Economic Discontent as a Mobilizer: Unemployment and Voter Turnout

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Published scholarship argues that a poor economy depresses voter participation in the United States. This troubling result suggests that incumbents are "underpenalized" for bad economic performance. We challenge this conclusion theoretically and empirically. Theoretically, we argue that a worsening economy has a disruptive effect that prods worried citizens to voice concern and seek remedies. Empirically, we analyze county-level data and find that, contrary to earlier studies, higher unemployment rates in fact stimulate more people to vote. We show that the effect is not the result of heightened electoral competition when unemployment is high. The relationship displays a partisan asymmetry in which Republican candidates are especially harmed by higher unemployment. The results also indicate that studies of economic voting need to consider the role of turnout in connecting economic performance to the incumbent's vote share.

The scholarly literature on "economic voting" is one of the richest, most sophisticated, and most voluminous in political science.[1] As a result, we now have a highly developed understanding of how the economy affects election *outcomes*. Yet researchers seem to assume that economic performance may persuade voters to favor one candidate over another without acknowledging that it may also affect their decisions about whether to vote at all. This is unfortunate for two reasons. First, it is normatively important for us to know whether the public is mobilized or silenced by poor economic performance. Second, in terms of understanding how elections work, we need to know whether there is a link between the effects that the economy has on turnout and the outcome of the election. At least for a subset of the population, it may well be the decision to vote is what holds elected officials accountable for economic performance, turning nonvoters into voters rather than causing voters to switch candidates.

The scant existing research on this subject argues that a poor economy actually lowers voter turnout. This troubling result suggests that incumbents are not held fully accountable for poor performance. This argument has been made more forcefully by Radcliff, who contends that "a weak economy . . . discourages the very people with the greatest interest in punishing government from turning out" (1994, 74). We challenge this view theoretically and find the opposite result empirically. A worse economy actually mobilizes voters, thus making turnout a key mechanism of economic accountability that connects the economy to electoral outcomes.

We begin by asking how one prominent indicator of economic hardship—unemployment—affects turnout in presidential and gubernatorial elections. Our theory argues that a worsening economy has a disruptive effect that prods worried citizens to voice concern (an expressive purpose) and seek remedies (an instrumental purpose). Using county-level data on unemployment and turnout from 1976 to 2008, we show in both cross-sectional and difference-in-difference models that contrary to earlier studies, higher levels of unemployment stimulate more people to vote. The effects of state unemployment rates are greater than the effects of county employment rates; we suggest this is because states are more meaningful political units. In a series of model extensions, we find this result to be robust to other specifications and is not merely a side effect brought about by mediating

[1]An online appendix with supplementary material is available at http://dx.doi.org/10.1017/S0022381614000437. Replication materials are available on the authors' web sites (faculty.polisci.wisc.edu/bcburden and www.marquette.edu/polisci/faculty_wichowsky.shtml).

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factors such as more competitive campaigns. Following research on party reputations, we also show that responses to unemployment are more acute under Republican governors and provide another pathway for Wright's (2012) theory of why Democrats are punished less for poor employment numbers. In a unified individual-level model of vote choice and turnout, we find that when higher state unemployment motivates turnout, it does so primarily to the advantage of Democratic gubernatorial candidates.

Because turnout is the primary means by which the public makes use of its "voice" to communicate with elected officials, we believe that the main results are of fundamental normative interest even if they have no impact on who wins elections. But we find that incumbents generally and Republicans in particular are in fact held accountable for heightened unemployment. Our findings thus stand in contrast to Radcliff's argument that incumbents are underpenalized in bad times because people who are hurt more by the economy become less likely to vote. Instead, we contend that rising concern about unemployment is a signal to potential voters that they should take electoral action. Researchers studying economic accountability need to consider the role of turnout in connecting economic performance to the incumbent's vote share.

An Alternative to the Withdrawal Hypothesis

Despite the normative and theoretical importance of the question, the relationship between the economy and turnout has attracted only limited scholarly attention. In the few cases where the literature does weigh in on the issue, it points to a negative effect: as things worsen, fewer people vote (Basinger, Cann, and Ensley 2012; Brody and Sniderman 1977; Kinder and Kiewiet 1981; Lacy and Grant 1999; Rosenstone 1982; Rosenstone and Hansen 1993; Southwell 1988; Verba, Schlozman, and Brady 1995).[2] This is of potential concern because it indicates that at the very time when the electorate should hold elected officials accountable for poor performance and express their dissatisfaction, voting becomes less appealing. This leads to a theoretical position, advocated by Radcliff (1992, 1994), that incumbents are "underpenalized" for poor performance. Even without taking a position on what an "appropriate" amount of punishment or reward would be, the complete lack of a relationship in bad times would be a significant breakdown in how representative democracy should work. While Radcliff's argument applies and is tested cross-nationally, he tests the results in the U.S. context in multiple articles to show specifically that a worsening economy has no effect on voter participation.

