**Introduction**

Welfare recipients have an unusually visible stake in elections and policy outcomes. Given such strong personal incentives, one might expect welfare recipients to be more politically active than other citizens (Olson 1965); however, this does not appear to be the case in the United States. In fact, public assistance recipients are an especially quiescent voting bloc (Verba, Schlozman, and Brady 1995). In this paper, I build on existing theories of attribution and voter behavior to model a novel theoretical explanation for the voting behavior of American welfare recipients. I empirically evaluate the implications of my model using data from the Maxwell Poll from 2004-2007. Using a novel measurement technique to classify aid-types, I find that [RESULTS].

To understand why aid-receiving voters constitute an interesting case, it is useful to consider traditional models of voter behavior. Hotelling (1929) observed that candidates in majoritarian elections converge to the median voter’s ideal point, because voters tend to vote for the most ideologically proximate candidate to themselves—or, more generally, *voters vote in their self-interest*.[[1]](#footnote-1) Subsequent scholars departed from rationaltheories of voting entirely, arguing that partisan attachment determines most voting behavior (Campbell, Converse, Miller, and Stokes 1960). Other scholars disagreed with what they found to be a rejection of cognitive voting (Key 1966). Seymour Lipset (1960) argued that one's decision to vote depends upon the perceived “relevance of government policies to the individual.”

Modern theories of voting behavior—prospective voting (Conover, Feldman, and Knight 1987), retrospective voting (Conover, Feldman, and Knight 1986), sociotropic voting (Hansford and Gomez 2015), and others (Dowding 2005; Fedderson and Sandroni 2006)—still rely on Lipset’s (1960) summation of the boundedly rational political actor: voters turnout based on the *perceived* relevance of policies to their lives. Thus, what matters is not simply the objective relevance of government to the voter, but the extent to which government agents can effectively claim credit (or avoid blame) for governmental action that citizens perceive to affect them. Presumably, then, those who stand to benefit the most from generous government policies (and, conversely, be most harmed by social spending cuts) should be likely to vote, particularly if they participate in aid programs that assist in feeding their families, provide health insurance, and meet other immediate, tangible needs.

Why, then, are aid-recieving citizens less likely to vote on average than those in higher income brackets? According to the U.S. Census, 47% of eligible adults with family incomes of less than $20,000 a year voted in 2012 and just 25% voted in the 2010 midterm elections. By contrast, those with family incomes of $100,000 or more turned out at rates of around 80% and 60% percent, respectively (U.S. Census Bureau 2012). Additionally, participants in means-tested federal aid programs—those for whom the actions of those in office are most relevant to their day to day lives—are less likely to vote than those who participate in universal, or non-means-tested, aid programs (Mettler and Stonecash 2008). Empirical evidence from developing countries suggests that means-tested government benefits increase voter turnout (De La O 2013; Manacorda et al. 2011; Labonne 2013; Pop-Eleches and Pop-Eleches 2012), yet empirical evidence in the United States suggests the opposite.

In this paper,…

**NEW SECTION**

There are two widely accepted reasons for the quiescence of aid-receiving voters in the United States. First, because aid recipients are often less well educated and less well off financially, the boost to their participation by their larger interest in government activity is insufficient to overcome their other resource deficits (Verba, Scholzman, and Brady 1995, 411). However, the ability of voters, regardless of their income, to make these cost and benefit assessments relies on the assumption of perfect information. While it is unlikely that anyone has perfect information, cost-benefit assessments may differ dramatically with the quality of information.

Conover, Feldman, and Knight[[2]](#footnote-2) (1986) find that voters differ in the *quantity* and *quality* of information they have on the national economy and how they apply it. CFK find that the public is fairly accurate in its evaluations of issues such that affected their daily lives, like unemployment, but highly inaccurate when evaluating less tangible issues, like inflation. The authors argue that these data reflect a broader trend, in which the accuracy of retrospective assessments depends jointly on the availability of information about the issue, the saliency of the issue, and the sensitivity of the issue to specific knowledge. Similarly, Hansford and Gomez (2015) find that economic evaluations are colored by appraisals of the incumbent and thus do not operate as an exogenous influence on votes.

