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ABSTRACT

Minimum Wages and Voting: Assessing the Political Returns to Redistribution outside the Tax System^{*}

The positive political returns to providing cash transfers have been well documented. However, redistribution through the tax and transfer system, while direct, is not the only means by which governments seek to change the income distribution: regulation of private market transactions may have a similar, if indirect, effect, implicitly redistributing via so-called "pre-distribution" policies. Wage floors, in particular, are implemented with the explicit goal of redistributing pre-tax firm income to low-wage workers. In the United States, polls consistently indicate minimum wage increases are broadly popular, and, also clearly associated with the Democratic party. This paper provides the first test of whether large minimum wage increases actually yield electoral gains for Democrats. For both federal and state races, I find no evidence that this is generally true using an event-study design and sub-national variation in minimum wages from the early 1990s to recent years. A null result is further confirmed when using a beneficiary-level political sentiment measure and difference-in-difference design. Various explanations for the finding are explored and dispelled while newly collected survey evidence supports a salience, or inattention, mechanism. Specifically, voters are found to attend much less to a minimum wage increase than to an equivalently-valued direct cash transfer from the government. This suggests putting money in people's hands may not be enough to receive political credit and that the directness of a transfer may itself matter.

JEL Classification:J8, D72Keywords:minimum wage, salience, voting

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1 Introduction

The positive, often large, political returns to providing cash transfers have been well documented. Among the best known works on the topic, Manacorda et al. (2011) find that receiving a cash transfer makes recipients 11-13 percentage points more likely to favor the implementing government. Other leading studies by Zucco Jr (2013) and De La O (2013) report similar findings, the former demonstrating an initial 15 percentage point increase and the latter a 9 percentage point increase in the vote share of parties responsible for significant cash transfer program expansions.¹

While redistribution through the tax and transfer system directly links governments to transfer recipients, it is not the only means by which governments can redistribute income from the status quo free market distribution. Regulation of private market transactions may have a similar, if indirect, effect; indeed, the redistributive function of regulation (alternatively termed implicit redistribution or "pre-distribution" policy, Hacker and Pierson, 2010; Bozio et al., 2020; Johnson and Muthoora, 2021; Rodrik and Stantcheva, 2021) is often by design. Wage floors, in particular, are implemented with a clear goal of changing the pre-tax income distribution to the benefit of low-wage workers.²

Robust minimum wages are broadly popular in the United States. Large majorities of the population support increases to the minimum wage, a finding that dates back decades, with high popular support across the ideological spectrum (Gallup, 2005, 2013). These increases are also clearly associated with the Democratic party: both at the state and national level, the vast majority of politicians who support minimum wage increases are Democrats and the vast majority of those who oppose them are Republicans (Helland, 2020). The minimum-wage-friendly public seems to understand this, preferring Democrats to deal with the minimum wage by a two to one margin (CNBC, 2015).

Extrapolating from the above literature on the political returns to cash transfers (henceforth, abbreviated as PRCT), one might therefore expect Democrats to benefit electorally when minimum wage increases are enacted. In this paper, I provide the very first empirical test of whether this is *actually* true. Using an event-study design and sub-national variation in mini-

¹For context, Manacorda et al. (2011), Zucco Jr (2013), and De La O (2013) are the three most cited papers on the topic from the last quarter century.

²And, by some estimates, the size of the effective transfer from recent US state minimum wage increases surpasses that of traditional anti-poverty cash transfers directly administered by the government (Jacobs, 2018), echoing recent work suggesting that "pre-distribution" policies may be more important in explaining lower inequality (across countries) than direct redistribution through the tax system (Blanchet et al., 2022).

mum wages from the early 1990s to recent years, I analyze whether implementing large minimum wage increases results in the growth of Democrat vote share. In complementary analysis of voter sentiment, employing a difference-in-difference design with a set of very recent minimum wages changes, I also assess whether expressed support for Democrats among minimum wage beneficiaries rises following a minimum wage increase.

The rationale for an expected affirmative answer to these questions is clear enough: voters reward governments that pad their pocketbooks - whether the padding is done directly through a government-provided cash transfer or indirectly by mandating transfers from firms to workers as under minimum wage law. An extra dollar is an extra dollar, after all. I call this the naive PRCT prediction as it is perhaps the first hypothesis that would be ventured by most readers of the PRCT literature. However, there are also reasons *a priori* why an indirect transfer mechanism like the minimum wage may not yield the same kinds of political rewards seen for directly administered cash transfers. Instead, the *directness* of the transfer may itself matter.

Why? For one, direct transfers might be *less* electorally remunerative for politicians than indirect regulatory-induced redistribution because of "anti-tax"/"anti-handout" sentiment or citizen preference for government to play its role in setting "fair" rules of the game "pre-distribution" rather than through redistribution (McCall, 2013; Kuziemko et al., 2022; Lindh and McCall, 2023).³ On the other hand, direct transfers might be *more* electorally remunerative because they are typically more conspicuous than government-induced redistribution that is achieved via the setting of labor market regulations that exist in the background of firm-worker transactions.

To this latter point, with the minimum wage specifically, a government-induced wage top-up is folded into a net take-home wage in an unmarked, unitemized fashion. This requires a recipient, if so inclined, to perform some mental accounting (Thaler, 1999) at pay time in order to back out the part of total pay coming from the government regulation. Moreover, though it is governments that set the rules requiring employers to pay more, the employer is still the one administering pay, typically without any special indication that the extra pay is caused by the government. This all serves to make the pay increase (and the government's role in it) somewhat inconspicuous and potentially limits political credit for this form of indirect transfer. In contrast, for most directly administered government cash transfers, the transfer is in addition to and separate from

³Similarly, findings in Kuziemko et al. (2015) suggest more general "anti-government" sentiment, or government distrust, can predispose relatively lower support for poverty reduction via direct government transfers than via the minimum wage (presumably because the latter involves a less direct role for a distrusted government).

a worker's gross pre-transfer labor market earnings, and, thus, clearly in the "addition" ledger when doing mental accounting. Furthermore, it is clearly the government directly administering final-stage delivery of the transfer to the voter as the government literally signs the check (or, has its name on the bank deposit, as the case may be). This makes a government's role in increasing one's earnings more salient and aids attribution. Under this salience hypothesis, consistent with the predictions of the broader behavioral economics literature on inattention and salience (Chetty et al., 2009; DellaVigna and Pollet, 2009; Goldin and Homonoff, 2013; Huet-Vaughn, 2019), the less salient a transfer, the less likely a voter is to react to it. Thus, a generous minimum wage increase may not actually generate electoral dividends.

The findings reveal that, in spite of the popularity of higher minimum wages, large increases of the minimum wage do not subsequently increase Democrat vote share. In the baseline specification, the precision of the estimate allows me to rule out even modest positive effect sizes - contrary to the naive prediction from the cash transfer literature. The null finding is true for both federal (congress) and state (governor) elections. Turnout is also not found to be affected. These results are in spite of the fact that the average minimum wage increase event studied would have sizably increased affected workers' earnings - by an average across treated counties of approximately 25% for a full-time minimum wage worker - and that there are significant numbers of affected workers in the population (not to mention the large majorities of all voters backing the policy).⁴ Furthermore, Democrats still receive no electoral reward for delivering these benefits when looking specifically at voting results in areas of the country with the greatest share of workers in the leading minimum-wage-employing industry (where the expected value of a minimum wage increase is largest).

While documenting these voting results for the first time is one important contribution of the present work, another is the detailed exploration of mechanisms that are or are not likely at play in explaining this null result. Though one explanation consistent with the results is the aforementioned salience mechanism, it is not the only possible reason for the absence of political returns from the minimum wage. In the paper, I consider several other reasonable alternative explanations informed by the existing literature. One is that voters concerned with

 $^{^{4}}$ Cengiz et al. (2019) study a similar time period of (slightly less) large US state-level minimum wage increases and estimate that 8.6% of workers had wages that were below the newly implemented minimum wage level, with even more - up to the 23rd percentile of the wage distribution - benefitting infra-marginally from wage spillovers as the wage scale is adjusted.

perceived costs of the minimum wage policy (disemployment), though a minority nationally, might be especially represented among marginal voters, leading offsetting votes by supporters and opponents of the reform to cancel each other out (hence, the null result). Another is the possibility that voters misattribute policy responsibility to incumbents (of whatever party), consistent with the work of Cole et al. (2012) and Bagues and Esteve-Volart (2016) in decidedly different contexts than the present. A third is that, ceteris paribus, voters would reward Democrats, but, that there also exists a simultaneous neutralizing effect of political contributions to Republicans by anti-minimum wage business interests, something consistent with the importance of political spending as an additional channel of influence (Bombardini and Trebbi, 2011; Bekkouche et al., 2022; Broberg et al., 2022). In the paper, I show that the evidence is not consistent with any of these three alternative explanations.

However, the question remains: is it differential salience that is actually the key explanatory difference between the previously documented positive political returns in the PRCT literature and the new voting null results found here? Two other differences across studies present themselves as possible explanations for the discrepancy in findings without need for an appeal to a behavioral economics phenomenon. First, the difference across studies may instead be explained by a different size (or voter perception of the size) of the relevant transfer beneficiary base (proportional to the overall electorate). Under this thinking, differential salience is not germane, and, if one were to instead analyze micro data taken from those seeing a net benefit from the minimum wage policy, rather than aggregate voting data, a positive political return to the minimum wage would actually be observed. Second, even if transfer beneficiary bases are (perceived to be) of identical size across studies, the perceived "treatment dose" (i.e. the marginal utility afforded per recipient, or, more generally, what a pro-transfer individual perceives the net societal benefit from the reform to be) may not be comparable across the indirect and direct transfers studied.⁵

Both possibilities are not easily explained away with the above event-study results using aggregate voting data alone. So, to explore the validity of the salience mechanism in light of these concerns, I conduct an original national survey before and after the timing of large subnational minimum wage increases that took place in many states on January 1, 2022.

The first finding from the survey, via a difference-in-difference analysis, is the confirmation of

⁵For instance, a cash transfer and a minimum wage increase may find equal number of voters who see the policies as bringing value to society, but, they may be inclined to see one or the other as a much more effective redistributive vehicle, or, as delivering much more value.

the event-study null results on Democrat vote share for an additional upstream (pre-ballot box) outcome of voter sentiment. Specifically, respondents who work in locations where minimum wage increases recently happened do not become more likely to support Democrats after the increase than do respondents in places with no minimum wage change during this time. This is true in the overall respondent pool and also even among those who say they view an increased minimum wage as a net benefit. The null result is precisely estimated - ruling out even a small positive change of about 5% of the standard deviation of pre-reform Democrat approval (at the upper bound of the estimate's 95% confidence interval). Thus, the small transfer beneficiary base explanation of the event-study null result does not apply here, since, even when focusing exclusively on a population that sees a net benefit from the indirect transfer, a null result is still observed (no political reward for Democrats).

