Máster en Democracia y Gobierno
Departamento de Ciencia Política y Relaciones Internacionales
Universidad Autónoma de Madrid

Working Papers Online Series
http://www.uam.es/centros/derecho/cpolitica/papers.htm

Estudio/Working Paper 75/2007

Economic models of voting

Michael S. Lewis-Beck
Universidad de Iowa
E-mail: michael-lewis-beck@uiowa.edu

Mary Stegmaier
Universidad de Virginia
E-mail: ms2bu@virginia.edu

Introduction

During the 1980 U.S. presidential election campaign that pitted incumbent President Jimmy Carter against challenger Ronald Reagan, Reagan asked American voters a peremptory question:

> "Next Tuesday all of you will go to the polls, will stand there in the polling place and make a decision. I think when you make that decision, it might be well if you would ask yourself, are you better off than you were four years ago?" - Ronald Reagan, U.S. Presidential Debate, Oct. 28, 1980

President Reagan's quote provides an ideal starting point to introduce the fundamentals of economic voting. The basic idea behind economic voting is referred to as the reward-punishment hypothesis. This hypothesis holds that when the economy is good, voters will reward the incumbent with their vote. Conversely, when the economy is bad, voters will punish the incumbent by casting their vote for the challenger. Given the poor condition of the U.S. economy in the fall of 1980, Reagan wagered that voters would punish the Carter's administration on Election Day.

While Reagan certainly wasn't the first to believe that voters might consider economics when casting their vote, he asked the question at a pivotal point in the study of economic voting. At the time, scholars such as V. O. Key and Anthony Downs, had laid the foundations for the contemporary study of economic voting, but very few studies testing these theories had been published. Thus, political scientists had only tentative answers to many fundamental questions as to the precise nature of economic voting.

One of these questions concerns the direction of voters' gaze. Do voters assess the past economic performance of the government or do they look to the future? The idea that voters review the performance of the incumbent government is referred to as retrospective voting. President Reagan's quote above provides us with a neat example of a retrospective question, since the time reference is over the past four years. Retrospective economic voting theory has its origins in V.O. Key (1966, 61) and his argument about the electorate's crucial "role of appraiser of past events, past performance, and past actions. It judges retrospectively." Morris Fiorina (1981, 26) later applied Key's view, seeing "an electorate that treats elections…as referenda on the incumbent administration's handling of the economy."

But, do voters only consider the past? Anthony Downs (1957, 39) suggested that voters look to the future: "When a man votes, he is helping to select the government which will govern him during the coming election period….He makes his decision by comparing future performances he expects from the competing parties." The theory that voters look to the future and vote according to economic expectations is called prospective economic voting. Questions surrounding the importance of retrospective versus prospective voting weave their way through many of our reviewed studies of economic voting.

A second question in the economic voting literature deals with the types of economic conditions voters consider. The conventional wisdom among politicians and the public is that voters vote according to their pocketbook. We see this is Reagan's quote, as he asks "are you" rather than "is the nation" better off now than 4 years ago.[1] The theory of pocketbook voting says that when personal or household financial conditions have deteriorated, voters will punish the incumbent. If personal financial conditions have improved, voters will reward the incumbent. In the overwhelming majority of studies, researchers have found that instead of emphasizing personal finances, voters are much more likely to be considering the national economic situation when casting their vote. The theory that national economic conditions matter to individual vote choice is called sociotropic voting.

To measure sociotropic retrospective and prospective evaluations, survey items of the following general form are standard:

> Retrospective question: "Looking back over the past year, would you say the national economic situation has gotten worse, better, or stayed the same?"
>
> Prospective question: "Looking ahead to the next year, do you think the national economic situation will be worse, better, or stay the same?"

By substituting the words "national economic situation" with the words "personal financial situation" the questions will then tap into pocketbook voting. Surveys in democratic countries include these and other political questions that enable researchers to determine the impact that the economy has on vote choice relative to other factors.

Selection of Studies

The fundamental questions concerning economic voting have been studied and addressed in democracies around the globe. Today, the study of economic voting is in full-flower with approximately 400 books and articles published on the subject. Obviously, not all of these works can be discussed, or even mentioned, here. However, for readers interested in economic voting in specific countries not reviewed here, we provide a list of recent studies in endnote two.[2] And, as a further library aid, we refer readers to additional earlier reviews (Anderson 1995, ch. 3; Lewis-Beck 1988 chs. 2 and 3; Lewis-Beck and Paldam 2000; Lewis-Beck and Stegmaier 2000; Monroe 1984; Nannestad and Paldam 1994; Norpoth 1996).

Because these investigations have become so numerous, an organizing theme is doubly necessary. Our first step is to emphasize micro-level, survey research, at the expense of the macro-level, aggregate, time-series research. Besides reducing the workload, the strategy has an academic logic. The initial studies were macro-, examining economic growth, unemployment, inflation and the like (Frey and Garbers 1972; Goodhart and Bhansali 1970; Kramer 1971; Rosa and Amson 1976). These pioneering efforts suggested that voters strongly responded to the economy. But these results forced the ecological inference question: do voters really think and act this way, or is the aggregate finding simply spurious? The answer appeared to lie with investigation of individuals in election surveys.

Survey research of this sort has focused more on the U.S. case than any other. Hence we start with it, moving to the next most-studied cases, Britain and France. Next, multi-national studies from different regions of the democratic world are explicated. After this review, conclusions are drawn about the workings of economics on democratic vote choice, and suggestions are made for future research.

In selecting studies to discuss, we stress first-order elections, that is presidential or parliamentary elections, deeming them more important than second-order contests. With respect to theory, the ordering principle is the reward-punishment model of the economic vote. Accordingly, voters are held to vote for the incumbent in economic good times, and vote against the incumbent in economic bad times. There are minor variants on this notion of economic voting, but it is the classic reward-punishment scheme, and the likelihood of its existence, that gives the theory its interest and power. Indeed, the economic voting paradigm has come to rival other political behavior models – party identification, social cleavages, and issue voting. As we shall see below, it appears a worthy adversary.

The Most Studied Cases: The United States, Great Britain, and France

The United States

The retrospective economic voter hypothesis in the U.S. was thoroughly pursued in Kiewiet's (1983) seminal analyses of the 1960-1980 American National Election Studies (ANES). In these, and subsequent ANES studies, two items have received special attention. The first, a pocketbook item, concerns the individual's financial well-being. The second, a sociotropic item, concerns the economic conditions of the entire nation. Kiewiet's (1983, 35) finding, that pocketbook voting is weak in presidential elections, whereas sociotropic voting is strong, has continued to characterize survey research from subsequent elections (Alvarez and Nagler 1995, 1998; Kinder et al. 1989; Lanoue 1994).