Thus, the decision to vote and for whom to vote as the joint product of the information about the costs and benefits of voting and how that information is processed. Differences in “processing” most often manifest through partisanship, education, or political sophistication (Gomez and Wilson 2001; Arceneaux 2006; Chen 2013).

While conventional models of voter behavior and motivation speak to the processes which undergird all voter decisions, social welfare (1) can impose a unique set of costs on participants through means-testing, (2) can confer a uniquely salient set of benefits through cash transfers or subsidization, (3) and can mitigate the type and saliency of economic information recipients process. Standard models of voter information processing, therefore, may not accurately predict the voting behavior of social welfare-receiving voters, since this group has access to a unique set of information. My novel theory of aid-related voting behavior addresses these seemingly conflicted literatures, by incorporating the heterogeneous effects for partisanship into the model, as well as allowing the cost of voting to vary across voters. Furthermore, the very act of receiving federal aid my affect the type of information voters receive and how they process it.

The second dominant explanation for the quiescence of aid-receiving voters argues that the aid institutions in the United States diminish the perceived self-efficacy of aid-recipients, making them less likely to turnout to vote. Pateman (1970) and Piven and Cloward (1971) highlight the educative effects of institutions, which shape the behavior of aid participants. Soss (1999) applies these social control arguments to the social welfare context, conducting 50 in-depth interviews with individuals participating in either Aid to Families with Dependent Children (AFDC) or Social Security Disability Insurance (SSDI) between August 1994 and August 1995 in the Midwest. AFDC is a means-tested program; SSDI is not. In the interviews, AFDC participants report embarrassment about their program participation and a desire to hide the fact that they receive social welfare from others. SSDI participants did not report this kind of shame. Both groups, however, recognized that their benefits were contingent upon who holds office.

Soss (1999) and others (Madsen 1986; Mettler and Stonecash 2008) argue that means-testing teaches participants that government is not responsive to them and that participants develop low self-efficacy. Participants carry over this sense of low efficacy to other political processes, including as voting. Because those participating in universal aid programs do not participate in the means-testing feedback loop, it follows that ***we should not expect this type of aid to decrease the likelihood of voting.*** Indeed, Mettler and Stonecash (2008) find that some universal aid programs can actually increase the probability of turning out to vote.

**Attribution -> PROBLEMS WITH EXISTING LITERATURE**

Because self-efficacy is a latent quality—and can, at best, be observed through self-reported measures—scholars use means-testing as a proxy. In other words, self-efficacy is a theoretical prior and is rarely empirically evaluated as the true causal mechanism. To address this, I categorize aid as means tested or universal; however, I also include two categories which the literature has heretofore not addressed, entitlements and loans. Whether self-efficacy or other factors drive the different between universal and means-tested aid, we will be able to observe the difference in behavior, if any. Furthermore, we will be able to see how other types of aid, such as government subsidized loans and entitlements, affect voter behavior. These forms of aid are often incorporated into the traditional means-testing and universal dichotomy, however they are distinct from these aid-types in important ways. Government subsidized loans are exactly that—a loan, unlike a government cash transfer that need not be paid back. Entitlements are often earned, either through military service or paid into over a lifetime.

Furthermore, I use an attribution model to describe the relationship between government aid and voter behavior. Attribution models may offer unique insights into the voting behaviors of those participating in social welfare programs. Attribution models explicitly model, and generate predictions based on, the nature and direction of the attribution process. Rather than relying on the presence or absence of the means-testing institution as an indicator for diminished self-efficacy, an attribution model of voting behavior allows us to explicitly model when, how, and why we expect attribution to occur because “individuals tend to simplify political issues by reducing them to questions of responsibility and their issue opinions flow from their answers to these questions,” (Iyengar 1994). We can therefore increase the specificity of our hypotheses to better understand if, and how, self-efficacy affects voter behavior.