These unsettling findings are generally explained by positing that economic hardship induces people to withdrawal from the political system. The withdrawal is caused by some combination of decreased resources, greater opportunity costs, heightened alienation, and distraction by one's personal circumstances. Although most of this research is now several decades old, the consensus from the research community still holds that a worsening economy in general, and a rising unemployment rate in particular, discourages voter participation.

Some recent research opens the door to the possibility that the withdrawal hypothesis is wrong, or at least too simplistic. Killian, Schoen, and Dusso (2008) suggest that people are motivated to vote when they perceive that their personal financial situations are falling behind national trends. This interesting result suggests that the public is risk averse and will weigh economic losses more heavily than gains, thus running contrary to Radcliff's theory. Arceneaux (2003) hypothesizes that economic adversity can increase turnout, but only when people blame the government for economic outcomes. This implies that rising unemployment increases aggregate turnout only if a sufficient share of the electorate sees the government as responsible. Gomez and Hansford (2010) contend that the economy matters most when performance is extremely poor or robust. They find some evidence for a modest curvilinear relationship between changes in national median income and turnout.[3]

Although these studies analyze differences across individuals rather than aggregate turnout, they nonetheless suggest that the withdrawal hypothesis deserves reexamination. We theorize that economic hardship will increase voter turnout. This is because

[2]Two rather dated studies find no relationship between the economy and turnout (Arcelus and Meltzer 1975; Fiorina 1978). Only one research note by two economists finds evidence for a positive relationship of unemployment on turnout (Silberman and Durden 1975).

[3]Lim and Sander (2013) show that individual unemployment (or simple absence from the labor force) decreases civic and political activity. State-level unemployment was positively related to political participation, but the participation measure excluded voter turnout. Charles and Stephens (2013) find a positive effect of unemployment on political interest and news exposure. In auxiliary models, they use employment measures in a small number of states, finding no effect of unemployment in presidential elections but a positive effect in gubernatorial elections.

the public is known to respond to positive and negative economic outcomes asymmetrically. We know from empirical research on ''prospect theory'' that people weigh losses more heavily than gains (Kahneman and Tversky 1979). As noted earlier, this general insight about risk aversion motivated Killian, Schoen, and Dusso's (2008) analysis of relative economic perceptions. While we are agnostic about the origins of risk aversion, this well-documented tendency might well have its roots in evolutionary adaptation (McDermott, Fowler, and Smirnov 2008). The public tends to remain complacent when salient indicators in their news environment are performing in a satisfactory fashion. When warning signs appear in economic indicators (or in other realms), the public becomes more attentive and informed. Research in political science has already uncovered a general negativity bias in which voters respond disproportionately to bad news and unpleasant perceptions (Fiorina and Shepsle 1990; Lau 1982, 1985). This has been demonstrated directly with regards to economic performance, where incumbents suffer more for bad times than they benefit from good times (Bloom and Price 1975; Easaw 2010; Kernell 1977). Moreover, both the public and the media respond more sharply to bad economic news than good economic news (Goidel and Langley 1995; Soroka 2006).

When times are good—unemployment rates are low and one has adequate employment—the economy does not provide a strong motivation toward participation. The reason is that in times of abundance there is little reason for potential voters to believe that turning toward government will do much to make a good situation better. In contrast, when economic indicators turn negative, the public's attention is piqued. Loosely monitoring the economic environment to that point, the public becomes more agitated and aware that they should heighten their vigilance. Our theory thus allows for responses to the economy to be both expressive and instrumental, the two dominant explanations for electoral behavior (see Fiorina 1976; Leighley 1995).

Knowledge of the economy will never be exact or complete, and it necessarily depends on information gleaned from news consumption, personal experiences, and other idiosyncratic factors. But in a large electorate people roughly understand whether the economy is doing well or not. This is especially true of intuitive metrics such as the unemployment rate. Mutz's (1998) theory of ''impersonal influence'' contends that perceptions of collective well-being are now more likely to come from the media than from direct experience or even indirect experience via friends, family, and colleagues. This is in large part because media focus on systematic patterns and broad analyses rather than coverage of individual events. Mutz's ideas are particularly fitting when it comes to unemployment. The federal government did not even begin systematically collecting state unemployment rates until the 1960s and county unemployment rates until the 1970s. We can combine Mutz's insights with these developments and the theory of risk aversion. When it appears that employment levels are problematic, individuals begin to search for remedies and actions, whether personal or societal. Participation in the electoral process is one natural and relatively low-cost way for a person to respond to economic adversity.