The second set of findings address the other mentioned concern regarding whether treatment dose and perceptions of net social benefit are comparable across indirectly and directly administered transfers. To this end, the survey includes questions about the degree to which respondents believe their communities would benefit from a minimum wage increase, and, also, alternatively, from another round of a common directly administered transfer (a stimulus check). These questions allow a focus on those who place positive and equivalent value on a direct cash transfer (the stimulus check) as they do on an indirect transfer (via an increased minimum wage). These people, in other words, report that they see equivalent marginal social utility from the two forms of transfer regardless of the directness of transfer delivery. For those in this population living in jurisdictions with the January 1, 2022 minimum wage increases, I find that correct beliefs about when the most recent stimulus check was received are more than twice as common as correct beliefs about the most recent minimum wage increase - even though the latter was much more recently received, making it less likely to be mis-remembered. This differential awareness is also true even for those who report that they value the minimum wage increase *more* than the stimulus check. Thus, even when it delivers higher perceived net benefit, respondents clearly show differential and reduced attention or awareness to the indirect transfer (vis a vis the direct transfer). This strongly supports the salience mechanism, and, in particular, an interpretation of diminished salience as coming in part from the cost of mentally accounting for unitemized indirect transfers like the minimum wage.

In terms of contributions to the literature, this work is the first evidence on whether Democrats

gain support at the ballot box from substantially increasing the minimum wage. This extends the PRCT literature to the study of the political returns from *indirect* forms of transfer. The results suggest that, for the electoral sustainability of progressive economic policy, the choice of redistributing directly via the tax system or indirectly via policy that affects the "pre-distribution" (through labor regulations, for instance) may matter a great deal. If choosing the latter, reelection minded political actors should do more to make clear when changes to background regulations take place, and, to make a government's hand in bringing them into being more salient. The governing models - whether in the minds of politicians or economists - of voters as either perfectly informed and rationally extracting information about politicians' true redistributive preferences from policy signals (Drazen and Eslava, 2006), or, as motivated by reciprocity concerns (Rabin, 1993; Manacorda et al., 2011) to re-elect policy makers that bring them past benefits, seem incomplete to explain the current findings. Instead, the work supports behavioral models of voters with limited attention, with the directness of a transfer affecting its salience.

Finally, while the primary contribution of this work is to the political economy literature and its intersection with behavioral economics, the findings also have bearing on the vast labor literature studying the employment consequences of the minimum wage. This literature relies on sub-national policy heterogeneity in the minimum wage for identification. One lingering concern of this kind of natural experiment comes from the non-random nature of the distribution of high and low minimum wages: changes in political preferences which lead a given place, and not others, to go on to raise its minimum wage may also affect the evolution of the labor market in a variety of other (non-minimum-wage-related) ways. However, as the results make clear, there is smooth co-movement of political preferences (for Democrat vs. Republican politicians) in the years leading up to a minimum wage spike in the eventually treated places. This provides greater confidence in the familiar use of policy discontinuities to assess the traditional employment (and price) effects of the minimum wage.

In the remainder of the paper, I go on to describe the data in Section 2. I present the main voting results showing the effect of minimum wage increases on elections in Section 3. In Section 4, I present alternative mechanisms that could explain these findings and evidence that is consistent with or inconsistent with the various alternatives. In this section I also present the findings from the survey, which both corroborates the voting results in Section 3 and helps to clarify the mechanism at play. I then conclude in Section 5.

2 Data

For electoral data, I use Dave Leip's Election Atlas (Leip, 2020) for US county-level results in federal House and state governors' races. For Congress, the data runs from 1992-2018. For governors' races the data runs from 1990-2018. The data used includes all on-cycle elections for races in these years with the exception of Alaska (where county and electoral boundaries don't align). As congressional electoral cycles are standardized across the country on a two year calendar on even-numbered years, this amounts to 14 electoral cycles in the congressional analysis. For governors' races, the election calendars are state specific. While most governor elections are 4 years apart, the calendar year for the cycle is not common to all states, and, in some states, elections are on a 2 year cycle (with changes between 2 and 4 year calendars taking place in some states during the data period). This means that, depending on the state, there are between 7 and 15 electoral cycles included in the governor analysis (usually on the lower side of this range).

The primary variable of interest from this data set is the Democratic party's share of total two-party (Democrat or Republican) votes cast in a contest. The other main outcome variable used, turnout, is also taken from the Leip data. In the corresponding specifications that follow I use log turnout, the log of the count of all votes cast in the Congressional (or governor) race (including ballots left empty).

Turning to the independent variable used in the voting analysis, for spatial and temporal variation in the indirectly administered transfer, I rely on large (≥ 50 cent) non-federal increases in the minimum wage that take place at the state or county level. The focus on these large reforms is common in the literature (Cengiz et al. (2019), Azar et al. (Forthcoming)) to ensure the minimum wage increases meaningfully raise pay and have large bite in the population. For reference, in the baseline analysis with the congressional data set, for the counties affected by the large minimum wage increase events under study the average size of the minimum wage increase between electoral cycles is about \$1.25 and represents a 25% increase in a minimum wage earner's income. Minimum wage data is taken from Dube et al. (2010), the UC Berkeley Labor Center, and, hand collection of changes to state and county minimum wages, drawing on the *Historical State and Sub-state Minimum Wages* data set (Vaghul and Zipperer, 2022) to catch discrepancies.

To explore an additional outcome of voter sentiment and to test the mechanism that may be at play, I also conduct a national survey timed to take place in two stages - the month before and the month after increases to state minimum wages scheduled to go into effect on January 1, 2022 in 21 states (and 26 cities or counties) across the United States. In the survey population, these changes in the governing minimum wage amount to an average increase of \$1. The survey was conducted with workers on Amazon Mechanical Turk (MTurk), known for having income levels that are significantly lower than those of the general population (Paolacci et al., 2010), thus, making this population of particular interest for this study. In total, 2256 responses were recorded in the survey across the two months. Responses from the same IP addresses or same MTurk ID are removed (to eliminate the duplicate) from the analysis in order to avoid the possibility of the same person responding more than once. Questions about the city, county, and state of work allow for the identification of the governing minimum wage applying to each respondent.⁶ After removing both duplicates and responses that can not be confidently geolocated from the responses provided (due to conflicting or uninformative state, county, or city of work information) there are 1950 observations in the sample.

The survey collects individual-level data in three key areas: a) the degree of approval for Democrats and Republicans; b) the degree of individual awareness of the most recent binding increase in the minimum wage, and, separately, of the most recent provision of a government check from a prominent direct cash transfer program (a stimulus check); and, c) the degree of self-perceived benefit deriving from these respective indirect and direct transfers.

The political attitudes questions take the form of a response (via a continuous slider) to a 7-point Likert scale question. The question reads

and similarly for Republicans

⁶To account for the governing minimum wage laws for those not currently employed, the questions ask "In what city (county, state) do you work (if unemployed, enter the city where you would most likely work)?" The governing minimum wage in the identified location is then determined through data from Vaghul and Zipperer (2022) and the Economic Policy Institute catalogue of state and local changes taking effect on Jan. 1, 2022.

On a scale of 0 to 7, how happy are you with the Republican party? (2) (7 means very happy; 0 means very unhappy)

The informational awareness questions ask respondents to identify (from a menu of calendar year options) the timing (i.e. the year) of the most recent (in)direct transfer of a given kind. Specifically, for the indirect transfer, respondents answer

When was last time the minimum wage was raised in the community (3) where you usually work?

And for the direct transfer, they answer

When was the last time stimulus checks were received (by mail or bank deposit) (4) by those in the area where you usually work?

Finally, to assess whether an individual identifies each of the two forms of transfer to be on net a benefit or cost, they are asked for a response (via a continuous slider) to a 7-point Likert scale question

The overall impact of a minimum wage increase on your broader community is: (5) 7 means provides a large net benefit; 3.5 means no effect; 0 means a large net cost: and similarly

The overall impact of the most recent government stimulus check on your broader community is: (6) 7 means provides a large net benefit; 3.5 means no effect; 0 means a large net cost:

For additional mechanism analysis, data on the unemployment rate and the share of county workers in the minimum-wage heavy restaurant sector come from the QCEW and campaign contribution data comes from the FEC disbursement database.

3 Main Voting Results

For identification, I utilize an event-study design. As noted, events are defined by the "treatment" of large (≥ 50 cent) sub-national increases in the minimum wage, following prior work focusing on large changes to the minimum wage. The familiar event-study specification takes the form

$$Dem_{it} = \sum_{k=-4, k \neq 0}^{k=3} \beta_k \mathbb{1}_{kit} + \lambda_t + \psi_i + \epsilon_{it}$$
(7)

where Dem_{it} represents Democrat two-party vote share in an electoral contest in county i at electoral cycle t; the treatment dummy $\mathbb{1}_{kit}$ equals 1 if in county i an electoral cycle t happens kcycles before/after a large non-federal minimum wage increase there (-1 is the left out category); λ_t represents electoral cycle fixed effects; ψ_i represents county fixed effects; and, ϵ_{it} is the error term, clustered at the state and county level.

Following the influential initial work of Goodman-Bacon (2021), the literature has raised contamination concerns for β_k estimates in a staggered timing event-study design such as that represented in (7). In particular, with heterogeneity in the treatment effect across treated cohorts, β_k 's from (7) can be contaminated by treatment effects from other relative periods, producing causally uninterpretable results for the event-time-dummy estimates. To avoid this, in the results that follow I estimate the interaction-weighted (IW) estimator version of (7) proposed by Sun and Abraham (2021). This estimator yields a weighted average of the cohort-specific average treatment effects on the treated where the weights are non-negative, sum to 1, and are easily interpretable (equal to the cohort's contribution, relative to other cohorts, to each respective event-time estimate). These IW event-study estimates are immune to the above contamination concerns and allow for heterogeneity in the treatment effect across the cohorts that are treated at different points in time - relying instead only on the identifying assumptions of no anticipation and parallel trends. In the baseline analysis for congressional elections, I use never-treated counties as the control group (composed of the counties in the 19 states that are not treated with a large, non-federal minimum wage increase of their own during the years under analysis). For the additional results for governor elections, I use last-treated counties as the control group as this fits the parallel trends better (though the estimated post-treatment effect is very similar when using never-treated counties as the control group for governors instead, as shown in the appendix).

