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## Economics, Elections, and Voting Behavior a

Suzanna Linn, Jonathan Nagler, and Marco A. Morales The Oxford Handbook of American Elections and Political Behavior Edited by Jan E. Leighley

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### **Abstract and Keywords**

This article pays attention to classic and recent work on economic voting at both the individual level and in the aggregate. It first presents the question of pocketbook versus sociotropic voting. The first major attempt to understand the mechanism causing the observed relationship between the state of the economy and voting was the attempt to discover whether voters were paying attention to the aggregate economy, or to their own pocketbook. Next, it addresses the question: do voters vote retrospectively, assessing past economic performance, or do they vote prospectively, basing votes on expectations of the future? Divided government raises an important question for students of economic voting. The implication is that divided government should reduce economic voting because the target of economic responsibility is less clear to voters. The article then provides a discussion of the directions research on economic voting is heading.

Keywords: economic voting, elections, pocketbook voting, sociotropic voting, aggregate economy, voters, divided government

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POLITICAL scientists have agreed for over thirty years that the state of the economy affects elections. But, explaining how and why the economy affects elections has turned out to be difficult. Downs (1957) and Key (1966) argued that voters should look at the economy in making voting decisions. Downs argued that voters would vote for the candidate likely to deliver the best economic performance. And Key argued that voters see elections as referenda, punishing incumbents if they presided over poor economic times. But it is Kramer's seminal 1971 article that first demonstrated a robust empirical link between economic performance and election outcomes. Kramer demonstrated that between the period 1896 and 1964 there was a positive correlation between improvements in real income and the incumbent party's share of the two-party congressional vote. This empirical finding essentially begins the scholarly industry that we review in this chapter. Note that there is little dispute about Kramer's finding (though in fact an error in one of the data series led to a future correction of the findings): no one disputes that over the period in question, economic prosperity was associated with higher (p. 376) vote-shares for the incumbent party; and no one doubts that this relationship extends beyond the period Kramer analyzed (which is now dated by thirty years).

However, hundreds of articles have been written since, attempting to do everything from better specify what we mean by "the incumbent party" to better identify the individual-level calculations leading to the aggregate phenomena that Kramer (1971) observed. Kramer was not attemping to examine the motivations of voters. He assumed that voters would punish or reward the incumbent party for the state of the economy, and that this should lead to the aggregate phenomena he observed. However, since then scholars have come up with many alternative explanations for what Kramer observed. And, scholars have developed an interest in considering whether or not the explanatory variables Kramer used were the "right" variables, or simply proxies that were highly correlated with the underlying variables driving his result.

The first refinement of the basic Kramer work to be developed was research analyzing whether voters were actually looking at the state of the *aggregate* economy in voting, or whether they were examining their own *personal* economic situation. At the aggregate level, these could be observationally equivalent. If we observe that voters reward the incumbent when the mean of real disposable income goes up, they could be doing this because they learned that real disposable income was up nationwide and they are rewarding the incumbent for this nationwide prosperity; or because an increase in real disposable income could imply—if it is distributed reasonably uniformly, an assumption we return to later—that most voters had an increase in their own personal income and they are rewarding the incumbent for that. Kiewiet and Kinder (1981; Kiewiet 1983) examined this question in detail, and introduced the notions of "pocketbook voting" versus "sociotropic voting" into the literature.

And whereas Kramer implicitly assumed that voters would vote "retrospectively," punishing or rewarding the incumbent as suggested by Key, scholars since have wondered whether voters are looking backwards or forwards in time. A naive model

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would suggest that since any forecast the voter has of the future must be based on the past, there is really no difference between these two perspectives. However, much ink has been spilled on the question.

Further questioning the reasoning of voters has been a line in the literature questioning how sophisticated voters are. Whereas in the simplest retrospective voting model the voters simply decide whether or not the performance of the incumbent in office, as measured by the performance of the macro economy, meets some pre-defined standard, more sophisticated models can require the voters to evaluate policy choices made by incumbents, and to make a more nuanced decision regarding attribution. Recall that in Kramer's model, he relied on the notion of "an incumbent" government. But in the United States there may not be one party so obviously responsible, as in cases of divided government.

(p. 377)

Yet another way that voters could reveal sophistication is to have preferences over economic policies, *or* over economic outcomes if they believe they have a choice. Exploring voter decision making, and presidential approval, Hibbs, Rivers, and Vasilatos (1982) allowed voters to behave as if they saw a Phillips-curve tradeoff between unemployment and inflation. Another mode of sophistication for voters would be to condition their vote-choice on preferred policy tool, knowing the penchant of the political parties. Thus voters in a recession might prefer the Democratic party, thinking it would be more likely to pursue expansionist fiscal and monetary policy than the Republican party. And voters seeing high inflation might prefer the Republican party if they believed that a Republican government would fight inflation more aggressively than a Democratic one. This is considered in the literature on rational partisans.