There are some additional implications of this theory. Economic statistics are reported at multiple levels: the nation, regions, states, counties, metropolitan areas, and even smaller units. To the degree that voting is a signal to politicians that change is necessary, turnout should respond more to statistics reported at levels that correspond to meaningful government units. We would expect a governor to be held more responsible for high state unemployment than unemployment in a specific city or county. This suggests greater turnout effects for higher levels of government and jurisdictions that correspond to meaningful political constituencies.

In summary, we heartily endorse Radcliff's point that economic effects on vote choice and turnout should be considered in tandem. The economy can certainly persuade some voters to change their minds, but it also mobilizes or demobilizes. Whereas traditional research suggests that the decision to vote is separate and prior to the decision about which party to support, research has shown that at least some people view the relevant choice as either abstaining or voting for a particular candidate (Basinger, Cann, and Ensley 2012; Lacy and Burden 1999; Krupnikov and Piston forthcoming; Lacy and Grant 1999; Stevens 2007). Where we differ with Radcliff is in the expected direction of the relationship.

In addition to positing a positive relationship between the unemployment rate and turnout, we incorporate recent research showing that this effect is likely to affect candidates of the two parties differentially. This work builds on Petrocik's (1996) theory of ''issue ownership,'' which contends that the public consistently views the Democrats as better able than Republicans to handle domestic social issues, of which unemployment is a prime example. Following this theory, Wright (2012) shows that high unemployment reduces the vote shares of Republican governors more than Democratic governors. Basinger, Cann, and

Ensley (2012) and Stevens (2007) provide additional evidence of this asymmetry in how the economy affects votes for the two parties. After testing the withdrawal hypothesis, we allow for the turnout effects of the economy to affect candidates of the two parties differentially. In doing so, our investigation elaborates existing work on economic voting to identify the role of turnout as a key intervening factor that translates economic indicators into election outcomes.

Data

Because we are challenging the dominant scholarly view, we bear the burden of providing robust evidence that does not depend on a small set of elections or a particular level of analysis. We start simply by examining unemployment rates and voter turnout in presidential and gubernatorial elections. Although the effect of unemployment might be of a different magnitude in local elections, or perhaps in midterm years without a governor's race, it seems unlikely that the direction of the effect would reverse signs from one type of election to another.

We focus on unemployment for three reasons. The first is its empirical relevance. The vast literature on economic voting often uses the unemployment rate as a key indicator of macroeconomic performance. The second reason is its theoretical and normative relevance: we expect incumbents to be held more accountable for poor job numbers than for other economic indicators. Politicians campaign on the jobs issue, the media focus attention on changes in the unemployment rate, and voters generally expect government to do something to address rising job loss. Other economic measures no doubt also shape assessments of the economy, but unemployment remains one of the most publicized markers of effective economic governance. Relatedly, the final reason is that unemployment is the most intuitive and tangible of indicators. The public is more likely to understand what it means for people to have jobs than to reason about changes in prices, exchange rates, the stock market, or other indicators.

Our data encompass presidential elections from 1976 to 2008. Although one can find state unemployment estimates for some earlier years (e.g., in annual Economic Reports to the President), reliable state-level and especially county-level data from the U.S. Bureau of Labor Statistics are only available from 1976 onward. The dataset is a modified version of county data collected by Gomez, Hansford, and Krause (2007).[4] It includes over 3,100 counties across nine elections, for a total sample size of about 28,000 county-years.

To examine our argument about the effects of economy at different levels of aggregation, the models we estimate below include both the state unemployment rates used above and county unemployment rates.[5] County unemployment is closer to capturing the experiences of one's local community (Reeves and Gimpel 2012). It also provides much more variation than is observed across states. On the other hand, states are certainly more meaningful political units. They correspond with the constituencies up for grabs in senatorial and gubernatorial elections and are the key building blocks in the Electoral College. We posit that individuals are simply more likely to be aware of the state rate. One reason is that state unemployment rates are frequently the subject of news coverage. When new jobs numbers are issued, media outlets often report on the new state unemployment rate, how much it has changed from the previous month, and how it compares to other states. In addition, and perhaps more importantly in the context of elections, statewide campaigns for governor, senator, and other offices are likely to involve discussion of the state employment situation. In contrast, fewer media outlets take responsibility for reporting county unemployment rates, especially when a media market covers many counties. This makes sense given Brooks and Prysby's (1999) finding that voters project onto the national economy from the state but not the local estimates. Because many Americans live and work in different counties, it might not even be clear which "local" economy ought to carry most weight in their calculations. Polling data also show that voters systematically view the local economy better than the state and especially the national economy.[6] If perceptions are skewed in a more negative direction for higher geographic units, and people respond more to bad news than good news, it is logical that state

[4]We rely on the federal government's official measure of unemployment, known as U-3, which counts the unemployed as someone "without work, available for work, and [who] has actively searched for work." We also considered the U-6 measure of unemployment, which includes the discouraged and "underemployed." The two indicators move in tandem ($r = .90$) and necessarily have similar relationships to voter turnout.