Some models (Fiorina 1981, 5; Kinder and Kiewiet 1981) suggest that voters choose presidential candidates based on their own financial circumstances, or “pocketbook voting.” In these attributive models, voters take stock of factors such as their personal employment, their health benefits, their income, and other changes to their personal financial situation. Based on these, voters either blame the incumbent for their bad circumstances or credit him with their good circumstances. Other models (Goren 1997; Gomez and Wilson 2001) suggest that voters are sociotropic, or base their economic attributions on national economic factors, such as the GDP, the stock market, inflation, and the unemployment rate. In these models, voters retrospectively blame the incumbent president for rising unemployment and inflation, a falling GDP, and rising taxes.[[3]](#footnote-3) Further, economic voters may be heterogeneous in their response to information. Weatherford (1978) finds that pocketbook responses vary by social class. Some argue that sophisticated voters are more sociotropic, while less sophisticated voters follow the pocketbook response (Goren 1997). Gomez and Wilson (2001) find the opposite—more sophisticated voters recognize the complicated series of institutions and actors that influence the national economy, they argue, and these voters do not attribute national economic data to the incumbent. Godbout and Belanger (2007), replicating Gomez and Wilson’s (2001) analysis with survey data from the past five American presidential elections (1988-2004), argue that low political sophisticates depend exclusively on sociotropic judgements, while high political sophisticates rely on a combination of sociotropic and pocketbook judgements. ***These literatures clearly articulate when the attributive process occurs: just before an election.***

In summation, we should expect behavior-affecting attribution to be more likely to occur in circumstances that conform to Bucher’s (1957) expectations for blame. Moreover, unless we have compelling theoretical priors, we should only expect aid to alter expected voter behavior directly leading up to an election. Furthermore, we should expect the attributive process to occur before the election but *after* aid is delivered (or declined.) Bearing this in mind, I now turn to the question of who is blamed and why.

Unlike government redistribution in the form of roads, fire and police protection, or subsidized student loads, social welfare benefits are often targeted, direct money-transfers from a federal or state office to an individual or household in need. This has two implications for our application of attribution models. First, insofar as aid-receiving individuals are voting based on their experience with aid—a version of pocketbook voting—we should not expect information quality to affect their attributive processes as Conover, Feldman, and Knight (1986) predict. This is because these voters have immediate access to how aid affects their lives and this process is necessarily subjective. However, aid receiving voters have a unique wrinkle in their attributive process. Unlike most voters, who appear to attribute most economic and government actions to the President (Gomez and Wilson 2003), social welfare recipients often receive federally-funded aid from state-level bureaucrats. To which level of government do aid-recipients credit with aid benefits and blame for aid-related costs, if they attribute them to government at all?

In his seminal work on self-efficacy and voter behavior, Douglas Madsen (1987) finds (1) successful petitioners see a slight increase in their sense of self-efficacy as compared to unsuccessful petitioners, but do not consider the government to be particularly responsive and (2) unsuccessful petitioners do not see themselves as inefficacious, but rather severely doubt government responsiveness. This implies that the factors that sustain a sense of self-efficacy do not necessarily likewise sustain a sense of government responsiveness. Madsen’s work, however, does not allow us to draw inferences on how aid-receiving voters divide blame and credit attribution in federalist systems, as his work draws on a survey of Indian men in 1967. Oz, Havens, and Halil (2018) find that geographic proximity increases the likelihood of a local official being blamed after a disaster in their study of the Flint, Michigan water crisis. Moreover, social identity theory suggests that if someone is “guilty,” (s)he must be among the out-group (Simon and Klandermans 2001; Bartels 2002). Indeed, Oz, Havens, and Bisgin (2018) find suggestive evidence that individuals who blamed Republicans for the Flint water crisis have more negative sentiment for the governor of Michigan than those blaming Democrats.

To review, successful petitioners tend to internalize their success and credit themselves. Unsuccessful petitioners tend to blame the government. We expect partisanship of the blamer and the blamed to determine who is blamed and why. This suggests two possible attributive processes. The first is internalization, in which voters attribute political outcomes to themselves and, perhaps, people like them. Broadly, this fits with the self-efficacy paradigm (Soss 1999; Mettler and Stonecash 2008), in which voters, rather than blame the government for the shame they endure during means testing, attribute the negative aid-related experience to themselves. The second is blame, in which voters attribute political outcomes to the federal government, most likely the sitting president (Gomez and Wilson 2003).[[4]](#footnote-4)

**Theoretical Model**

I model the relationship between aid and voting behavior as a Bayesian game of imperfect information.

