Indonesians. *IV estimates*: This is determined using the CONCERN INDEX variable in Table 3 in the first stage of the IV analysis.

This table shows the Inequality treatment had no impact on preferences for redistribution. The Position treatment led relatively rich respondents to become less supportive of redistribution and had no impact on relatively poor respondents.

TABLE 6: DIFFERENCES BETWEEN THE IMPACT OF INEQUALITY AND POSITION TREATMENTS

VARIABLES	(1) CONCERN INDEX	(2) REDISTRIBUTION INDEX	(3) VOTE AGAINST PRESIDENT
Top 40 percent	-0.144*** (0.05)	-0.144*** (0.04)	-0.074** (0.03)
Controls	Y	Y	Y
Observations	789	789	789
Bottom 40 percent	0.088 (0.06)	0.010 (0.04)	-0.010 (0.03)
Controls	Y	Y	Y
Observations	628	628	628

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *CONCERN INDEX*: unweighted average of the z-scores of the two variables that are used to measure people's concern about inequality (see table 3), oriented so that a higher index means more concern about inequality. *REDISTRIBUTION INDEX*: is the unweighted average of the z-scores of the five variables that are used to measure people's support for redistribution (see table 5), oriented so that a higher index means more support for redistribution. *VOTE AGAINST PRESIDENT*: Share of respondents that would vote against the current President if there was an election today. *Bottom 40 percent*: Respondents who have a monthly household per capita income in the bottom 40 percent of the national income distribution. *Top 40 percent*: Respondents who have a monthly household per capita income in the top 40 percent of the national income distribution.

This table shows there were statistically significant differences between the impact of the Inequality and Position treatments for relatively rich respondents across each of the main groups of outcomes, however there were no differences for relatively poor respondents.

11 Appendix A - Additional tables

TABLE A1: MAIN RESULTS FOR POSITION TREATMENT EXCLUDING HOUSEHOLDS WITH ONE OR MORE THAN FIVE HOUSEHOLD MEMBERS

VARIABLES	(1) CONCERN INDEX	(2) REDISTRIBUTION INDEX	(3) VOTE AGAINST PRESIDENT
Top 40 percent	0.001 (0.06)	-0.167*** (0.04)	0.005 (0.03)
Controls	Y	Y	Y
Observations	635	635	635
Bottom 40 percent	0.160** (0.07)	0.089 (0.05)	-0.028 (0.04)
Controls	Y	Y	Y
Observations	431	431	431

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *CONCERN INDEX*: unweighted average of the z-scores of the two variables that are used to measure people's concern about inequality (see table 3), oriented so that a higher index means more concern about inequality. *REDISTRIBUTION INDEX*: is the unweighted average of the z-scores of the five variables that are used to measure people's support for redistribution (see table 5), oriented so that a higher index means more support for redistribution. *VOTE AGAINST PRESIDENT* Share of respondents that would vote against the current President if there was an election today. *Bottom 40 percent*: Respondents who have a monthly household per capita income in the bottom 40 percent of the national income distribution. *Top 40 percent*: Respondents who have a monthly household per capita income in the top 40 percent of the national income distribution.

This table shows that even after excluding the outlier households with only one or more than five household members, the Position treatment still led relatively rich respondents to become less supportive of redistribution and relatively poor respondents to be more concerned about inequality.

TABLE A2: THE IMPACT OF THE POSITION TREATMENT BY QUINTILE

VARIABLES	(1) CONCERN INDEX	(2) REDISTRIBUTION INDEX	(3) VOTE AGAINST PRESIDENT
Bottom Quintile	0.176** (0.084)	0.116* (0.065)	-0.071 (0.047)
Controls	Y	Y	Y
Observations	323	323	323
Second Bottom Quintile	0.093 (0.082)	0.041 (0.063)	-0.027 (0.051)
Controls	Y	Y	Y
Observations	299	299	299
Middle Quintile	0.077 (0.078)	0.027 (0.057)	0.020 (0.038)
Controls	Y	Y	Y
Observations	451	451	451
Second Top Quintile	-0.148 (0.097)	-0.049 (0.072)	-0.035 (0.054)
Controls	Y	Y	Y
Observations	257	257	257
Top Quintile	0.058 (0.068)	-0.203*** (0.048)	0.021 (0.038)
Controls	Y	Y	Y
Observations	512	512	512

