Numbers and attitudes towards welfare state generosity

Carsten Jensen (Department of Political Science, Aarhus University)

Anthony Kevins (School of Governance, Utrecht University)*

Abstract: Between pro-retrenchment politicians and segments of the media, exaggerated claims about the generous benefits enjoyed by those on welfare are relatively common. But to what extent, and under what conditions, can they actually shape attitudes toward welfare? This study explores these questions via a survey experiment conducted in the UK, examining: (1) the extent to which the value of the claimed figure matters; (2) if the presence of anchoring information about minimum wage income has an impact; and (3) whether these effects differ based on egalitarianism and political knowledge. Results suggest that increasing the size of the claimed figure decreases support in a broadly linear fashion, with anchoring information important only when (asserted) benefit levels are modestly above the minimum wage income. Egalitarianism, in turn, primarily matters when especially low figures are placed alongside information about minimum wage, while low-knowledge respondents were more susceptible to anchoring effects than high-knowledge ones.

Key Words: welfare state; benefit generosity; public opinion; United Kingdom.

*Corresponding Author

There is a long history of politicians trotting out claims about the generosity of welfare programmes in order to create public support for retrenching them. Ronald Reagan's famous "welfare queen", raking in over $150 000 a year, is but one example of this use of massaged or even falsified statistics about welfare benefit levels. Whether these figures are meant to highlight benefit fraud – as with Reagan – or inequities in the welfare system – as with former British Chancellor of the Exchequer George Osborne's complaint about families receiving "£100 000 a year in benefit" – their persistence as a trope is striking. And not only are these campaigns clearly viewed as vote-winners, but they also often give rise to real policy changes as well: the benefit cap, introduced in 2013 under the Conservative-Liberal Democrat coalition in the UK, was precisely intended to ensure that benefit levels never exceeded a threshold that the government designated the "average earned income of working households" (see Kennedy et al., 2016).

But to what extent do these sorts of claims about welfare generosity actually affect public opinion? Clearly, at least part of the intention in emphasizing overly generous benefits is to generate a reaction among the public, attracting both votes and support for welfare reform. Yet this raises another question: at what point do citizens find benefits to be "overly" generous? To take the British example, £100 000 is obviously a lot of money for someone on social assistance, since it is multiple times larger than the average income in Britain – but how would people react to a more realistic yet still substantial, figure of, say, a quarter of that size?

Drawing theoretical inspiration from existing research on public opinion formation (e.g. Bartels, 2005; Cruces et al., 2013; Petersen, 2015) and attitudes toward the welfare state (e.g. Wenzelburger and Hörisch, 2016; Giger and Nelson, 2013; Jæger, 2012), we explore these questions using an experiment conducted via a nationally representative survey of just under 2000 Britons. In doing so, we investigate: (1) the extent to which claims about benefit levels affect beliefs about whether the welfare system is too generous; and (2) the impact of receiving information about

the minimum wage alongside these claims. In combination with validated measures of respondents'

egalitarianism and political knowledge, this survey provides important insights into how numerical

information affects attitudes about the right levels of welfare generosity.

We find a number of interesting patterns. First, claims about benefit levels do indeed have

an impact on whether or not people think benefits are too generous. Broadly speaking, the higher

the claimed level of benefits, the more people believe benefits are too generous. Respondents told

that the typical family on benefits get £29 000 per year are notably more likely to think that benefits

are too generous than those told that the typical family on benefits get £9000. Second, situating

these claims alongside information about the minimum wage matters, but only for those told that

benefits were modestly higher than minimum wage income. Third, respondent egalitarianism

primarily makes a difference when especially low figures are placed alongside information about

minimum wage income. Finally, low-knowledge respondents appear to have been particularly

susceptible to anchoring effects.

Our findings, in brief, underscore how powerful using (inflated) figures can be for garnering

support for welfare state cutbacks. By contrast, objective reference points – or at least the minimum

wage income – matter rather less. These findings add to an emerging literature on "benefit myths"

and how these may affect popular attitudes toward the welfare state (Jensen and Tyler, 2015;

Geiger, 2017a; 2017b). More broadly, we also contribute to the literatures on information (e.g.

Kuklinski et al., 2000; Leeper and Slothuus, 2017) and framing (e.g. Chong and Druckman, 2007)

in public opinion formation by indicating how the strategic use of construed information can shift

attitudes. As such, our results will be relevant not just for scholars preoccupied with the politics of

the welfare state, but for all those concerned with the interaction between elite communication and

citizen opinion formation.

Preferences for benefit generosity in the welfare state literature

The starting point of the contemporary welfare state literature on public preferences dates back to Pierson's (1994) seminal *Dismantling the Welfare State?* The core proposition of Pierson is that the welfare state has become hugely popular among the majority of voters, and that politicians have therefore been forced to either hide their cutbacks or refrain from retrenchment altogether. Indeed, assumptions about the welfare state's broad popularity have been borne out repeatedly by surveys documenting that voters usually prefer increased spending on the welfare state, and that they typically believe it is the government's responsibility to provide protection in cases of unemployment, sickness, and other misfortunes (e.g. Van Oorschot, 2006; Jensen, 2014; Jæger, 2012). This is frequently the case even when respondents are confronted with trade-offs between social spending and taxation: the British Social Attitudes Survey, for example, documents that the proportion of Britons wanting to spend less on the welfare state in order to reduce taxation has never surpassed ten percent since polling began in 1983. By 2016, fully 48 percent wanted the government to spend more on the welfare state, while less than five percent wanted cuts (Curtice, 2017: 1-2).

Yet the broadly pro-welfare state stance of citizenries has quite obviously not meant that welfare cuts have been off the table, and analysis of large-N datasets has documented the considerable rollback of entitlements in many western welfare states (Korpi and Palme, 2003; Allan and Scruggs, 2004). The sheer frequency of retrenchment would seem to fly in the face of Pierson's claim that citizens love the welfare state so much that any attempt at cutting it back will lead to electoral disaster. Giger and Nelson (2011) and Schumacher et al. (2013), moreover, found that governments' vote shares did not systematically drop from one election to the next in the wake of cutbacks; voters occasionally seem to have reacted to reforms, but much of the time cutbacks had no effect on aggregated vote shares. Yet regardless of the precise extent to which voters are

bothered by retrenchment (c.f. Lee et al., 2017), these debates raise the possibility that voters' preferences might be less one-dimensional than Pierson's argument suggests. As a consequence, micro-level analysis of welfare preferences offers a particularly valuable route forward.

For our purposes, the key consideration here is that for many citizens, pro-welfare state stances exist in balance with other considerations, often moral or economic in nature (e.g. Ryan, 2014). In a simple but analytically powerful move that highlights this complexity, Giger and Nelson (2013) argue that voters can care both about the welfare state and a sound economy, but that the weight given to each dimension varies among people. Some are "unconditional believers" of the welfare state, while others are more "conditional believers", meaning that they ascribe roughly equal value to the welfare state and the economy (empirically speaking, few individuals ascribe more weight to the economy than the welfare state). The authors find that only unconditional believers punish governments for cutbacks.

The fact that many people cherish multiple goals is important because it underscores the potential impact of using moral or economic cues to shape support for cutbacks. Framing studies have a long history in political science (Chong and Druckman, 2007), and have recently also been employed to study welfare state preferences. Using survey experiments, Slothuus (2007) and Petersen et al. (2011), for instance, show that framing recipients as undeserving ("lazy") makes people less supportive of generous welfare state benefits. Similarly, Wenzelburger and Hörisch (2016) and Naumann (2017) find that people become more accepting of cuts if they are framed as economic necessities. And in a related strand of research, authors such as Lergetporer et al. (2016) and Stanley and Hartman (2017) have shown how information about how much is spent on the welfare state – and whether undeserving groups get a comparably large share of that spending – affect public preferences.

This strand of research suggests that voters are open to elite messages that present the social policy programmes as a burden. If voters accept the narrative, they tend to become less supportive of the welfare state (see, for example, Geiger, 2017a). In our reading, this is what politicians, as well as varied media outlets, are trying to achieve when they use inflated figures on benefit generosity (see Baumberg et al., 2012); yet it is, of course, not terribly surprising that people will become more sceptical of the welfare state if they think recipients receive some outlandish amount in benefits. The more interesting question is at what *point* people find benefits to be overly generous. Benefit levels lie on a continuum of generosity without a clear *a priori* dividing line between "suitable" and "outlandish". It is an empirical question where on this continuum voters think benefits become too generous. At the same time, it may well be that different groups of voters have fundamentally distinct responses to different levels of benefit generosity, as well as the presence or absence of information about relative economic benchmarks like the minimum wage. These questions are far from trivial and have, to our knowledge, not been investigated previously.

Expectations about the effect of claimed welfare benefit generosity on support

It is well established that citizens exhibit substantial biases when processing informational claims. For one thing, they generally possess limited factual knowledge (Delli Carpini and Keeter, 1996), which complicates the assessment and incorporation of new information. Recent research suggests, for example, that citizens are ignorant of both the distribution of income in society and where they themselves might fit into that distribution (Bartels, 2005; Norton and Ariely, 2011). Citizens are similarly in the dark when it comes to issue such as spending on welfare, benefits fraud, and the demographic composition of benefit claimants as a group (e.g. Jacobs and Shapiro, 1999; Kuklinski et al., 2000; Taylor-Gooby et al, 2003). As Geiger (2017b: 17), concludes, "[k]nowledge about the benefits system is low, as even where the public are right *on average*, on almost no measure do

more than one-third of *individuals* provide a correct answer as we define it; and the public are often not right on average" (emphasis in original). But if this is the case, how do people assess when benefit levels are "too generous", and under what conditions can claims about generosity impact people's preference?