*The Basic Model*

***Players:*** Two politicians, an incumbent (I) and a challenger (C), who have different ideal points ( and ).[[5]](#footnote-5) A voter (V) whose ideal point 0,1] lies somewhere between *xI* and *xc*.

***Types:*** Nature selects the politicians’ types, with probabilities: . Nature privately reveals to *I* and *C*, respectively. Type prefers not to deliver aid the voter though delivers aid with some positive probability. Type  prefers to deliver aid though fails to deliver aid with some positive probability. The probability that the politician delivers aid in accordance with his type is *p* > 1-p or *p >* ½.[[6]](#footnote-6)

***Sequence of Play:***

1. Nature determines each politician’s type, with probabilities and reveals types privately to *I* and *C*, respectively.

2. Nature then draws from the incumbent’s urn to pick the first period aid amount, . The incumbent responds according to his type with greater likelihood than not. First period aid is administered.

3. Nature determines the cost of voting, and reveals this cost to voter *V.*

4. The voter *V* chooses whether to vote, .

5(a). If *V* votes , then he decides the election winner, .

5(b). If *V* does not vote , Nature decides the election winner, .

6. The winner (*I* or *C*) picks the second period aid amount, . The winner responds according to his type with greater likelihood than not. Second period aid is administered.

***Politicians’ Utility:*** In each period , each politician receives:

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where is the executive’s choice of distributive aid policy. denotes the politician’s type, which represents her preferred distributive policy. Hence, a politician of type prefers to deliver aid while a politician of type always prefers no aid .

***Voter’s Utility:*** *V*’s utility function is constant across periods:

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where represents the amount of distributive aid awarded to the voter in period *t* {1,2}, represents the voter’s ideal point, and *x*o is the ideal point of the office-holding politician, who is either the Incumbent *I* or the Challenger *C*  Hence, the voter’s utility depends on his ideological proximity to the office holder as well as his benefit from any distributive aid.

In between the two periods, the voter may choose to vote in the election by incurring a turnout cost, *c*,which is randomly drawn by Nature from the uniform distribution and revealed to *V* prior to the election. *V*’s payoff for the entire game is therefore given by:

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where is *V*’s choice of whether to turn out in the election, and and are *V’s* payoffs from the first and second periods, respectively.

***Voter Beliefs:*** The Voter *V* does not observe the politician types, and that Nature randomly chooses. Instead, *V* can only observe the Incumbent's first-period distributive policy, and form updated beliefs about *I*’s type. Let denote the V’s posterior beliefs about the probability that after observing

***Equilibrium Results:[[7]](#footnote-7)***

For simplicity, I assume that Voter *V* resolves indifference in favor of abstaining.

***Lemma A*** **(Executive’s Distributive Policy):** In each period the office-holding executive, , chooses the distributive policy: , where is the opposite of the office holder’s type. Incumbent types are therefore not fully separating.

***Lemma B*** ***(Voter’s updated beliefs about Incumbent’s type):*** After observing the Incumbent’s choice of during the first period, the Voter *V*’s updated belief about the Incumbent’s type is:

Via *Lemma A*, Incumbent types are probabilistically separating in equilibrium, so after observing *y*1, *V*’s updated belief about *I*’s type is:

Given Lemma B, *V* expects to receive units of aid in *t=*2 if *I* is reelected and units of aid if *C* wins the election. V’s expected second period payoff from *I*’s reelection would be: whereas his expected second period payoff from *C*’s election would be: Therefore, conditional on turning out, *V* votes for *I* iff:

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When is above this threshold, *V* prefers that the Incumbent win the election, so V’s total expected payoff from voting would be:

When is below the threshold in, *V* prefers that the Challenger win the election, so V’s total expected payoff from voting would be:

In both cases, *V*’s total combined expected payoff from not voting is:

Hence, in equilibrium, *V* turns out to vote iff: where:

***Lemma C: (V’s Turnout and Vote Choice):*** *V*’s turnout choice in the election is:

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| --- | --- |
| where: |  |
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Therefore, given turning out, *V*’s vote in the election is:

where y-1 is the aid amount not delivered in the period (i.e. if one unit of aid was delivered, y-1 = 0.)