Results from the 2004 U.S. presidential election suggest that sociotropic voting is alive and well. Bivariate analysis of the 2004 ANES shows that among those who thought the national economy was "better," about 87 percent said they voted for Bush. In contrast, among those who thought it was "worse," only 20 percent voted for Bush. This 67-percentage point difference implies that the economic effect can be quite large. Of course, this is only a preliminary, bivariate result. What do recent multivariate studies show? It is helpful to consider the model generally estimated. Here is a stylized version of the standard specification, across many studies.

Vote = economics + other issues + party identification + socioeconomic status controls

The investigations by Alvarez and Nagler (1995, 1998) on the 1992 and 1996 elections, respectively, conform to this general specification. They found powerful sociotropic effects, while finding no pocketbook effects. For example, in 1996, voters who saw the national economy as "better" were 38 percent more likely to vote for Clinton, when compared to those who saw it as "worse." Morover, this economic effect was greater than that of any issue studied (Alvarez and Nagler 1998, 1360-2). In his examination of the 2000 election, Norpoth (2004, 54) reports that the parameter estimate for the national economy "is strong." He further observes that, in that election, the economy ranked about the same in importance for voters as it had in 1992 and 1996 (Norpoth 2004, 53).

An important argument is that these reported strong economic effects exaggerate the true impact of the economy, because they are based on perceptions, which contain random and systematic error (Kramer 1983). To test this possibility, Markus (1988, 1992) measured the national economy objectively with election year Real Disposable Income (RDI). By grafting that measure to each respondent in a pooled analysis of the 1956-1988 ANES surveys, he found significant and strong RDI effects, with a one-percentage point increase expected to raise incumbent support 2.5 percent. Nadeau and Lewis-Beck (2001, 164) replicated this finding on an extended pool, 1956-1996. Further, they showed that a subjective measure of the national economy, a national business index (NBI), exercised a still stronger effect. For each election year, NBI equals the percent who said the economy was "better" minus the percent who said it was "worse." To illustrate, for 1996, "better" = 54.5%, worse = 26.5%, so NBI = 54.5 - 26.5 = 28. When NBI changes one standard deviation, the expected incumbent support changes 5.5%. (Nadeau and Lewis-Beck 2001, 165). They also explored other aspects of economic voting that we have not yet touched on: the time dimension and the institutional context.

Thus far, the assumption has been that economic voting is entirely retrospective. However, there are some scholars who have argued that voting is equally prospective, perhaps more so (Clarke and Stewart 1994; MacKuen, Erikson and Stimson 1992). Scattered evidence from different presidential election surveys suggests a prospective component exists. Fiorina (1981, 139) found that expectations about which party would better handle economic problems helped account for the 1976 presidential vote. Studying the 1984 election, Lewis-Beck (1988, 121) uncovered significant prospective effects, as did Lanoue (1994) for 1988. Lockerbie (1992), looking at 1956-1988 ANES surveys, decided that prospective effects exceed retrospective ones. Nadeau and Lewis-Beck (2001, 172-5), in their pooled analysis above, examined the impact of an Economic Future Index (EFI), equal to the percentage who think business conditions over the next 12 months will be "good" minus the percentage who think they will be "bad." Comparing coefficients, it has about the same impact as NBI.

In American presidential elections, then, it appears that economic voting can be prospective as well as retrospective. Moreover, these two components appear weighted, depending on whether or not the sitting president is running for re-election. When he runs, the economic vote is mostly retrospective. This makes good sense. Voters know that he has been president, and tend to hold him responsible for his economic record. However, when the party candidate is not the president himself, they tend not to hold him responsible, since he was obviously not in the driver's seat (Nadeau and Lewis-Beck 2001, 175). This was the case in 2000, when Al Gore, not Bill Clinton, was the candidate. Gore could not make much of the economic boom going into that contest, because he was not the incumbent president. (Norpoth 2004, makes this point quite well).

What we see is that the strength of economic voting can vary with the institutional and political context. This is not surprising, once we consider that the classic reward-punishment model rests psychologically on the attribution of responsibility. Whom do I praise or blame for economic performance? In U.S. presidential elections, it is more likely to be the sitting president, contrasted to a mere candidate from the president's party. Rudolph and Grant (2002) do show, in a special 2000 election survey, that respondents who specifically attributed economic responsibility to the president were much more likely to vote for Al Gore. However, in this contest, only 24.6 percent of the respondents were in that attribution group (Rudolph and Grant 2002, 811). The other groups attributed economic responsibility to business leaders, Congress, or the Federal Reserve. As the authors note, "The failure of Al Gore to garner more support was not due to the status of the economy, but to his inability to make the case that it was the Clinton-Gore administration that was responsible for the economy. Failure to do so meant that others received credit and Gore lost votes" (Rudolph and Grant 2002, 818).

As the above example reminds us, economic perceptions may be interactive, or heterogeneous. That is, while the typical elector has an average response to the economy, indicated by an additive regression coefficient, subgroups of electors may have a response different from the average, as indicated by a non-additive regression coefficient. The attribution group may not only affect the impact of sociotropic perceptions; it can also affect the relative importance of pocketbook versus sociotropic effects.[3] Nevertheless, the main point should not be lost: in study after study, presidential election after presidential election, strong sociotropic economic effects have manifested themselves in the general voting population. Further, of all issues facing the American electorate, economic ones are generally at the top of the list in terms of their impact on voter choice.

Great Britain

In Britain, scholars have the well-executed national British Election Study (BES) to investigate economic voting questions. The BES has been on-going for over 40 years, and its early investigators were attuned to the economic voting hypothesis. In the classic words of pioneers Butler and Stokes (1969, 392), "the electorate's response to the economy is one under which voters reward the Government for the conditions they welcome and punish the Government for the conditions they dislike." Their focus was especially on personal economic expectations for the future. They found that Conservative Government support "changed between the elections of

1959 and 1964 according to whether the individual sees his economic well-being as having improved or not …[in] a strong trend" (Butler and Stokes 1969, 403-4).