Numbers are, in and of themselves, neutral – so understanding the importance of number-based claims requires us to focus on characteristics of the targeted audience. Existing research suggests that several contextual factors will be central. First, given that citizens have limited knowledge about the distribution of income in society, we assume that they will be uncertain as to how a specific level of benefits compares to the income of the typical employed person. At the same time, there is some research to suggest that providing factual information about the shape of the income distribution, correcting for misconceptions, can change people's opinions about the appropriate level of redistribution (cf. Cruces et al., 2013; Lawrence and Sides, 2014). To us, this suggests that citizens' assessments of the appropriateness of welfare benefit levels will, in the absence of any additional information about the income distribution, reflect the level of asserted benefits income, such that greater amounts engender increasingly anti-generous positions (H1). The flipside of this expectation is that respondents may be affected by information about how welfare income compares to well-known yardsticks, such as the income of those working for the minimum wage. Inspired by Petersen (2015), we expect that many individuals will view income levels at the minimum wage as a natural ceiling that benefits should not surpass, as the idea that the claimants can make more on welfare benefits than while working will generate perceptions of unfairness and/or economic disincentives ("welfare traps", in common parlance) (H2).

Second, as mentioned above, many citizens harbour strong opinions about the welfare state, especially when it comes to programmes aimed at the working-age poor (the ones under study here). Ideologically left-leaning individuals tend to view the jobless as more deserving than right-

7

leaning individuals do (Skitka and Tetlock, 1993; Jensen and Petersen, 2017) and, possibly as a consequence, they are also more supportive of generous welfare programmes (Zaller and Feldman, 1992; Jacoby, 1994). Citizens are also prone to engage in motivated reasoning: information is used not to update pre-existing beliefs, but rather to strengthen them – either by discounting inconvenient information (Taber and Lodge, 2006) or by only seeking out information that fits these beliefs (Druckman et al., 2012).

In particular, we expect egalitarianism to be the key value orientation shaping how citizens evaluate information about welfare generosity. In particular, information suggesting that welfare benefits are relatively high are most likely to play into the predispositions of anti-egalitarians, since the claim aligns with their prior belief that the jobless are relatively lazy and undeserving of the support they receive. Among egalitarians, by contrast, we would expect welfare state support to be relatively less affected by claims about benefit levels, given a higher baseline level of support for social programmes and a likely predisposition to discount assertions about high benefit levels. There are good reasons to expect, in sum, that increasing the claimed level of benefits will have a greater effect on anti-egalitarian individuals than egalitarian ones (H3).

Citizens' egalitarian orientations and the presence (or absence) of meaningful yardsticks may interact. One expectation, in light of the literature referenced above, is that egalitarianism matters most in the absence of yardsticks (H4). When a yardstick is provided, by contrast, we would expect these patterns to be modified. Assuming that the minimum wage signals some sort of common-sense ceiling for benefit generosity, attitudes of egalitarian individuals should approach the opinions of anti-egalitarians when they are presented with claims that benefit levels are equal to or greater than the income of those working at the minimum wage. On the other hand, we expect much greater divergence when egalitarians are informed that benefit levels are (substantially) below the minimum wage (H5).

Finally, we started out by noting that people's knowledge about politics in general and the welfare state in particular is limited. While this is undoubtedly true in the abstract, there is nevertheless substantial variation in how knowledgeable people are. Knowledge, or political sophistication, has been shown to matter for opinion formation in a great many contexts and ways. From this strand of the literature, we draw the expectation that political knowledge will diminish the effect of assertions about welfare benefit levels; thus, we expect that higher levels of political knowledge will lead to smaller differences across the treatment groups, with or without the minimum wage information included (H6). Table 1 summarizes the six hypotheses that lay out our expectations.

[Table 1 about here]

Data and methods

Our experiment was conducted via a survey carried out by YouGov on 1952 Britons. Data were collected using YouGov's online panels, with respondents quota-sampled to achieve representativeness in terms of gender, age, education, and geographical region (defined according to the European Union's NUTS 2 regional classification); in other words, the standard set of socio-demographic variables that most surveys aim to obtain representativeness upon. This approach is clearly inferior to the gold-standard random sample, as YouGov's basin of self-selected respondents may differ in meaningful ways from the general population, and the overall accuracy of the data relies heavily upon the correctness of the survey weights. Nevertheless, Ansolabehere and Schaffner (2014) have shown that conducting online surveys in this way yields similar coefficient estimates and total survey error when compared to traditional telephone and mail interviews.

The experiment was set up to assess the extent to which attitudes about welfare generosity are affected by statements about the purported level of current welfare benefits. Specifically, we examine how responses are affected by the two factors discussed in the above sections: (1) the welfare income quoted in the treatment, with monetary values of (approximately) 50%, 75%, 100%, 125%, and 150% of the yearly minimum wage income for a "typical family"; and (2) the inclusion of a reference point in the treatment, namely the current yearly minimum wage income for a "typical family". (Note that in no instance were respondents provided with the percentages; all prompts include only amounts in pounds sterling.) In light of our use of deception, all respondents were presented a debrief statement at the conclusion of the survey.

The experiment's "no minimum wage information" treatments thus took the following form:

> According to the Office for National Statistics, the typical family on welfare received about £[amount] worth of benefits per year.

While the "minimum wage information" treatments took the form of:

> According to the Office for National Statistics, the typical family on welfare received about £[amount] worth of benefits per year, while the typical family working for minimum wage took home about £19000.

Based on this, the respondents were asked to indicate their agreement with the statement, "to what extent do you disagree or agree that benefits for *the typical family on welfare* are too generous?" on a five-point scale going from "disagree strongly", "disagree somewhat", "neither agree nor disagree", "agree somewhat" to "agree strongly". Alternatively, respondents could record their response as "don't know".[1]

---

[1] The mean length of time spent on the survey experiment page was approximately 30 seconds, but there are several outliers who clearly left the page open while doing something else (standard deviation: 324). The median length is thus

A couple of points are worth noting here. First, the contrast between welfare benefit levels and take-home pay in the "minimum wage information" treatments is clearly misleading, since low-wage families would in reality also be receiving welfare state support (e.g. housing benefits, child benefits, etc.). Second, the use of the term "typical family" in the treatment prompt is purposefully vague, with the intention that respondents would not find the values *a priori* unbelievable. In both instances, however, these wordings reflect the real-world practices of politicians, think tanks, and journalists, who use these sorts of ambiguities to construct comparisons and "typical" values designed to elicit strong reactions, while at the same time referring to official government sources to obscure their machinations (e.g. Jensen and Tyler, 2015). Indeed, we draw clear inspiration here from debates in Britain around the implementation of the benefit cap in 2013; initially set at £26 000 (for households) and then lowered to £20 000 (£23 000 in London), the policy was justified, in the words of former Chancellor of the Exchequer George Osborne, by the argument that "families out of work should not get more than the average family in work".[2]

In calculating our baseline reference value (i.e. the amount the "typical family working for minimum wage took home"), we employed the following parameters: first, we input the current minimum wage (£7.20 an hour); second, we assumed two earners, with one working the national full-time average of 37 hours and the other working the national part-time average of 16 hours; third, we assumed both workers to be under the state pension age; and finally, we situated them outside of Scotland. We then used the UK government's tax calculator,[3] employing the most common tax code (1150L), to calculate the level of each of the two worker's take home earnings. To be clear, we do not suggest that this figure actually represents the "typical family's" income, as

more instructive, at 17 seconds. As we would hope, respondents presented with the additional minimum wage information text spent longer on the page (median time: 19 seconds) than those who were not (median time: 15 seconds).

[2] https://www.gov.uk/government/speeches/chancellor-george-osbornes-summer-budget-2015-speech
[3] https://www.gov.uk/estimate-income-tax

all of our specific parameter choices can be debated; rather, what is important here is that respondents are provided with a figure that serves as a believable stand-in for the minimum wage income – not that the figure represents the "true" amount.

The result of these calculations was a net income of £12 702 for the full-time worker and £5990 for the part-time worker, giving us a total of £18 692. (For reference, the median household income in the UK was £26 300 in 2016). The final values employed in the treatments were then rounded to the nearest thousand, giving us values of £9000 (50% of the minimum wage), £14 000 (75%), £19 000 (100%), £24 000 (125%), and £29 000 (150%). Since respondents were randomly sorted into treatment groups receiving one of these five monetary values with or without information about the minimum wage income, this gives us a total of ten treatments.

As highlighted by our hypotheses above, two additional concepts are central to our analysis: egalitarianism (capturing the value orientation that is most relevant for our purposes) and political knowledge. Both variables are constructed on the basis of Item Response Theory (IRT), which allows us to assess the presence of a latent trait using a series of question responses (see, for example, Treier and Hillygus, 2009). Given our use of ordinal variables (in the case of egalitarianism) and binary variables (in the case of political knowledge), IRT offers a more appropriate approach to estimating latent measures than traditional factor analysis, as the latter assumes a normal distribution of the variables included in the index construction (Kaplan, 2004).[4]

For our egalitarianism measure, we use a set of questions validated by previous work (Feldman and Johnston, 2014). Specifically, respondents began the survey by answering the

---

[4] Nevertheless, we confirm that our key findings are not affected by using conventional factor analysis instead.

following six questions, all of which could be answered on a five-point scale ranging from "strongly disagree" to "strongly agree" (once again with an alternative "don't know" category):[5]

- Our society should do whatever is necessary to make sure that everyone has an equal opportunity to succeed.
- We have gone too far in pushing equal rights in this country.
- One of the big problems in this country is that we don't give everyone an equal chance.
- This country would be better off if we worried less about how equal people are.
- It is not really that big a problem if some people have more of a chance in life than others.
- If people were treated more equally in this country, we would have many fewer problems.

Responses to the individual items were then recoded such that stronger agreement with egalitarian viewpoints always corresponded to higher values on the five-point scale. Finally, respondents were then assigned individual IRT scores and divided based on whether they fell below or above the mean (below described as anti-egalitarian and egalitarian groups).