Turning first to the baseline results, Figure 1 reports the effect of an increased minimum wage on the Democrat vote share in congressional elections. The first thing to note in the figure is the presence of parallel trends between treated and control counties in advance of a large minimum wage increase in the eventually treated counties. This has important implications in its own right for the large body of minimum wage research that relies on sub-national policy heterogeneity in the minimum wage to assess the employment effects of the minimum wage. One lingering concern of such natural experiments comes from the non-random nature of the distribution of high and low minimum wages: changes in political preferences which lead a given place, and not others, to go on to raise its minimum wage related) ways. However, Figure 1 makes clear that there is smooth co-movement of political preferences (for Democrat vs. Republican politicians) in the years leading up to a minimum wage spike in the eventually treated places. This provides greater confidence in the use of policy discontinuities to assess the traditional employment effects of the minimum wage.

Regarding the political outcome of primary interest in the present work, Figure 1 makes clear that places benefiting from large minimum wage increases brought to them by Democratic politicians do not appear to reward Democratic lawmakers at the ballot box. For all three congressional election cycles following the large minimum wage increase, the estimated political returns to Democrats from increasing the minimum wage are statistically insignificant with effect size point estimates near zero. Column 1 of Table 1 reports these estimates (corresponding directly to Figure 1). In the election immediately following the minimum wage increase, the point estimate is a statistically insignificant -0.015. The upper bound of the 95% confidence interval is just under 0.018, ruling out even a modest 1.8 percentage point increase in Democrat vote share in the election most closely tied to the policy reform. Greater redistribution via increased minimum wages, thus, appears to provide no political reward to Democrats. By comparison, in leading works from the PRCT literature, the political returns estimated for redistributing via *direct cash transfers* are large and significant: an 11-13 percentage point increase in recipient support in Manacorda et al. (2011), a 6-15 percentage point increase in recipient vote share in Zucco Jr (2013), and a 9 percentage point increase in recipient vote share in De La O (2013). In Section 4, I discuss the comparison between direct cash transfers and an indirect transfer via an increased minimum wage in greater detail.

Figure 2 estimates the effect of increased minimum wages on turnout in congressional races. The specification is identical to that in Figure 1 with the exception that here as the outcome I use the log of votes cast in the congressional election. In principle, an increased minimum wage may have an independent effect on turnout regardless of whether it invites vote switching by those already expecting to vote absent the policy change. However, the results indicate no statistically significant effect on turnout either. Point estimates are near zero in all three congressional election cycles following a large minimum wage increase event. In the election immediately following the minimum wage increase, the estimate is an insignificant 0.7 percent reduction in turnout with the 95% confidence interval ruling out a 2.7 percent increase in turnout. Any degree of positive turnout effect is completely ruled out by the 95% confidence intervals in the second post-minimum wage electoral cycle, with a slightly positive but still insignificant estimate three electoral cycles out. The null results on turnout differ from Markovich and White (2022) whose main analysis looks at a single minimum wage increase in New York City in their study of the minimum wage's effect on turnout, with the authors reporting a significant positive effect. The difference in findings may result from the broader scope of minimum wage events studied here, the micro-level data on turnout by specifically municipal workers that is used in this other study, or, other substantive differences in methods. As this paper's focus is on the outcome of political support, I leave deeper exploration of the effect on turnout to other work, but, I note here that the null effect of the minimum wage on voting preference (and on an additional measure of political support in Section 4.4.1) seems on its face to be more consistent with there being no effect on turnout as well.

I now extend the baseline results in federal congressional races to state elections for governor. In the analysis of governor elections, the event window is shortened by a period on each side of the event because the longer gap between governor races (typically 4 years, rather than 2 for congressional races) gives a more limited number of electoral cycles to analyze in most states.⁷ Figure 3 reports equivalent results to Figure 1 but for governor vote share (Column 2 of Table 1 reports the corresponding estimates). Figure 4 reports results for turnout in the governor elections equivalent to Figure 2. For both Democrat vote share and turnout in governor races, there is once again no statistically significant change resulting from the minimum wage increases.

 $^{^{7}}$ On the other hand, elections in two extra calendar years - 1990 and 1991 - are available for governor races from Leip (2020), and, are included in the analysis. All together, though, sample size is reduced for the governor analysis.

Unlike the baseline congressional analysis, which uses never-treated counties as the control group, these governor figures use last-treated counties as a control group to obtain more comparable pre-trends across treatment and control. Appendix Figures A1 and A2 report governor results when using the never-treated counties as the control instead, with similar null results.

4 Understanding the Mechanism

I now turn to investigation of possible mechanisms that explain the above null finding. While the evidence is not definitive, a combination of empirical and survey results lead me to dispel most of the candidate mechanisms considered, whereas a salience mechanism is supported as a likely explanation.

4.1 Offsetting Beneficiaries and Opponents

A natural starting point for explaining the finding is the recognition that only some voters are beneficiaries or supporters of a minimum wage increase. Despite its overall popularity, a nontrivial number of voters report opposition to increased minimum wages (Gallup, 2005, 2013). While this is a clear minority of the population, if voters on the margin (i.e. potential vote switchers) are roughly equally represented by supporters and opponents of the minimum wage, a minimum wage increase may lead the two to cancel out one anothers' votes. This kind of offsetting heterogenous treatment effect (an extra vote from one person for a Democrat met by an extra vote from another for a Republican) could then explain the above null finding.

I perform two tests for evidence consistent with this proposed explanation. Both consider likely predictors for the heterogenous treatment effect and test for a varying minimum wage voting preference effect across the predictor. First, if the above rationale is correct, we would expect areas with more minimum wage workers to have a greater balance of minimum wage supporters than opponents given the increased number of beneficiaries. The test then is for more positive, pro-Democrat minimum wage voting effects in counties with larger initial shares of restaurant sector workers relative to their overall county workforce (as the restaurant sector is the largest minimum-wage-employing industry in the US). Second, if the above rationale is correct, we would also expect to see a more negative relationship between minimum wage increases and Democrat vote share in areas with more likely opponents. As job loss is the chief argument against minimum wages, high unemployment areas should find this argument more compelling, and, thus, the test is for more negative minimum wage voting effects in higher unemployment areas.

Empirically, I see no evidence that either of these predictions bear out. Figure A3 shows that a null result persists even when looking at the top quintile of counties in the initial restaurant workers to total workforce distribution. Figure A4 further shows a null result persists when looking at the top quintile of counties in the initial unemployment rate. This supports the conclusion that the null result in Section 3 is unlikely to be explained by the use of aggregate county voting data masking actually extant positive voting preference responses at the individual level (rewarding Democrats like in the PCRT literature) that are washed out by offsetting negative individual voting preference responses (from pivotally placed opponents). In section 4.4, I present additional complementary evidence, showing that even when analyzing micro-data on an individual's support for Democrats there is no increase in support for the party following a minimum wage increase - even in a population where 100% of people sees a minimum wage increase as a net benefit. The details are discussed more there, but, on balance, the hypothesis described in this subsection is judged to have little support.

4.2 Counterposing Political Spending

Another possible explanation for the null vote share result is inspired by the literature studying the effect of money in politics (Bombardini and Trebbi, 2011; Bekkouche et al., 2022; Broberg et al., 2022). It is well known that many businesses that rely on minimum wage-level workers oppose minimum wage laws.⁸ If this business opposition manifests itself in increased contributions to Republican versus Democrat candidates after minimum wage increases, this political spending might undo what would otherwise have been a real increase in votes for Democrats ceteris paribus (e.g. by funding greater Republican candidate advertising, counter-messaging, get out the vote operations, or other campaign activities). Such political spending by industry opponents of the minimum wage could then allow Republicans to regain voter favor enough to overcome any lost support from opposing the minimum wage, resulting in the observed null vote share effect. And, absent the spending, we might have observed a similar political return to indirect redistribution through the minimum wage as in the PRCT literature.

I look for support for this hypothesis using Federal Election Commission (FEC) data on campaign contributions (FEC, 2021). The FEC offers comprehensive records on campaign fi-

⁸Such opposition is a regular position of restaurant and retail associations.

nance for all federal candidates. I track disbursements made to the Republican and Democrat House candidate, respectively, in each congressional seat and election cycle from the following sources: the associated Political Action Committees (PACs) of the National Council of Chain Restaurants, the National Restaurant Association, the National Retail Federation, and the Retail Industry Leaders Association. These groups constitute the main business associations for retail and restaurant industries, the primary employers of minimum wage earners in the US. From this data I can construct, for each House district-electoral cycle, the Republican share of the total contributions made by these groups to either the Democrat or Republican candidate. If the above explanation for the voting preference null result is correct, we would expect the Republican share of contributions to rise when the minimum wage is increased. Instead, we see no statically significant change in the share of contributions going to Republicans from these restaurant and retail association opponents of the minimum wage, as the event-study results using this outcome show in Figure A5. The evidence is thus inconsistent with this proposed explanation. Of course, other more indirect channels exist for money to influence the political process, such as lobbying and corporate philanthropy (i Vidal et al., 2012; Bertrand et al., 2021). However, given the openness of these industry associations in publicly opposing minimum wages, it seems unlikely backdoor channels would be used without also leveraging direct political contributions as well.

4.3 Misattribution to Incumbents

A third possible explanation for the null result is that voters *do* respond positively to minimum wage increases, but, misattribute credit for the policy and direct their vote to the incumbent party rather than to the Democrat in the race. Such an explanation would be consistent with previous work finding that incumbent politicians benefit electorally when a voter receives an economic windfall that has nothing to do with incumbent actions (Bagues and Esteve-Volart, 2016). Under this interpretation, voters would notice when a minimum wage increase happens (in contrast to the salience mechanism discussed below), but, would erroneously respond to this signal by voting to pay back, so to speak, the incumbent party that presided at the time of the increase - regardless of whether they actually supported the increase. If this is indeed the way voters respond to minimum wage increases then we should not necessarily expect to see Democrats enjoy increased vote shares. However, we would expect to see an increase in the incumbent party vote share if this is true. Yet, empirically, I find no evidence to support

this misattribution-to-incumbents hypothesis. Figure A6 replicates Figure 1 with the incumbent party vote share as the outcome. The event time point estimates post minimum wage are again close to zero and insignificant.⁹ I thus reject this proposed mechanism as inconsistent with the findings.

4.4 Limited Attention and Differential Salience

I now consider a limited attention, or salience, hypothesis inspired by the behavioral economics literature that shows inattention and informational salience have an important role in a wide variety of economic settings (Chetty et al., 2009; DellaVigna and Pollet, 2009; Goldin and Homonoff, 2013; Huet-Vaughn, 2019). Put simply, the hypothesis explains the estimated null result in the present context in the following way: if voters do not attend to information about changes in the minimum wage, then their voting behavior, naturally, should not be expected to change upon a minimum wage increase they do not notice. This holds true even if voters would, otherwise, vote more Democratic had they instead been fully aware that a minimum wage increase is happening.