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *CONCERN INDEX*: unweighted average of the z-scores of the two variables that are used to measure people's concern about inequality (see table 3), oriented so that a higher index means more concern about inequality. *REDISTRIBUTION INDEX*: is the unweighted average of the z-scores of the five variables that are used to measure people's support for redistribution (see table 5), oriented so that a higher index means more support for redistribution. *VOTE AGAINST PRESIDENT* Share of respondents that would vote against the current President if there was an election today. *Bottom quintile*: Respondents who have a monthly household per capita income in the bottom 20 percent of the national income distribution. *Second Bottom quintile*: Respondents who have a monthly household per capita income between the top 60 percent and bottom 20 percent of the national income distribution. *Middle quintile*: Respondents who have a monthly household per capita income between the top 40 percent and bottom 40 percent of the national income distribution. *Second Top quintile*: Respondents who have a monthly household per capita income between the top 20 percent and bottom 60 percent of the national income distribution. *Top quintile*: Respondents who have a monthly household per capita income in the top 20 percent of the national income distribution.

This table shows that the effect of the Position treatment on relatively rich (poor) respondents is primarily driven by those in the top (bottom) quintile of the national income distribution.

TABLE A3: BACKGROUND CHARACTERISTICS ASSOCIATED WITH BEING CONCERNED ABOUT INEQUALITY

VARIABLES	(1) GAP	(2) MOBILITY	(3) CONCERN INDEX
Household members	-0.002 (0.007)	0.008 (0.008)	0.006 (0.013)
Bottom 40 percent	0.019 (0.032)	0.013 (0.039)	0.037 (0.060)
Male	-0.011 (0.028)	-0.002 (0.034)	-0.016 (0.052)
Tertiary educated	0.074*** (0.028)	-0.008 (0.034)	0.086 (0.053)
Aged over35yrs	-0.048 (0.033)	0.038 (0.041)	-0.023 (0.063)
Urban dweller	-0.010 (0.029)	-0.060* (0.036)	-0.072 (0.055)
Married	0.053* (0.030)	-0.019 (0.036)	0.049 (0.056)
Working full-time	0.027 (0.029)	-0.062* (0.035)	-0.029 (0.054)
Regular participation in social media	0.093*** (0.030)	0.030 (0.037)	0.147*** (0.057)
Observations	906	906	906

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *GAP*: Share of respondents that agree the gap between the rich and the poor is too large in Indonesia. *MOBILITY*: Share of respondents that agree it is difficult or impossible for people to increase the money they have through hard work alone. *CONCERN INDEX*: is the unweighted average of the z-scores of columns (1) and (2), oriented so that a higher index means more concern about inequality. *Male*: Dummy equal to one if the respondent is male and zero otherwise. *Aged over35yrs*: Dummy equal to one if the respondent's age is 35 years old or above and zero otherwise. *Urban dweller*: Dummy equal to one if the respondent resides in urban areas and zero otherwise. *Household members*: Respondent's number of household members. *Tertiary educated*: Dummy equal to one if the respondent's education level is at least a Bachelor's degree and zero otherwise. *Married*: Dummy equal to one if the respondent is married and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Regular participation in social media*: Dummy equal to one if the respondent participates in at least three of the five widely used social media platforms in Indonesia (e.g. Facebook, Twitter, Line, Instagram, and Google Plus) and zero otherwise. *Bottom 40 percent*: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise.

This table presents the results of OLS multivariate regressions whereby the background characteristics of respondents are the independent variables and the measures of concern about inequality are the dependent variable. It shows that on average regular participation in social media is positively associated with being concerned about inequality after controlling for other background characteristics. This analysis is based on respondents in the control group.