Of the subsequent investigations of the BES, the most comprehensive for our purposes is that of Sanders (2003), who examines the effects of party identification and economic perceptions in five separate general elections between 1974 and 1997. (But see also Alt 1979; Studlar, McAllister and Ascui 1990). Because of data availability, he limits himself to assessing the sociotropic retrospective variable, based on an item asking if national economic conditions have worsened or not over the last year. He finds, as expected, that "the governing party loses support among those voters who believe that economic conditions have worsened" (Sanders 2003, 261). For example, according to the 1974 logistic analysis, believing the economy has worsened doubled the odds of a vote for the Conservatives. Even restricting the samples to strong party identifiers, the sociotropic impact remains clear, and shows no relative deterioration over time. Specifically, examining the Conservative vote, the ratio of the party identification effect to the economic perception effect varies from about 3:1 to 4:1 across the series, beginning at 3.85 (in 1974) and ending at 3.85 (in 1997).

A vigorous tradition in British voting studies explores the impact of regional differences (McAllister and Studlar 1992). In terms of economic voting, a telling example comes from Johnston et al. (2000). They examine the role of local context on national retrospective economic voting in the 1997 general election. They find that, when the voter's neighborhood is perceived as less well off, or has relatively high unemployment, any positive sociotropic evaluation of the national economy is much reduced. On the basis of their logistic regressions, they conclude that there is "strong evidence of spatial variations in economic voting in England and Wales at the 1997 general election" (Johnston et al. 2000, 141).

Currently, the British Election Study (2001, 2005) seems especially vital. Clarke et al. (2004) recently published a thorough volume on the 2001 general election, <u>Political Choice in Britain</u>. This text, along with the venerable <u>Political Change in Britain</u> (Butler and Stokes 1969), nicely book-end 35 years of election survey research in Britain. Clarke et al. (2004, 83) note, as did their predecessors, that economics matters for British elections. The controversy rests with how, and how much.

Labour, as the ruling party, went into the 2001 election under economic blue skies. Unemployment and inflation rates were low, at just over three percent, and interest rates were falling. The perceptual data from the 2001 BES reflect these positive economic indicators: 70

percent saw the economic past as the "same or better," and 68 percent saw the economic future as the "same or better" (Clarke et al. 2004, 84-5). Further, as an issue priority, economics ranked second after the National Health Service (Clarke et al. 2004, 90). In attempting to explain vote choice for or against Labour, the authors posit the following competing models: socio-demographic, party identification, issue-proximity, economic voting, issue performance, and feelings about party leaders. In terms of fit, the economic voting model does better than all but the party identification and party leader models (Clarke et al. 2004, 104).

The authors blend these rival models into a composite model. The estimation, of Labour vs. opposition vote, correctly classifies 87.6 percent of the choices (Clarke et al. 2004, Table 4.10). Interestingly, the pocketbook variables, both retrospective and prospective, cease to be significant. The national economy variables, both retrospective and prospective, remain significant, and carry coefficients of almost equal magnitude. Given the rigorous controls, this much strengthens the case that British economic voters are prospective as well as retrospective. Further, the potency of the general judgments about the national economy supports an old notion from Butler and Stokes (1969, 391), who seemed to see such judgments as catchall expressions of economic particulars: "the dominant mode of popular response to economic goals seems to be one that approves at the same time of full employment, larger pay packets, stable prices, and … a strong currency and balanced international payments." In other words, the standard sociotropic items are well-phrased, capturing the many rivulets of the complex modern economy.

In terms of vote probabilities, the effect of a perceptual shift in national economic conditions, prospective or retrospective, is almost as great as a shift to a Labour party identification (Clarke et al. 2004, 113). In addition, investigation of the influences on party leader images reveals indirect effects of economic perceptions. Overall, the Clarke et al. (2004, 123) conclusion seems incontestable: "reactions to the economy had substantial effects on electoral choice in 2001." Further, their careful work caps the more general point: economic issues figured prominently in shaping the British voter's decision.

France

The French example would seem to offer an especially good test of the economic voting idea, because of the uniqueness and complexity of its political system. It has many parties, a dual executive, and two rounds of balloting. One might easily imagine that, under such rules, the economic signal would be lost before reaching the ballot box. But such is not the case, as numerous studies have shown.

Election surveys have a long tradition in France, and explanations of declared voter preference are vigorously pursued. (On recent elections, see Boy and Mayer 1993, 1997; Cautrès and Mayer 2004). Alas, a full battery of economic perception questions has not been regularly posed. However, when they have been, the results merit attention. Further, these results can be supplemented by judicious use of the Euro-Barometer data, as seen below.

The first micro-study of economics and the French voter examined economic perception items in the Euro-Barometer, 1970-1978 (Lewis-Beck 1983). When these disparate 55 items are correlated with left-right vote intention, average r = .20 (Lewis-Beck 1983, 350). In regression models predicting left-right legislative vote in 1973 and 1978, personal and collective economic items reach statistical significance, in the face of strong controls on ideology, class, religion, and region (Lewis-Beck 1983, 356).

A follow-up study fielded a full battery of economic items in certain of the 1983 and 1984 Euro-Barometers, France included. An idealized model of legislative vote intention (incumbent vs. opposition), with only economic perceptions as predictor variables, was initially postulated, yielding a respectable percentage of variance explained (Lewis-Beck 1988, 56). A fully specified single-equation model, including class, religion, and ideology as controls, demonstrated statistically significant effects from national retrospective and prospective items (not to mention an item on economic anger). Interestingly, no retrospective pocketbook effects were revealed (Lewis-Beck 1988, 56, 82). A general finding – significant retrospective sociotropic effects, but no retrospective pocketbook effects, has persisted across subsequent studies, to which we now turn.

The first serious battery of economic questions was administered in the 1995 French National Election Studies (FNES). At the bivariate level, the economic voting hypothesis appeared promising in these 1995 data. For example, among those who saw a brighter economic future, 72 percent expressed a second-round presidential preference for Chirac, in contrast to only 18 percent among those who saw a dark economic future. Analyzing economic effects on the first presidential ballot via a logistic regression, Lewis-Beck (1997) established there was an economic vote, more sociotropic than personal, and prospective as well as retrospective. He further showed that French economic voters were more sophisticated than naïve. First, economic perceptions tended to influence only votes for major party candidates. The French voter, rightly, did not attribute economic responsibility to lesser parties, such as the Ecologists, and so did not vote for them on those grounds. Second, voters did not vote against Jospin if they perceived a deteriorating economy, even though he was the candidate of Socialist president Mitterrand. Instead, they voted against the incumbent Prime Minister Balladur, whom they rightly perceived as in charge of the economy, under conditions of cohabitation (Prime Minister and President of different parties).