Furthermore, accounting for imperfect informational salience can also help to explain the comparative finding that: i) on the one hand, the voters studied here do not seem to reward politicians for providing valued indirect transfers when implemented via "background" labor market regulation, while, ii) on the other hand, in the existing literature, we see that voters do reward politicians for direct cash transfers (Manacorda et al., 2011; Zucco Jr, 2013; De La O, 2013). In short, if there is differential salience for otherwise equivalent direct and indirect transfers - with the transfers provided directly by the government being more attended to by voters - this could explain such a pattern.

To make this latter statement more precise, consider a constituent's support for a political actor to be determined by a function $V(p, \tau; \sigma)$, where τ is a transfer to the constituent of size τ for which the political actor is ultimately responsible, and, p represents all other political and economic considerations that affect the constituent's support for that political actor, with Vincreasing in τ and p absent inattention. The parameter σ , running between 0 and 1, represents the degree of attention the constituent gives to the transfer τ , with $\sigma = 1$ being full attention. To simplify, let $V(p,\tau;\sigma) = p + \sigma\tau$. Consider two kinds of transfer of equivalent size: one,

⁹Figure A7 shows the same specification but with the last-treated control group for better parallel trends, and, there is, again, a null result.

 τ_{tt} , a subsidy to the individual provided directly by the government thru the tax and transfer system, and, the other, τ_{mw} , which is indirectly delivered to the individual through a governmentmandated increase in the minimum wage. If the individual attends less to the indirect transfer, then $\sigma_{mw} < \sigma_{tt}$. Thus, for two equivalently sized but differently delivered transfers τ_{tt} and τ_{mw} (such that $\tau_{tt} = \tau_{mw} = \tau$), the marginal increase in political support from an increase in the *direct* transfer is $\frac{\delta V}{\delta \tau_{tt}} = \sigma_{tt} \delta \tau_{tt} = \sigma_{tt} \delta \tau$, and, the marginal increase in political support from an increase in the *indirect* transfer is $\frac{\delta V}{\delta \tau_{mw}} = \sigma_{mw} \delta \tau_{mw} = \sigma_{mw} \delta \tau$, with the consequence that $\sigma_{mw} \delta \tau < \sigma_{tt} \delta \tau$ (again, because $\sigma_{mw} < \sigma_{tt}$) - meaning the increase in political support will be greater for the direct transfer.

The reasons why a minimum-wage-based transfer might be less attended to by a voter than a direct transfer are numerous. Perhaps most important is the question of who is responsible for transfer administration, or, for signing the check, so to speak. With a direct transfer, the recipient sees that the government is the one delivering the extra money to them (they literally sign the check or are listed on the bank transfer) making the government's role salient whereas a minimum wage increase is government policy funneled through an employer without any direct attribution to the government's policy at the time of the wage increase. Instead, the employer administers the pay increase, allowing the government's role and political credit to potentially be missed. Additionally, mental accounting also matters. This is because the salience of the government hand in a minimum wage increase depends on a beneficiary's willingness to unpack a gross earnings statement to back out, or itemize, the top up resulting from the labor market regulation. The typical direct government transfer, on the other hand, will be inherently additive to non-government sources of income and in the "addition" ledger of mental accounting.¹⁰

But, empirically speaking, is differential salience actually the key explanatory difference between the previously documented positive political returns to direct cash transfers and the new results here showing the absence of such returns when transfers are administered indirectly through labor market regulation? Other possibilities certainly exist. For one, it may be that the difference across studies is instead explained by a different (perceived) size of the transfer beneficiary base (proportional to the overall electorate). The fraction of the population that

¹⁰For infra-marginal workers (whose wage prior to the minimum wage increase was already above the new wage floor), when they see policy-induced spillover increases in their wage (Cengiz et al., 2019; Giupponi et al., 2022; Biewen et al., 2022) - for instance, to preserve pay hierarchies in the firm - the causal attribution to the government policy is even less salient and clear.

personally benefits from minimum wage increases is not trivial (estimated in related work at close to a quarter of wage earners who either directly or indirectly benefit).¹¹ Still, it's possible that in the direct cash transfer studies an even higher fraction of the population is directly treated, or, alternatively, is at least perceived to be treated by voters who see the transfer as having a net benefit. This would result in a more noticeable effect on aggregate voting patterns in these studies for reasons unrelated to salience. Additionally, even if transfer beneficiary bases are perceived to be of identical size, one might wonder whether the "treatment dose" (i.e. the purchasing-power-adjusted dollars of transfer per recipient) is comparable across the indirect and direct transfer studies. Ultimately, this later question boils down to the more fundamental question of whether potential voters would assess the net benefit (both personal and communitywide) from a minimum wage increase to be comparable to the same construct in the cash transfer studies. As the direct cash transfer studies take place, by and large, in middle and lower income countries where marginal utility from a dollar of extra income would be expected to be higher, there is some prima facie reason to think this concern is relevant when considering the mechanism underlying the comparative analysis of the direct and indirect transfer results (and, that, again, it may not be differential salience that primarily distinguishes the direct and indirect transfers studied).

4.4.1 Survey Results

In light of such considerations, I designed a survey to rule out these confounding explanations for the different results coming from research on direct and indirect transfers. By recording information on individual-level attitudes, awareness, and perceptions of net benefit from direct and indirect transfers, with fine spatial and temporal variation, the survey allows us to go beyond what can be known from the aggregate voting data and long-run panel analysis in Section 3.

How so? First, since the survey provides individual-level political views rather than district aggregates, we can avoid the first of the above concerns (about different perceived sizes of the transfer beneficiary base) as an alternative explanation of this paper's null result. To reiterate its logic, the supposition is that the null voting result following a minimum wage increase would

¹¹Cengiz et al. (2019) study a similar time period of (slightly less) large US state-level minimum wage increases and estimate that 8.6% of workers had wages that were below the newly implemented minimum wage level, with even more - up to the 23rd percentile of the wage distribution - benefitting infra-marginally from wage spillovers as the wage scale is adjusted.

actually be a positive result (like the PRCT literature findings on direct transfers) *if only* a higher fraction of a county's population saw benefits coming from the minimum wage increase (with the assumption being that in the PRCT studies this fraction is comparatively larger). With individual-level survey data, we can focus exclusively on the population that reports that their community benefits, on net, from minimum wage increases.¹² Thus, when looking at how their attitudes toward Democrats change following a minimum wage increase, we are looking at a sample, by construction, that sees only positive net benefit to the minimum-wage-induced transfer. If there is still a null result in this population (where 100% of the sample see a net benefit to the minimum wage) then it cannot be that too few people perceiving a benefit from the indirect transfer is the explanation for the lack of a political return accruing to Democrats after they administer indirect transfers via minimum wage increases.

In fact, such a null result is exactly what we observe in the first finding from the survey data. That is, even for individuals who personally assess net benefits to come from an increase in the minimum wage, we do not see a statistically significant increase in their level of support for Democrats following such an increase. Specifically, respondents who work in locations where minimum wage increases recently happened (in the past month) do not become more likely to support Democrats after the increase than do those working in places with no minimum wage change during this time. This is true of the overall respondent pool, and, more to the point, it is also true of those who say the minimum wage increase would provide a net benefit to their community (i.e. those who answered over 3.5 on the Likert scale to question 5 from Section 2). The results for this latter group are reported in Figure 5.¹³ The left panel of Figure 5 shows their distribution of Likert scale responses to question 1 (Democrat party valence) from Section

¹²Alternatively, one could focus on a more narrow sense of benefit by looking at personal or family benefit. This, however, would fail to capture the large population of people who support minimum wage increases even if they don't directly get more income from the policy. Such other-focused constituents would also presumably (in theory) respond favorably to policymakers who implement the minimum wage increase that they report liking. I thus consider the broader "net benefit to the community" assessment to be the proper construct for the study of political returns from the minimum wage policy since it encompasses both kinds of supporters, and, I present results with this definition of net beneficiaries going forward. However, for robustness, I also included a survey question about more narrowly-focused personal benefit from a minimum wage increase (just like question 5 from Section 2 but with the substitution of "you and your family" for "your broader community"). In practice, there is no difference in the results, as shown below, when using this alternative definition of net benefit (likely because the MTurk population has sufficiently low household income so that such distinctions are not great). 1754 survey respondents report seeing some net benefit to their broader community from a minimum wage increase, while 1704 report a net benefit to them or their family.

¹³Figure A8 reports equivalent results for those who answered that they saw a minimum wage increase to be of personal benefit to them or their family. The results are very similar and the conclusions are the same.

2 separately for the period pre-minimum wage increase and for the period post-minimum wage increase *in places where a minimum wage increase takes place*. The right panel shows the same for a placebo shock in control places, i.e. those places where a minimum wage increase *does not* take place during this time. As can be seen, in both panels there is no statistically significant change in attitudes toward Democrats, and, in fact, the mean support for Democrats drops some in the treated (left) panel while slightly rising in the control (right) panel. The difference-in-difference estimate, recorded in column 3 of Table 1, is statistically insignificant and negative. The upper bound of the 95 percent confidence interval is a small positive 0.088 change in the Likert scale, which is only about 4.6% of the standard deviation (1.91) of the pre-event period distribution of Likert scale responses to the Democrat support question among respondents in the eventually treated location. The survey, therefore, confirms that the event-study null results apply even to individual-level voter sentiment and even for those who see a minimum wage increase as a net benefit.

A second finding from the survey comes from focusing on those individuals in the sample who report that they place equivalent (and positive) value on receipt of a direct cash transfer as they do on receipt of an indirect transfer via an increased minimum wage. In other words, these people see equivalent marginal social utility from the two forms of transfer regardless of the directness of transfer delivery. By focusing on them, we may conclude that any observed difference in how such people treat the two forms of transfer is itself a candidate mechanism for explaining the paper's results that is immune to the above concern regarding unobserved differences in treatment dose or perceptions of net social benefit associated with the different kinds of transfer. For an especially strong test of the salience hypothesis, I further focus on survey responses from states that just had a minimum wage increase take effect in the last month.¹⁴. By analyzing the post-minimum wage event survey response in these places, I study a time when minimum wage-induced changes to one's paycheck should be most salient. And, yet, as we see below, the data suggests very low levels of awareness about the minimum wage increase - both in absolute terms and relative to awareness of increases in earnings from a key direct cash transfer program.