TABLE A4: BACKGROUND CHARACTERISTICS (+VOTING INTENTIONS) ASSOCIATED WITH BEING CONCERNED ABOUT INEQUALITY

VARIABLES	(1) GAP	(2) MOBILITY	(3) CONCERN INDEX
Household members	-0.004 (0.007)	0.004 (0.008)	-0.001 (0.013)
Bottom 40 percent	0.007 (0.031)	-0.007 (0.038)	0.002 (0.058)
Male	-0.025 (0.027)	-0.024 (0.033)	-0.056 (0.051)
Tertiary educated	0.066** (0.028)	-0.021 (0.034)	0.063 (0.052)
Aged over35yrs	-0.057* (0.033)	0.023 (0.040)	-0.048 (0.061)
Urban dweller	-0.015 (0.029)	-0.067* (0.035)	-0.086 (0.054)
Married	0.048 (0.029)	-0.028 (0.036)	0.033 (0.055)
Working full-time	0.029 (0.028)	-0.059* (0.034)	-0.023 (0.053)
Regular participation in social media	0.087*** (0.030)	0.021 (0.036)	0.132** (0.055)
Vote Against President	0.151*** (0.032)	0.250*** (0.039)	0.441*** (0.059)
Observations	906	906	906

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *GAP*: Share of respondents that agree the gap between the rich and the poor is too large in Indonesia. *MOBILITY*: Share of respondents that agree it is difficult or impossible for people to increase the money they have through hard work alone. *CONCERN INDEX*: is the unweighted average of the z-scores of columns (1) and (2), oriented so that a higher index means more concern about inequality. *Male*: Dummy equal to one if the respondent is male and zero otherwise. *Aged over35yrs*: Dummy equal to one if the respondent's age is 35 years old or above and zero otherwise. *Urban dweller*: Dummy equal to one if the respondent resides in urban areas and zero otherwise. *Household members*: Respondent's number of household members. *Tertiary educated*: Dummy equal to one if the respondent's education level is at least a Bachelor's degree and zero otherwise. *Married*: Dummy equal to one if the respondent is married and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Regular participation in social media*: Dummy equal to one if the respondent participates in at least three of the five widely used social media platforms in Indonesia (e.g. Facebook, Twitter, Line, Instagram, and Google Plus) and zero otherwise. *Bottom 40 percent*: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise. *Vote Against President*: Share of respondents that would vote against the current President if there was an election today.

This table presents the results of OLS multivariate regressions whereby the background characteristics (including voting intentions) of respondents are the independent variables and the measures of concern about inequality are the dependent variable. It shows that on average intending to vote against the President and regular participation in social media is positively associated with being concerned about inequality after controlling for other background characteristics. This analysis is based on respondents in the control group.

TABLE A5: BACKGROUND CHARACTERISTICS ASSOCIATED WITH VOTING INTENTIONS

	(1) VOTE AGAINST PRESIDENT	(2) VOTE FOR PRESIDENT	(3) OTHER
Household members	0.015** (0.007)	-0.004 (0.008)	-0.010* (0.006)
Bottom 40 percent	0.079** (0.033)	-0.057 (0.038)	-0.022 (0.029)
Male	0.091*** (0.028)	-0.050 (0.033)	-0.040 (0.025)
Tertiary educated	0.053* (0.029)	-0.017 (0.034)	-0.035 (0.026)
Aged over35yrs	0.057* (0.034)	0.009 (0.040)	-0.066** (0.031)
Urban dweller	0.031 (0.030)	0.015 (0.035)	-0.046* (0.027)
Married	0.036 (0.031)	-0.034 (0.036)	-0.002 (0.027)
Working full-time	-0.012 (0.030)	0.011 (0.035)	0.001 (0.026)
Regular participation in social media	0.035 (0.031)	-0.030 (0.036)	-0.005 (0.028)
Observations	906	906	906

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *VOTE AGAINST PRESIDENT*: Share of respondents that would vote against the current President if there was an election today. *VOTE FOR PRESIDENT*: Share of respondents that would vote for the current President if there was an election today. *OTHER*: Share of respondents that do not know or would not vote. *Male*: Dummy equal to one if the respondent is male and zero otherwise. *Aged over35yrs*: Dummy equal to one if the respondent's age is 35 years old or above and zero otherwise. *Urban dweller*: Dummy equal to one if the respondent resides in urban areas and zero otherwise. *Household members*: Respondent's number of household members. *Tertiary educated*: Dummy equal to one if the respondent's education level is at least a Bachelor's degree and zero otherwise. *Married*: Dummy equal to one if the respondent is married and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Regular participation in social media*: Dummy equal to one if the respondent participates in at least three of the five widely used social media platforms in Indonesia (e.g. Facebook, Twitter, Line, Instagram, and Google Plus) and zero otherwise. *Bottom 40 percent*: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise.