Lewis-Beck and Nadeau (2000) generally pursue French economic voting in the face of systematically changing institutional conditions such as cohabitation, election type, and ballot order. The following is a widely-agreed upon, baseline specification of the vote choice in French national elections:

Vote = class + religion + left-right ideology + economics

In their regression estimations, Lewis-Beck and Nadeau modify this specification to incorporate cohabitation effects in conjunction with economic effects. Thus, focus is on coefficients for these independent variables: retrospective sociotropic evaluation, retrospective sociotropic evaluation times (x) cohabitation. The dependent variable is incumbent vote (Prime Minister party vs. not), and the data are a pool of eight Euro-Barometer surveys 1984-1994. According to the results, under cohabitation, the impact of the economic vote is cut in half. French voters see the Prime Minister as primarily responsible for running the economy, and reward or punish him (or her) accordingly. However, they also recognize that, failing unity with the President, economic power is inevitably diluted, so they punish less.

Analysis of surveys from the 1988 and 1995 presidential elections, both occurring under cohabitation, exposes more economic voting dynamics (Lewis-Beck and Nadeau 2000, 177-80). First, economic voting is stronger in presidential elections than in legislative contests. Second, in presidential contests, perceived economic gains enhanced the vote for candidates from the Prime Minister's party coalition (not the President's), as voters held it economically responsible. Finally, economic voting in presidential contests is greater when, on the second ballot, one of the candidates is the Prime Minister. In that case, that candidate has an actual economic track record in office, and voters are more willing and able to attribute blame or praise.

Repeated survey analyses of national elections in Fifth Republic France manifest strong and complex patterns of economic voting. It is largely sociotropic and more or less equally retrospective or prospective, depending in part on the institutional context. The French voter is sophisticated, knowing whom and how much to blame. When government is unified, the president is the lightening rod for economic discontent. However, under cohabitation, the burden shifts to the prime minister. Smaller parties are blamed less than large parties, legislative candidates are blamed less than presidential candidates, and presidential candidates who are prime minister are blamed more than presidential candidates who are not prime minister. These dynamics illustrate how powerful the economic pulse can be in guiding the elector across complex political waters.

Comparing Democracies: Cross-National Studies

Thus far, we have considered single-country studies. There are, however, a growing number of studies that examine multiple countries. The following aggregate-level pooled analyses, on nation-samples from different parts of the world, have all found important economic voting effects: Lewis-Beck and Mitchell (1990), on the five major Western European countries; Chappell and Veiga (2000), on 13 Western European nations; Pacek (1994) and Tucker (2001) on Central European samples; Remmer (1991) on 12 Latin American countries; Pacek and Radcliff (1995) on eight low-income nations; Wilkin et al. (1997) on a world-wide sample of countries. While generally positive, the findings were not always so (Paldam 1991).

Further, the results are not always consistent across countries. Lewis-Beck (1988) found that economic voting strength descended in this order: Britain, Spain, Germany, France, and Italy. He argued the main reason was "coalitional complexity" (Lewis-Beck 1988, 105). For example, for Britain the incumbent was one party, for Italy it was five. The more parties in the incumbent coalition, the more "diffusion of government responsibility" (Lewis-Beck 1986, 341). In other words, when responsibility for managing the economy is less clear, it is harder for the voter to attach blame, and the economic vote is diluted.

The clarity of responsibility hypothesis has received fullest attention in the work of Powell and Whitten (1993), in their investigation of 19 industrial democracies, 1969-1988. They argue that if "the legislative rules, the political control of different institutions, and the lack of cohesion of the government all encourage more influence for the political opposition, voters will be less likely to punish the government for poor performance of the economy. Responsibility for that performance will simply be less clear" (Powell and Whitten 1993, 393). To assess the political context, they look at five indicators: voting cohesion of governing parties, formation of the committee system, opposition from the upper chamber, minority government, and coalition government. They find that, in countries where the assignment of government responsibility is made unclear, there are no significant economic effects on the vote, in contrast to strongly significant economic effects where responsibility is clear.

Other pooled analyses on nations have demonstrated that the electoral impact of economics depends on political or institutional context. First is the replication of the above result, with 40 new cases and clarity of responsibility measures refined (Whitten and Palmer 1999). Second, these works have begun to extend beyond Western Europe. Roberts and Wibbels (1999) investigate 16 Latin American nations across the 1980s and 1990s, reporting that the impact of economics depends on election type. Samuels (2004) looking at a mostly Latin American sample, finds the institutions of presidentialism affect the strength of the economic vote. Benton (2005), in a comparative analysis of 13 Latin American countries, discovers that when electoral laws are more restrictive, economic voting is heightened.

The foregoing studies suggest strongly that political institutions and context condition the economic vote. Nevertheless, since all these studies are aggregate, they can be no more than suggestive. To confirm these conditional effects, we need to explore comparative analyses of individual-level electoral surveys. The first comparative survey examination of the economic vote was done by Lewis-Beck (1986, 1988). He analyzed economic voting in Britain, France, Germany, Italy, and Spain, examining simple hypotheses on the differing findings from survey to survey; however, he never pooled them into one data-set (Lewis-Beck 1988, ch. 7). There are some relevant fully pooled survey studies, and they are reviewed below.

Anderson (2000) examines the impact of political context on economic voting, in a pool of 13 European country surveys, from the 1994 Euro-Barometer. The dependent variable of principal interest is incumbent vote (for any of the parties in the coalition) versus otherwise. The independent economic variables are retrospective pocketbook and retrospective sociotropic, with controls on ideology, religiosity, and social class. Political context variables include Powell and Whitten's (1993) clarity of responsibility index, strength of the governing party, and number of available alternatives. He shows that sociotropic voting is consistently enhanced by political context, such as clarity of responsibility, governing party strength, and a small number of parties. He concludes that, "Taken together, these findings suggest that voters' ability to express discontent with economic performance is enhanced when accountability is simple. 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).

Nadeau et al. (2002) extend Anderson's analysis in space and time, looking at a pooled cross-sectional time series of eight countries surveyed in the 1976-1992 Euro-Barometers. They elaborate the clarity of responsibility measure, including the long-term cross-national institutional components of Powell and Whitten (1993), as well as short-term components that can vary within a country, such as number of parties in the ruling coalition and longevity of government. The dependent variable, in logistic regression analyses, is the dichotomy of vote for (or against) a party in government. Control variables are left-right self-placement, and a socioeconomic status battery. The economic measure comes from the standard retrospective sociotropic item, aggregated into an index assigned to each respondent, in a manner similar to that followed by Nadeau and Lewis-Beck (2001) in their pooled analysis of the ANES.