The Voter turns out iff c, which is drawn from , is sufficiently low. Let denote the probability of turnout for a voter with ideal point and who receives of aid during period 1.

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Hence, the change in *turnout probability* caused by the delivery of aid in period 1 is:

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Chart, line chart

Description automatically generated

**Figure 1**

In other words, delivering aid to ideologically distant voters () *strictly decreases* their probability of turning out, while delivering aid to ideologically proximate voters () *strictly increases* their probability of turning out. Additionally, conditional upon turnout, delivering aid *strictly increases* the likelihood of voting for the incumbent.

*Lemmas A* and *B* state that the equilibrium is probabilistically separating. An Incumbent of type most often provides aid but fails to do so with some positive probability (the inverse holds for ). The delivery of aid during period one thus increases *V*’s expected payoff from having the incumbent reelected relative to the probability that the aid distribution was an informative signal. The increased expected payoff drives my main prediction that the delivery of aid in period one increases a right-wing voter's probability of turnout.

From Lemmas A, B, and C, we can derive the simple prediction that those who favor the incumbent *a priori* should be more likely to credit the incumbent with the positive experience of aid and, therefore, turnout to vote for him or her. Those who do not favor the incumbent *a priori* may credit the incumbent with the positive experience of aid, but be unwilling to vote for a candidate from a party they do not prefer. Voters engaging in this attributive process, therefore, should be less likely to turnout to vote at all. Put differently, receiving aid in period one causes a relatively larger *increase* in a right-wing voter’s turnout probability but a relatively smaller *decrease* in a left-wing voter’s turnout probability, given *p* > ½. Aid delivered in period one increases a right-wing voter’s preference for the incumbent over the challenger, while decreasing a left-wing voter’s motivation to vote out the incumbent (i.e. ). Hence, the right-wing voter is more likely to vote (and reelect the incumbent), while the left-wing voter is less likely to vote (and vote for the challenger).

H1(a): For a left-wing voter (), receiving distributive aid in period 1 causes a strict decrease in the probability of voter turnout.

H1(b): For a right-wing voter (), receiving distributive aid in period 1 causes a strict increase in the probability of voter turnout.[[8]](#footnote-8)

**Research Design**

To test these hypotheses, I would ideally exploit a natural experiment design using data on Disaster Supplemental Nutrition Assistance Program (D-SNAP) from Florida in 2004 following Hurricanes Charley, Frances, Ivan, and Jeanne. Every county in the state of Florida declared a state of emergency and were, therefore, eligible for disaster aid, including D-SNAP. Chen (2013) has already shown that Republicans who received universal FEMA aid in Florida were more likely to turnout in 2004 than 2002 as compared to Democrats who received FEMA aid.[[9]](#footnote-9) SNAP is a federally funded, means-tested aid program. With D-SNAP application and receipt data from the USDA, I can isolate to the day the proportion of applicants who received their aid prior to the 2004 Presidential Election.[[10]](#footnote-10) I can then aggregate aid-recipiency at the county level[[11]](#footnote-11) and match it to county-level voter registrations and turnout in the 2004 Presidential elections. This test allows us to directly compare the means-testing and attribution hypotheses.