This table presents the results of OLS multivariate regressions whereby the background characteristics of respondents are the independent variables and the measures of voting intentions are the dependent variable. It shows that on average having a large number of household members, being in the bottom 40 percent of the income distribution and being male is strongly associated with intending to vote against the President after controlling for other background characteristics. This analysis is based on respondents in the control group.

TABLE A6: BACKGROUND CHARACTERISTICS ASSOCIATED WITH PREFERENCES FOR REDISTRIBUTION

	(1)	(2)	(3)	(4)	(5)	(6)
	URGENT	RESPONSIBILITY	TOOLS	TAXESLOW	TAXTOP1%	INDEX
Household members	0.005 (0.004)	0.001 (0.008)	0.005 (0.008)	-0.009 (0.008)	-0.008 (0.007)	-0.001 (0.009)
Bottom 40 percent	-0.032 (0.020)	-0.009 (0.035)	-0.055 (0.036)	0.013 (0.036)	-0.014 (0.032)	-0.056 (0.042)
Male	-0.053*** (0.017)	0.059* (0.030)	0.051* (0.031)	-0.009 (0.032)	0.013 (0.028)	0.007 (0.037)
Tertiary educated	-0.017 (0.018)	0.016 (0.031)	0.009 (0.032)	-0.038 (0.032)	-0.006 (0.028)	-0.022 (0.038)
Aged over35yrs	0.030 (0.021)	0.091** (0.037)	0.075** (0.037)	0.091** (0.038)	0.014 (0.034)	0.143*** (0.044)
Urban dweller	-0.006 (0.018)	-0.021 (0.032)	0.006 (0.033)	0.045 (0.033)	0.027 (0.029)	0.021 (0.039)
Married	0.025 (0.019)	0.067** (0.033)	0.051 (0.033)	0.071** (0.034)	0.026 (0.030)	0.115*** (0.040)
Working full-time	-0.011 (0.018)	-0.018 (0.032)	-0.016 (0.032)	0.052 (0.033)	-0.022 (0.029)	-0.013 (0.038)
Regular participation in social media	0.014 (0.019)	0.052 (0.033)	0.064* (0.034)	0.084** (0.034)	0.063** (0.030)	0.129*** (0.040)
Observations	906	906	906	906	906	906

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *URGENT*: Share of respondents that believe urgent action is required from the government to reduce inequality. *RESPONSIBILITY*: Share of respondents that agree the government is responsible for closing the gap between the rich and the poor in Indonesia. *TOOLS*: Share of respondents that agree the government has the ability and the tools to reduce the inequality of opportunities between children born in poor and rich families. *TAXES LOW*: Share of respondents that describe taxes in Indonesia today for those with high incomes as too low. *TAX TOP 1%*: Share of respondents that would rather the government raise income taxes on the richest 1% of people as opposed to cut public services to decrease government debt. *INDEX*: is the unweighted average of the z-scores of all variables from columns (1) to (5), oriented so that a higher index means more support for redistribution. *Male*: Dummy equal to one if the respondent is male and zero otherwise. *Aged over35yrs*: Dummy equal to one if the respondent's age is 35 years old or above and zero otherwise. *Urban dweller*: Dummy equal to one if the respondent resides in urban areas and zero otherwise. *Household members*: Respondent's number of household members. *Tertiary educated*: Dummy equal to one if the respondent's education level is at least a Bachelor's degree and zero otherwise. *Married*: Dummy equal to one if the respondent is married and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Regular participation in social media*: Dummy equal to one if the respondent participates in at least three of the five widely used social media platforms in Indonesia (e.g. Facebook, Twitter, Line, Instagram, and Google Plus) and zero otherwise. *Bottom 40 percent*: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise.