Along with allowing voters to prefer different policies, a relatively unexamined area of voter sophistication in the literature is the idea that voters look at measures of the economy between the level of aggregation of the individual (i.e., "pocketbook") and the national macro-economy (i.e., "sociotropic"). If economic growth is distributed evenly across the population, all voters prefer the candidate offering the most growth and preferring the candidate who would raise growth the most is the same as preferring the candidate who would maximize one's own income. But if voters observe that some parties provide unequally distributed growth, then some voters may prefer a party providing a lower aggregate growth-rate, but one in which they receive a larger share of the growth. We take up this question in two sections on groups and economic voting. And in times when there is variation across region in economic performance, voters may also look at regional economic performance rather than national economic performance. We consider this as well below.

Finally, concerns about the endogeneity of economic evaluations have arisen in the context of models that rely on subjective perceptions of the economy. When voters are asked to evaluate the economy, party identification and intended vote choice may drive economic evaluations as voters favorable to the incumbent could see the economy

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through "rose-colored glasses," and voters opposed to the incumbent may see the economy as half-empty rather than half-full. If economic perceptions are in fact affected by respondents' vote choice, then inferences of economic perceptions causing vote choice based on cross-sectional models are obviously suspect. Recent research has confronted this issue head on, and we discuss this in the section on endogeneity.

In what follows we discuss each of these issues with particular attention to classic and recent work on economic voting at both the individual level and in the aggregate. We start with the question of whether voters care most about the state of their own personal finances or whether they weigh national conditions most heavily in their voting calculus—the question of pocketbook versus sociotropic voting. We then consider the additional questions raised above. We end with a discussion of the directions research on economic voting is heading.

# (p. 378) Pocketbook versus Sociotropic Voting

The first major attempt to understand the mechanism causing the observed relationship between the state of the economy and voting was the attempt to discover whether voters were paying attention to the aggregate economy, or to their own pocketbook. The belief was that these were observationally equivalent at the aggregate level. If an improving aggregate economy meant that most individuals were seeing improvement in their personal finances, then we would observe a correlation between aggregate economic circumstances and the vote across time whether individuals were voting on their personal finances or on the state of the aggregate economy. And the work at the aggregate level had been very much motivated by the idea that persons were looking at their personal finances (in a rational Downsian manner, looking for the candidate who would increase their own utility, or in this case, personal fortune).

In highly influential works Kiewiet (1983) and Kinder and Kiewiet (1981) analyzed individual survey data to determine whether individuals were motivated by personal or national economic circumstances. Kinder and Kiewiet were explicit that they were *not* looking to distinguish self-interested motivation versus altruistic motivation. They argue that a voter may view the incumbent's handling of the national economy as an "indicator of the incumbent's ability to promote (eventually) their own economic welfare." And Kiewiet and Rivers (1984, 381) point out the theoretical limitations of using one's own pocketbook: "suppose a distant relative dies, leaving a substantial inheritance. Does the lucky recipient attribute his or her good fortune to whoever happens to be in the White House at that moment?" In other words, how well the national economy does might be a better predictor of an individual's future well-being than the individual's own recent economic performance. Kinder and Kiewiet look at a variety of questions respondents were asked about both personal finances and the national economy. They report that it is *not* the case that respondents' national evaluations are simply functions of their personal

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experience. In fact they note that the correlation between such responses across individuals is quite low.<sup>1</sup>

Kiewiet (1983) examined responses to National Election Study questions on pocketbook evaluations versus evaluations of the national economy. He found that for presidential elections, national evaluations won the race of the variables. They were generally significant in models of vote choice, while pocketbook evaluations were not generally significant.

# (p. 379) Retrospective Versus Prospective Voting

When we assess the influence of economic assessments on the vote, we must not only consider whether pocketbook or national conditions weigh most heavily in the vote calculus, but we must also consider whether voters assess the past or look forward and gauge the future. Here we ask: do voters vote retrospectively, assessing past economic performance, or do they vote prospectively, basing votes on expectations of the future?

The time horizon relevant to voters has important implications both for the sophistication of voters and the interpretation of election outcomes. In the earliest work, Downs speculated voters assess their expectations about future (economic) performance and vote for the party giving them the greatest expected utility. In contrast, Key argued voters punish or reward the incumbent party based on past economic performance. In his major work on retrospective voting, Fiorina (1981) adopted Key's perspective. Downs requires of voters that they assess future policies, Fiorina that they assess past outcomes. Underlying each theory, then, is a distinct understanding both of what elections require of voters and also what elections mean. In the case of prospective voting, voters are relatively sophisticated as they must have expectations of future performance of the economy under the policy positions of the different parties. Votes cast reflect on the best direction for the future. Elections in effect become mandates for the party in power. Under retrospective voting, much less sophistication is required of voters, they need only reflect on the past performance of the parties, the outcomes. Elections in the retrospective case are then referend on party performance. Overall, as we shall see, the evidence is mixed, suggesting some role for both retrospective and prospective evaluations. Voters are often portrayed as relatively sophisticated, especially in the aggregate, but they do not neglect the role of past economic conditions.