Similarly, our political knowledge index is based off of previous work using the Comparative Study of Electoral Systems (see, for example, Grönlund and Milner, 2006) and testing respondents factual knowledge about quantities (e.g. Ansolabehere et al., 2017). Respondents were thus presented the five following questions: "Which of these persons was the Chancellor of the Exchequer before the recent election?"; "Which party came in second in seats in the parliamentary elections of June 2017?"; "Who is the current Secretary-General of the United Nations?"; "What was the unemployment rate in the United Kingdom as of August 2017?"; and "What was the average household income in the United Kingdom in 2016?". In each instance, there were five potential responses: the right answer; three wrong answers; and "don't know". Those who answered correctly were then assigned a score of 1, while all others were given a 0. (The median number of

---

[5] Note that respondents were presented with these questions two pages prior to the experiment, with one survey question in between.

correct responses was 3, with a roughly normal distribution.) Finally, as above, each respondent was given an IRT score and the sample was divided based on whether they fell below or above the mean (below described as low- and high-knowledge groups).

As Appendix Table 1 illustrates, each of our treatment groups contained between 179 and 191 respondents, for a total of 1836 in the sample, once we exclude respondents who answered our key question (i.e. regarding benefit generosity) with "don't know". Responses to our dependent variable have a weighted mean of 3.22 and a standard deviation of 1.31.

Findings

On the basis of these data, we constructed a series of ordered logistic regressions, all of which incorporate survey design weights. We begin by laying out the overall results from the experiment, which allow us to assess H1 (without minimum wage information, increasing the claimed level of benefits will decrease support in a roughly linear fashion) and H2 (claims that benefits are higher than the minimum wage will reduce support among all respondents). At this point, we want to know: (1) did respondents change their attitudes regarding welfare generosity as the claimed levels of benefits increased?; and (2) did information about the minimum wage affect preferences?

Figure 1 displays the probability of agreement or strong agreement with the statement "benefits for *the typical family on welfare* are too generous?", broken down for each of the 10 treatment groups and with the associated 95% confidence intervals illustrated in each instance.[6] On the horizontal axis we see the levels of claimed benefits (ranging from £9000 to £29 000, with intervals of £5000). On the vertical axis, one finds the predicted probability of either agreeing or strongly agreeing that benefits are too generous. Finally, the light grey bars represent those treatment groups that did not receive information about the minimum wage income, while the black

---

[6] Figures created using the mplotoffset package (Winter, 2017) and plotplainblind (Bischof, 2017).

bars represent those that did. Given the setup of survey experiment, results are best illustrated via figures; here and below, we therefore discuss a set of post-estimation plots, while the tables laying out the ordered logistic regression results that underlie them are relegated to the appendix (see Appendix Tables 2, 3, and 4). Finally, note that pair-wise comparisons are employed throughout the analysis to ensure the statistical significance of the contrasts discussed below, with the results of these tests visible in Online Appendix Tables 1, 2, and 3.

[Figure 1 about here]

Several observations are noteworthy. First, across the conditions there is a positive and roughly linear gradient in the predicted probability of feeling that benefits are too generous. In other words, the likelihood of thinking benefits are too generous increases gradually, suggesting that the respondents reflected on the claimed benefits and made up their minds accordingly (as per H1). If numbers had no informational value for respondents, such a pattern would not be visible, instead replaced by a flat line (i.e. with high-benefit treatment groups as supportive as low-benefit groups). Instead, we see that probability of agreement rises from around 0.33 in the £9000 treatment groups to about 0.61 in the £29 000 treatment group.[7]

Second, information about the minimum wage income for the "typical family" (here situated at approximately £19 000) does indeed have an effect (as per H2), but only for the £24 000 treatment group: the probability of agreeing or strongly agreeing moves from 0.47 without the minimum wage treatment to 0.62 with it (with the difference statistically significant at the p<0.01

---

[7] The 95 percent confidence intervals for the £9000 treatment groups are: .28 to .41 without minimum wage information; and .26 .to .39 with it. For the £29 000 groups, these values are: .52 to .66 without minimum wage information; and .54 .to .69 with it.

level).[8] The effect disappears for the £29 000 treatment group, for which the minimum wage and non-minimum wage group responses are statistically indistinguishable. The special character of the £24 000 treatment suggests Britons may be relatively knowledgeable about where low to average income levels lie. This could be driving our results if respondents generally recognise that, regardless of whether minimum wage information is included, the £9000, £14 000, and £19 000 benefit figures are clearly low, while the £29 000 figure is clearly high. (Recall that this latter figure is larger than the median household income in Britain, at about £26 300.) It may be that additional information, such as on the minimum wage income, is only valuable to respondents when the claimed benefit level starts to near assumed low- to average-household income levels (i.e., in the low- to mid-£20 000 range).

It is also noteworthy that respondents do not seem to care if benefits levels are said to be less than half of the minimum wage income, nor are they bothered if they are *equally* as generous as the minimum wage. This latter finding is particularly interesting, as it suggests that people do not buy into the oft-heard argument that there must be a monetary incentive for the unemployed to accept jobs at the minimum wage, since that would imply that benefits would have to be lower. Rather, Figure 1 suggests that people do not want benefit recipients to earn *more* than those working for the minimum wage do.

[Figure 2 about here]

---

[8] The 95 percent confidence intervals here are: .40 to .54 without the minimum wage treatment; and .55 to .69 with it.

We then break down the treatment effects by egalitarianism.[9] This allows us to test H3 (increasing the claimed level of benefits affects anti-egalitarians more than egalitarians), H4 (the effect of egalitarianism on support is strongest in the absence of information about the minimum wage) and H5 (claims that benefits are substantially below the minimum wage will lead the attitudes of egalitarians and anti-egalitarians to diverge).

Figure 2 lays out the probability of agreement or strong agreement across the treatment groups for egalitarians (on the left panel) and anti-egalitarians (on the right). We begin by noting that we do not find support for H3: the difference between the £9000 and £29 000 treatment groups for both egalitarians and anti-egalitarians is just over 0.2, regardless of whether or not minimum wage information is included. Despite differences in the levels of agreement across the two groups, the slopes are substantively indistinguishable. This is true regardless of whether minimum wage information is included, suggesting a lack of support for H4 as well. Indeed, the presence or absence of minimum wage information makes a limited difference for the effect of egalitarianism, with the exception of the £24 000 figure (where we find a clear effect only among egalitarians).

Instead, it is primarily when respondents were informed about the minimum wage income that they responded in a non-linear fashion to increases in the claimed benefit income level. For egalitarians, the suggestion that benefit income was only £9000 resulted in a lower likelihood of agreement relative to all other treatment groups when minimum wage information was present. For anti-egalitarians, by contrast, such a bump occurred only where the asserted benefit levels were above the minimum wage income (i.e., with the £24 000 and £29 000 amounts), with respondents considerably more likely to agree that benefits were too generous – but a similar effect is also noted

---

[9] When broken down by egalitarianism, the treatment group samples range in size from 79 (anti-egalitarians with the £19 000, minimum wage treatment) to 95 (anti-egalitarians with the £9000, no minimum wage treatment), with most subsamples in the 80s.

among egalitarians. (See Online Appendix Table 2 for full details.) On the whole, then, the results offer partial support for H5.

[Figure 3 about here]

Finally, we turn to examine how political knowledge conditions the effect of our treatments,[10] with Figure 3 illustrating the probability of feeling that benefits are too generous across high- and low-knowledge respondents. Recall that the goal here is to assess whether greater political knowledge decreases the effect of claims about welfare generosity (H6). Results instead highlight that low-knowledge respondents are driving the anchoring effects noted in Figure 1: they are much more likely to agree or strongly agree that benefits are too generous when presented with the £24 000 figure alongside the minimum wage information (at 0.77) than without it (at 0.50).[11] Those with high knowledge, by contrast, respond to increasingly large amounts of asserted benefit income in a roughly linear manner, with no real signs that minimum wage information had an effect.

In sum, we find at least partial support for four of our hypotheses. First, our findings suggest that in the absence of information about the minimum wage income, responses do indeed broadly reflect the level of asserted benefits income, with greater amounts associated with increasingly anti-generous positions (H1). Second, we find that claims that benefits are higher than the minimum

---

[10] When broken down by knowledge, the treatment group samples range in size from 56 (low-knowledge respondents with the £19 000, minimum wage treatment) to 123 (high-knowledge respondents with the £19 000 and £24 000, minimum wage treatment). The greater differences here are the result of the fact that the knowledge IRT scale is built off of right or wrong questions, leading to smaller variation in scores: just under 60% of the sample are classified as high-knowledge, while just over 40% are low-knowledge – with the dividing line between those who answered three or more questions correctly and those who only answered two or fewer questions correctly.

[11] The 95 percent confidence intervals here are: .69 to .84 with the minimum wage treatment; and .39 to .61 without it.

wage reduce support among all respondents (H2), but that this effect is present only with the £24 000 figure. Third, claims that benefits were substantially below the minimum wage do indeed appear to lead the attitudes of egalitarians and anti-egalitarians to diverge, though we only see evidence of this effect with the £9000 figure (H5). Finally, the analysis suggests that high political knowledge decreases the effect of anchored claims about welfare generosity (H6).

More generally, our results also indicate that information about the minimum wage income primarily made a difference only with the £24 000 treatment. As highlighted above, one explanation for this finding could be that Britons on the whole may be capable of assessing the generosity of a given level of welfare benefits, perhaps because they have a reasonably good sense of where low- to average-household income levels broadly lie. In support of this interpretation, we observed that the main effect of the minimum wage information treatment was located among less knowledgeable respondents. Yet it is of course also possible that this result is simply the product of random noise in the data, and further research on the matter is therefore required.

At the same time, we find no support for our two remaining hypotheses: increasing the claimed level of benefits does not impact anti-egalitarians more than egalitarians (H3); and the effect of egalitarianism on support is not shaped by the presence or absence of information about the minimum wage (H4). Taken together, the overarching impression is that egalitarianism affects responses to benefit claims considerably less than one might expect. This is arguably because people's egalitarianism is such a powerful guide for policy preferences to begin with.