**Model 1:** Logit[Pr(Voted 2004) = α + DRegistered Republican

+ βAid Application Accepted x Registered Republican

+ DAid Application Accepted +βEducation

+ βLocal Office Code + DFemale Head of Household

+ DVoted in 2002 + DVoted in 2000 + βIncome

+DState Governor Republican +βRace

+βNumber of Dependents +βYear-Month+ε]

If H1(a) holds, we should expect that Republicans who received D-SNAP should be more likely to turnout in 2004 than Republicans who did not receive D-SNAP, holding other relevant factors constant. If H2 holds, we should expect that Democrats who received D-SNAP to be more likely to turnout to vote for the challenger (John Kerry (D)) than Democrats who did not receive D-SNAP, holding other relevant factors constant. If H1(b) holds, we should expect Democrats who received D-SNAP to be less likely to turnout to vote for president than those who did not receive D-SNAP, holding other relevant factors constant.

However, D-SNAP data is not public use and may only be obtained by Freedom of Information Act (FOIA) requests. My request for this data remains pending. Therefore, to test the implications of my model, I utilize data from the Maxwell Poll from Syracuse University. The poll includes data on federal aid status, voter behavior, and party identification from a nationally representative sample from 2004-2007. The survey also includes detailed information on the type of aid the respondent receives and whether the respondent, someone in the household, or both receive aid from a given program.

Previous work dichotomizes aid as either means-tested or universal, with entitlements falling into universal aid. Means-tested aid is thought to diminish turnout while universal aid is often thought to mobilize voters. However, I argue that this conceptualization of aid is lacking in two important ways. Firstly, entitlements are meaningfully distinct from other forms of universal aid, such as FEMA or Social Security Disability Insurance (SSDI). Beneficiaries are *entitled* to their benefits because they made a costly effort to obtain them. To be eligible for entitlements, one must put forward a costly effort, either by serving in the United States military (GI Bill) or paying into the program until age 65 (Social Security).

Secondly,

**Empirical Plan**

This section outlines my empirical plan. It will be the basis for my analysis section.

For all models, I will disaggregate by year. Data are weighted to be demographically representative of the United States population.

I will estimate a standard OLS model with the 4-category Voting Frequency variable as my dependent variable. My primary independent variables will be Party-ID (1 if Republican, 0 otherwise), a count of aid programs an individual benefits from (1-10), and the interaction between these two variables. Because George W. Bush is the President in all three years (2004-2007), I predict that the coefficient on Party ID will be positive and significant, that the coefficient on aid will be positive and significant, and that the interaction will be positive and significant.

I will then estimate an OLS model with the same dependent variable and with Party ID as an independent variable, but with dummy variables for each of the aid programs.

I will then run an ordinal logit to estimate the predicted probability of a person falling into each of the 4 Voting Frequency categories, given their partisanship and aid participation. As before, I will include both a continuous measure of aid and, separately, a battery of dummy variables to capture receiving aid.

I may also create a dichotomous measure for administrative burden (1 for high, 0 for low) and include that in my analysis. However, this measure may be overly reductive.

Relevant controls include: how often the respondent follows public affairs (proxy for political knowledge); registered to vote (yes or no); political trust; self-efficacy; income; education; race; sex.

In appendix, may also use aid as predictor of self-efficacy and political-trust. Nonessential – will see where we are once the main analysis is done.

**Analysis**

#Model 1: Vote ~ all programs + party ID

#Model 2: Vote ~ all programs + controls (race, income, education, sex, followpa,

#trustoff, peopsay)

#Model 3: Vote ~ recieves aid dummy\*\*partyID + controls

#Model 4: Vote ~ count of loans + count of entitlements + county of means +

#count of universal + party ID + controls

#Model 5: Vote ~ controls + count of loans\*\*party ID

#Model 6: Vote ~ controls + count of entitlements\*\*party ID

#Model 7: Vote ~ controls + count of universal\*\*party ID

#Model 8: Vote ~ controls + count of means\*\*party ID

**Empirical Concerns**

**Discussion**

**Appendix A**

***Proof of Lemma A:*** In each period and for either politician , *q*’s utility payoff is:

In the final period, *t*=2, choosing is a strictly dominant strategy. In period *t*=1, an incumbent of type could increase her probability of reelection by choosing but this increased probability is never sufficiently large to outweigh the disutility of playing her less-preferred strategy in period 1. Hence, choosing is always strictly dominant.