[5]The correlation between county and state unemployment rates is .62. This correlation does not appear to vary systematically, ranging from a low of .38 in 1996 to a high of .61 in 1984.

[6]http://www.gallup.com/poll/155192/Americans-Upbeat-Local-Economy-Down-World.aspx.

TABLE 1 Cross-Sectional Models of County Turnout

	Model 1		Model 2	
	Unweighted	Weighted	Unweighted	Weighted
County unemployment rate	.131*	.174*	.083*	.134*
	(.028)	(.058)	(.021)	(.054)
State unemployment rate	.524*	.544*	.322*	.343*
	(.040)	(.083)	(.032)	(.090)
% Black	.032	.352*	.040	.335*
	(.040)	(.072)	(.028)	(.080)
% High school graduates	1.509*	.443	.915*	-.006
	(.222)	(.823)	(.155)	(.708)
Median income	-.416	3.571*	-.335	3.285*
	(.370)	(.750)	(.255)	(.543)
Presidential campaign competitiveness	.010*	.006	.0002	-.002
	(.003)	(.008)	(.0022)	(.007)
Simultaneous gubernatorial election	5.328*	5.623*	3.277*	3.544*
	(.353)	(.578)	(.241)	(.402)
Simultaneous senatorial election	.636*	.656*	.621*	.318**
	(.047)	(.086)	(.052)	(.103)
Lagged turnout	-	-	.446*	.399*
			(.010)	(.044)
Constant	52.590*	38.523*	30.215*	21.008*
	(.927)	(2.144)	(.859)	(2.438)
Number of observations	27,900	27,900	27,840	27,840
Number of counties	3,112	3,112	3,112	3,112
County fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Weighted by population	No	Yes	No	Yes

Note: Dependent variable is percentage turnout in county. Ordinary least squares models. Standard errors clustered by county. *$p < .05$, two-tailed test.

unemployment rates would have bigger effects on turnout.[7]

We begin with a simple regression model of presidential election turnout as a function of the unemployment rates in the county and state. Also included in the model are factors known to affect turnout. First is the degree of competitiveness of the campaign. We measure this as the difference between the two major parties' vote shares.[8] Our models also control for whether a state had a simultaneous gubernatorial or senatorial campaign. In addition to these electoral factors, the models include measures of demographics known to correlate with turnout: percent black, percent with high school educations, median income (adjusted for inflation), and whether a simultaneous gubernatorial or senatorial campaign took place. The models also include fixed effects for both counties and years. These many controls provide for conservative estimates because they soak up all unmeasured variation in turnout across time and space, making it more difficult for unemployment to have an independent effect. We cluster standard errors by county to reflect the panel nature of the data. Finally, because county populations vary so dramatically, we report results for both unweighted models and those weighted by population.

Results

The basic results are presented in Table 1. Model 1 is a baseline model that produces positive coefficients for both unemployment rates, using both weighted

[7]Ansolabehere, Snowden, and Meredith (2013) show that the public does not accurately estimate national unemployment rates. This happens in part because they allow their states' unemployment rates to influence their estimates of the national rate.

[8]Because this variable is measured after the fact, it could potentially be an artifact of turnout levels. Using an alternative measure, based on states targeted as battlegrounds by the major party campaigns, did not alter the key substantive results.

and unweighted data. Contrary to the withdrawal hypothesis, both county and state unemployment rates increase voter turnout. The state effect is about three times as large as the county effect. This is consistent with our argument that economic performance at higher and more meaningful levels of aggregation will have more sizable effects on voter participation. Turnout rises approximately one point for every two-point increase in unemployment. Other variables mostly operate as expected. For example, turnout is higher in counties with more high school graduates, where the presidential race is closer, and where there are simultaneous gubernatorial and senatorial elections.

Model 2 replicates the original specification but includes a control for lagged turnout (i.e., in the previous presidential election). Even with this strong control, the unemployment rate effects are somewhat smaller but still positive and statistically significant. This is true for both the unweighted and weighted models.