The direct transfer in question is a stimulus check (also termed an Economic Impact Payment) that was part of the federal government's covid relief response. Three independent payments were sent in 2020 and 2021, with the last issued in March 2021 for \$1400 per person (below an income

¹⁴Relaxing this restriction, however, does not change the results, as discussed below

threshold). To measure whether a survey respondent places equivalent value on an increased minimum wage and on a stimulus check, I measure whether an individual's Likert responses to questions 5 and 6 from Section 2 are within 0.1 points of one another (and to ensure that positive value is placed on both transfers - i.e. that both are seen as goods - both responses are required to be above 3.5). As can be seen in Figure A9, there is strong evidence of differential awareness, with much higher levels of correct information about the direct transfer (the paired t-test p-value is 0.003 for the test of equal incidence of correct answers to the minimum wage and stimulus question). Figure A10 shows this pattern persists when no longer restricting the responses to come from states where the minimum wage increase had just taken effect in the last month.

An even stronger test of differential awareness based on the directness of the transfer comes from studying those who report they value the additional direct transfer *more* than the indirect transfer (rather than valuing them equivalently). These people gave a higher-valued response to question 5, about the benefit of the minimum wage, than to question 6, about the benefit of the stimulus check, in Section 2 (again, requiring the further condition that both responses are above 3.5). One would expect such people to pay even more attention to the minimum wage than to the stimulus check since they value it more. However, even among these respondents, correct information about the minimum wage increase is limited and far less common than correct information about the stimulus check. As can be seen in Figure 6, a majority of these respondents (56%) are correct about the most recent stimulus check while a much smaller fraction (28%) are correct about the most recent minimum wage increase. This difference is statistically significant at the 1% level (paired t-test p-value of less than 0.001). Figure A11 shows this pattern persists when no longer restricting the responses to come from states where the minimum wage increase had just taken effect in the last month.¹⁵ This evidence provides strong support for differential attention. In particular, the finding suggests missed itemization of the minimum wage increase (in the larger gross wage) may cause the diminished attention to this indirect transfer.

In conclusion, while differential salience (between directly and indirectly administered transfers) is not conclusively *the causal force* explaining the null result on Democrat support from increased minimum wages in contrast to the results of the PRCT literature, it is an explanation consistent with the totality of this work's findings (among many other explored explanations

¹⁵Furthermore, all these results are the same when constructing equivalent samples based on respondent assessment of personal or family benefit from the policy.

that are not). Critically, the survey results show that it is a candidate explanation immune to two alternative explanations for the cross-study discrepancy in findings. First, the survey shows that even in a population that sees a net benefit from the indirect transfer of a minimum wage, there is still no political reward for Democrats from increasing the minimum wage. This means that the discrepancy in findings between the PRCT literature (positive political rewards) and the current work (no political rewards) cannot be explained by the the direct transfers studied having larger transfer beneficiary bases (or voter perceptions of their size) proportional to the overall electorate, thus, passing a threshold to see a significant political reward that the minimum wage does not. Even when this proportion is one for an indirect minimum-wage-based transfer (as in the survey of minimum wage beneficiaries), there is still a precise null result on political credit. Second, the intensive margin - the individual-level marginal utility or perception of the net societal benefit - of a given transfer may certainly differ across the direct transfer programs studied in the PRCT literature and the minimum wage policies studied here. And, if this perceived value is higher for the former than the later this may also in theory explain the pattern of political returns. However, as the survey shows, when holding this intensive margin constant, or, even when the minimum wage delivers a higher perceived net benefit than a direct transfer, respondents clearly show differential and reduced attention and awareness to the indirect transfer via the minimum wage (vis a vis the direct transfer). Even though it is as much or more valued! This suggests that lack of attention to the minimum wage change because of the indirect nature of the transfer (and not different intensive margin impacts) may indeed be a core cause of the null result on political credit.

5 Conclusion

In this work, I answer for the first time the question of whether electoral rewards accrue to Democrats when they enact large increases to the minimum wage. Studying almost 30 years of sub-national minimum wage changes with an event-study design, I find no change in Democrat vote share at both the federal (congress) and state (governor) level. In a separate analysis of more recent minimum wage increases, I also see no resulting change in political sentiment, measured by expressed support for Democrats, even among those that see the minimum wage increase as clearly beneficial. These null results are precisely estimated and differ significantly from the positive response one might expect based on the literature studying the political returns to cash transfers *directly* administered by the government (Manacorda et al., 2011; Zucco Jr, 2013; De La O, 2013).

An original survey provides support for the view that the discrepancy in findings may be due specifically to the difference in the directness of the transfers under study, with the minimum wage, unlike cash transferred through the tax system, being a form of *indirect* transfer to low-income families (i.e. the government's role in the transfer is only in the background through the setting of labor laws and the government does not directly administer the transfer). This indirectness makes it harder for inattentive voters to notice the less salient act of government transfer (that they otherwise like and benefit from), as the survey finds, and therefore, to deliver political reward to the agent bringing it about (in this case the Democratic party). This explanation of the findings casts doubt on models of rational and well-informed voters and is consistent with behavioral models of inattention in this context (Chetty et al., 2009; DellaVigna and Pollet, 2009; Goldin and Homonoff, 2013; Huet-Vaughn, 2019).

In the policy space, the findings have potentially far-reaching implications for how governments design their economics policies (beyond simply the minimum wage). Specifically, the way that political parties aid low-income voters - redistribution through the tax and transfer system, or, instead, implicit distribution via other policies that change incomes in the "pre-distribution" - may have profound consequences for sustaining political support, and, thus, the long-term survival of a more progressive-minded government. Equivalent-sized transfers alternatively administered directly or indirectly can have very different electoral returns for political parties. This does not necessarily mean that re-election minded politicians should scrap intervention via policies that affect the "pre-distribution" in favor of tax-and-transfer interventions. But, it does suggest that expanded efforts are needed to make the government's hand more salient in the redistributive changes to background regulation that these governments bring into being.

References

- Azar, José, Emiliano Huet-Vaughn, Ioana Marinescu, Bledi Taska, and Till Von Wachter, "Minimum wage employment effects and labor market concentration," *Review of Economic Studies*, Forthcoming.
- Bagues, Manuel and Berta Esteve-Volart, "Politicians? luck of the draw: Evidence from the Spanish Christmas lottery," *Journal of Political Economy*, 2016, *124* (5), 1269–1294.
- Bekkouche, Yasmine, Julia Cage, and Edgard Dewitte, "The heterogeneous price of a vote: Evidence from multiparty systems, 1993–2017," *Journal of Public Economics*, 2022, 206, 104559.
- Bertrand, Marianne, Matilde Bombardini, Raymond Fisman, Brad Hackinen, and Francesco Trebbi, "Hall of mirrors: Corporate philanthropy and strategic advocacy," The Quarterly Journal of Economics, 2021, 136 (4), 2413–2465.
- **Biewen, Martin, Bernd Fitzenberger, and Marian Rümmele**, "Using Distribution Regression Difference-in-Differences to Evaluate the Effects of a Minimum Wage Introduction on the Distribution of Hourly Wages and Hours Worked," 2022.
- Blanchet, Thomas, Lucas Chancel, and Amory Gethin, "Why is Europe more equal than the United States?," *American Economic Journal: Applied Economics*, 2022, 14 (4), 480–518.
- Bombardini, Matilde and Francesco Trebbi, "Votes or money? Theory and evidence from the US Congress," *Journal of Public Economics*, 2011, 95 (7-8), 587–611.
- Bozio, Antoine, Jonathan Goupille-Lebret, and Malka Guillot, "Predistribution vs. Redistribution: Evidence from France and the US," 2020.
- Broberg, Nikolaj, Vincent Pons, and Clemence Tricaud, "The impact of campaign finance rules on candidate selection and electoral outcomes: Evidence from France," Technical Report, National Bureau of Economic Research 2022.
- Cengiz, Doruk, Arindrajit Dube, Attila Lindner, and Ben Zipperer, "The effect of minimum wages on low-wage jobs," *The Quarterly Journal of Economics*, 2019, 134 (3), 1405– 1454.

- Chetty, Raj, Adam Looney, and Kory Kroft, "Salience and taxation: Theory and evidence," *American Economic Review*, 2009, 99 (4), 1145–77.
- **CNBC**, "CNBC All-America Economic Survey," Hart Research Associates, https://https://www.cnbc.com/2015/07/07/optimism-of-the-wealthiest-soars-cnbcsurvey.html, 2015.
- Cole, Shawn, Andrew Healy, and Eric Werker, "Do voters demand responsive governments? Evidence from Indian disaster relief," *Journal of development economics*, 2012, 97 (2), 167–181.
- **De La O, Ana L**, "Do conditional cash transfers affect electoral behavior? Evidence from a randomized experiment in Mexico," *American Journal of Political Science*, 2013, 57 (1), 1–14.
- DellaVigna, Stefano and Joshua M Pollet, "Investor inattention and Friday earnings announcements," The Journal of Finance, 2009, 64 (2), 709–749.
- Drazen, Allan and Marcela Eslava, "Pork barrel cycles," 2006.
- Dube, Arindrajit, T William Lester, and Michael Reich, "Minimum wage effects across state borders: Estimates using contiguous counties," *The Review of Economics and Statistics*, 2010, 92 (4), 945–964.
- FEC, "Federal Election Committee Disbursement Data," https://www.fec.gov/data/disbursements, February 2021.
- Gallup, "Gallup Poll (United States)," Gallup, https://news.gallup.com/poll/20710/public-solidly-supports-increase-minimum-wage.aspx, 2005.
- _, "Gallup Poll (United States)," Gallup, https://news.gallup.com/poll/165794/americansraising-minimum-wage.aspx, 2013.
- Giupponi, Giulia, Robert Joyce, Attila Lindner, Tom Waters, Thomas Wernham, and Xiaowei Xu, "The Employment and Distributional Impacts of Nationwide Minimum Wage Changes," *Mimeo*, 2022.
- Goldin, Jacob and Tatiana Homonoff, "Smoke gets in your eyes: cigarette tax salience and regressivity," *American Economic Journal: Economic Policy*, 2013, 5 (1), 302–36.