This table presents the results of OLS multivariate regressions whereby the background characteristics of respondents are the independent variables and the measures of support for redistribution are the dependent variable. It shows that on average regular participation in social media, being married and aged over 35 years old is positively associated with being more supportive of redistribution after controlling for other background characteristics. This analysis is based on respondents in the control group.

TABLE A7: BACKGROUND CHARACTERISTICS (+VOTING INTENTIONS) ASSOCIATED WITH PREFERENCES FOR REDISTRIBUTION

	(1)	(2)	(3)	(4)	(5)	(6)
	URGENT	RESPONSIBILITY	TOOLS	TAXESLOW	TAXTOP1%	INDEX
Household members	0.004 (0.004)	-0.001 (0.007)	0.005 (0.008)	-0.010 (0.008)	-0.007 (0.007)	-0.003 (0.009)
Bottom 40 percent	-0.033* (0.020)	-0.023 (0.034)	-0.060* (0.036)	0.009 (0.036)	-0.012 (0.032)	-0.066 (0.042)
Male	-0.054*** (0.017)	0.042 (0.030)	0.046 (0.031)	-0.013 (0.032)	0.016 (0.028)	-0.004 (0.037)
Tertiary educated	-0.017 (0.018)	0.006 (0.031)	0.006 (0.032)	-0.040 (0.032)	-0.004 (0.028)	-0.028 (0.038)
Aged over35yrs	0.029 (0.021)	0.080** (0.036)	0.072* (0.037)	0.088** (0.038)	0.016 (0.034)	0.136*** (0.044)
Urban dweller	-0.007 (0.018)	-0.026 (0.032)	0.004 (0.033)	0.044 (0.033)	0.028 (0.029)	0.017 (0.039)
Married	0.024 (0.019)	0.060* (0.032)	0.049 (0.033)	0.069** (0.034)	0.027 (0.030)	0.111*** (0.040)
Working full-time	-0.011 (0.018)	-0.016 (0.031)	-0.015 (0.032)	0.053 (0.033)	-0.022 (0.029)	-0.012 (0.038)
Regular participation in social media	0.013 (0.019)	0.046 (0.033)	0.062* (0.034)	0.083** (0.034)	0.064** (0.030)	0.125*** (0.040)
Vote Against President	0.012 (0.020)	0.187*** (0.035)	0.059 (0.036)	0.047 (0.037)	-0.029 (0.033)	0.124*** (0.043)
Observations	906	906	906	906	906	906

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *URGENT*: Share of respondents that believe urgent action is required from the government to reduce inequality. *RESPONSIBILITY*: Share of respondents that agree the government is responsible for closing the gap between the rich and the poor in Indonesia. *TOOLS*: Share of respondents that agree the government has the ability and the tools to reduce the inequality of opportunities between children born in poor and rich families. *TAXES LOW*: Share of respondents that describe taxes in Indonesia today for those with high incomes as too low. *TAX TOP 1%*: Share of respondents that would rather the government raise income taxes on the richest 1% of people as opposed to cut public services to decrease government debt. *INDEX*: is the unweighted average of the z-scores of all variables from columns (1) to (5), oriented so that a higher index means more support for redistribution. *Male*: Dummy equal to one if the respondent is male and zero otherwise. *Aged over35yrs*: Dummy equal to one if the respondent's age is 35 years old or above and zero otherwise. *Urban dweller*: Dummy equal to one if the respondent resides in urban areas and zero otherwise. *Household members*: Respondent's number of household members. *Tertiary educated*: Dummy equal to one if the respondent's education level is at least a Bachelor's degree and zero otherwise. *Married*: Dummy equal to one if the respondent is married and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Regular participation in social media*: Dummy equal to one if the respondent participates in at least three of the five widely used social media platforms in Indonesia (e.g. Facebook, Twitter, Line, Instagram, and Google Plus) and zero otherwise. *Bottom 40 percent*: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise. *Vote Against President*: Share of respondents that would vote against the current President if there was an election today.