One concern about our state models is that the relationship between unemployment and turnout may be spurious. Even with so many fixed effects and a lagged dependent variable, if the model is not properly specified, it is theoretically possible that an unmeasured factor such as a state's social capital or political culture could influence both unemployment and turnout. To reduce this concern, we shift from estimating cross-sectional models to a more convincing difference-in-difference approach. This approach moves from *levels* of variables to *differences* between their values in the current election and the previous one four years earlier. By taking differences, much of the county-specific and state-specific inertia and endogeneity in unemployment rates and turnout are factored out. We are accordingly more confident that relatively short-term fluctuations in unemployment are responsible for changes in turnout, even if long-term participation rates in the states differ significantly. We continue to include year and county fixed effects to account for unmeasured differences in how turnout rates vary across time and space. In short, the difference-in-difference specification permits us to control for preexisting differences in turnout among counties, avoid spurious relationships, and thus isolate the effects of changing unemployment rates on turnout.

Table 2 provides the results of these models. The first column presents the sparsest specification where the change in turnout is a function of the change in unemployment (beyond the county and year fixed effects). The second column includes the covariates that appeared in the cross-sectional specification.

TABLE 2 Difference-in-Difference Models of County Turnout

	Model 1	Model 2
Δ County unemployment rate	.054*	.050*
	(.019)	(.019)
Δ State unemployment rate	.447*	.436*
	(.032)	(.032)
% Black		.068*
		(.018)
% High school graduates		.693*
		(.136)
Median income		-.253
		(.245)
Presidential campaign competitiveness		.007*
		(.003)
Simultaneous gubernatorial election		.714*
		(.222)
Simultaneous senatorial election		.710*
		(.073)
Constant	-4.293*	-5.543*
	(.102)	(.656)
Number of observations	24,750	24,750
Number of counties	3,112	3,112
County fixed effects	Yes	Yes
Year fixed effects	Yes	Yes

Note: Dependent variable is change in county turnout percentage. Ordinary least squares models. Standard errors clustered by county. *$p < .05$, two-tailed test.

These variables are not technically necessary, unless one believes that the *changes* in turnout are dependent upon them, but they do help unpack the black box of state effects and provide additional confidence in the unemployment effects we estimate.

The difference-in-difference results are consistent with those from our cross-sectional models. As before, the coefficient on state unemployment is larger than the county effect and suggests that a one percentage point change in turnout occurs for every two-point change in the state unemployment rate. This consistency across specifications is reassuring because it indicates that simultaneity and omitted variables are not major concerns in the cross-sectional analysis.[9]

In summary, we find that unemployment rates have positive effects on voter turnout, with state rates having bigger effects than do county rates. These results are robust to including control variables, fixed

[9]We also explored nonlinear effects of unemployment by introducing quadratic terms to allow for diminishing returns from extremely high (or low) unemployment rates. There is no evidence that county unemployment has a curvilinear relationship to turnout and only modest evidence of a nonlinear effect of state unemployment on turnout.

effects, lagged dependent variables, and difference-in-difference specifications. This runs contrary to the dominant view supporting a withdrawal hypothesis. Poor economic performance, as captured by the unemployment rate, creates more voters, not fewer. This would appear to undermine Radcliff's theory of underpunishment. Instead, we posit that poor performance is held accountable because of—not despite—changes in turnout.

Two Potential Mechanisms

As the first analysis showing a systematically positive effect of a worsening economy on turnout, the results point to several directions in which research ought to proceed. Although it is not possible to examine here all implications that flow from this new orientation, we begin by addressing two possible mechanisms that connect unemployment to voting. The first inquiry is whether the unemployment-turnout link is made possible by enhanced campaign intensity by elites seeking to take advantage of public discontent. This hypothesis suggests that higher turnout is merely a response to a more competitive electoral environment rather than unemployment per se. The second inquiry is whether turnout responds to the political parties' differential reputations for how well they handle unemployment. This hypothesis suggests that people are indeed motivated to vote by a poor economy but only when a party perceived to be capable of addressing the problem is going to be in office. To preview the results, we find no evidence for the "competition" hypothesis but abundant evidence for the "party reputation" hypothesis, thus providing further support for our theory of voter stimulation.