To assess the validity of these findings, we performed several robustness checks. First and foremost, in order to minimise the risk that our results are spurious, we reran all of the above analysis on a sample that only included respondents who clearly received the treatment. To do so, we used responses to an open-ended attention check question asking "About how much does *the typical family on welfare* receive in benefits per year?" This question was presented to respondents

four questions after the treatment, and just over 65 percent of the sample entered the exact figure that was stated in their treatment group. Restricting our analysis to that 65 percent clearly reduces our power substantially, but it does not notably alter the patterns or results presented above. (See Online Appendix Figures 1, 2, and 3.)

Next, we confirmed that the key results in Figure 1 were unaffected by including controls for factors related to experienced vulnerability, as this factor may shape responses to asserted benefit levels. This led us to reconstruct the models from our main analysis with controls for household income, education levels, geographic region, and having one's income come primarily from benefits. As Online Appendix Figures 4, 5, and 6 illustrate, doing so has no meaningful impact on the results, save for in one instance: responses among egalitarians exposed to the £9000, £14 000, and £19 000 claims with minimum wage information become statistically indistinguishable – though these treatment responses still remain distinct from those with higher claimed values. Finally, we also ensured that smaller potential changes to the modelling had no impact on the findings. Most notably, this included: constructing the egalitarianism and political knowledge categories using standard factor analysis rather than IRT; and running logistic (rather than ordered logistic models), collapsing the dependent variable's response categories into a binary variable dividing those who agree from everyone else (leaving aside the "don't know" category). In no instance were results substantially effected by the changes.

Conclusion

We began this article with the observation that (inflated) claims about benefit generosity appear to be a rather commonplace rhetorical weapon employed by politicians. We speculated that claims such as these are common because politicians and other politically-motivated actors expect they can generate a sense of outrage with the status quo that will help justify welfare state cutbacks. For

better and for worse, the empirical findings reported above suggest that this is a highly viable strategy: our experiment, conducted on a survey of just under 2000 Britons, indicate that larger figures stimulate increasingly negative sentiments regardless of pre-existing egalitarianism level. Our results also suggest that claiming that benefits are more generous than the minimum wage may boost scepticism toward benefits where the claimed benefit level is not so high as to already strike citizens as *prima facie* outrageous (in our study, at £24 000). On that point, it is worth noting that the highest asserted figure used in the experiment (£29 000) is much lower than some of the real-life values put forth by prominent politicians such as Ronald Reagan and George Osborne; to the extent that the public is indeed relatively cognisant of where low- to average-income levels approximately lie, it seems likely that extremely exaggerated figures may have a limited influence on attitudes.

From the perspective of the welfare state literature, our findings help us to understand a long-standing tension drawn out by existing research: the welfare state remains highly popular (e.g. Jensen, 2014; Jæger, 2012), yet retrenchment has long been a government practice that very frequently goes unpunished (e.g. Giger and Nelson, 2010; Schumacher et al., 2013). Rather than suggesting a disconnect between public opinion and welfare reform (c.f. Soroka and Wlezien, 2010; Brooks and Manza, 2007), our results point to one route politicians may take – despite broadly pro-welfare state preferences – to garner support for their desired reforms. It is clearly wrongheaded to equate general expressions of support for the welfare state with support for benefits no matter their (real or asserted) generosity. In particular, our findings suggest that many people believe benefits should not be more generous than the minimum wage. The flipside of this result, however, is that there is limited support for reining in benefits if these are below or even approximately equal to the minimum wage. One potential explanation for this may be that the minimum wage, at least in a

British context, signals the lowest income upon which people can maintain a decent standard of living.

Overall, our results point to several potentially valuable avenues for future research. On the one hand, studies might seek to unpack the mechanism(s) driving the effects behind our analysis. Doing so could involve exploring the economic and/or moral dimensions of citizen preferences that seem to be in tension with their generally pro-welfare state stances, applying related research (e.g. Giger and Nelson, 2013; Ryan, 2014) to discussions of political discourse. Such work might also tap into existing research on labour market vulnerability (e.g. Kevins, 2017; 2018), as an individual's risk of going on benefits may well shape their response to asserted benefit levels. Finally, research in this vein might also help to uncover the explanation behind the seemingly distinct character of the £24 000 treatment.

On the other hand, our study also highlights the value of research examining the effects of political rhetoric on these sorts of preferences in the "real world". In that regard, it could be especially valuable to investigate the over-time relationship between media discourse and public opinion, in the process building upon studies focussed on popular welfare myths (e.g. Geiger, 2017a; Geiger and Meueleman, 2016). Such research could also help to address real-world questions that our experimental setup does not allow us to answer, in the process establishing the external validity of the findings presented here (see Gaines et al., 2007). Just how durable are the effects we uncover, for example, and are they robust to the presence of counter-arguments and counter-frames (e.g. Jerit, 2009)?

Supplementary Files: Data and do file are available at the Harvard Dataverse.

Works Cited:

Allan, J. P. and Scruggs, L. (2004) 'Political Partisanship and Welfare State Reform in Advanced Industrial Societies', *American Journal of Political Science,* 48 (3): 496-512.

Ansolabehere, S., Meredith, M. and Snowberg, E. (2017) 'Asking About Numbers: Why and How', *Political Analysis,* 21 (1): 48-69.

Ansolabehere, S. and Schaffner, B. F. (2014) 'Does Survey Mode Still Matter? Findings from a 2010 Multi-Mode Comparison', *Political Analysis,* 22 (3): 285-303.

Bartels, L. M. (2005) 'Homer Gets a Tax Cut: Inequality and Public Policy in the American Mind', *Perspectives on Politics,* 3 (01): 15-31.

Baumberg, B., Bell, K. and Gaffney, D. (2012) *Benefits Stigma in Britain.* London, UK: Elizabeth Finn Care.

Bischof, D. (2017), 'New Figure Schemes for Stata: Plotplain &Plottig', *The Stata Journal*, 17 (3): 748-759.

Brooks, C. and Manza, J. (2007) *Why Welfare States Persist: The Importance of Public Opinion in Democracies.* Chicago, IL: The University of Chicago Press.

Chong, D. and Druckman, J. N. (2007) 'Framing Public Opinion in Competitive Democracies', *American Political Science Review,* 101 (4): 637-655.

Cruces, G., Perez-Truglia, R. and Tetaz, M. (2013) 'Biased Perceptions of Income Distribution and Preferences for Redistribution: Evidence from a Survey Experiment', *Journal of Public Economics,* 98 (Supplement C): 100-112.

Curtice, J. (2017) 'Role of Government'. In: Phillips M, Taylor EA and Simpson I (eds) *British Social Attitudes.* 1-18.

Delli Carpini, M. X. and Keeter, S. (1996) *What Americans Know About Politics and Why It Matters.* Yale University Press.

Druckman, J. N., Fein, J. and Leeper, T. J. (2012) 'A Source of Bias in Public Opinion Stability', *American Political Science Review,* 106 (02): 430-454.

Feldman, S. and Johnston, C. (2014) 'Understanding the Determinants of Political Ideology: Implications of Structural Complexity', *Political Psychology,* 35 (3): 337-358.

Gaines, B. J., Kuklinski, J. H. and Quirk, P. J. (2007) 'The Logic of the Survey Experiment Reexamined', *Political Analysis,* 15 (1): 1-20.

Geiger, B. B. (2017a) 'False Beliefs and the Perceived Deservingness of Social Security Benefit Claimants'. In: Oorschot Wv, Roosma F, Meueleman B, et al. (eds) *The Social Legitimacy of Targeted Welfare: Attitudes to Welfare Deservingness.* Cheltenham, UK: Edward Elgar, 73-92.

Gieger, B. B. (2017b). 'Benefit 'myths'? The accuracy and inaccuracy of public beliefs about the benefits systems', *Social Policy & Administration*, Early View.

Geiger, B. B. and Meueleman, B. (2016) 'Beyond 'Mythbusting': How to Respond to Myths and Perceived Undeservingness in the British Benefits System', *Journal of Poverty and Social Justice,* 24 (3): 291-306.

Giger, N. and Nelson, M. (2010) 'The Electoral Consequences of Welfare State Retrenchment: Blame Avoidance or Credit Claiming in the Era of Permanent Austerity?', *European Journal of Political Research,* 50 (1): 1-23.

Giger, N. and Nelson, M. (2013) 'The Welfare State or the Economy? Preferences, Constituencies, and Strategies for Retrenchment', *European Sociological Review,* 29 (5): 1083-1094.

Grönlund, K. and Milner, H. (2006) 'The Determinants of Political Knowledge in Comparative Perspective', *Scandinavian Political Studies,* 29 (4): 386-406.

Jacobs, L. R. and Shapiro, R. Y. (1999) *Myths and Misunderstandings About Public Opinion toward Social Security: Knowledge, Support, and Reformism*. Century Foundation.

Jacoby, W. G. (1994) 'Public Attitudes toward Government Spending', *American Journal of Political Science,* 38 (2): 336-361.

Jæger, M. M. (2012) 'Do We All (Dis) Like the Same Welfare State? Configurations of Public Support for the Welfare State in Comparative Perspective', *Changing Social Equality: The Nordic Welfare Model in the 21st Century*: 45.

Jensen, C. (2014) *The Right and the Welfare State.* Oxford, UK: Oxford University Press.

Jensen, C. and Petersen, M. B. (2017) 'The Deservingness Heuristic and the Politics of Health Care', *American Journal of Political Science,* 61 (1): 68-83.

Jensen, T., and Tyler, I. (2015). ''Benefits broods': The cultural and political crafting of anti-welfare commonsense', *Critical Social Policy*, 35 (4): 470-491.

Jerit, J. (2009) 'How Predictive Appeals Affect Policy Opinions', *American Journal of Political Science,* 53 (2): 411-426.

Kaplan, D. (2004) *The Sage Handbook of Quantitative Methodology for the Social Sciences.* Sage.

Kennedy, S., Wilson, W., Apostolova, V., et al. (2016) *The Benefit Cap*. London, UK: House of Commons Library.