They find here that economic voting is stronger where there is more clarity of responsibility, which can vary within a country as well as across countries. In the high clarity countries -- Britain, France, Ireland, Germany -- "economic evaluations are a moderately strong force on intended vote….In the remaining countries [Denmark, The Netherlands, Belgium, Italy], economic evaluations…make a much smaller contribution" (Nadeau et al. 2002, 414-5). However, "[e]ven in those countries where clarity of responsibility for governmental action tends, on average, to be low, voters will, under propitious conditions, credit or blame the government for the economic situation" (Nadeau et al. 2002, 418-9). In other words, economic voting as a government sanction is always possible.

The above investigations have looked at political context. Hellweg (2001) looks at economic context, tying the political economy literature on globalization to the economic voting question. Because of globalization, that is, international economic integration, governments are less able to manage their national economics. Therefore, as electorates perceive this, we should expect to see less economic voting. He looks at a pool of nine national surveys, from the Comparative Study of Electoral Systems data (1999). The dependent variable is vote intention for the incumbent (versus otherwise). The economic perception item is the standard sociotropic retrospective one, and there are controls on ideology and socioeconomic status. Globalization of a nation is operationalized with export and import dollars as a proportion of GDP. When this variable is assigned to each respondent and interacted with the sociotropic variable, one observes the expected result, i.e., there is a significant decrease in economic voting in the face of more open trade.

Summary and Conclusions

According to Lewis-Beck (1988, 162), "the generalization of the economic voting model across nations" was "ripe for challenge." The review at hand roundly refutes that challenge, showing the robustness of economic voting theory, regardless of national democratic setting. It is not important whether the democracy is much-studied or little-studied, resilient or fragile, the economy reliably moves voters to hold their government accountable in national elections. When they see prosperity, they give support. When they see business conditions in decline, they withdraw support. This reward-punishment pattern can be counted on, election after election, country after country.

How strong are these effects on individual voters? There are different ways to answer. When sociotropic assessments change from "better" to "worse," reported vote probability shifts are never trivial and are sometimes quite strong. Even when the probability shift is small, cumulatively it can generate a critical increase or decrease in the aggregate electoral share for the incumbent. Economic opinion can be decisive, for it is short-term and can seriously change, unlike more inertial forces. Compared to other issues, it regularly produces a stronger structural impact, as measured by its regression coefficients. Further, it is the rare election where economic matters are not at the top of the public's political agenda. This is not surprising given it is a valence issue (Stokes 1992). No one opposes prosperity. Its valence strength allows it to rival, even occasionally surpass, in importance other factors, such as party identification or social cleavages.

How does economic voting work? The outline is simple enough. First, voters attribute to the incumbent responsibility for managing the economy. Second, they judge economic conditions. Third, they blame or praise accordingly with their vote. Slight variation in the process can occur at any of these decision points. Voters may define the political economic incumbent differently, for example, prime minister, president, or legislature. They may have differing assessments of economic conditions, for example, some may see things as better, others worse. They may vary in the intensity of their blame; for example, workers might react more strongly to recession (Weatherford, 1978). Such variations in the reasoning chain, when systematically linked to identifiable psychological or sociological groups, expose heterogeneity in economic voting. Trust, individualism, sophistication, education, and gender have all been found, at least at certain times, to condition the economic vote.

Just as group membership can condition the economic vote, so can political context. It has enduring aspects, mostly from institutions, and malleable aspects, mostly from the game of politics. The essentially fixed, institutional features of a polity, often written in the constitution or standing legislation– term definitions, power divisions, electoral laws, ballot rules, election type – can alter the direction and weight of the economic vote. The fluctuating, short-run concerns of politics –composition of the ruling coalition, opposition strength, multiparty dynamics, government time in office – also impact the economic vote. Besides the political context, there is the economic context, of which globalization is but one example. These contextual variables vary across nations and within nations, ever-shaping the economic vote coefficient. In democracies, economic currents sway electors, forging new streams as context dictates, arriving at the ballot box as the river arrives at the sea.

When voters look at the economy, what aspects are relevant? They may look directly or indirectly at a host of formal indices, such as the GDP growth rate, and informal indicators, such as their own pocketbook. In general, voters observe several indices, weigh them, and make a summary economic judgment. In these evaluations, the nation consistently appears as a more important object of evaluation than lower political units, e.g., states and counties, or lower social units, e.g., the neighborhood and the individual. These summary judgments are not totally unrelated to objective measures of the economy. On the contrary, when this question has been studied, subjective assessments are found predictive of objective assessments. Take our leading examples, of the U.S., Britain, and France. Subjective national economic assessments, when aggregated, correlate very highly with standard macroeconomic indicators of growth, inflation, and unemployment (see respectively, Nadeau and Lewis-Beck 2001; Sanders 2000; Bélanger and Lewis-Beck 2004, 232-4).

While economic voters give emphasis to the well-being of the nation, their gaze may be retrospective, prospective, or a mix of the two, depending in part on the political context. When the incumbent party candidate has a clear track record, presumably from having served a term or two, past considerations weigh more heavily. In contrast, when the incumbent party candidate has an ambiguous track record, economic voting is more likely to be prospective.

In terms of future survey research on economic voting, we believe three general areas deserve special attention: the composition of sociotropic perceptions, the modeling of economic effects, and the stability of the economic vote. We consider each of these, in turn, beginning with the first. What information on the economy do voters have? There is work here, which serves as a beginning (Blendon et al. 1997; Holbrook and Garand 1996; Sanders 2000). And, we need to know more about how they weigh the information in arriving at their summary judgment of the national economy. We know little at the individual-level about the particular subjective and objective economic assessments that feed into the voter's overall evaluation of the economy.

We would expect these components to change over time, in part because of how the media "frames" economic news (Behr and Iyengar 1985; Goidel and Langley 1995; Haller and Norpoth 1997; Hetherington 1996; Mutz 1994). As job insecurity and income inequality continue to rise, in fact and in media reports, national economic performance could change from a consensus issue to a conflict issue. That is, economic voters might become focused on growth in their particular share of the pie, rather than growth of the whole pie, as now. (There is some indirect evidence for this, in the effects of the "jobs" variable in the forecast of current U.S. elections; see Lewis-Beck and Tien 2004). In such a circumstance, the impact of the standard sociotropic measures would decline, and distributional measures would have to take their place.