The early empirical work on economic voting was based on aggregate data, and implicitly followed Key, testing whether recent objective economic conditions drove election outcomes. Kramer (1971) showed that voters use economic performance over the last year to guide their vote choice, voting for the incumbent party when times are good and against it when times are bad. He showed that congressional elections respond in particular to national income over the last year. In the immediate aftermath of Kramer's work, empirical analyses of economic voting continued to rely on aggregate-level time-

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series data. Tufte (1975) demonstrated that midterm elections were referenda on the performance of the economy under the incumbent president's party; Meltzer and Vellrath (1975) and Fair (1978) extended the analysis to presidential elections; and Bloom and Price (1975) showed that the effects of economic downturns hurt incumbents while the symmetric effect (p. 380) was absent. Models of presidential approval relying on aggregate economic data also showed strong economic effects in parallel (see Hibbs 1987, Kernell 1978, Mueller 1970). Thus evidence of economic voting based on aggregate-level data over time has been quite strong for over thirty years.

But this work did not compare the roles of retrospections and prospections of the state of the economy. Prospections were absent from the analysis. Analysis that directly compares the relative role of the past and the future in the economic voting calculus soon followed. This work had to come to grips with two other questions. First, should tests of the time frame of voters' horizons be assessed with respect to national or pocketbook considerations? Second, should tests involve objective economic conditions or should they be based on subjective evaluations of the economy? Data and design considerations led to distinct answers to these questions. At the individual level, analysis focused on subjective evaluations, particularly of personal economic conditions. But as Kramer (1983) pointed out, objective conditions presented two problems. First, measures of personal objective income are composed of a mix of government-and non-government-induced income, making it impossible to know the effect of government-induced income, the only portion of income that should matter in economic voting. Second, national economic conditions are constant within an election, making assessment of their effects impossible in the context of a single election. The effect of these two concerns was a focus on subjective evaluations of economic conditions. Pocketbook evaluations were the primary means to assess retrospective evaluations, especially in the early work, but sociotropic evaluations also played some role in later work. At the same time, aggregate analyses began to consider subjective economic evaluations, generally both personal and sociotropic.

The first individual-level analysis of the time frame of economic voting considered comparisons of the effects of retrospective and prospective pocketbook evaluations. A number of scholars looked at individual congressional elections with mixed findings. Using the 1978 National Election Study, Kuklinksi and West (1981) found that retrospective evaluations explained neither Senate nor House votes. Prospective evaluations contributed significantly (both statistically and substantively) to the Senate model, but not the House model, of the vote. Also looking at congressional elections, Abramowitz (1985) showed that results of the House elections of 1974, 1978, and 1982 responded more to prospective than retrospective evaluations. Lockerbie (1992) echoed this result in his analysis of retrospective and prospective pocketbook evaluations in each House election from 1956 to 1988. Accounting for the potential endogeneity of economic evaluations in a path model, Lockerbie finds that both retrospections and prospections matter.

(p. 381)

Scholars focused on presidential elections similarly found mixed results. Miller and Wattenberg (1985) analyzed a series of presidential elections from 1952 to 1980 and found that retrospections were much more commonly significant and substantively important than were prospective evaluations, especially in races with incumbents (incumbents were much more likely to be evaluated retrospectively). In open-seat races elections were more Downsian: prospective evaluations proved more important. Lewis-Beck (1988a) found that vote choice is a function of both retrospective and prospective evaluations in the 1984 presidential election.

Individual-level analysis focusing on pocketbook evaluations is best characterized as mixed, with findings varying across elections and branches of government. These findings are perhaps unsurprising given that sociotropic evaluations have been shown to be more important than pocketbook evaluations in work comparing the two. Lewis-Beck (1988b) examined the effects of both pocketbook and sociotropic evaluations using a unique survey by the Survey of Consumer Attitudes and Behavior (SCAB). In both January and July of 1984, SCAB asked not only the usual battery of economic questions, but also asked political questions to a panel of respondents. This unique panel allowed him to model current vote choice for the president and congressional candidate as a function of retrospective and prospective evaluations (both pocketbook and sociotropic) and also partisanship in the previous time period such that evaluations today are treated as exogenous to partisanship in the previous time period. He found that both retrospective and prospective evaluations (personal and sociotropic) influence current general evaluations of government economic performance in equal amounts. General economic evaluations in turn influence the vote. Once sociotropic evaluations are included in the mix, the single analysis of Lewis-Beck seems to suggest that retrospective and pocketbook evaluations are both important to general economic assessments and ultimately vote choice. But at the individual level, we are left with no clear answer as to the relative importance of retrospective and prospective evaluations.

While early aggregate work traced votes and presidential approval to retrospective conditions, recent aggregate-level analysis has focused on subjective evaluations and explicitly looked at the relative roles of retrospective and prospective evaluations, generally also assessing whether pocketbook or sociotropic evaluations carry the day. In their seminal piece, Mackuen, Erikson, and Stimson (1992) examined presidential approval as a function of four aggregate measures of economic assessments: (1) mean perceptions of current family finances, personal retrospections, (2) mean perceptions of current business conditions, business retrospections, (3) mean perceptions of next year's family finances, personal expectations, and (4) mean long-term business expectations, all measured from the Survey of Consumer Attitudes and Behavior from 1954:3 to 1988:2. When all four measures were included in the same regression, business expectations won the race to explain approval. The other three indicators were not even collectively significant. "Clearly, (p. 382) the reason presidential approval responds to the economy is that presidential approval responds to economic expectations" (603). They found, in turn, that economic expectations are a function of leading indicators, which are themselves a function of what people have heard in the news about the economy. They concluded that

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people use the past to judge perhaps, but more importantly, they behave as if following rational expectations, using any available information they have about the future to make their evaluations of the president as well.