To test the "competition" hypothesis, we use state-level models to determine whether political elites serve as an intermediary between the economy and voter participation. The idea is that a worsening economy could make incumbents appear more vulnerable, and thus stimulate stronger challengers to run and the nonincumbent party to invest more resources. This in turn would make campaigns more competitive. The more competitive campaign environment would then lead to heightened public attention and turnout, producing a correlation between the economy and participation rates. In other words, the connection between unemployment and turnout could be a side effect of heightened competition rather than direct public reaction to economic conditions. This argument is not easily examined in presidential elections, where the top of the ticket dominates the information environment, leaving little room for state and local challengers to influence turnout. Turning to state-level data permits us to examine the argument in midterm elections where the absence of a presidential race means that competition in congressional and gubernatorial races is an important determinant of turnout.

We considered this possibility in three ways. First, we estimated a model of the presence of high-quality challenger emergence in midterm elections. The dependent variable in this analysis is the share of House incumbents who faced challengers with prior elective experience (Jacobson 1990). Data are aggregated by state, resulting in a measure of competitiveness that ranges from zero (no quality challengers ran against House incumbents in the state) to one (every one of these House races was contested by a quality challenger). Second, to address the chance that strategic incumbents will choose to retire instead of seek reelection during an economic downturn (Groseclose and Krehbiel 1994; Hall and Van Houweling 1995), we estimated a second model that uses the share of House seats in the state that become open. Our third model measures competitiveness using the amount of money the national party committees transferred to state and local parties in each year (in constant 2008 dollars, per eligible voter in the state). Party transfers have been used elsewhere as indicators of campaign efforts to mobilize in close elections (Holbrook and McClurg 2005; Wichowsky 2012). Finally, because previous research finds that voters are more likely to blame the president (and members of his party) for poor economic performance (Kramer 1971; Lewis-Beck and Stegmaier 2000; Tufte 1978), we also recalculated each dependent variable to focus on the vulnerability of incumbents from the president's party. Our key variable of interest is the unemployment rate in the *previous* year, given that candidates make their decisions about whether or not to run well in advance of the election (Wilcox 1987). The data cover midterm elections from 1978 to 2010. All models include several state-level covariates as well as fixed effects for states and years. We also cluster standard errors by state to account for the nonindependence of the observations. As shown in Table 3, we find no evidence linking the unemployment rate to the competitiveness of the electoral environment.[10]

[10]Prior-year unemployment is a statistically significant predictor of the share of House seats that become open but is signed in the unexpected direction. In an online appendix, we report difference-in-difference models. Those effects are also generally null, with one significant positive coefficient and one significant negative coefficient out of the six models.

TABLE 3 Unemployment and Electoral Competition

	Quality Challengers		Open Seats		Party Transfers	
	All Incumbents	Only Incumbents from President's Party	All Seats	Only Seats Held by President's Party	Both Parties	Only Party not in White House
Lagged state unemployment rate	-0.022	-0.013	-0.014*	-0.008	0.001	0.005
	(0.016)	(0.020)	(0.008)	(0.012)	(0.010)	(0.004)
% Black	0.318	-0.646	-0.132	0.563	-2.340	-0.331
	(1.613)	(1.749)	(0.739)	(1.550)	(2.434)	(0.734)
% College	-1.141	-0.892	0.935*	0.114	0.655	0.498
	(0.922)	(1.014)	(0.408)	(0.521)	(0.699)	(0.349)
Per capita income ($1,000s)	0.112	0.149	-0.035	0.072	0.109	0.031
	(0.134)	(0.221)	(0.035)	(0.064)	(0.076)	(0.057)
Simultaneous senatorial election	-0.018	0.016	0.023	0.055*	0.094*	0.028*
	(0.024)	(0.031)	(0.016)	(0.016)	(0.019)	(0.008)
Constant	0.090	-0.106	0.197	-0.076	-0.232	-0.180
	(0.349)	(0.649)	(0.127)	(0.221)	(0.285)	(0.135)
Observations	388	341	396	348	350	350
Number of states	50	50	50	50	50	50
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Note: Ordinary least squares models. Standard errors clustered by state. *$p < .05$, two-tailed test.

Tough economic times appear to mobilize voters directly rather than via political elites.

The second hypothesis we consider involves Wright's (2012) analysis showing that the public punishes Republican incumbents more than Democratic incumbents when unemployment rates are high. The reason, he contends, is that the Democratic Party "owns" the issue of unemployment and is viewed by voters as the better party to remedy the problem of joblessness. Republicans are not viewed as equally competent in dealing with unemployment and thus suffer more at the polls when rates are high. This provocative argument could be compatible with ours if it was further developed to link turnout and vote choice. Because Republican incumbents are viewed as less capable of solving unemployment, a high rate would be especially alarming to the public and might bring out even more voters, both to send a signal (the expressive purpose) and to replace the incumbent with someone from the party better able to address the issue (the instrumental purpose).