With respect to modeling, economic perceptions routinely manage statistical significance, even in the face of controlling, or over-controlling. The single-equation format, followed by almost all practitioners in this field, poses collinearity risks that need to be recognized. One possible solution moves to a multi-equation format. Another, perhaps preferable, solution gives more attention to verifying the exogenous status of the independent variables. Worry has been expressed that the economic perception variables are endogenous, in part determined by partisanship (Anderson et al. 2004; Evans 1999; Evans and Andersen 2006; Wlezien et al. 1997). A first step, of course, is to include partisan variables as controls, but that is only a first step. It may be necessary to exogenize the economic perception variables by some sort of instrumental variables procedure. More importantly, the partisan variables may need to be made exogenous, on the grounds that they are absorbing too much variance explained and suppressing the economic effects (Lewis-Beck 2006). This seems to be the logic Fiorina (1981, 170) employed, when he lagged party identification and converted it into an instrument, before estimating economic effects. His more or less forgotten exercise suggests that panel data, rather than cross-sectional data, are the way out of this endogeneity-exogeneity dilemma.

Once the exogeneity of the independent variables has been assured, the analyst can better focus on the key question of the impact of the economic issue, relative to other issues. In his analysis of the major Western European democracies, Lewis-Beck (1988, 160) concluded that economics provided the "premier issue set." Alvarez and Nagler (1995, 1998) and Alvarez, Nagler and Bowler (2000) make much the same argument for the U.S. and Britain. In terms of "issue voting" models, the expectation is that economics can be demonstrated generally to be the top issue for the electorate, both in terms of rank and structural effect. Already, in the studies at hand, it has been shown a respectable rival to partisan identification, in terms of impact. As the exogeneity issues come to be resolved, it may appear in even closer competition.

Some have questioned the value, not to say the reality, of the economic voting hypothesis, because of the instability of coefficients across studies. First, recall that even the parameter estimates from the anchoring variables of social cleavage and party identification have varied from election to election without diminishing their acknowledged importance in models of democratic vote choice. Second, the findings reviewed here suggest the instability of the economic vote is more apparent, a product of neglecting contextual effects. Once the long-term institutional or the short-term political framework is modeled, the economic coefficients settle down in understandable ways. For example, effects are predictably larger in presidential elections, compared to legislative contests, predictably smaller when the ruling government is multi-party rather than single party. Third, among issue variables, economics must inherently produce more stable coefficients than most, because it is the central valence issue of domestic democratic politics. Just as everyone wants peace abroad, they want prosperity at home. When governments fail to deliver on that economic promise, citizens hold them accountable.

References

Allen, M. W. 2000. Self-interest, economic beliefs, and political party preference in New Zealand. Political Psychology, 21(2): 323-45.

Alt, J. 1979. The Politics of Economic Decline. Cambridge: Cambridge University Press.

Alvarez, R. M. and Nagler, J. 1995. Economics, issues and the Perot candidacy: voter choice in the 1992 presidential elections. American Journal of Political Science, 39: 714-44.

____________. 1998. Economics, entitlements, and social issues: voter choice in the 1996 presidential election. American Journal of Political Science, 42: 1349-63.

Alvarez, R. M., Nagler, J. and Bowler, S. 2000. Issues, economics, and the dynamics of multiparty elections: the British 1987 general election. American Political Science Review, 94(1): 131-49.

Anderson, C. J. 1995. Blaming the Government: Citizens and the Economy in Five European Democracies. Armonk, NY: M.E. Sharpe

____________. 2000. Economic voting and political context: a comparative perspective. Electoral Studies, 19: 151-70.

Anderson, C. J., Mendes, S. M. and Tverdova, Y. 2004. Endogenous economic voting: evidence from the 1997 British election. Electoral Studies, 23: 683-708.

Anderson, L., Lewis-Beck, M. S. and Stegmaier, M. 2003. Post-socialist democratization: a comparative political economy model of the vote for Hungary and Nicaragua. Electoral Studies, 22: 469-84.

Behr, R. and Iyengar, S. 1985. Television news, real-world cues, and changes in the public agenda. Public Opinion Quarterly, 49: 38-57.

Bélanger, É and Lewis-Beck, M. S. 2004. National economic voting in France: Objective versus subjective measures. Pp. 231-42 in The French Voter: Before and After the 2002 Elections, ed. M. S. Lewis-Beck. New York: Palgrave Macmillan.

Bellucci, P. 2002. From class voting to economic voting: patterns of individualization of electoral behavior in Italy, 1997-1996. Pp. 261-83 in Economic Voting, eds. H. Dorussen and M. Taylor. New York: Routledge.

Benton, A. L. 2005. Dissatisfied democrats or retrospective voters? Economic hardship, political institutions, and voting behavior in Latin America. Comparative Political Studies, 38(4): 417-42.

Bielasiak, J. and Blunck, D. 2002. Past and present in transitional voting: electoral choices in post-communist Poland. Party Politics, 8: 563-85.

Blais, A., Nadeau, R., Gidengil, E. and Nevitte, N. 2002. The impact of issues and the economy in the 1997 Canadian federal election. Canadian Journal of Political Science, 35: 409-21.

Blendon, R. J., Benson, J. M., Brodie, M., Morin, R., Altman, D. E., Gitterman, D., Brossard, M. and James M. 1997. Bridging the gap between the public's and economists' views of the economy. Journal of Economic Perspectives, 11(3): 105-18.

Borre, O. 1997. Economic voting in Danish electoral surveys 1987-1994. Scandinavian Political Studies, 20(4): 347-365.

Boy, D. and Mayer, N. 1993. The French Voter Decides. Ann Arbor, MI: University of Michigan Press.

_________________. 1997. L'Électeur a Ses Raisons. Paris: Presses de Sciences Politiques.

Butler, D. and Stokes, D. 1969. Political Change in Britain: Forces Shaping Electoral Choice. New York: St. Martin's Press.

Canton, D. and Jorrat, J. R. 2002. Economic evaluations, partisanship, and social bases of presidential voting in Argentina, 1995 and 1999. International Journal of Public Opinion Research, 14(4): 413-27.

Cautrès, B. and Mayer, N. 2004. Le nouveau désordre électoral, les leçons du 21 avril 2002. Paris: Presses de Sciences Politiques.

Chappell, H. W., Jr. and Veiga, L. G. 2000. Economics and elections in Western Europe: 1960-1997. Electoral Studies, 19: 183-97.