There is some consensus that prospective evaluations matter and do so more than retrospections, but debate remains over the role of retrospective evaluations. Clarke and Stewart (1994) take issue with MacKuen, Erikson and Stimson's (MES) (1992) analysis and findings, arguing that many of the key variables in their work are non-stationary and that presidential approval is cointegrated with long-term business expectations (five-year). Reestimating the MES model as an error correction model over the period 1954:2–1992:2, they found that both business expectations *and* business retrospections have significant short-run effects on presidential approval and that business expectations also have a long-term effect on presidential approval. Retrospective evaluations are not wholly irrelevant in this story, but an important component of evaluations of the president.

Nadeau and Lewis-Beck (2001) compared retrospective and prospective voting using an alternative measure of prospective evaluations. Like Clarke and Stewart, they found an important role for retrospective evaluations. Arguing that voters weigh different aspects of the economy differently, they built a national business index (NBI) to measure retrospective evaluations and an economic future index (EFI) to measure expectations.<sup>3</sup> When NBI and EFI were both in the model, each was significant, with retrospective assessments having a slightly larger effect than prospective assessments. Moreover, Nadeau and Lewis-Beck interacted elections in which no incumbent ran with each NBI and EFI and found (1) significant positive direct effects for each NBI and EFI; (2) retrospective economic voting was weaker when no incumbent was running; and (3) prospective economic voting was stronger when no incumbent was running. In the end the voter looks fairly sophisticated. Economic voting is almost entirely retrospective when an incumbent is running and there is a record to evaluate. When there is no incumbent, the electorate is more forward-looking. However, these results are based on pooling the NES from 1956 to 1996, and estimating individual-level models with the economic variables—NBI and EFI—entered as year-specific terms. Thus Nadeau and Lewis-Beck are inferring statistical significance with approximately 13,000 observations, (p. 383) when in fact they have eleven distinct cases of their economic variable varying. It is hard to imagine that the results would reach traditional levels of statistical significance with either clustering to correct the standard errors, or with multi-level modeling.

Are economic votes cast retrospectively or prospectively? Individual-level analysis is mixed. Concerns about the endogeneity of economic evaluations and the focus on pocketbook voting at the individual level cloud our conclusions. The evidence at the aggregate level for prospective voting, especially national-level prospective voting, seems to dominate that for retrospective voting, but retrospective evaluations appear to be relevant as well. Voters appear to be Downsian, looking to the future, but grounding assessments in retrospective evaluations: both prospective and retrospective evaluations

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matter to the voter. Elections appear to be both mandates for the future and referenda or						
the past.						
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## **Divided Government and Economic Voting**

Divided government raises an important question for students of economic voting. Who do voters hold accountable for the state of the economy when control of government is divided? How do they cast an economic vote? The authority for economic policy making is shared by both Congress and the president. So who gets credit when the economy is strong and blame when it is weak if each branch of government is controlled by a different party? Interestingly this question received attention only following on the heels of cross-national work on government accountability and transparency. Powell and Whitten (1993), Anderson (2000), Royed, Leyden, and Borrelli (2000), Nadeau Nienni, and Yoshinaka (2002), and others argued that "Voters' economic assessments have stronger effects on government support when it is clear who the target is, when the target is sizable, and when voters have only a limited number of viable alternatives to throw their support to" (Anderson 2000, 168). The implication is that divided government should reduce economic voting because the target of economic responsibility is less clear to voters.

Norpoth (2001) looked explicitly at the role divided government plays in economic voting in the US. He began by asking which party voters hold accountable for their economic evaluations when government is divided. Following Powell and Whitten, Norpoth predicted that there will be less economic voting with divided government and suggested four plausible hypotheses regarding voter behavior: (1) voters cannot decide who to hold accountable so no economic votes are cast, the hung jury hypothesis, (2) economic voting at the presidential level reflects on (p. 384) the president's party, while economic voting at the congressional level reflects on the party controlling Congress, the split decision hypothesis, (3) all blame or credit goes to the president's party in both presidential and congressional elections, the president liable hypothesis, and (4) all blame or credit goes to the congressional party in both presidential and congressional elections, the Congress liable hypothesis. Norpoth used exit-poll data in the elections of 1992 and 1996 and found that economic evaluations work in the direction of the presidential party for both presidential and House vote. The president liable hypothesis received overwhelming support. Norpoth did not, however, consider any elections that feature unified control and thus cannot compare the degree of economic voting under the two types of regimes.