This table presents the results of OLS multivariate regressions whereby the background characteristics (including voting intentions) of respondents are the independent variables and the measures of support for redistribution are the dependent variable. It shows that on average intending to vote against the President, regular participation in social media, being married and aged over 35 years old is positively associated with being more supportive of redistribution after controlling for other background characteristics. This analysis is based on respondents in the control group.

TABLE A8: INEQUALITY TREATMENT HETEROGENOUS EFFECTS

VARIABLES	(1) CONCERN INDEX	(2)	(3) REDISTRIBUTION INDEX	(4)	(5)	(6) VOTE AGAINST PRESIDENT
Bottom 40 percent	N	Y	N	Y	N	Y
Treatment effect	0.160*** (0.044)	0.046 (0.060)	0.024 (0.031)	0.067 (0.045)	0.077*** (0.025)	-0.031 (0.035)
Controls	Y	Y	Y	Y	Y	Y
Observations	1,210	618	1,210	618	1,210	618
Tertiary educated	N	Y	N	Y	N	Y
Treatment effect	0.128** (0.054)	0.124*** (0.047)	0.004 (0.038)	0.063* (0.034)	0.031 (0.029)	0.053* (0.028)
Controls	Y	Y	Y	Y	Y	Y
Observations	842	986	842	986	842	986
Working full-time	N	Y	N	Y	N	Y
Treatment effect	0.099* (0.054)	0.149*** (0.047)	0.004 (0.037)	0.057* (0.035)	0.051* (0.030)	0.034 (0.028)
Controls	Y	Y	Y	Y	Y	Y
Observations	855	973	855	973	855	973
Facebook user	N	Y	N	Y	N	Y
Treatment effect	-0.152 (0.109)	0.163*** (0.038)	-0.018 (0.085)	0.047* (0.027)	-0.054 (0.056)	0.053** (0.022)
Controls	Y	Y	Y	Y	Y	Y
Observations	208	1,620	208	1,620	208	1,620

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Y: Yes (i.e. the respondent has this characteristic). N: No (i.e. the respondent does not have this characteristic). *CONCERN INDEX*: unweighted average of the z-scores of the two variables that are used to measure people's concern about inequality (see table 3), oriented so that a higher index means more concern about inequality. *REDISTRIBUTION INDEX*: is the unweighted average of the z-scores of the five variables that are used to measure people's support for redistribution (see table 5), oriented so that a higher index means more support for redistribution. *VOTE AGAINST PRESIDENT* Share of respondents that would vote against the current President if there was an election today. *Bottom 40 percent*: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise. *Tertiary educated*: Dummy equal to one if the respondent's education level is at least a Bachelor's degree and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Facebook user*: Dummy equal to one if the respondent uses Facebook and zero otherwise.

This table presents the heterogenous treatment effects of the Inequality treatment in terms of whether a respondent is in the bottom 40 percent of the income distribution, tertiary educated, working full-time and uses Facebook. It shows that the overall effect from this treatment was primarily driven by richer respondents and those that use Facebook.

TABLE A9: POSITION TREATMENT HETEROGENOUS EFFECTS (AMONG RESPONDENTS IN TOP 40% OF THE INCOME DISTRIBUTION)

VARIABLES	(1) CONCERN INDEX	(2)	(3) REDISTRIBUTION INDEX	(4)	(5) VOTE AGAINST PRESIDENT	(6)
Tertiary educated	N	Y	N	Y	N	Y
Treatment effect	0.075 (0.093)	-0.049 (0.070)	-0.164** (0.067)	-0.145*** (0.050)	0.034 (0.051)	-0.014 (0.039)
Controls	Y	Y	Y	Y	Y	Y
Observations	289	480	289	480	289	480
Working full-time	N	Y	N	Y	N	Y
Treatment effect	-0.123 (0.095)	0.058 (0.068)	-0.258*** (0.068)	-0.098** (0.050)	0.005 (0.051)	0.006 (0.039)
Controls	Y	Y	Y	Y	Y	Y
Observations	292	477	292	477	292	477
Facebook user	N	Y	N	Y	N	Y
Treatment effect	0.079 (0.196)	-0.028 (0.058)	-0.171 (0.154)	-0.161*** (0.041)	0.089 (0.106)	-0.011 (0.032)
Controls	Y	Y	Y	Y	Y	Y
Observations	69	700	69	700	69	700