Although we lack the space to fully integrate Wright's argument with ours, we conducted preliminary tests of the idea. Because our county dataset only includes nine presidential elections and the presidential race dominates the effects of lower level contests, this required returning to the midterm state turnout data. Using Wright's data, we estimated turnout models in midterm elections, allowing the party of the incumbent governor to moderate the relationship between the unemployment rate and turnout. The results, found in Table 4, demonstrate how Wright's argument conditions our theory. A poor economy is associated with higher turnout in gubernatorial elections, but only when a Republican sits in the governor's mansion. Across the range of unemployment rates observed in our dataset (roughly 2% to 14%), turnout increases by more than seven percentage points under Republican governors but does not vary under their Democratic counterparts.

Moving beyond Wright's study, we can test more generally whether unemployment affects both the decision to vote and for whom to vote. To do this, we use the pooled American National Election Studies (ANES) and model the turnout and vote choice decisions jointly as a function of state unemployment rates and a series of control variables. We are agnostic about whether individuals consider turnout and candidates simultaneously or sequentially and so employ the multinomial logit model.[11] That is, rather than

[11]Research shows that the computationally more intense multinomial probit is only sometimes superior to multinomial logit, depending on whether the "independent of irrelevant alternatives" (IIA) is a concern (e.g., Dow and Endersby 2004). A Hausman test failed to detect the IIA problem in our data, so we employ the more straightforward logit formulation.

TABLE 4 Unemployment and Partisan Asymmetry in Gubernatorial Elections (1990–2010)

State unemployment rate	0.058
	(0.118)
Republican incumbent	-0.044*
	(0.012)
Republican incumbent × State unemployment rate	0.584*
	(0.179)
% Black	1.112*
	(0.512)
% College	0.043
	(0.079)
Simultaneous senatorial election	0.014*
	(0.005)
Constant	0.323*
	(0.033)
Number of observations	285
Number of states	36
State fixed effects	Yes
Year fixed effects	Yes

Note: Dependent variable is percentage turnout in county. Ordinary least squares models. Standard errors clustered by county. *$p < .05$, two-tailed test.

assume as most models do that the choice for voters is to pick the Democrat or Republican, we entertain the possibility that at least some individuals are deciding between abstention and voting for one of the candidates. Both classic and more contemporary works on economic voting largely ignore turnout, assuming that the turnout decision is not only prior, but also independent of vote choice. Our model does not impose this assumption. Further, if higher unemployment rates stimulate people to vote but mainly just for the Democrats, who are expected to handle the issue more competently, then our model will reveal this asymmetric effect.

In Table 5 we report the result of a model in which state employment rates predict voting for one candidate or the other relative to the baseline category of not voting. The model also includes dummies for Democratic and Republican identifiers and a series of demographic variables related to race, ethnicity, and socioeconomic status. We note that among the socioeconomic measures is whether the individual is personally unemployed. Research has shown that unemployed individuals are significantly less likely to vote. This is because the workplace provides opportunities for mobilization and because unemployment is in large part a proxy for other factors that dampen participation rates (Schlozman and Verba 1979; Schur 2002).[12] Our model opens the possibility that the effects of unemployment have a partisan coloration and are not solely about turnout in a nonpartisan sense. Although we found no evidence in our earlier results that competition explained the relationship between unemployment

TABLE 5 Individual-Level Turnout and Partisan Asymmetry in Gubernatorial Elections (1978 to 1998)

	Vote for Democrat	Vote for Republican
State unemployment rate	6.639*	2.505
	(3.254)	(4.845)
Campaign expenditures	0.229*	0.335*
	(0.090)	(0.120)
Democrat	1.378*	0.351*
	(0.075)	(0.138)
Republican	0.22*	1.688*
	(0.133)	(0.121)
African American	0.374*	-0.626*
	(0.123)	(0.221)
Latino	0.116	-0.316*
	(0.077)	(0.113)
Other race/ethnicity	-0.664*	-0.584*
	(0.151)	(0.152)
Female	-0.011	-0.027
	(0.049)	(0.054)
Married	0.193*	0.353*
	(0.065)	(0.071)
Age	0.041*	0.042*
	(0.002)	(0.002)
Education	0.635*	0.639*
	(0.042)	(0.046)
Income	0.175*	0.228*
	(0.034)	(0.030)
Income not reported	-0.302*	-0.124
	(0.112)	(0.144)
Unemployed	-0.338*	-0.570*
	(0.127)	(0.135)
Constant	-6.051*	-6.811*
	(0.414)	(0.446)
Observations	7,620	
State fixed effects	Yes	

Note: Dependent variable is three categories where abstain is the reference category. Minor party and independent votes are omitted. Multinomial logit model with robust standard errors. *$p < .05$, two-tailed test.