Kevins, A. (2017) *Expanding Welfare in an Age of Austerity: Increasing Protection in an Unprotected World*. Amsterdam, NL: Amsterdam University Press.

Kevins, A. (2018) 'Dualized Trust: Risk, Social Trust and the Welfare State', *Socio-Economic Review,* OnlineFirst.

Korpi, W. and Palme, J. (2003) 'New Politics and Class Politics in the Context of Austerity and Globalization: Welfare State Regress in 18 Countries, 1975-95', *American Political Science Review,* 97 (3): 425-446.

Kuklinski, J., Quirk, P. J., Jerit, J., et al. (2000). 'Misinformation and the currency of democratic citizenship', *Journal of Politics*, 62 (3): 790-816.

Lawrence, E. D. and Sides, J. (2014) 'The Consequences of Political Innumeracy', *Research & Politics,* 1 (2): 1-8.

Lee, S., Jensen, C., Arndt, C., et al. (2017) 'Risky Business? Welfare State Reforms and Government Support in Britain and Denmark', *British Journal of Political Science*: 1-20.

Leeper, T., and Slothuus, R. (2017). *Can Citizens Be Framed? How Information More than Emphasis Changes Opinions*. Working paper.

Lergetporer, P., Schwerdt, G., Werner, K., et al. (2016). *Information and Preferences for Public Spending: Evidence from Representative Survey Experiments*. Bonn: IZA.

Naumann, E. (2017) 'Do Increasing Reform Pressures Change Welfare State Attitudes? An Experimental Study on Population Ageing, Pension Reform Preferences, Political Knowledge and Ideology', *Ageing and Society,* 37 (2): 266-294.

Nelson, K. (2011) 'Social Assistance and Eu Poverty Thresholds 1990–2008: Are European Welfare Systems Providing Just and Fair Protection against Low Income?', *European Sociological Review,* first published online October 5, 2011 doi:10.1093/esr/jcr080.

Norton, M. I. and Ariely, D. (2011) 'Building a Better America—One Wealth Quintile at a Time', *Perspectives on Psychological Science,* 6 (1): 9-12.

Petersen, M. B. (2015) 'Evolutionary Political Psychology: On the Origin and Structure of Heuristics and Biases in Politics', *Political Psychology,* 36 (S1): 45-78.

Petersen, M. B., Slothuus, R., Stubager, R., et al. (2011) 'Deservingness Versus Values in Public Opinion on Welfare: The Automaticity of the Deservingness Heuristic', *European Journal of Political Research,* 50 (1): 24-52.

Pierson, P. (1994) *Dismantling the Welfare State? Reagan, Thatcher, and the Politics of Retrenchment.* Cambridge, UK: Cambridge University Press.

Ryan, T. J. (2014) 'Reconsidering Moral Issues in Politics', *The Journal of Politics,* 76 (2): 380-397.

Schumacher, G., Vis, B. and van Kersbergen, K. (2013) 'Political Parties' Welfare Image, Electoral Punishment and Welfare State Retrenchment', *Comparative European Politics,* 11 (1): 1-21.

Skitka, L. J. and Tetlock, P. E. (1993) 'Providing Public Assistance: Cognitive and Motivational Processes Underlying Liberal and Conservative Policy Preferences', *Journal of Personality and Social Psychology,* 65 (6): 1205-1223.

Slothuus, R. (2007) 'Framing Deservingness to Win Support for Welfare State Retrenchment', *Scandinavian Political Studies,* 30 (3): 323-344.

Soroka, S. N. and Wlezien, C. (2010) *Degrees of Democracy: Politics, Public Opinion, and Policy.* New York, NY: Cambridge University Press.

Stanley, L. and Hartman, T. K. (2017). 'Tax preferences, fiscal transparency, and the meaning of welfare: An experimental study', *Political Studies*, early view.

Taber, C. S. and Lodge, M. (2006) 'Motivated Skepticism in the Evaluation of Political Beliefs', *American Journal of Political Science,* 50 (3): 755-769.

Taylor-Gooby, P., Hastie, C. and Bromley, C. (2003) 'Querulous Citizens: Welfare Knowledge and the Limits to Welfare Reform', *Social Policy & Administration*, 37 (1): 1-20.

Treier, S. and Hillygus, D. S. (2009) 'The Nature of Political Ideology in the Contemporary Electorate', *Public Opinion Quarterly,* 73 (4): 679-703.

Van Oorschot, W. (2006) 'Making the Difference in Social Europe: Deservingness Perceptions among Citizens of European Welfare States', *Journal of European Social Policy,* 16 (1): 23-42.

Wenzelburger, G. and Hörisch, F. (2016) 'Framing Effects and Comparative Social Policy Reform: Comparing Blame Avoidance Evidence from Two Experiments', *Journal of Comparative Policy Analysis: Research and Practice,* 18 (2): 157-175.

Winter, N. (2017) 'MPLOTOFFSET: Stata module to produce marginsplots with offset plotting symbols', Statistical Software Components S458344, Boston College Department of Economics.

Zaller, J. (1992) *The Nature and Origins of Mass Opinion.* Cambridge, UK: Cambridge university press.

Zaller, J. and Feldman, S. (1992) 'A Simple Theory of the Survey Response: Answering Questions Versus Revealing Preferences', *American Journal of Political Science,* 36 (3): 579-616.

Table 1: Effects of Claims about Welfare Benefit Generosity

H1	Without minimum wage information, increasing the claimed level of benefits will decrease support in a roughly linear fashion
H2	Claims that benefits are higher than the minimum wage will reduce support among all respondents
H3	Increasing the claimed level of benefits affects anti-egalitarians more than egalitarians
H4	The effect of egalitarianism on support is strongest in the absence of information about the minimum wage
H5	Claims that benefits are substantially below the minimum wage will lead the attitudes of egalitarians and anti-egalitarians to diverge
H6	Greater political knowledge decreases the effect of claims about welfare generosity

Figure 1: "Benefits Too Generous", Overall Treatment Effects
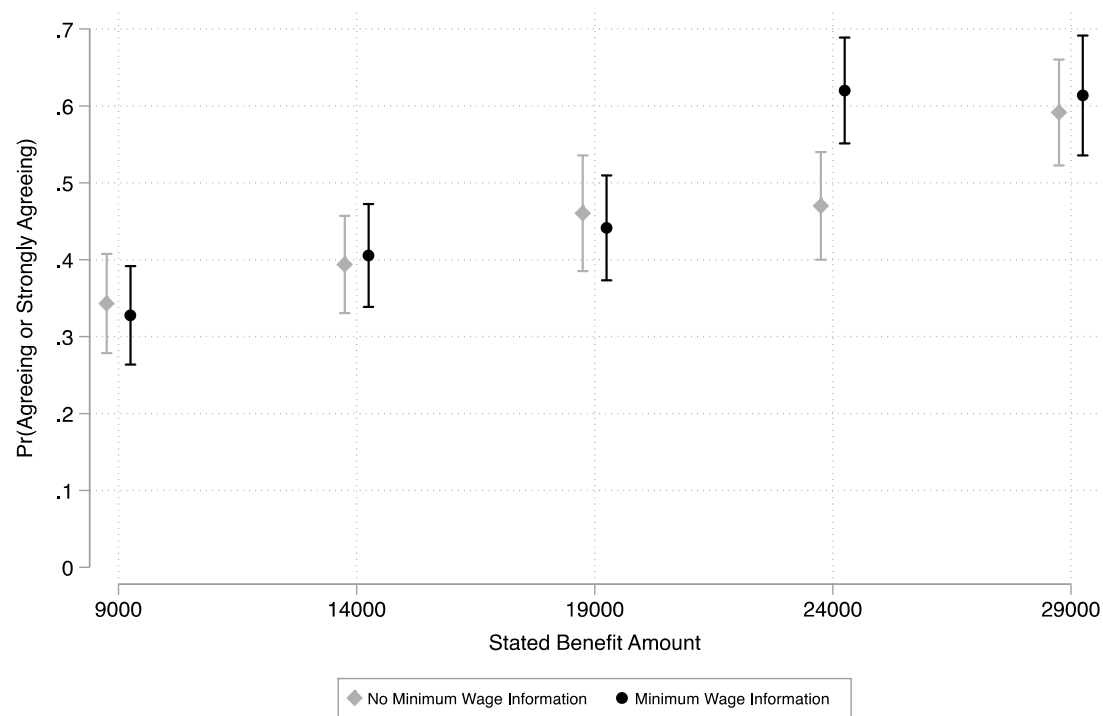
Figure 2: "Benefits Too Generous", Treatment Effects based on Egalitarianism
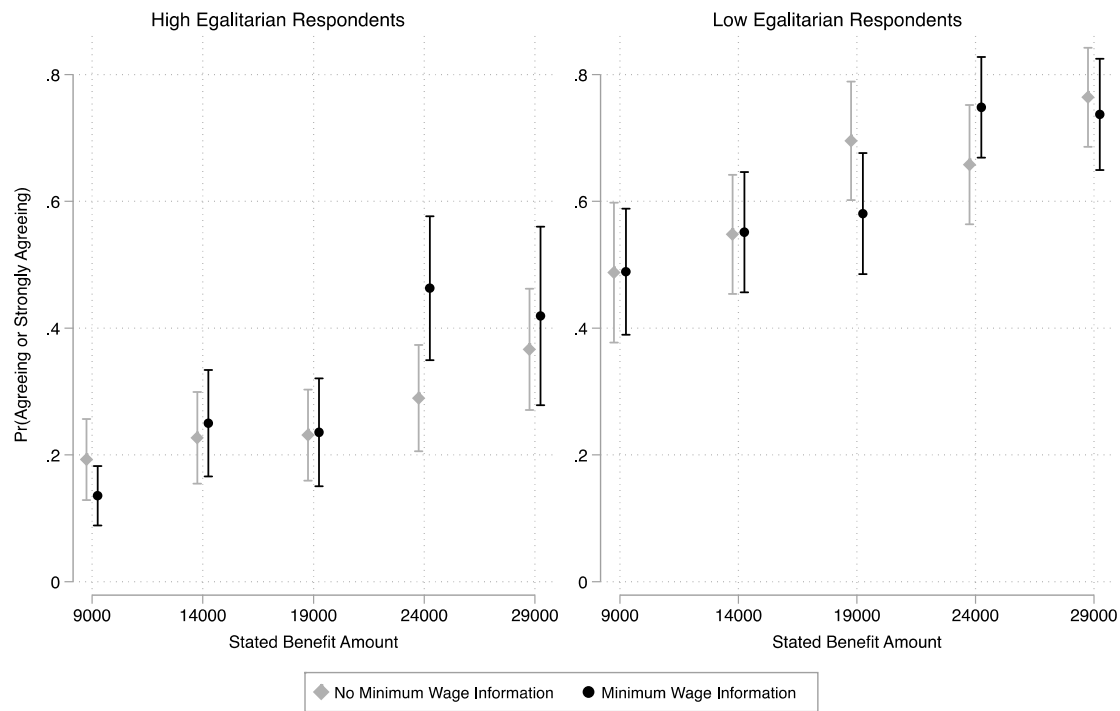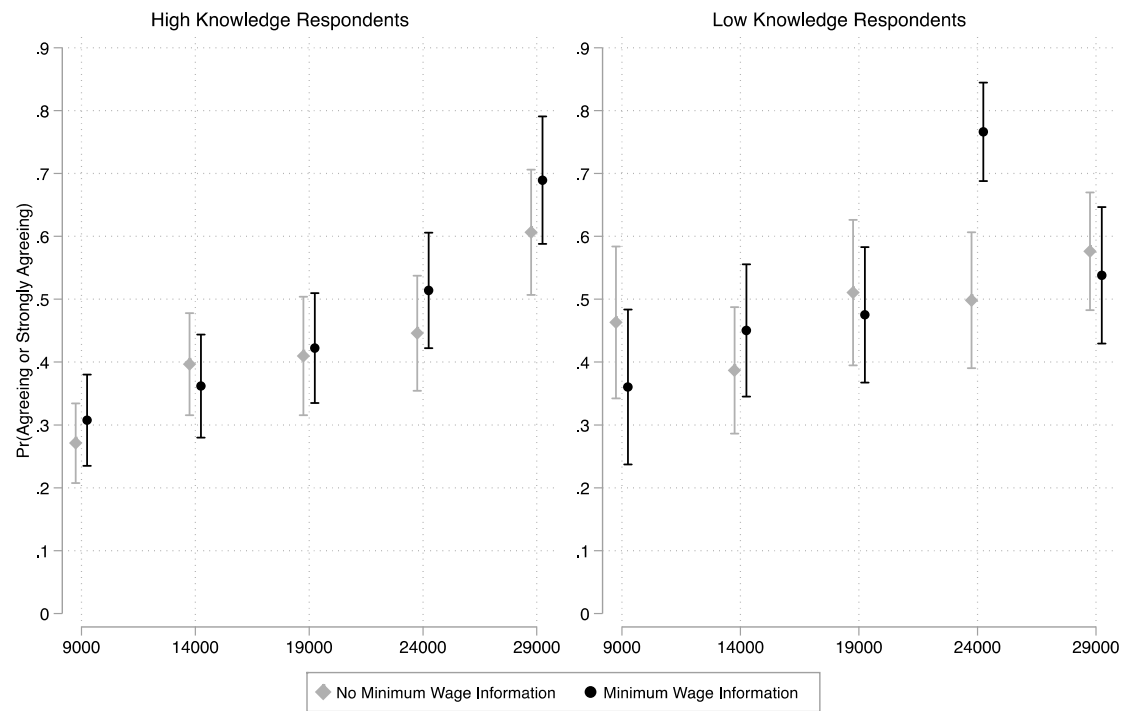
Figure 3: "Benefits Too Generous", Treatment Effects based on Political Knowledge