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Y: Yes (i.e. the respondent has this characteristic). N: No (i.e. the respondent does not have this characteristic). *CONCERN INDEX*: unweighted average of the z-scores of the two variables that are used to measure people's concern about inequality (see table 3), oriented so that a higher index means more concern about inequality. *REDISTRIBUTION INDEX*: is the unweighted average of the z-scores of the five variables that are used to measure people's support for redistribution (see table 5), oriented so that a higher index means more support for redistribution. *VOTE AGAINST PRESIDENT* Share of respondents that would vote against the current President if there was an election today. *Tertiary educated*: Dummy equal to one if the respondent's education level is at least a Bachelor's degree and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Facebook user*: Dummy equal to one if the respondent uses Facebook and zero otherwise.

This table presents the heterogeneous treatment effects of the Position treatment for respondents in the top 40 percent of the income distribution in terms of whether a respondent is tertiary educated, working full-time and uses Facebook. It shows that the overall effect from this treatment was primarily driven by respondents that do not work full-time.

TABLE A10: POSITION TREATMENT HETEROGENOUS EFFECTS (AMONG RESPONDENTS IN THE BOTTOM 40% OF THE INCOME DISTRIBUTION)

VARIABLES	(1) CONCERN INDEX	(2)	(3) REDISTRIBUTION INDEX	(4)	(5) VOTE AGAINST PRESIDENT	(6)
Tertiary educated	N	Y	N	Y	N	Y
Treatment effect	0.115 (0.075)	0.142 (0.097)	0.032 (0.057)	0.154** (0.074)	0.006 (0.042)	-0.141** (0.062)
Controls	Y	Y	Y	Y	Y	Y
Observations	394	228	394	228	394	228
Working full-time	N	Y	N	Y	N	Y
Treatment effect	0.121 (0.075)	0.175* (0.094)	-0.010 (0.055)	0.236*** (0.078)	-0.017 (0.043)	-0.087 (0.060)
Controls	Y	Y	Y	Y	Y	Y
Observations	404	218	404	218	404	218
Facebook user	N	Y	N	Y	N	Y
Treatment effect	-0.059 (0.158)	0.178*** (0.063)	-0.110 (0.131)	0.111** (0.048)	-0.156* (0.090)	-0.017 (0.038)
Controls	Y	Y	Y	Y	Y	Y
Observations	91	531	91	531	91	531

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Y: Yes (i.e. the respondent has this characteristic). N: No (i.e. the respondent does not have this characteristic). *CONCERN INDEX*: unweighted average of the z-scores of the two variables that are used to measure people's concern about inequality (see table 3), oriented so that a higher index means more concern about inequality. *REDISTRIBUTION INDEX*: is the unweighted average of the z-scores of the five variables that are used to measure people's support for redistribution (see table 5), oriented so that a higher index means more support for redistribution. *VOTE AGAINST PRESIDENT* Share of respondents that would vote against the current President if there was an election today. *Tertiary educated*: Dummy equal to one if the respondent's education level is at least a Bachelor's degree and zero otherwise. *Working full-time*: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise. *Facebook user*: Dummy equal to one if the respondent uses Facebook and zero otherwise.

This table presents the heterogenous treatment effects of the Position treatment for respondents in the bottom 40 percent of the income distribution in terms of whether a respondent is tertiary educated, working full-time and uses Facebook. It shows that this treatment had a large effect on respondents that work full-time, are tertiary educated and use Facebook.

12 Appendix B - Variable Definitions and Survey Questions

Background characteristics:

Male: Dummy equal to one if the respondent is male and zero otherwise.

Aged over 35yrs: Dummy equal to one if the respondent's age is 35 years old or above and zero otherwise.

Urban dweller: Dummy equal to one if the respondent resides in urban areas and zero otherwise.