In contrast to Norpoth's evidence that all economic voting reflects on the president's party, Rudolph and Grant (2002) and Rudolph (2003b) proposed a theory of "attribution moderation" in which economic voting is conditional on holding the president (in presidential elections) or Congress (in congressional elections) responsible for the state of the economy. By this theory we would find support for the president liable hypothesis only if voters hold the president accountable for economic conditions under divided government. Yet there is reason to expect that attribution moderation would occur under divided government as the question who to blame or credit for economic conditions rises front and center. To test this theory, the authors used survey data from 1998 and 2000 in

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which respondents were asked who they hold most responsible for the state of the economy. They found that economic voting at the presidential (congressional) level was stronger when voters hold the president (Congress) responsible for the state of the economy. To the extent that divided government obscures control, economic evaluations are likely to be of less importance when casting a vote than they are under unified control.

Rudolph (2003a) also looked at the consequences of divided control of government at the state level. What happens when the governor and state legislature are held by different parties? Who do citizens hold responsible for fiscal policy and how does it effect economic voting? The patterns here repeat those at the national level, with those attributing responsibility to the governor more likely to cast an economic vote for the governor. Further, as his authority in the budgetary process grows, they are even more likely to cast their economic votes for the governor.

Divided government has the potential to make economic voting harder by obscuring the responsibility for economic outcomes. In terms of the comparative work, the target for economic voting becomes less clear. And yet Norpoth found that Americans tend to hold the president accountable for economic conditions even under divided government. But, as Rudolph's work shows, not everyone will blame or credit the president's party. Some will hold Congress responsible, others the president. One thing appears to be clear. Divided government can complicate the voter's decision calculus for at least a portion of the electorate.

# (p. 385) Heterogeneous Preferences: Groups and Economic Voting

Groups matter in politics. But often what places one in a group also determines one's preference, or in some cases, one's preference can place one in a group. For instance, Hibbs et al. (1982) compares the preferences of Republicans and Democrats over different economic policies. Yet it is those preferences that caused respondents to become Republicans or Democrats. Linn and Nagler (2005) compare the preferences of people in the bottom and top quintile. But it is not their membership in a "group" that generates the preference in the Linn and Nagler story, rather it is objective circumstance that leads to the preference, and leads to being measured as part of a "group." In this section we consider groups of people only so far as those groups consist of people with shared preferences, in the section following we take a broader view of groups.

Hibbs and Vasilatos (1982), Hibbs et al. (1982), and Linn and Nagler (2005) note that voters do not have homogeneous preferences. This is, after all, the basis of all politics. If all voters had the same preferences, we would be describing a homogeneous society that does not exist. Hibbs noted that voters have different unemployment versus inflation tradeoffs. In Hibbs's world left-voters, who are presumably lower-income, would prefer less unemployment even at the cost of more inflation; whereas right-voters, who are presumably higher-income, would prefer lower inflation, even at the cost of higher unemployment. This description of the world is not simply more nuanced than saying that "all voters prefer more growth to less" (since ceteris paribus, it is difficult to imagine that that would not be true), but it describes fundamental economic conflict. Linn and Nagler do not specify particular tradeoffs as Hibbs does with inflation versus unemployment, but rather consider that voters might prefer less growth for the aggregate economy, if they were to receive a larger share of that growth. Linn and Nagler move between individualbased preferences to group characteristics in arguing that voters are likely to view their share of growth as easiest to measure by a characteristic such as place in the income distribution. Thus Linn and Nagler postulate that voters will look at the growth rate of their income-quintile as a way to simultaneously measure aggregate growth, and their share of it. The intuition is straightforward: if the aggregate economy grows 3 percent, but an individual sits in the bottom income quintile that shows no growth in disposable per-capita income, then it seems foolish to reward the incumbent for such a performance. But this view of "group" aggregation is arbitrary in some ways. Obviously where one sits in the income distribution matters. Tax policy varies based on one's level of income. But a voter could also look at other ways that the effects of economic growth vary across citizens in deciding how good a job the incumbent has done. At the specific (p. 386) policy level, union workers might choose to punish an incumbent who signed a trade agreement they felt lowered wages in their industry, even if the agreement provided an overall boost to GDP. Or, citizens in a state doing poorly might simply observe that their region is doing

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badly, and see no reason to reward the incumbent for prosperity happening in other parts of the country.

Aggregate analyses of economic evaluations or incumbent party support based on groups in the electorate show that groups respond differently to economic conditions. Hibbs, Rivers, and Vasilatos (1982) found that Republicans are more sensitive to inflation than Democrats and Independents while Democrats show greater sensitivity to unemployment and real income when evaluating the president. Among different segments of the labor force, they find that greater sensitivity to inflation exists among those outside the labor force (retirees), while unemployment and real income sensitivity is greatest among blue-collar workers. Linn and Nagler (2005) examine income groups and find no difference in the responsiveness of poorer or wealthier Americans to economic performance.

Other scholars have looked at membership in groups, and identification with groups, as mediating entities between pocketbook voting and sociotropic voting. We turn next to that.