Appendix Table 1: Sample Size across Treatment Groups

	No Minimum Wage Information	Minimum Wage Information	Total
£9000	185	180	365
£14000	180	188	368
£19000	182	179	361
£24000	182	186	368
£29000	191	183	374
Total	920	916	1836

Appendix Table 2: Ordered Logistic Regression for Overall Sample (see Figure 1)

	Benefits Too Generous
Minimum Wage Information Treatment	-0.0693 (0.203)
Treatment Amount (Ref: £9000)	
£14000 Treatment	0.218 (0.195)
£19000 Treatment	0.491* (0.209)
£24000 Treatment	0.529** (0.202)
£29000 Treatment	1.019*** (0.203)
Minimum Wage Information # £14000	0.118 (0.279)
Minimum Wage Information # £19000	-0.00767 (0.290)
Minimum Wage Information # £24000	0.679* (0.287)
Minimum Wage Information # £29000	0.162 (0.298)
Cut 1	
Constant	-1.547*** (0.150)
Cut 2	
Constant	-0.287* (0.144)
Cut 3	
Constant	0.649*** (0.146)
Cut 4	

Constant	1.895***
	(0.155)

Observations	1836

Cells contain coefficients from an ordered logistic regression (incorporating design weights) with standard errors in parentheses.

$^+ p < 0.10,\ ^* p < 0.05,\ ^{**} p < 0.01,\ ^{***} p < 0.001$

Appendix Table 3: Ordered Logistic Regression, with Egalitarianism (see Figure 2)

	Benefits Too Generous
Minimum Wage Information	-0.420
	(0.283)
Treatment Amount	
(Ref: £9000)	
£14000 Treatment	0.207
	(0.290)
£19000 Treatment	0.231
	(0.284)
£24000 Treatment	0.535[+]
	(0.292)
£29000 Treatment	0.885[**]
	(0.293)
Minimum Wage Information # £14000	0.546
	(0.416)
Minimum Wage Information # £19000	0.444
	(0.421)
Minimum Wage Information # £24000	1.170[**]
	(0.419)
Minimum Wage Information # £29000	0.642
	(0.458)
Egalitarianism	
(Ref: Egalitarians)	
Anti-Egalitarian	1.382[***]
	(0.302)
Minimum Wage Information # Anti-Egalitarianism	0.426
	(0.414)
£14000 # Anti-Egalitarianism	0.0357
	(0.413)
£19000 # Anti-Egalitarianism	0.644
	(0.425)
£24000 # Anti-Egalitarianism	0.169
	(0.423)
£29000 # Anti-Egalitarianism	0.341
	(0.426)
Minimum Wage Information # £14000 # Anti-Egalitarianism	-0.539
	(0.581)
Minimum Wage Information # £19000 # Anti-Egalitarianism	-0.950
	(0.597)
Minimum Wage Information # £24000 # Anti-Egalitarianism	-0.740
	(0.596)
Minimum Wage Information # £29000 # Anti-Egalitarianism	-0.792
	(0.631)

Cut 1	
Constant	-1.033***
	(0.209)
Cut 2	
Constant	0.374+
	(0.205)
Cut 3	
Constant	1.432***
	(0.209)
Cut 4	
Constant	2.788***
	(0.217)
Observations	1772

Cells contain coefficients from an ordered logistic regression (incorporating design weights) with standard errors in parentheses.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix Table 4: Ordered Logistic Regression, with Political Knowledge (see Figure 3)

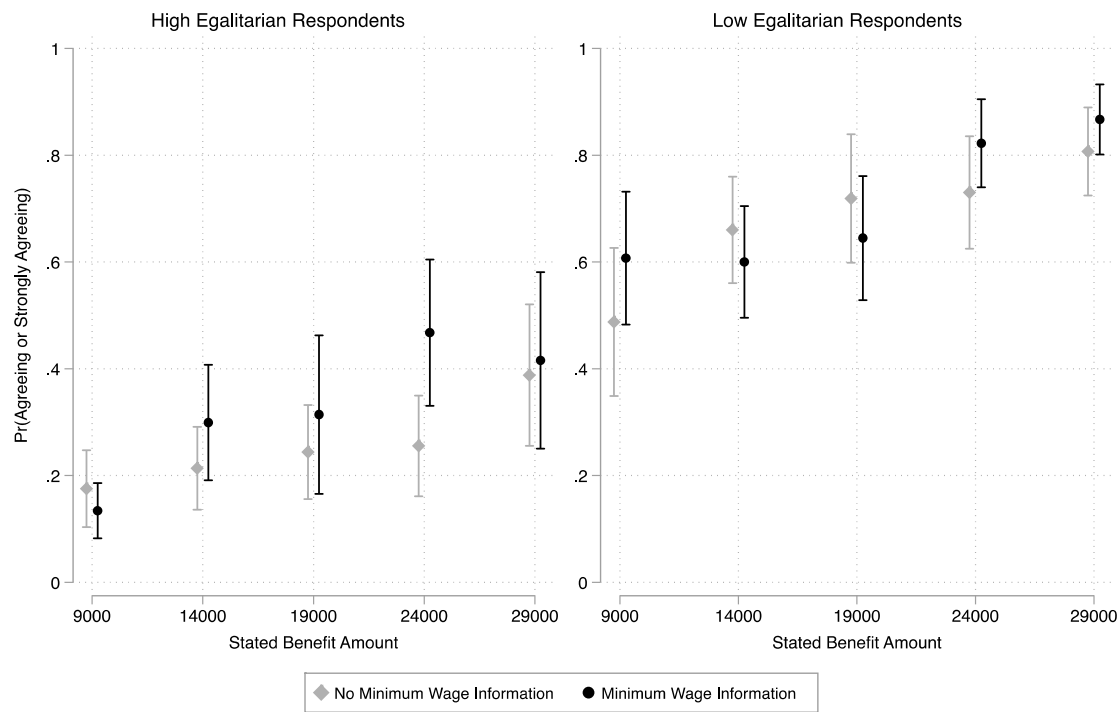|	Benefits Too Generous
Minimum Wage Information	0.178
	(0.232)
Treatment Amount (Ref: £9000)	
£14000 Treatment	0.570*
	(0.234)
£19000 Treatment	0.624*
	(0.251)
£24000 Treatment	0.772**
	(0.247)
£29000 Treatment	1.422***
	(0.266)
Minimum Wage Information # £14000	-0.326
	(0.339)
Minimum Wage Information # £19000	-0.126
	(0.353)
Minimum Wage Information # £24000	0.0952
	(0.351)
Minimum Wage Information # £29000	0.186
	(0.394)
Political Knowledge (Ref: High Knowledge)	
Low Knowledge	0.841**
	(0.294)
Minimum Wage Information # Low Knowledge	-0.604
	(0.434)
£14000 # Low Knowledge	-0.882*
	(0.403)
£19000 # Low Knowledge	-0.434
	(0.424)
£24000 # Low Knowledge	-0.631
	(0.412)
£29000 # Low Knowledge	-0.966*
	(0.411)
Minimum Wage Information # £14000 # Low Knowledge	1.013+
	(0.587)
Minimum Wage Information # £19000 # Low Knowledge	0.411
	(0.602)
Minimum Wage Information # £24000 # Low Knowledge	1.525*
	(0.597)
Minimum Wage Information # £29000 # Low Knowledge	0.0840
	(0.613)