[12]Incantalupo (2011) suggests that the effects of personal unemployment experiences depend on the aggregate unemployment rate such that one's unemployment is more likely to translate into political action when the national unemployment rate is high enough to "politicize" the issue.

and turnout, we include gubernatorial candidate expenditures (1998 dollars per eligible voter in the state) to control for the competitiveness of the campaign (Jensen and Beyle 2003).

The results show that higher state unemployment rates do in fact stimulate greater turnout (i.e., less abstention) but that the increase in turnout only benefits Democratic gubernatorial candidates. All else equal, a one standard deviation swing around the mean state unemployment rate is associated with a four percentage point increase in the probability of voting for the Democratic candidate and a four percentage point decrease in the probability of abstaining. Other variables work mostly as expected. Competitive races are positively correlated with casting a ballot for either candidate relative to the baseline category of not voting. Self-identified partisans are highly likely to vote for the candidates representing their parties. Blacks are more likely to vote for Democratic candidates than abstain. Those who are married, are older, have more education, and higher incomes are more likely to vote, and about equally so for the two parties. Finally, the unemployed are more likely to abstain. This effect actually runs opposite the effect of the unemployment rate; personal unemployment makes individuals less likely to vote for both parties whereas a higher unemployment rate actually stimulates more voting, at least for the Democratic candidates. While we contend that personal unemployment is largely a proxy for unmeasured characteristics, this seeming contradiction could also be explained by Mutz's (1998) argument that individuals are affected by both their own situations and those of a generalized collective. In summary, we find that higher state unemployment rates do in fact agitate the public into participating at higher rates in gubernatorial elections, whose votes go disproportionately to Democratic candidates.

Conclusion

We have shown that increases in the unemployment rate are associated with higher—not lower—levels of voter turnout. This is a new finding that contradicts political science scholarship supporting a ''withdrawal hypothesis'' in which a worsening economy leads to lower levels of voter participation. Using a variety of data sources and modeling techniques, we demonstrate that higher unemployment rates generally increase turnout. Moreover, state unemployment rates have more effect than county rates. The effect is not trivial, with a two-point increase in the unemployment rate increasing turnout by about a point. This result holds up to a variety of statistical tests including difference-in-difference models. We attribute the consistent positive effect we find to the disturbing effects of economic downturns. For both expressive and instrumental reasons, the public responds to worsening unemployment rates by becoming more participatory, at least when it comes to voting in elections. Although we take no normative position on how much punishment for poor economic performance is appropriate or whether it should vary by level of government, it is nonetheless comforting that incumbents are not in fact given a free pass by potential voters who abstain more when the unemployment rate is higher.

We find no evidence that the relationship is mediated by campaign competition or strategic challenges to vulnerable incumbents. This supports our contention that the effect is due to the behavior of the public rather than campaign elites. The data support Wright's (2012) theory that Republican incumbents pay a bigger price for poor unemployment, at least when measured by its mobilizing effects in midterm elections. In a combined model of turnout and vote choice, we go further in showing that where higher state unemployment stimulates turnout, it does so mainly to the advantage of Democratic gubernatorial candidates.

There is still much to investigate. It is possible that state economic indicators matter more in gubernatorial elections whereas national indicators matter more in presidential or senatorial elections where the focus is presumably on the country as a whole. Research is mixed on whether voters engage in this sort of differentiation (e.g., Arceneaux 2006; Atkeson and Partin 1995; Carsey and Wright 1998). Other research suggests that the degree to which economic evaluations affect voting depends on the political sophistication of the individual (Gomez and Wilson 2007) as well as institutions and other contextual factors (Rudolph 2003). These are important considerations that might shape turnout as well as vote choice. Such work examines subjective economic assessments, which naturally vary across individuals. In contrast, we rely on objective indicators that vary by time and geographical unit and thus provide a different form of statistical leverage. It remains to be seen whether the effects of unemployment extend to other widely used measures of economic outcomes including inflation, income growth, and inequality, or even more specific indicators such as gasoline and housing prices.

Most importantly, our results contradict Radcliff's theory that incumbents are not adequately punished

for bad times because those harmed most by the economy abstain disproportionally. We find that turnout and vote choice are linked in the opposite way that he suggests. Poor economic conditions, at least in terms of unemployment, bring out more voters. These voters are more likely than the typical voter to select candidates based on economic performance. A large body of research has shown that bad economic performance routinely harms the incumbent, but those studies limit their focus to active voters. We agree with Radcliff that economic voting must be at least partly a function of turnout rather than simply vote choice among regular voters.

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