Clarke, H., Sanders, D., Stewart, M. C. and Whiteley, P. 2004. Political Choice in Britain. Oxford: Oxford University Press.

Clarke, H. and Stewart, M. 1994. Prospections, retrospections, and rationality: the 'bankers' model of presidential approval. American Journal of Political Science, 38: 104-23.

Colton, T. J. 1996. Economics and voting in Russia. Post-Soviet Affairs, 12(4): 289-317.

Domínguez, J. I. and McCann, J. A. 1995. Shaping Mexico's political arena: the construction of partisan cleavages in the 1988 and 1991 national elections. American Political Science Review. 89: 34-48.

Downs, A. 1957. An Economic Theory of Democracy. New York: Harper and Row.

Evans, G. 1999. Economics and politics revisited: exploring the decline in Conservative support, 1992-1995. Political Studies, 47: 139-51.

Evans, G. and Andersen, R. 2006 forthcoming. The political conditioning of economic perceptions. Journal of Politics.

Feldman, S. 1982. Economic self-interest and political behavior. American Journal of Political Science, 26: 446-66.
Fiorina, M. 1981. Retrospective Voting in American National Elections. New Haven: Yale University Press.
Fraile, M. 2002. The retrospective voter in Spain during the 1990s. Pp. 284-302 in Economic Voting, eds. H. Dorussen and M. Taylor. New York: Routledge.
Frey, B. S. and Grabers, H. 1972. Der Einfluss wirtschaftlicher variabler auf die popularität der regierung – eine empirische analyse. Jahrbücher für Nationalökonomie und Statistik, 186: 281-95.
Fröchling, H. 1998. Ökonomie und Wahlen in Westlichen Demokratien: Ein Vergleichende Rational-Choice-Analyse. Weisbaden: Germany: Westdeutscher Verlag.
Goidel, R. K. and Langley, R. E. 1995. Media coverage of the economy and aggregate economic evaluations: uncovering evidence of indirect media effects. Political Research Quarterly, 48: 313-28.
Gomez, B. T. and Wilson, J. M. 2001. Political sophistication and economic voting in the American electorate: a theory of heterogeneous attribution. American Journal of Political Science, 45(4): 899-914.
Goodhart, C. A. E. and Bhansali, R. J. 1970. Political economy. Political Studies, 18: 43-106.
Haller, H. B. and Norpoth, H. 1997. Reality bites: news exposure and economic opinion. Public Opinion Quarterly, 61: 555-75.
Hellwig, T. T. 2001. Interdependence, government constraints, and economic voting. Journal of Politics, 63(4): 1141-62.
Hetherington, M. 1996. The media's role in forming voters national economic evaluations in 1992. American Journal of Political Science, 40: 372-95.
Holbrook, T. and Garand, J. 1996. Homo economus? Economic information and economic voting. Political Research Quarterly, 49: 351-75.
Hsien, J. F., Lacy, D. and Niou, E. M. S. 1998. Retrospective and prospective voting in a one-party-dominant democracy: Taiwan's 1996 presidential election. Public Choice, 97: 383-99.
Irwin, G. and van Holsteyn, J. 1997. Where to go from here? Revamping electoral politics in the Netherlands. West European Politics, 20(2): 93-118.
Johnston, R., Pattie, C., Dorling, D., MacAllister, I., Tunstall, H. and Rossiter, D. 2000. Local context, retrospective economic evaluations, and voting: the 1997 general election in England and Wales. Political Behavior, 22(2): 121-43.
Key, V. O. 1966. The Responsible Electorate. New York: Vintage.
Kiewiet, D. R. 1983. Macroeconomics and Micropolitics: The Electoral Effects of Economic Issues. Chicago: University of Chicago Press.
Kinder, D., Adams, G. and Gronke, P. W. 1989. Economics and politics in the 1984 American presidential election. American Journal of Political Science, 33: 491-515.
Kramer, G. 1971. Short-term fluctuations in U.S. voting behavior, 1896-1964. American Political Science Review, 65: 131-43.
___________. 1983. The ecological fallacy revisited: aggregate- versus individual-level findings on economics and elections, and sociotropic voting. American Political Science Review, 77: 92-111.
Lanoue, D. J. 1994. Retrospective and prospective voting in presidential-year elections. Political Research Quarterly, 47: 193-205.
Lewis-Beck, M. S. 1983. Economics and the French voter: a microanalysis. Public Opinion Quarterly, 47: 347-60.

__________________. 1986. Comparative economic voting: Britain, France, Germany, Italy. American Journal of Political Science, 30: 315-46.

__________________. 1988. Economics and Elections: The Major Western Democracies. Ann Arbor: University of Michigan Press.

__________________. 1997. Le Vote du 'Porte-Monnie' en Question. In Boy and Mayer 1997: 239-61.

__________________. 2006 forthcoming. Does economics still matter: econometrics and the vote. Journal of Politics.

Lewis-Beck, M. S. and Mitchell, G. 1990. Modelos transnacionales de voto economico: estudio de un conjunto de paises europeos. Revista del Instituto de Estudios Economicos, 4: 65-81.

Lewis-Beck, M. S. and Nadeau, R. 2000. French electoral institutions and the economic vote. Electoral Studies, 19: 171-182.

Lewis-Beck, M. S. and Paldam, M. 2000. Economic voting: an introduction. Electoral Studies, 19: 113-21.

Lewis-Beck, M. S. and Stegmaier, M. 2000. Economic determinants of electoral outcomes. Annual Review of Political Science, 3: 183-219.

Lewis-Beck, M. S. and Tien, C. 2004. Jobs and the job of president: a forecast for 2004. PS: Political Science and Politics, 37: 753-58.

Lockerbie, B. 1992. Prospective voting in presidential elections, 1956-1988. American Politics Quarterly, 20: 308-25.

MacKuen, M., Erikson, R. and Stimson, J. 1992. Peasants or bankers? The American electorate and the U.S. economy. American Political Science Review, 86: 597-611.

Markus, G. 1988. The impact of personal and national economic conditions on the presidential vote: a pooled cross-sectional analysis. American Journal of Political Science, 32: 137-54.

________________. 1992. The impact of personal and national economic conditions on presidential voting, 1956-1988. American Journal of Political Science, 36: 829-34.

McAllister, I. and Studlar, D. T. 1992. Region and voting in Britain, 1979-87: territorial polarization or artefact? American Journal of Political Science, 36(1): 168-99.

Monroe, K. R. 1984. Presidential Popularity and the Economy. New York: Praeger.