Household members: Respondent's number of household members.

Tertiary educated: Dummy equal to one if the respondent's education level is at least a Bachelor's degree and zero otherwise.

Married: Dummy equal to one if the respondent is married and zero otherwise.

Working full-time: Dummy equal to one if the respondent works at least 30 hours per week and zero otherwise.

Regular participation in social media: Dummy equal to one if the respondent participates in at least three of the five widely used social media platforms in Indonesia (e.g. Facebook, Twitter, Line, Instagram, and Google Plus) and zero otherwise.

Facebook user: Dummy equal to one if the respondent uses Facebook and zero otherwise.

Bottom 40 percent: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 40 percent of the national income distribution and zero otherwise.

Bottom quintile: Dummy equal to one if the respondent's monthly household per capita income is in the bottom 20 percent of the national income distribution and zero otherwise.

Second Bottom quintile: Dummy equal to one if the respondent's monthly household per capita income is between the top 60 percent and bottom 20 percent of the national income distribution and zero otherwise.

Middle quintile: Dummy equal to one if the respondent's monthly household per capita income is between the top 40 percent and bottom 40 percent of the national income

distribution and zero otherwise.

Second Top quintile: Dummy equal to one if the respondent's monthly household per capita income is between the top 20 percent and bottom 60 percent of the national income distribution and zero otherwise.

Top quintile: Dummy equal to one if the respondent's monthly household per capita income is in the top 20 percent of the national income distribution and zero otherwise.

Vote against the President: Share of respondents that would vote against the current President if there was an election today.

Vote for the President: Share of respondents that would vote for the current President if there was an election today.

Other: Share of respondents that do not know or would not vote.

Variables related to concern about inequality and support for redistribution:

GAP: Share of respondents that agree the gap between the rich and the poor is too large in Indonesia.

MOBILITY: Share of respondents that agree it is difficult or impossible for people to increase the money they have through hard work alone.

URGENT: Share of respondents that believe urgent action is required from the government to reduce inequality.

RESPONSIBILITY: Share of respondents that agree the government is responsible for closing the gap between the rich and the poor in Indonesia.

TOOLS: Share of respondents that agree the government has the ability and the tools to reduce the inequality of opportunities between children born in poor and rich families.

TAXES LOW: Share of respondents that describe taxes in Indonesia today for those with high incomes as too low.

TAX TOP 1%: Share of respondents that would rather the government raise income taxes on the richest 1% of people as opposed to cut public services to decrease government debt.

The following questions were asked immediately following the treatments:

If the presidential election was held today, would you re-elect JOKOWI as the president?

1. Yes 2. No 3. Would not vote 4. Don't know

To what extent do you agree with the following statement "The gap between the rich and the poor in Indonesia is too large". 1. strongly agree 2. agree 3. neither agree nor disagree 4. disagree 5. strongly disagree

In your opinion, which of the following three statements best describes the current reality in Indonesia? 1. people easily improve the amount of money they have if they are willing to work hard 2. it is difficult to improve the amount of money people have despite working hard 3. it is almost impossible to improve the amount of money people have despite working hard

In your opinion, how urgent or not urgent does the difference in incomes between rich and poor in Indonesia need to be resolved by the Indonesian government? 1. very urgent 2. quite urgent 3. less urgent 4. not urgent at all

To what extent do you agree with the following statement "It is the responsibility of the government to reduce the gap between the rich and the poor?" 1. strongly agree 2. agree 3. neither agree nor disagree 4. disagree 5. strongly disagree

Generally, how would you describe taxes in Indonesia today for those with high incomes? Taxes are... 1. much too high 2. too high 3. about right 4. too low 5. much too low

As you may know, there have been proposals to decrease government debt by either raising income taxes on the richest 1% of people or cutting public services. Do you think income taxes on the richest 1% of people should be? 1. increased 2. stay the same 3. decreased

To what extent do you agree with the following statement “The government has the ability and the tools to reduce the inequality of opportunities between children born in poor and rich families” 1. strongly agree 2. agree 3. neither agree nor disagree 4. disagree 5. strongly disagree