However, it is important to note that the politician has *no control over nature’s draw from their urn.* In other words, they do not get to make this choice. This is because this model focuses on the behavior of the voter, rather than strategic behavior from the politician. By fixing the politician’s behavior as a product of nature, we can better understand voter behavior. With this understanding, we may be able to make inferences and expand the model to include strategic behavior from the politicians.

***Proof of Lemma B:*** Via *Lemma A*, incumbent types are probabilistically separating in equilibrium, so after observing *y*1, *V*’s updated belief about *I*’s type is:

***Proof of Lemma C:*** Given Lemma B, *V* expects to receive units of aid in period 2 if *I* is reelected and units of aid if *C* wins the election. V’s expected second period payoff from *I*’s reelection would be: whereas his expected third period payoff from *C*’s election would be: Therefore, conditional on turning out, *V* votes for *I* iff:

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When is above the threshold in *Eq. 6*, *V* prefers that the Incumbent win the election, so V’s total expected payoff from voting would be:

When is below the threshold in, *V* prefers that the Challenger win the election, so V’s total expected payoff from voting would be:

In both cases, *V*’s total combined expected payoff from not voting is:

Hence, in equilibrium, *V* turns out to vote iff: where:

***Proof of H1(a) and H1(b):*** The Voter turns out iff c, which is drawn from , is sufficiently low. Let denote the probability of turnout for a voter with ideal point and who receives of aid during period 1.

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Hence, the change in *turnout probability* caused by the delivery of aid in period 1 is:

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This quantity is strictly positive when and strictly negative when

**Appendix Something**

*Incorporating Administrative Barriers*

As previously stated, not all aid is created equally. Incumbents may deliver aid to constituents in a way that forces potential recipients to incur a cost, such as the means-testing associated with Medicaid, the supplemental nutrition assistance program (SNAP), or temporary aid to needy families (TANF). Even though authorizing states to administer expedited SNAP in a disaster ultimately delivers aid, individuals must still incur the cost of applying for aid and undergoing means testing. Contrastingly, consider COVID-19 individual aid, for which individuals did not have to apply.

To account for these administrative costs, when the incumbent delivers one unit of aid, regardless of his type, we can write this aid amount as 1 – ε, where and represents the cost potential aid recipients must incur to obtain aid. There may be no cost to participants to obtain aid (ε = 0); alternatively, the cost of obtaining aid may negate any potential benefit (ε = 1). Thus, the voter’s expected utility is given by If ε = 0, the model is as described above. If ε > 0, it impedes the ability of aid to offset the cost of voting for the incumbent. To consider the implications of costs associated with aid type, I allow to vary across [0,1] and express it as . Now, not only is incumbent type determined exogenously, but so is the value of aid.

In the real world, politicians have some control over the types of aid they distribute. However, more often than not, the need for aid—and the need for a certain kind of aid—is determined by apolitical circumstances, such as a hurricane, a snowstorm, or a pandemic. FEMA aid, with its relatively low administrative costs to recipients, cannot be delivered following a stock market collapse, but unemployment benefits can. Unemployment benefits, however, come at a higher administrative cost to recipients. How does allowing λ to vary across 0-1 affect the model?

The politicians’ utility is now given by, Whereas before the politicians’ utility was either 0 or -1, it now varies from 0 to -1. When and < 1, the aid-giving incumbent now incurs some cost. This cost is decreasing as approaches 1. When , the cost to the incumbent approaches 0 as approaches 0.

The voter’s utility in each period is now given by, where represents the voter’s ideal point, and *x*o is the ideal point of the office-holding politician, {0, 1}. Previously, *yt* and had either no effect (*yt* = 0) or a strictly positive effect (*yt* = 1). Now, and vary continuously between 0 and 1. If , aid will not have a positive effect on V’s utility per round. Given that aid is delivered, I assume voters expect to remain constant across periods. That is, while the deliverance of aid (1) or no aid may vary (0) between rounds, administrative costs should remain constant. If voters receive aid in *t*1 at some value , they update their beliefs about candidates based on the expected probability of receiving 0 or

***Voter Beliefs:*** The Voter *V* does not observe the politician types, and that Nature randomly chooses. Instead, *V* can only observe the Incumbent's first-period distributive policy, and form updated beliefs about *I*’s type. Let denote the V’s posterior beliefs about the probability that after observing

***Equilibrium Results:[[12]](#footnote-12)***

For simplicity, I assume that Voter *V* resolves uncertainty in favor of abstaining.