Mughan, A., Bean, C. and McAllister, I. 2003. Economic globalization, job insecurity and the populist reaction. Electoral Studies, 22: 617-33.

Mutz, D. 1994. Contextualizing personal experience: the role of the mass media. Journal of Politics, 56: 689-715.

Nadeau, R. and Lewis-Beck, M. S. 2001. National economic voting in U.S. presidential elections. Journal of Politics, 63: 159-81.

Nadeau, R., Niemi, R. G. and Yoshinaka, A. 2002. A cross-national analysis of economic voting: taking account of the political context across time and nations. Electoral Studies, 21: 403-23.

Nannestad, P. and Paldam, M. 1994. The VP function: a survey of the literature on vote and popularity functions after 25 years. Public Choice, 79: 213-45.

Nannestad, P., Paldam, M. and Rosholm, M. 2003. System change and economic evaluations: a study of immigrants and natives in Israel. Electoral Studies, 22:485-501.

Norpoth, H. 1996. The economy. In Comparing Democracies: Elections and Voting in Global Perspective. eds. L. LeDuc, R. G. Niemi and P. Norris. Thousand Oaks, CA: Sage, 299-318.

________________. 2004. Bush v. Gore: the recount of economic voting. Pp. 49-64 in Models of Voting in Presidential Elections, eds. H. F. Weisberg and C. Wilcox. Stanford: Stanford University Press.

Pacek, A. C. 1994. Macroeconomic conditions and electoral politics in East Central Europe. American Journal of Political Science, 38: 723-44.

Pacek, A.C. and Radcliff, B. 1995. Political economy of competitive elections in the developing world. American Journal of Political Science, 39: 745-59.

Paldam, M. 1991. How robust is the vote function? A study of seventeen nations over four decades. Pp. 9-31 in Economics and Politics: The Calculus of Support, eds. H. Norpoth, M. S. Lewis-Beck and J. D. Lafay. Ann Arbor: University of Michigan Press.

Posner, D. N. and Simon, D. J. 2002. Economic conditions and incumbent support in Africa's new democracies: evidence from Zambia. Comparative Political Studies, 35(3): 313-36.

Powell, G. B. and Whitten, G. D. 1993. A cross-national analysis of economic voting: taking account of the political context. American Journal of Political Science, 37: 391-414.

Remmer, K. L. 1991. The political impact of economic crisis in Latin America in the 1980s. American Political Science Review, 85: 777-800.

Roberts, K. M. and Wibbels, E. 1999. Party systems and electoral volatility in Latin America: a test of economic institutional, and structural explanations. American Political Science Review, 93(3): 575-90.

Rosa, J. J. and Amson, D. 1976. Conditions économiques et elections: une analyse politico-économetrique (1920-1973). Revue Française de Science Politique, 26: 1101-24.

Rudolph, T. J. and Grant, J. T. 2002. An attributional model of economic voting: evidence from the 2000 presidential election. Political Research Quarterly, 55(4): 805-23.

Samuels, D. 2004. Presidentialism and accountability for the economy in comparative perspective. American Polticial Science Review, 98: 425-36.

Sanders, D. 2000. The real economy and the perceived economy in popularity functions: how much do the voters need to know?: A study of British data, 1974-97. Electoral Studies, 19: 275-94.

_____________. 2003. Party identification, economic perceptions, and voting in British general elections, 1974-97. Electoral Studies, 22: 239-63.

Seligson, M. A. and Gomez, M. 1989. Ordinary elections in extraordinary times: the political economy of voting in Costa Rica. Pp. 158-84 in Elections and Democracy in Central America, eds. J. A. Booth and M. A. Seligson. Chapel Hill: University of North Carolina Press.

Stokes, D. E. 1992. Valence politics. Pp. 141-62 in Electoral Politics, ed. D. Kavanagh. Oxford: Clarendon Press.

Studlar, D. T., McAllister, I. and Ascui, A. 1990. Privatization and the British electorate: microeconomic policies, macroeconomic evaluations, and party support. American Journal of Political Science, 34: 1077-101.

Tucker, J. A. 2001. Economic conditions and the vote for incumbent parties in Russia, Poland, Hungary, Slovakia, and the Czech Republic from 1990 to 1996. Post-Soviet Affairs, 17(4): 309-31.

Weatherford, M. S. 1978. Economic conditions and electoral outcomes: class differences in the political response to recession. American Journal of Political Science, 22: 917-38.

Welch, S. and Hibbing, J. 1992. Financial conditions, gender, and voting in American national elections. Journal of Politics, 54: 197-213.

Whiteley, P. F. 2005. Forecasting seats from votes in British general elections. British Journal of Political Science and International Relations, 7(2): 165-73.

Whitten, G. D. and Palmer, H. D. 1999. Cross-national analyses of economic voting. Electoral Studies, 18: 49-67.

Wilkin, S., Haller, B. and Norporth, H. 1997. From Argentina to Zambia: a world-wide test of economic voting. Electoral Studies, 16: 301-16.

Wlezien, C., Franklin, M. and Twiggs, D. 1997. Economic perceptions and vote choice: disentangling the endogeneity. Political Behavior, 19(1): 7-17.

Youde, J. 2005. Economics and government popularity in Ghana. Electoral Studies, 24: 1-16.

Endnotes

[1] In expanding on this question, Reagan mentions not only personal economic conditions, but also the national unemployment rate (a sociotropic consideration) as well as non-economic issues. The Commission on Presidential Debates website contains the full text of the debate: http://www.debates.org/

[2] Survey research has examined economic voting in many democracies other than those covered in this chapter. Here we offer one recent study for a sampling of countries not reviewed in this article: Argentina (Canton and Jorrat 2002); Australia (Mughan et al. 2003); Canada (Blais et al. 2002); Costa Rica (Seligson and Gomez 1989); Denmark (Borre 1997); Germany (Fröchling 1998); Ghana (Youde 2005); Hungary (Anderson et al. 2003); Israel (Nannestad et al. 2003); Italy (Bellucci 2002); Mexico (Domínguez and McCann 1995); Netherlands (Irwin and van Holsteyn 1997); New Zealand (Allen 2000); Nicaragua (Anderson et al. 2003); Poland (Bielasiak and Blunck 2002); Russia (Colton 1996); Spain (Fraile 2002); Taiwan (Hsien et al. 1998); and Zambia (Posner and Simon 2002).

[3] For examples of heterogeneity in US economic voting see: Weatherford (1978); Feldman (1982); Welch and Hibbing (1992); Gomez and Wilson (2001).