- Goodman-Bacon, Andrew, "Difference-in-differences with variation in treatment timing," Journal of Econometrics, 2021, 225 (2), 254–277.
- Hacker, Jacob S and Paul Pierson, Winner-take-all politics: How Washington made the rich richer-and turned its back on the middle class, Simon and Schuster, 2010.
- Helland, Sophia, "The Political Economy of State Minimum Wage Laws and Legislator Voting Behavior," 2020.
- Huet-Vaughn, Emiliano, "Stimulating the vote: ARRA road spending and vote share," American Economic Journal: Economic Policy, 2019, 11 (1), 292–316.
- i Vidal, Jordi Blanes, Mirko Draca, and Christian Fons-Rosen, "Revolving door lobbyists," *The American Economic Review*, 2012, *102* (7), 3731.
- Jacobs, Ken, "Governing the market from below: Setting labor standards at the state and local levels," No One Size Fits All, 2018, pp. 271–94.
- Johnson, Simon and Priscilla S Muthoora, "The Political Economy of Inclusive Growth: A Review1," *IMF Working Papers*, 2021, 2021 (082).
- Kuziemko, Ilyana, Michael I Norton, Emmanuel Saez, and Stefanie Stantcheva, "How elastic are preferences for redistribution? Evidence from randomized survey experiments," *American Economic Review*, 2015, 105 (4), 1478–1508.
- _, Nicolas Longuet Marx, and Suresh Naidu, "Compensate the Losers?'Economy-Policy Preferences and Partisan Realignment in the US," 2022.
- Leip, Dave, "David Leip's atlas of US Presidential elections, datasets," Harvard Dataverse, https://doi. org/10.7910/DVN/XX3YJ4, 2020.
- Lindh, Arvid and Leslie McCall, "Bringing the market in: an expanded framework for understanding popular responses to economic inequality," *Socio-Economic Review*, 2023, 21 (2), 1035–1055.
- Manacorda, Marco, Edward Miguel, and Andrea Vigorito, "Government transfers and political support," American Economic Journal: Applied Economics, 2011, 3 (3), 1–28.

- Markovich, Zachary and Ariel White, "More money, more turnout? Minimum wage increases and voting," *The Journal of Politics*, 2022, *84* (3), 1834–1838.
- McCall, Leslie, The undeserving rich: American beliefs about inequality, opportunity, and redistribution, Cambridge University Press, 2013.
- Paolacci, Gabriele, Jesse Chandler, and Panagiotis G Ipeirotis, "Running experiments on amazon mechanical turk," Judgment and Decision making, 2010, 5 (5), 411–419.
- Rabin, Matthew, "Incorporating fairness into game theory and economics," The American economic review, 1993, pp. 1281–1302.
- Rodrik, Dani and Stefanie Stantcheva, "A policy matrix for inclusive prosperity," Technical Report, National Bureau of Economic Research 2021.
- Sun, Liyang and Sarah Abraham, "Estimating dynamic treatment effects in event studies with heterogeneous treatment effects," *Journal of Econometrics*, 2021, 225 (2), 175–199.
- Thaler, Richard H, "Mental accounting matters," Journal of Behavioral Decision Making, 1999, 12 (3), 183–206.
- Vaghul, Kavya and Ben Zipperer, "Historical state and sub-state minimum wages," 2022.
- Zucco Jr, Cesar, "When payouts pay off: Conditional cash transfers and voting behavior in Brazil 2002–10," American Journal of Political Science, 2013, 57 (4), 810–822.

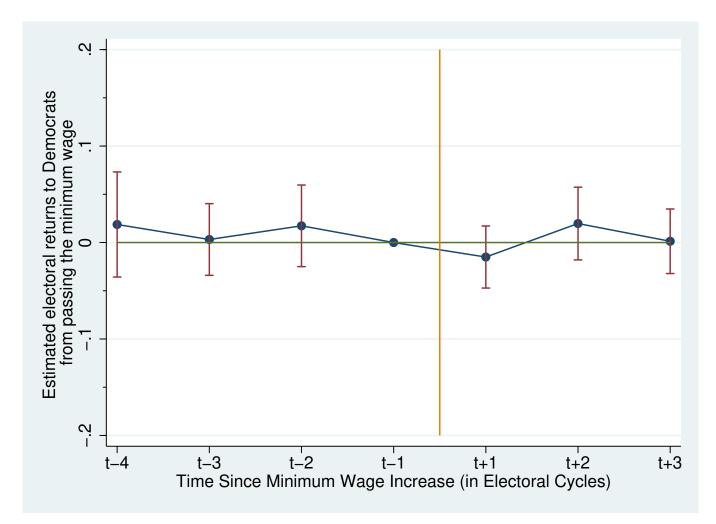


Figure 1: Effect of an Increased Minimum Wage on Democrat Vote Share in Congressional Elections

Notes: The figure reports event study results based on the Sun and Abraham (2021) IW estimator version of (7) (using never-treated units as the control group). The outcome is the share of a county's two-party (Democrat or Republican) votes going to the Democrat in a congressional election within our period of analysis (all on-cycle elections from 1992-2018). Standard errors are clustered at the state and county.

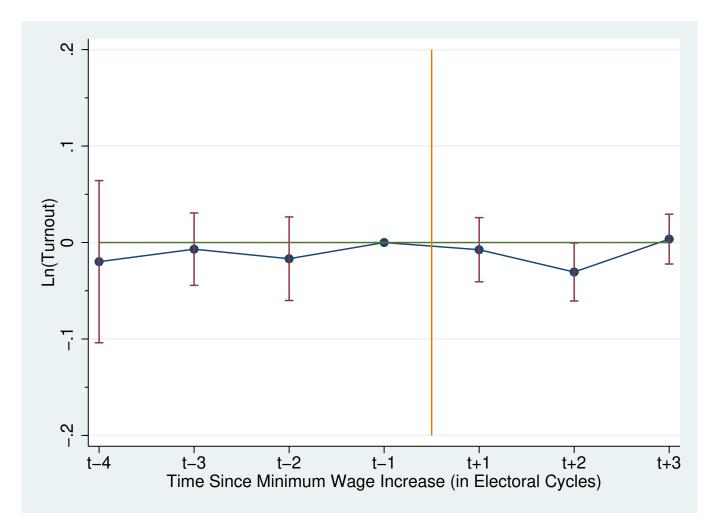


Figure 2: Effect of an Increased Minimum Wage on Turnout in Congressional Elections *Notes:* The figure reports a specification that is identical to that reported in Figure 1 (see figure notes) with the exception that here the outcome is the log of votes casts in the congressional election.

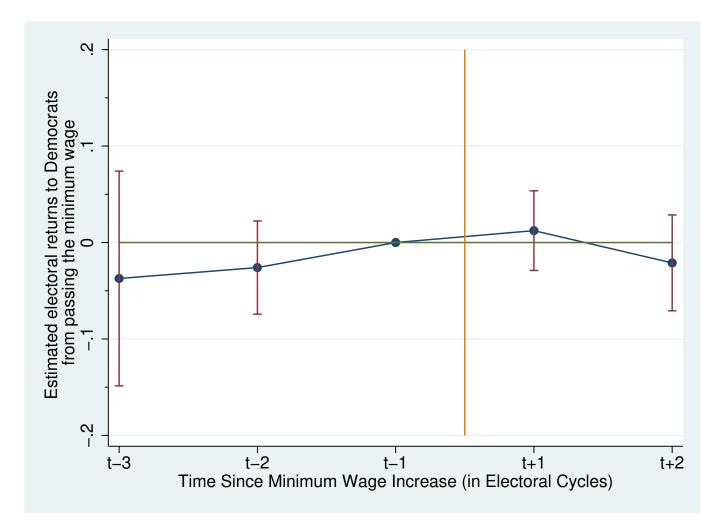


Figure 3: Effect of an Increased Minimum Wage on Democrat Vote Share in Governor Elections *Notes:* The figure reports event study results based on the Sun and Abraham (2021) IW estimator version of (7) (using last-treated units as the control group). The outcome is the share of a county's two-party (Democrat or Republican) votes going to the Democrat in the election of governor within our period of analysis (all on-cycle elections from 1990-2018). Standard errors are clustered at the state and county.

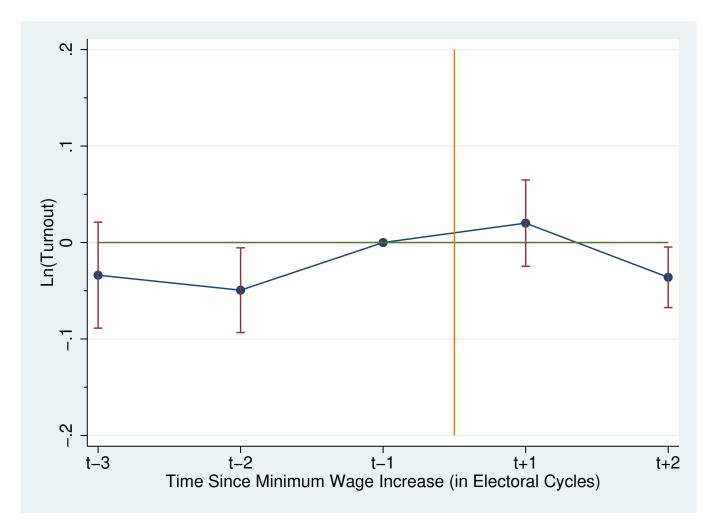


Figure 4: Effect of an Increased Minimum Wage on Turnout in Governor Elections *Notes:* The figure reports a specification that is identical to that reported in Figure 3 (see figure notes) with the exception that here the outcome is the log of votes casts in the election for governor.

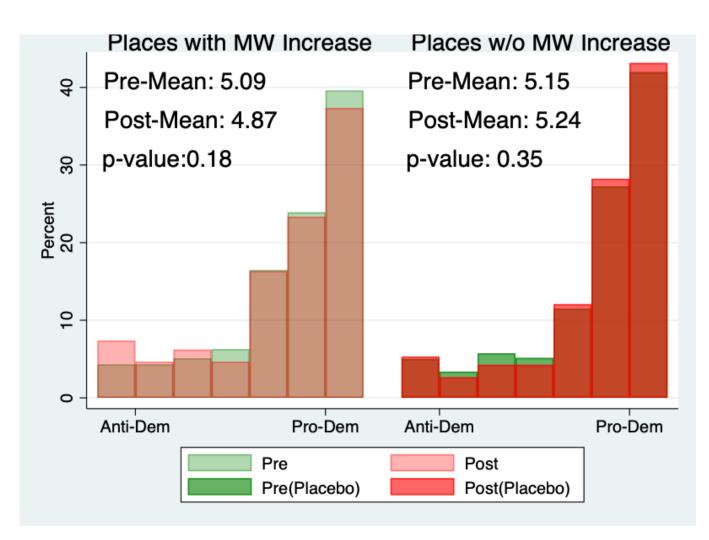


Figure 5: Attitudes Toward Democrats Do Not Improve After Minimum Wage Increases *Notes:* The figure reports the change in Democrat party favorability in places facing a minimum wage change and in places that do not experience one for a sample of survey respondents who report that a minimum wage increase would provide a net benefit to their community (i.e. those who answered over 3.5 on the Likert scale to question 5 from Section 2). The left panel shows the distribution of Likert scale responses to question 1 (Democrat party valence) from Section 2 separately for the month pre-minimum wage increase and the month post-minimum wage increase *in places where a minimum wage increase takes place* on Jan. 1, 2022. The right panel shows the same for the placebo shock in control places, i.e. those places where a minimum wage increase *does not* take place at this time. The sample size is 1754 respondents (512 in the treated group and 1242 in the placebo treatment group). The difference-in-difference estimate is statistically insignificant (p-value of 0.12) and negative (see Column 3 of Table 1).