## **Groups**

Mutz and Mondak (1997, 285) note that "In studies of American political behavior it is axiomatic that groups matter." There are many reasons to expect that groups may matter or, put differently, that voters may respond heterogeneously to economic performance based on group identification or membership. Information may be filtered and interpreted through the perspective of a group (Campbell et al. 1960); group membership may result in different objective interests (as we discussed above; see Hibbs 1982a, Hibbs and Vasilatos 1982, Linn and Nagler 2005) or different information sources (Krause 1997); people may be encouraged to think in terms of politically relevant groups based on race, gender, class, or incomes (Mutz and Mondak 1997). Groups may also matter because group evaluations are either or both more personally relevant than national evaluations and more politically relevant than personal circumstances (Glasgow 2005, Mutz and Mondak 1997).

There is an observational equivalence between group membership providing shared preferences leading to common behavior among group members, and group membership providing a social identification with the group and an interest in the membership of the overall group leading to common behavior. In other words, we can't tell if someone who is black is paying attention to the economic (p. 387) well-being of blacks because they view it as a measure of how well the government is treating them, or if they are paying attention to the economic well-being of blacks because they care about blacks. This is precisely the identification problem with sociotropic voting. A sociotropic voter could be altruistic, or they could simply view the state of the national economy as a measure of

incumbent economic competence—a competence likely to affect their *own* economic well-being in the future.

Group evaluations are typically found to be distinct from both pocketbook and sociotropic evaluations (Conover 1985; Kinder, Adams, and Gronke 1989; Kinder, Rosenstone, and Hansen 1983; Mutz and Mondak 1997). Conover (1985) and Kinder, Rosenstone, and Hansen (1983) find an independent effect for group evaluations on presidential vote choice.

Krause (1997), in an analysis of education/information groups, finds that as voters' level of education declines economic expectations rely more heavily on retrospective evaluations while more educated voters draw on more information, particularly media coverage of the economy, to shape their expectations. Welch and Hibbing (1992) consider gender, and claim to show that men are more likely to be economic voters than women, at least in part because women see themselves as accountable for their own economic situations. Welch and Foster (1992) show that black voters consider the change in economic fortunes of blacks, as well as the change in national economic conditions, when voting.

# **Subnational Economic Conditions and Economic Voting**

While we are able to cite a preponderance of evidence to show that a relationship exists between national economic conditions and presidential election outcomes, there has been much less research on whether economic conditions at the subnational (i.e., state or county) level affect vote shares in a presidential election. This is a sensible question as there is substantial variation of economic conditions—and electoral results—across states.

The few available pieces looking into this matter have documented a relationship between subnational economic conditions and vote shares for presidential candidates at the subnational level. Wright (1974) shows that changes in state-level per capita income were a strong predictor of state-level vote shares for the Democratic candidate in the 1936 and 1940 elections, and Abrams (1980) finds similar results for the incumbent running for reelection in the 1956 and 1972 elections. In contrast, (p. 388) Meltzer and Vellrath (1975) find weak evidence for effects of per capita income on vote shares at the state level for the 1960-1972 elections, but provide strong evidence that higher statelevel unemployment and inflation help Democratic candidates. Peltzman (1990) looks at presidential elections between 1950 and 1988 and finds that increases in state-level personal income and reductions in state-level inflation rates increase the vote shares for the incumbent party. For the 1992 election, Blackley and Shepard (1994) and Abrams and Butkiewicz (1995) find that increases in state-level per capita personal income increased Bush's vote shares, but higher unemployment increased Clinton's vote shares at the state level. The 2004 election was analyzed with county-level data by Lacombe and Shaughnessy (2007), who show that per capita personal income and unemployment rates at the county level are good predictors of vote shares for Bush at the county level.

Evidence suggests that per capita income at the state and county level is a good and consistent predictor of electoral outcomes at the state and county levels. But while results are not as clear regarding inflation and unemployment, it must be noted that econometric specifications vary across analyses, making some of these comparisons difficult. It might also be the case that specific conditions lead to different effects of economic variables across elections. But this matter is hard to settle without more detailed research.

Few attempts have been made to determine whether national or subnational economic conditions matter most in determining electoral outcome. Strumpf and Phillippe (1999) compare the effects of state-level and national economic conditions in vote shares at the state level, while Eisenberg and Ketcham (2004) take a fuller approach and compare county-level, state-level, and national economic conditions on vote shares at the county level. They both find that subnational economic conditions are related to the vote shares obtained by each party at the subnational level, but they confirm that national economic

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conditions have much stronger effects. In particular, both studies suggest that: (1) national per capita income growth and unemployment rates have robust effects on electoral outcomes at the state and county level; (2) state-level per capita income growth and inflation rates determine vote shares at the state and county level; and (3) only county-level per capita income growth influences vote shares at the county level.

## **Endogeneity of Economic Perceptions**

A strain of the literature on economic voting that has existed since at least the 1990s has argued that estimates of the impact of economic perceptions, and thus of economic conditions, on voting have been vastly exaggerated because economic (p. 389) perceptions are themselves influenced by the respondents' vote choice. The argument is straightforward. A typical cross-sectional model puts economic perceptions on the right-hand side, assuming such perceptions are exogenous explanatory variables, and finds that such perceptions are significantly related to vote choice. But, if the causality is backwards, if in fact the economic perceptions are caused by the vote choice, then the inference that economic perceptions, or economic conditions, affect vote choice would be invalidated. So if voters who intend to vote for the incumbent rationalize their response to the economic perception question by stating that the economy has been good, then we could mistakenly infer that economic perceptions influence vote choice when no such relationship exists.