***Lemma D*** ***(Voter’s updated beliefs about Incumbent’s type):*** After observing the Incumbent’s choice of during the first period, the Voter *V*’s updated belief about the Incumbent’s type is:

Via *Lemma A*, Incumbent types are probabilistically separating in equilibrium, so after observing *y*1, *V*’s updated belief about *I*’s type is:

Given Lemma D, *V* expects to receive units of aid in *t=*2 if *I* is reelected and units of aid if *C* wins the election. V’s expected second period payoff from *I*’s reelection would be: whereas his expected second period payoff from *C*’s election would be: Therefore, conditional on turning out, *V* votes for *I* iff:

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| and  Given that aid is delivered in period 1 , must satisfy the following threshold for V to vote for I: . Thus,  *H2(a): For a left-wing voter (), those participating in aid with low administrative costs will be less likely to turnout to vote than those participating in aid with high administrative costs.*  *H2(b): For a right-wing voter (), those participating in aid with low administrative costs will be more likely to turnout to vote than those participating in aid with high administrative costs.* |  |

1. Later, Duncan Black (1984) formalized this observation into the median voter theorem. [↑](#footnote-ref-1)
2. Hereafter denoted CFK. [↑](#footnote-ref-2)
3. Processing such information comes at a cost and it may well be that it is easier for voters to acquire information about the federal government than state and local governments. Arceneaux (2006) finds that voters will hold state and local officials accountable for policy outcomes if and only if that the issue is both highly accessible and the level of government perceived to be functionally responsible for that issue coincides with the level of government that is actually responsible. Given that aid funding and administration involves a complicated mixture of federal, state, and bureaucratic discretion—and that this discretion varies across aid program—I think it is unlikely that aid-receiving voters attribute costs and benefits to state-level government. Rather, I believe it is more likely that voters consider social welfare spending to be a federal issue and attribute credit and blame to the most obvious federal figurehead, the President (Gomez and Wilson 2003). [↑](#footnote-ref-3)
4. I limit my discussion of these processes to aid-receipt during election years, as previous work suggests that this is when the attributive process is most likely to occur (Baiker and Finkelstein 2018). Secondly, I limit my discussion of government attribution to voters attributing costs and benefits to the sitting President, rather than state or congressional figures. While these processes may occur, they require a longer series of cognitive linkages than linking federally funded aid to the sitting President (Gomez and Wilson 2001, 2003; Arceneaux 2006). [↑](#footnote-ref-4)
5. It could be that xI=0 and xc=1. I have assigned these ideal points to mimic the 2004 Bush-Kerry race, an ideal case for testing this model, but the ideal points of the incumbent and challenger could easily be reversed to mimic other races. [↑](#footnote-ref-5)
6. In other words, type θ=1, the generous type, delivers aid with probability *p* > ½ while type θ=0, the ungenerous type, does *not* deliver aid with probability *p* > ½. [↑](#footnote-ref-6)
7. Proofs for Lemmas A, B, and C may be found in Appendix A. [↑](#footnote-ref-7)
8. Proofs in Appendix A. [↑](#footnote-ref-8)
9. Chen compares his results to 2002 turnout during the midterm election. District lines were redrawn after 2000, which makes county-level comparisons for 2000-2004 impossible. Because midterm turnout is historically lower than turnout for Presidential elections, this may exaggerate the observed effect. [↑](#footnote-ref-9)
10. I have already submitted the FOIA request for these data to the USDA and they are gathering materials. [↑](#footnote-ref-10)
11. Contingent on pending external funding requests and the quality of the D-SNAP data from USDA, I may be able to aggregate at the district level. [↑](#footnote-ref-11)
12. Proofs for Lemmas A, B, and C may be found in Appendix A. [↑](#footnote-ref-12)