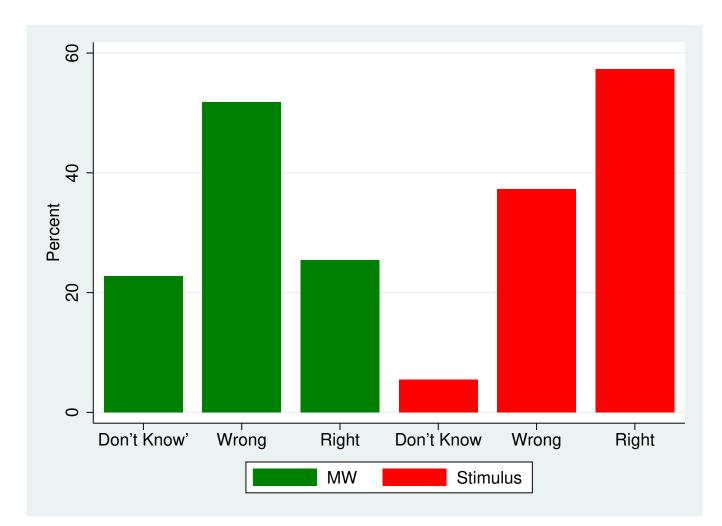


Figure 6: Differential Attention to an Increase in Direct (Stimulus Check) vs. Indirect (Minimum Wage) Transfer Among Those Who Value The Indirect Transfer More

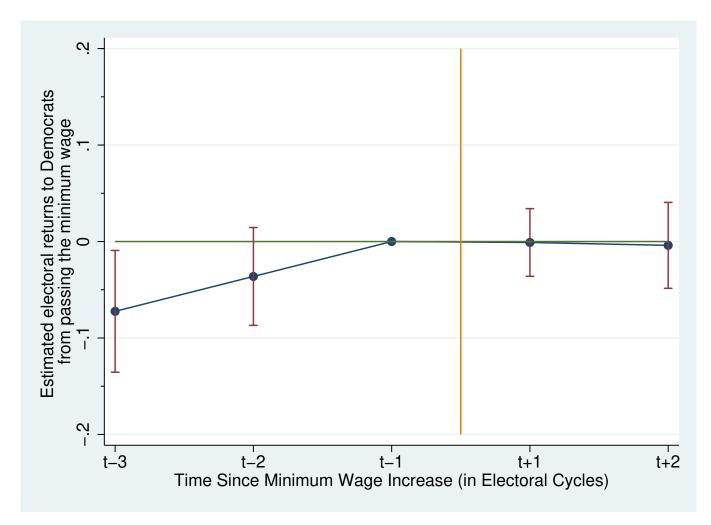
Notes: The figure reports survey responses to two questions that assess respondent information about a common indirect and direct transfer, respectively. One question asks respondents to identify the last time that the minimum wage was increased in the area where the respondent works (responses summarized on the left side of the figure). The other question asks respondents to identify the last time that stimulus checks were received in the area where the respondent works (responses summarized on the right side of the figure). Responses are selected from a menu of calendar year options with an "I don't know" option. The sample consists of respondents from states where the minimum wage increase had just taken effect in the last month so as to make it more likely that a respondent would correctly identify the timing of the most recent minimum wage change. The most recent stimulus check, by comparison, had been delivered in the previous year. Also, the sample consists of those who report that they value a minimum wage increase more than a stimulus check (i.e. the Likert response value to question $\frac{5}{5}$ is greater than the value in response to question $\frac{6}{5}$ in Section 2), so as to, again, make it more likely that there should be a comparatively greater incidence of a correct response to the minimum wage question (given the minimum wage increase's greater perceived value), with the additional sample condition that both responses are above 3.5 on the Likert scale (so that both kinds of transfer are seen as a net benefit). The sample size is 110 respondents. The p-value on a paired t-test of equal incidence of correct response to the minimum wage and stimulus question is less than 0.001.

	Election		Survey
	Congress	Governor	Dem Support
	(1)	(2)	(3)
t+1	-0.015	0.012	—
	(0.016)	0.021)	—
t+2	0.020	-0.021	_
	(0.019)	(0.025)	_
t+3	0.001	_	—
	(0.017)	_	_
DD		_	-0.315
	_	_	(0.201)
N	43273	10533	1754
adj. R^2	0.573	0.526	0.003

 Table 1: Minimum Wage Increases Do Not Lead to Increases in Democrat Support

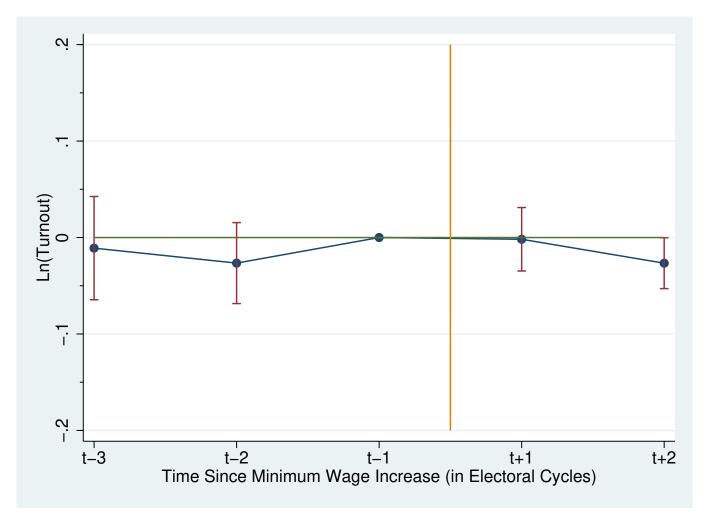
Notes: The table presents the various estimates of change in support for Democrats following increases in the minimum wage. Column 1 takes congressional Democrat vote share as the outcome and corresponds to Figure 1. Column 2 takes governor Democrat vote share as the outcome and corresponds to Figure 3. Column 3 takes the survey question on Democrat favorability (question 1 from Section 2, measured on a 7 point Likert scale) as the outcome and corresponds to a difference-in-difference estimate using the data underlying Figure 5, i.e. the population of survey respondents that see a minimum wage increase as beneficial (clustering standard errors at the level of state in which the survey respondent works). For further details on each column, see the corresponding figure notes for more detail. * p < 0.10, ** p < 0.05, *** p < 0.01

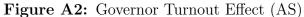
A Appendix





Notes: The figure reports results from an equivalent specification to that in Figure 3 with a change in control group. Here the specification uses the never-treated units as the control group instead of the last-treated units.





Notes: The figure reports results from an equivalent specification to that in Figure 4 with a change in control group. Here the specification uses the never-treated units as the control group instead of the last-treated units.

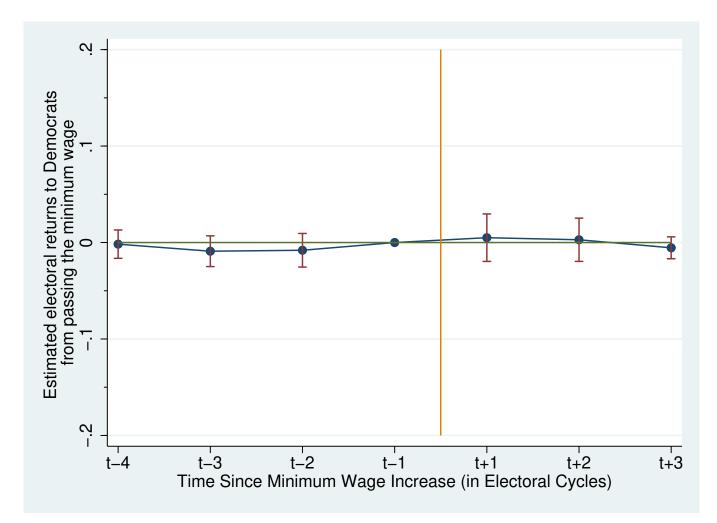


Figure A3: No Positive Effect of Minimum Wage Increases on Democrat Vote Share in Areas with Greater Share of Minimum Wage Affected Workers (Where a Stronger Argument For the Benefits of the Minimum Wage Can Be Made)

Notes: The figure reports results from an equivalent specification to that used in Figure 1. In this case, the regression is run only on the sample of counties in the upper quintile of the initial distribution of the share of restaurant workers in the workforce.

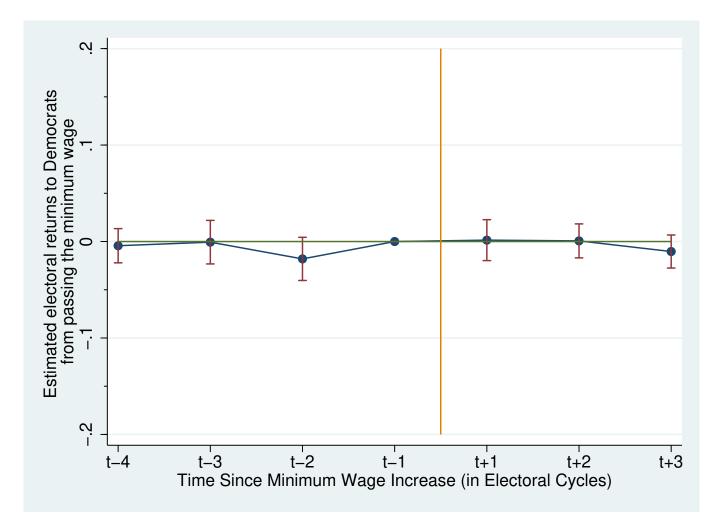


Figure A4: No Negative Effect of Minimum Wage Increases on Democrat Vote Share in Higher Unemployment Areas (Where a Stronger Argument Against the Minimum Wage Can Be Made) *Notes:* The figure reports results from an equivalent specification to that used in Figure 1. In this case, the regression is run only on the sample of counties in the upper quintile of the initial unemployment rate distribution.