Cut 1	
Constant	-1.233***
	(0.162)
Cut 2	
Constant	0.0392
	(0.160)
Cut 3	
Constant	0.990***
	(0.164)
Cut 4	
Constant	2.255***
	(0.171)
Observations	1836

Cells contain coefficients from an ordered logistic regression (incorporating design weights) with standard errors in parentheses.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Online Appendix

Online Appendix Figure 1: "Benefits Too Generous", Overall Treatment Effects Among

Respondents Who Passed Attention Check
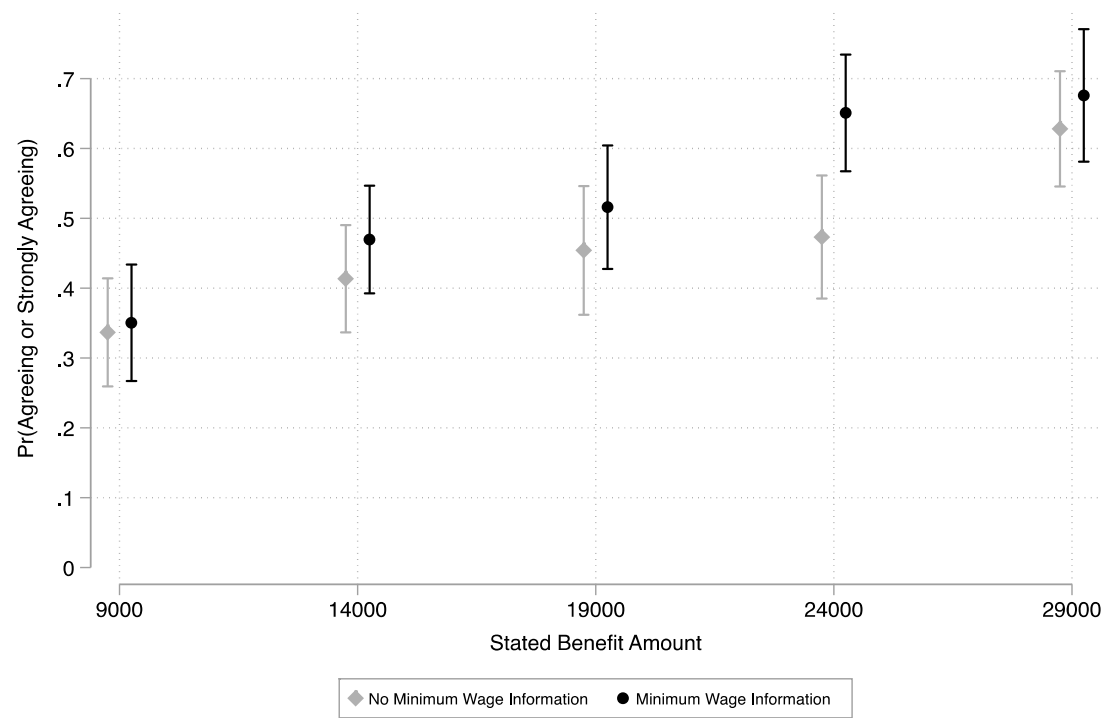
Online Appendix Figure 2: "Benefits Too Generous", Treatment Effects based on Egalitarianism

Among Respondents Who Passed Attention Check

Online Appendix Figure 3: "Benefits Too Generous", Treatment Effects based on Political

Knowledge Among Respondents Who Passed Attention Check
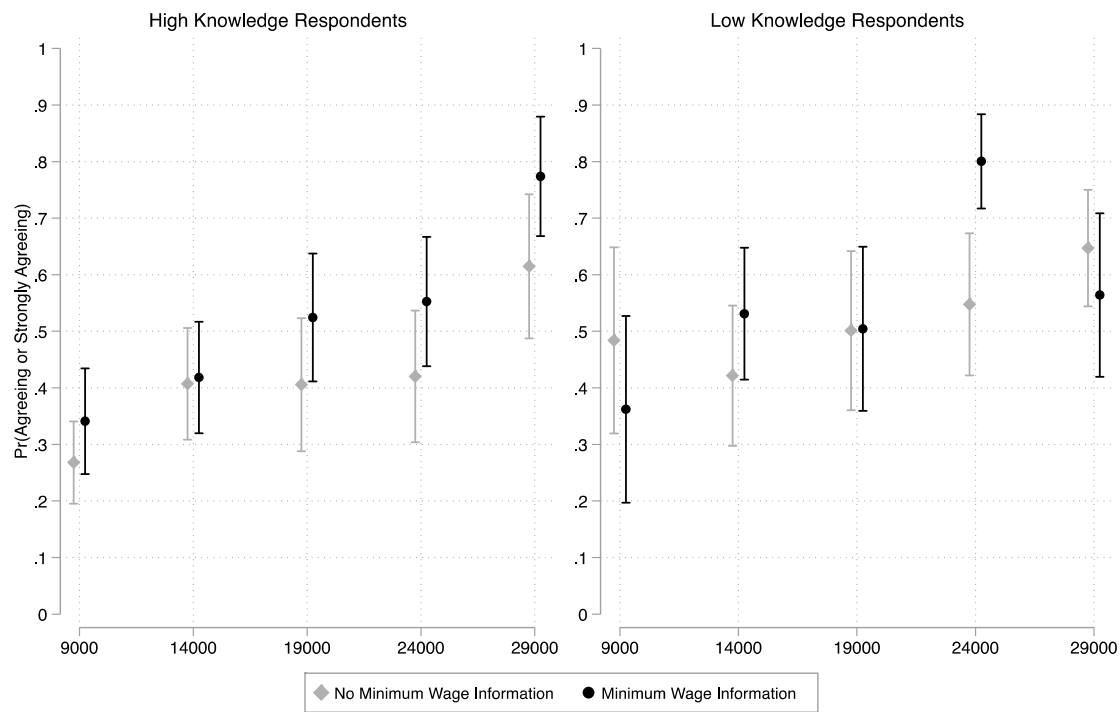
Online Appendix Figure 4: "Benefits Too Generous", Overall Treatment Effects with Controls
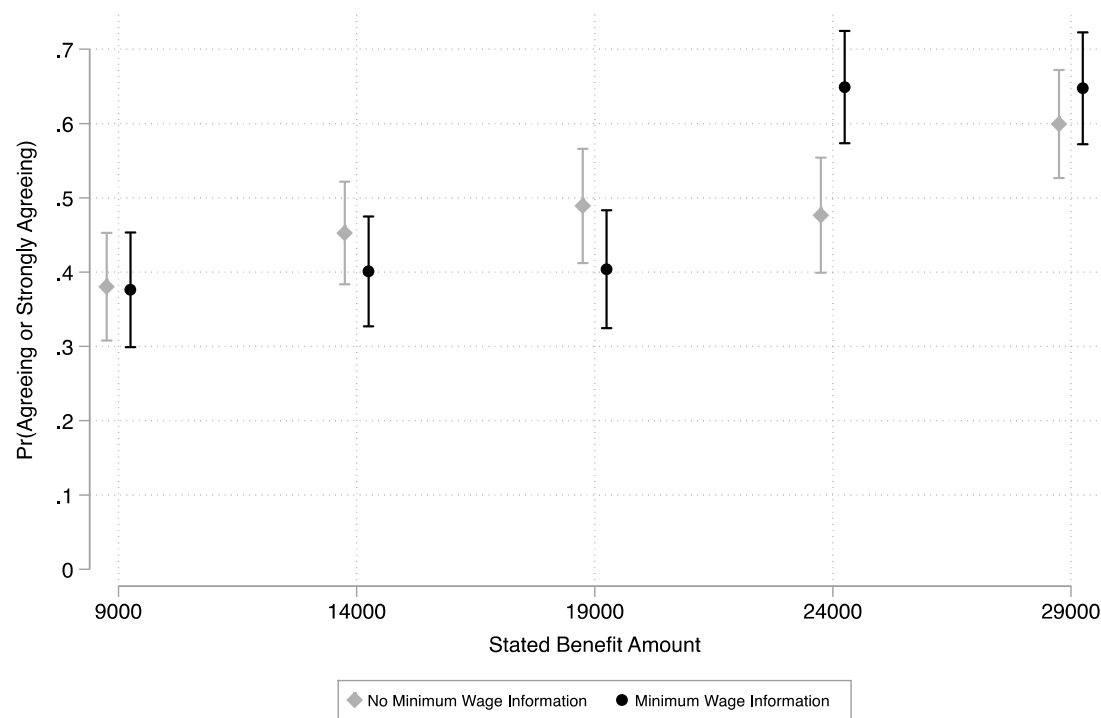
Online Appendix Figure 5: "Benefits Too Generous", Treatment Effects based on Egalitarianism with Controls
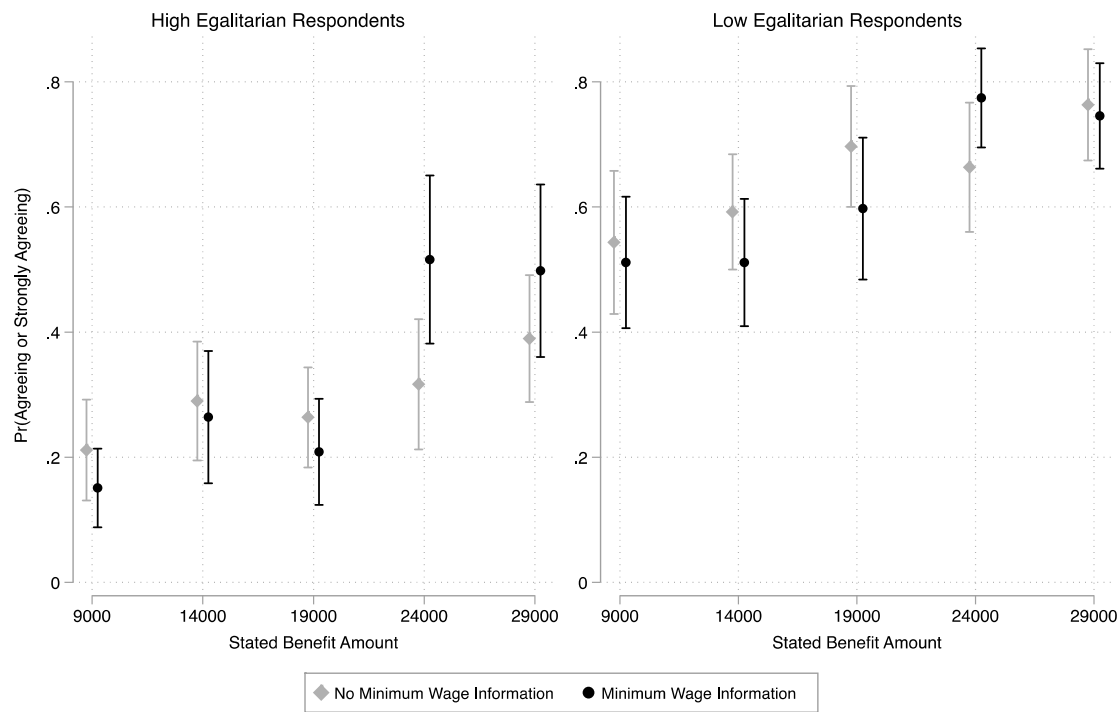
Online Appendix Figure 6: "Benefits Too Generous", Treatment Effects based on Political