The critique of the cross-sectional individual-level voting models is obviously troubling. And it is difficult to resolve with cross-sectional data. Inference in cross-sectional data does generally depend upon assumptions of the direction of causality. There are (at least) four strategies to resolve the issue. First, one can attempt to gain leverage with panel data. Second, one can look for a "slower-moving" measure of political preferences (i.e., partisanship) to attempt to anchor the economic perceptions. Third, one can move away from the cross-sectional individual-level data to look at changes in real economic conditions over time and how they affect vote choice. Fourth, one can find less aggregated real economic measures that differ in the cross-section and would allow for cross-sectional analysis of the impact of economic conditions on vote choice.

As early as the 1960s, the idea that perceptions of the state of the world are influenced by partisanship via a "perceptual screen" had been advanced (Campbell et al. 1960). Perceptions of the state of the economy are no exception. While not concerned with endogeneity in economic evaluations, but with the origins of economic evaluations, Conover, Feldman, and Knight's (1987) widely cited analyses find evidence that (sociotropic) prospective evaluations might be influenced by partisanship in the United States, but no relationship was uncovered between retrospective (sociotropic) evaluations and partisanship (Conover and Feldman 1986).

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These findings have been qualified lately by Evans and Andersen (2006), who introduce new evidence suggesting that economic evaluations might be endogenous to partisanship. They show that partisanship influences retrospective economic evaluations, although its impact is stronger on sociotropic than pocketbook evaluations in Britain. They claim that their analysis proves that the effects of partisanship on economic evaluations are stronger than those of economic evaluations on partisanship. Lewis-Beck (2006) severely criticizes their analysis, arguing that the measure of government-approval that Evans and Anderson use is non-standard, and closer to a measure of partisanship. The question they use is "Please choose a phrase from this card to say how you feel about the Conservative Party. Strongly against (1); Against (2); Neither in favor nor against (3); In favor (4); Strongly in favor (5)." Lewis-Beck is correct that this is *not* a question of "approval (p. 390) of the *job* the party is doing." This should set the stage for several attempts at replication with alternative measures of approval.

The endogeneity of partisanship to economic evaluations is relevant so long as we are concerned with modeling these evaluations. But for purposes of economic voting, our more pressing concern would be to assess whether economic evaluations are endogenous to vote choice as this would bias our estimates of the impact of perceived economic conditions on vote choice.

Wlezien, Franklin, and Twiggs (1997) were the first to claim that individuals would tend to give better assessments for the candidates they support. That is, vote choice would shape economic evaluations. Their empirical analysis in Britain, France, Italy, and Germany found mixed evidence. They found that vote choice predicted prospective evaluations in Britain, France, and Germany; but that it predicted retrospective evaluations only in France.

Prospective evaluations are of course clouded by uncertainty over which party will be in office after a coming election. Ladner and Wlezien (2007) argue that individuals who think their most preferred party will win the election would be more likely to have a more positive evaluation about the future state of the economy than those individuals who think their most preferred party will not win. They find evidence to support their claim in the United States and Britain.

On the other end of this argument, Anderson, Mendes, and Tverdova (2004) argue that individuals improve their assessment about the future state of the economy if they voted for the party that actually won the election, while those who voted for the losing party will tend to worsen their assessment. They present evidence to support their claim from Britain.<sup>4</sup>

Lewis-Beck, Nadeau, and Elias (2008) try to address the question of endogeneity of economic perceptions with a combination of panel data and the use of allegedly exogenous instruments for economic perceptions. But the panel nature of the data seems only to be used to address potential endogeneity of party identification. They actually address potential endogeneity of economic perceptions by using respondents' perceptions of their personal finances as an instrument for respondents' perceptions of national

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economic conditions in an instrumental variables setup. Their instrumental variables result for the impact of perception of national economic conditions on vote choice is indistinguishable from their OLS estimate of the impact of perception of national economic conditions on the vote.

## (p. 391) What Next

While political scientists know a lot about economic voting, as the discussion above reveals, there is much we still do not know. The weight of evidence from all sorts of data makes clear that voters reward incumbents for good times, and punish them for bad times. We know this from data over time comparing election outcomes to measures of the macro-economy. And we know it from individual-level data in cross-sections comparing perceptions of the economy to individual vote choice.