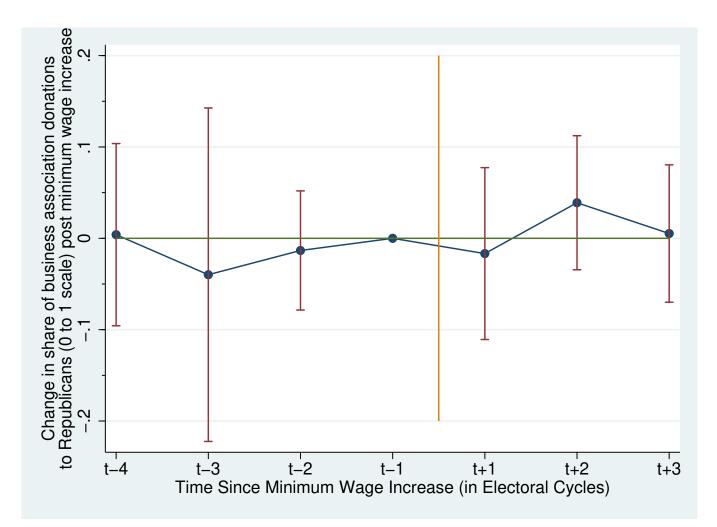


Figure A5: The Effect of Minimum Wage Increases on the Republican Share of Congressional Campaign Contributions Made By Business Associations Representing the Chief Employers of Minimum Wage Workers (Retail and Restaurant)

Notes: The figure reports results from an equivalent specification to that used in Figure 1 with a change in the outcome. Here the outcome is the share of two-party congressional campaign contributions made to the Republican candidate by the political action committees of the leading business associations for the industries that employ the most minimum wage workers in the United States, retail and restaurants. Campaign contribution information comes from Federal Election Commission (FEC) data on disbursements made to the Republican and Democrat House candidate, respectively, in each congressional seat and election cycle from the following sources: the associated Political Action Committees (PACs) of the National Council of Chain Restaurants, the National Restaurant Association, the National Retail Federation, and the Retail Industry Leaders Association.

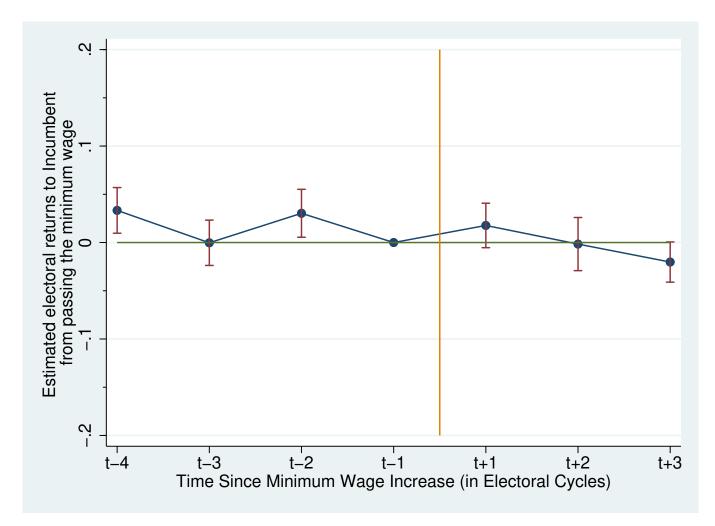


Figure A6: The Effect of Minimum Wage Increases on Congressional Incumbent Party Vote Share

Notes: The figure reports results from an equivalent specification to that used in Figure 1 with a change in the outcome. In this case the outcome is the vote share for the incumbent party.

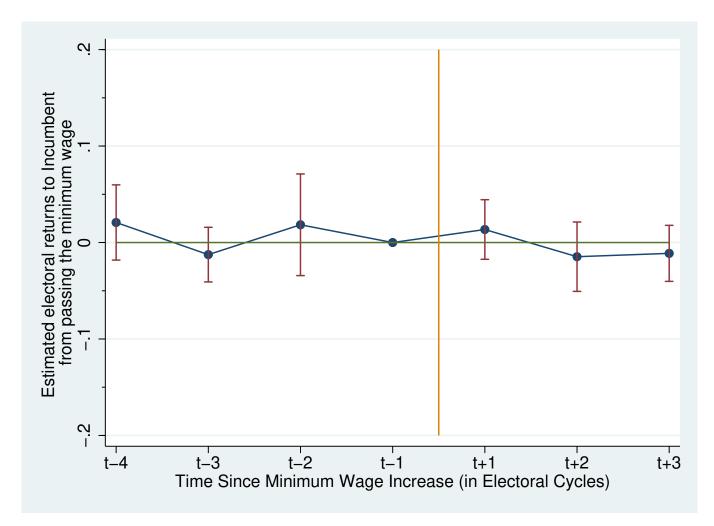


Figure A7: The Effect of Minimum Wage Increases on Congressional Incumbent Party Vote Share (Last Treated Control Group)

Notes: The figure reports results from an equivalent specification to that in Figure A6 with a change in control group. Here the specification uses the last-treated units as the control group instead of never-treated units.

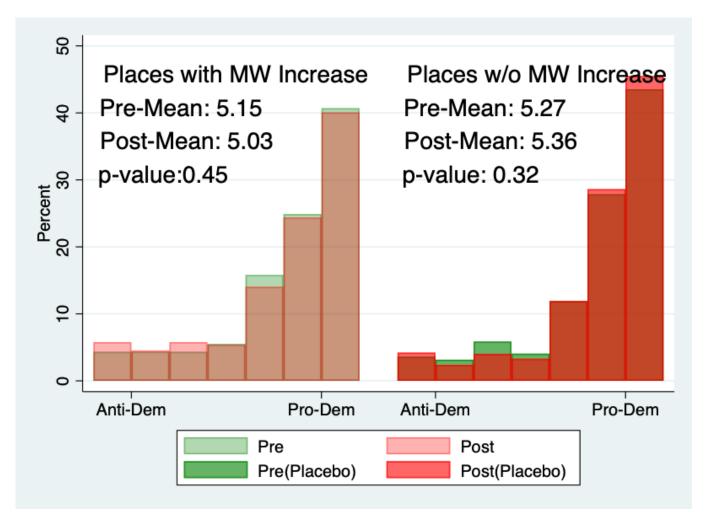


Figure A8: Attitudes Toward Democrats Do Not Improve After Minimum Wage Increases (Alternative Definition of Population Seeing a Net Benefit from a Minimum Wage Increase) *Notes:* The figure reports equivalent results to Figure 5. The difference is that here the sample of survey respondents is those who report that a minimum wage increase would provide a net benefit to them personally (i.e. they answered over 3.5 on the Likert scale to a question similar to question 5 from Section 2 but with the substitution of "you and your family" for "your broader community"). The sample size is 1704 (495 in the treatment group and 1209 in the placebo treatment group). The difference-in-difference estimate is statistically insignificant (p-value of 0.31) and negative. See Figure 5 notes for further description.

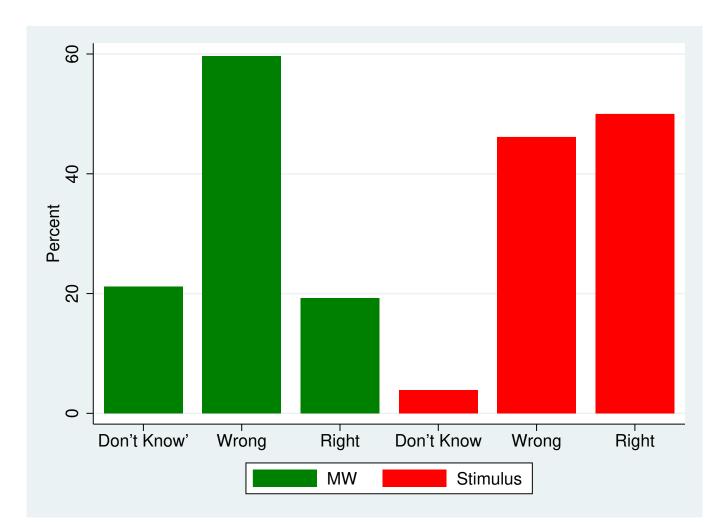


Figure A9: Differential Attention to an Increase in Direct (Stimulus Check) vs. Indirect (Minimum Wage) Transfer Among Those Who Value the Transfers Equally

Notes: The figure reports survey responses to two questions that assess respondent information about a common indirect and direct transfer, respectively. One question asks respondents to identify the last time that the minimum wage was increased in the area where the respondent works (responses summarized on the left side of the figure). The other question asks respondents to identify the last time that stimulus checks were received in the area where the respondent works (responses are selected from a menu of calendar year options with an "I don't know" option. The sample consists of respondents from states where the minimum wage increase had just taken effect in the last month so as to make it more likely that a respondent would correctly identify the timing of the most recent minimum wage change. The most recent stimulus check, by comparison, had been delivered in the previous year. Also, the sample consists of those who report that they value a minimum wage increase and the stimulus check equally (i.e. the Likert response value to question 5 is less than 0.1 units away from the value in response to question 6 in Section 2), with the additional sample condition that both responses are above 3.5 on the Likert scale (so that both kinds of transfer are seen as a net benefit). The sample size is 52 respondents. The p-value on a paired t-test of equal incidence of correct response to the minimum wage and stimulus question is 0.003.

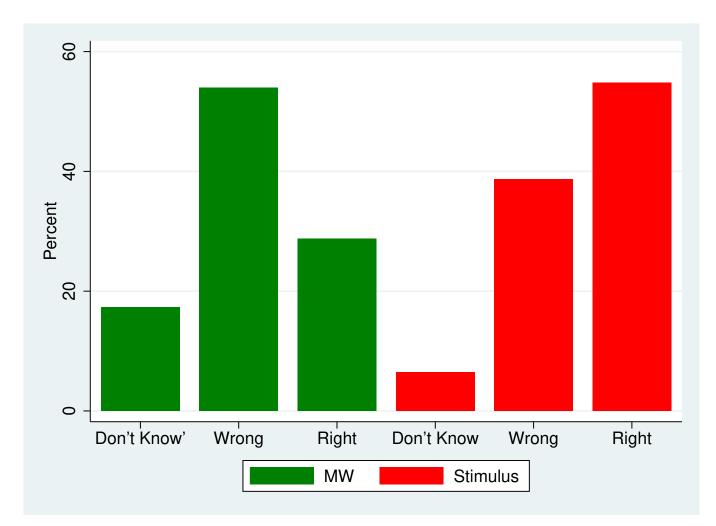


Figure A10: Differential Attention to an Increase in Direct (Stimulus Check) vs. Indirect (Minimum Wage) Transfer Among Those Who Value the Transfers Equally (Full Sample) *Notes:* The figure is the same as Figure A9 with the exception that in this figure there is no restriction of the sample to respondents who were just treated. The sample size is 341 respondents. The p-value on a paired t-test of equal incidence of correct response to the minimum wage and stimulus question is less than 0.001. See Figure A9 notes for more details.



Figure A11: Differential Attention to an Increase in Direct (Stimulus Check) vs. Indirect (Minimum Wage) Transfer Among Those Who Value The Indirect Transfer More (Full Sample) *Notes:* The figure is the same as Figure 6 with the exception that in this figure there is no restriction of the sample to respondents who were just treated. The sample size is 711 respondents. The p-value on a paired t-test of equal incidence of correct response to the minimum wage and stimulus question is less than 0.001. See Figure 6 notes for more details.