Knowledge with Controls
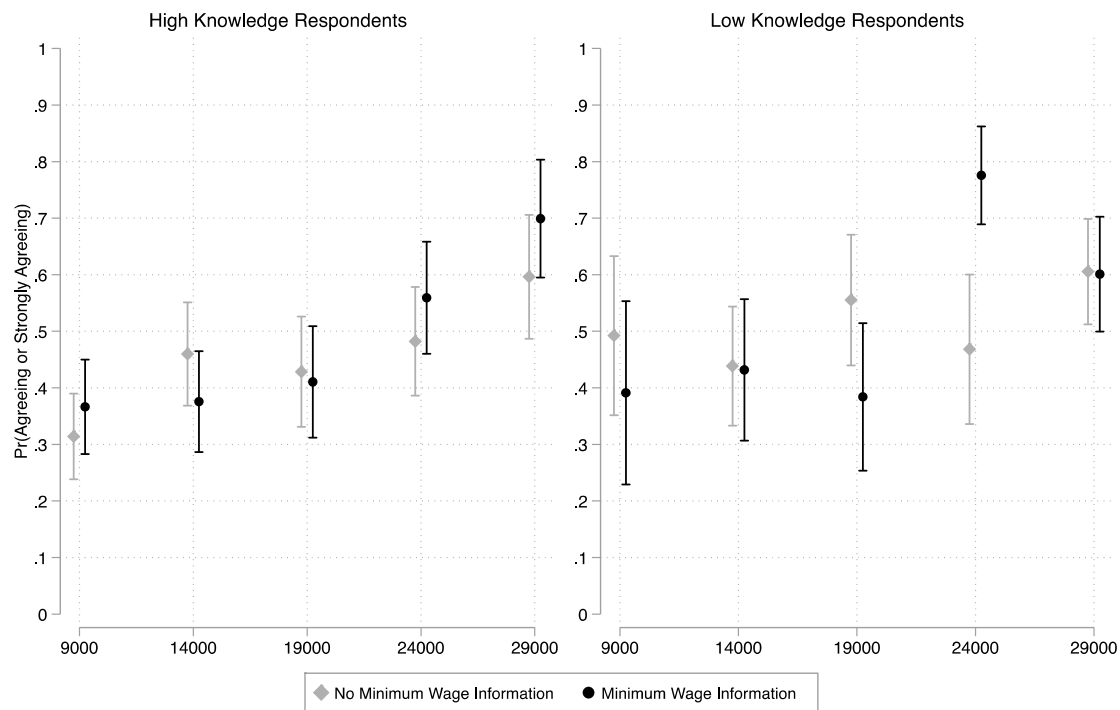
Online Appendix Table 1: Pairwise comparisons of marginal linear predictions, overall analysis

Design df = 1835

Margins: asbalanced

	Margin	Std. Err.	Unadjusted Groups		
No Minimum Wage Information#9000	0	0	A		
No Minimum Wage Information#14000	0.218	0.195	A	B	
No Minimum Wage Information#19000	0.491	0.209		B	
No Minimum Wage Information#24000	0.529	0.202		B	
No Minimum Wage Information#29000	1.019	0.203			C
Minimum Wage Information#9000	-0.069	0.203	A		
Minimum Wage Information#14000	0.267	0.199	A	B	
Minimum Wage Information#19000	0.414	0.200		B	
Minimum Wage Information#24000	1.139	0.207			C
Minimum Wage Information#29000	1.112	0.220			C

Note: Margins sharing a letter in the group label are not significantly different at the 5% level.

Online Appendix Table 2: Pairwise comparisons of marginal linear predictions, analysis broken

down by egalitarianism

Design df = 1771

Margins: asbalanced

	Margin	Std. Err.	Unadjusted Groups
No Minimum Wage Information#9000#Egalitarian	0	0	A B
No Minimum Wage Information#9000#Anti-Egalitarian	1.382	0.302	E F
No Minimum Wage Information#14000#Egalitarian	0.207	0.290	B
No Minimum Wage Information#14000#Anti-Egalitarian	1.625	0.280	F G
No Minimum Wage Information#19000#Egalitarian	0.231	0.284	B
No Minimum Wage Information#19000#Anti-Egalitarian	2.257	0.306	H I
No Minimum Wage Information#24000#Egalitarian	0.535	0.292	B C D
No Minimum Wage Information#24000#Anti-Egalitarian	2.086	0.297	G H I
No Minimum Wage Information#29000#Egalitarian	0.885	0.293	C D E
No Minimum Wage Information#29000#Anti-Egalitarian	2.608	0.300	I

Minimum Wage Information#9000#Egalitarian	-0.420	0.283	A						
Minimum Wage Information#9000#Anti-Egalitarian	1.388	0.288			E	F			
Minimum Wage Information#14000#Egalitarian	0.333	0.303	B	C					
Minimum Wage Information#14000#Anti-Egalitarian	1.638	0.284				F	G		
Minimum Wage Information#19000#Egalitarian	0.255	0.314	B						
Minimum Wage Information#19000#Anti-Egalitarian	1.757	0.288				F	G	H	
Minimum Wage Information#24000#Egalitarian	1.284	0.310			E	F			
Minimum Wage Information#24000#Anti-Egalitarian	2.522	0.300							I
Minimum Wage Information#29000#Egalitarian	1.106	0.359		D	E	F			
Minimum Wage Information#29000#Anti-Egalitarian	2.463	0.308							I

Note: Margins sharing a letter in the group label are not significantly different at the 5% level.

Online Appendix Table 3: Pairwise comparisons of marginal linear predictions, analysis broken down by knowledge

Design df = 1835

Margins: asbalanced

	Margin	Std. Err.	Unadjusted Groups
No Minimum Wage Information#9000#High Knowledge	0	0	A
No Minimum Wage Information#9000#Low Knowledge	0.841	0.294	C D E F G
No Minimum Wage Information#14000#High Knowledge	0.570	0.234	B C D
No Minimum Wage Information#14000#Low Knowledge	0.529	0.267	B C D
No Minimum Wage Information#19000#High Knowledge	0.624	0.251	B C D E
No Minimum Wage Information#19000#Low Knowledge	1.031	0.285	D E F G
No Minimum Wage Information#24000#High Knowledge	0.772	0.247	C D E F
No Minimum Wage Information#24000#Low Knowledge	0.983	0.272	D E F G

			A	B	C	D	E	F	G	H	I
No Minimum Wage Information#29000#High Knowledge	1.422	0.266							G	H	
No Minimum Wage Information#29000#Low Knowledge	1.297	0.251						F	G	H	
Minimum Wage Information#9000#High Knowledge	0.178	0.232	A	B							
Minimum Wage Information#9000#Low Knowledge	0.415	0.313	A	B	C	D					
Minimum Wage Information#14000#High Knowledge	0.422	0.238	A	B	C						
Minimum Wage Information#14000#Low Knowledge	0.790	0.270			C	D	E	F			
Minimum Wage Information#19000#High Knowledge	0.676	0.242			C	D	E				
Minimum Wage Information#19000#Low Knowledge	0.890	0.272			C	D	E	F	G		
Minimum Wage Information#24000#High Knowledge	1.045	0.246				D	E	F	G		
Minimum Wage Information#24000#Low Knowledge	2.177	0.276									I
Minimum Wage Information#29000#High Knowledge	1.786	0.290								H	I

Minimum Wage Information#29000#Low Knowledge	1.142	0.273	E F G

Note: *Margins sharing a letter in the group label are not significantly different at the 5% level.*