But we do not have good ideas of what necessarily constitutes "good times" or "bad times". Hibbs (2000) exhaustively tests competing economic measures to show that real disposable per capita income is the best aggregate economic measure for predicting incumbent vote-share. But we do not have a good idea of what the baseline is against which voters measure changes in real disposable per capita income (or any other aggregate economic measure). Declining real income would surely be bad times. But how much of an increase in real income is required for voters to reward the incumbent? And, is there any reason to believe that this number is fixed over time? Voters conditioned to think that 3 percent growth in real disposable per capita income is normal in the 1980s may be willing to adjust to 2 percent growth in the 2010s. We simply do not know the answer to this. And in the absence of examining alternative economic performance and voter reaction in parallel universes, we may never know the answer to this.<sup>5</sup>

Finally, we return to what has been recognized as a crucial question in the economic voting literature for at least thirty years, but has yet to receive a satisfactory answer: what aspect of the economy are voters looking at in deciding whether to reward or punish the incumbent? Sociotropic concerns seem to have decisively won out over pocketbook measures. But there are many economic measures in between the level of an individual voter's bank account, and an aggregate measure of the macro economy such as GDP or real disposable per capita income. As two of us have written elsewhere, voters might choose to consider the distribution of changes in economic performance. Rewarding an incumbent for an increase in income that has gone entirely to members of a different part of the economic stratum might make little sense. If real disposable per capita income goes up 3 percent, but 95 percent of the increase goes to the top 1 percent of the income distribution—why should voters in the bottom 99 percent of the income distribution reward the incumbent? We are studying voters, not stockholders. And unlike stockholders, not all voters are simply interested in maximizing the value of their shares. Politics is about conflict and voters are a heterogeneous bunch with varied (p. 392)

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preferences. *Ceteris paribus*, they all prefer more economic growth to less. But that is rarely the choice offered.

Further considering heterogeneity in voters, we think that some voters probably pay more attention than other voters to things such as the stock market or federal deficits. Research going forward should be paying attention to what forms voters' economic perceptions. And that research will have to acknowledge the heterogeneity of voters. In addition, research needs to consider what measures of the economy voters *should* consider. For a voter in the bottom of the income distribution: what aggregate measures are the most reliable indicators of how they are likely to fare in the future?

Some areas of the impact of the economy on vote choice remain surprisingly underresearched. We know something about the impact of media coverage of the economy on economic perceptions. But it is obviously an area where more research would be helpful. Can we really predict the impact on the vote for the incumbent given a 2 percent increase in real disposable per capita income, or does it depend upon what the media say? Research on the impact of the media generally would suggest that by talking about the economy the media could get voters to put more emphasis on the economy, but that the media could not tell the voters how to think about the economy. But De Boef and Kellstedt (2004) find that the amount and tenor of news coverage of the economy drives aggregate perceptions along with an independent effect for objective economic indicators. However, more work is needed. Voters have both local and general sources of information about the economy. They can observe how their peers or friends and family are doing economically. But they depend on a range of government statistics, and the media bringing those statistics to them, to learn about the macro-economy. Again, we note the heterogeneity of voters here. There is obviously a set of financially tuned-in voters who will know the state of the economy whether the media emphasizes it or not. However, many voters are more passive about seeking information on the economy, and will not know of economic change unless it is reported via mainstream media.

Another area of research obviously suggested by reviewing the existing literature is into the potential endogeneity of economic perceptions as reported in surveys. Existing work on this topic is thoroughly inconclusive. We are not optimistic that this will be solved by a search for a valid instrument. As the congressional campaigns field has spent thirty years searching for valid instruments for campaign spending, we do not see political scientists finding some variable that influences economic perceptions, but does *not* also influence vote choice. But obviously the genie is out of the bottle on the question of whether such perceptions are endogenous. So this is clearly an area where research is needed if we are to have faith in cross-sectional models of voting.

And there remains a normative cloud over the whole concept of economic voting. If the government is disproportionately rewarded or punished for (p. 393) something it has relatively little control over, then it suggests that voters are behaving suboptimally and

failing to exercise enough control over policy decisions that *are* completely in the hands of the levers of government.

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### **Notes:**

- (1) They report median correlations across the sets of questions of .09, .02, and .03 for 1972, 1974, and 1976, respectively (p. 139).
- (2) No single measure of either retrospections or prospections is available in the NES for the full period and to make matters worse, sometimes attribution is to parties, sometimes not, making pooling the data impossible.
- (3) NBI is built from the following question: "Would you say that at the present time business conditions are better or worse than a year ago?" The authors assign a score of 1 for better, -1 for worse, and 0 for same. Calculate the percentage in each category and

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subtract the percentage worse from better. EFI is built in the same way from the following future-oriented question: "Now turning to business conditions as a whole—do you think that during the next 12 months we'll have good times financially, or bad times financially?"

- (4) Glasgow and Weber (2005), while investigating a related issue in Germany—whether individuals think that a victory by their preferred candidate will improve their well-being—find evidence that they explicitly argue supports the findings of Anderson et al. (2004).
- (5) This of course suggests we should ask a more precise question.

#### Suzanna Linn

Political Science, Pennsylvania State University

Suzanna Linn is Professor of Political Science at Pennsylvania State University.

### Jonathan Nagler

Politics, New York University

Jonathan Nagler is Professor of Politics, Wilf Family Department of Politics, New York University.

### Marco A. Morales

Politics, New York University

Marco A. Morales is Ph.D. candidate, Wilf Family Department of Politics, New York University.

