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Michael S. Lewis-Beck University of Iowa, michael-lewis-beck@uiowa.edu

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# Does Economics Still Matter? Econometrics and the Vote

# Michael S. Lewis-Beck University of Iowa

Evans and Andersen make the provocative argument that the effects of economic perceptions on political support are greatly exaggerated, owing to the endogeneity of economic perceptions with respect to partisanship. I question their claim, for several reasons. First, the dependent variable measure of popularity is unusual. Second, the causal modeling is based on debatable assumptions that could be behind these surprising results. Third, in the United Kingdom and the United States, evidence suggests that national economic perceptions reflect closely the real economy. There may well be an endogeneity problem in economic voting studies, but it more likely runs from economic perceptions to partisanship, rather than vice versa. Panel studies, available for both the United Kingdom and the United States in national election surveys, offer ideal databases for testing these rival claims in the future. Great care must be given to exogenize properly the partisanship variable.

t last report, published pieces on economic voting numbered over 300 (Lewis-Beck and Stegmaier 2000). By one current estimate, this number is now pushing 400 (Lewis-Beck and Stegmaier 2006). While these studies differ in how the economic vote works, they generally agree the economic vote exists and is relatively important. One of the most studied cases is the United Kingdom, where economic conditions, variously measured, have repeatedly been found to have a vigorous electoral effect. (For a comprehensive microlevel treatment, using the British Election Studies (BES), see Sanders (2003); for a contemporary macrolevel example, see Bélanger, Lewis-Beck, and Nadeau (2005).) The Evans and Andersen (2006) article at hand commands special attention, then, because it upsets the apple cart.

They draw a bold conclusion: "conventional wisdom is likely to considerably overstate the importance of retrospective economic considerations for political preferences" (Evans and Andersen 2006). Further, they call for a reconsideration of "the prevailing emphasis on subjective economic explanations of party support and voting" (Evans and Andersen 2006). Before accepting such conclusions, we need to be sure that their approach and methods are sound. Below, I evaluate measurement problems, then examine issues of modeling and analysis. I show there are a number of difficulties, indicating that we should be cautious about accepting the findings of Evans and Andersen.

#### Measurement

In this literature, there are two standard dependent variables, popularity or vote (Nannestad and Paldam 1994). If the data are available, vote is generally preferred because, as Campbell et al. observed, "political behavior" is "the ultimate dependent variable in our theoretical scheme" (1960, 397). Despite reporting usual vote measures for the 1992 and 1997 elections, Evans and Andersen (2006) do not employ them in their crucial panel analyses (Figures 2–4, and the appendix).<sup>1</sup> This means their argument rests on using popularity as the dependent variable. Unfortunately, the popularity measure is nonstandard, perhaps unique to this study. Here is their popularity measure:

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<sup>&</sup>lt;sup>1</sup>They only use a dependent variable of vote in an introductory cross-sectional model (Table 2). In the web site appendix, they use it in a preliminary test (Table A2), but do not pursue it in later tests.

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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).

This popularity measure is almost never used in British studies. Most commonly, popularity is measured from a vote intention question, "If there were a General Election tomorrow, which party would you support?" (Sanders 1991; Whiteley 1986). Sometimes it is measured as the percentage who express "satisfaction with the way X is doing his [her] job as prime minister" (Norpoth 1991, 145). Other times it is measured as the percentage who "approve or disapprove of the Government's record to date" (Lewis-Beck, Nadeau, and Bélanger 2004, 280, 288). Of course, there is nothing wrong per se with using a unique measure of popularity. However, it does pose problems of interpretation and comparability.

The measure reads more like a party identification measure than a popularity measure. It does not ask respondents if they will vote Conservative, or approve of Conservative performance. Rather, it asks how they feel about the party. In other words, it is affective, asking the respondents themselves to assess their psychological attachment. The current party identification question in the BES reads as follows: "Generally speaking, do you think of yourself as Conservative, Labour, Liberal Democrat, or what? Would you call yourself very strong [party named], fairly strong, or not very strong?" (Clarke et al. 2004, 338-39). The popularity measure of Evans and Andersen, which likewise asks about strength of partisan feeling, seems uncomfortably close to the BES party identification measure. Thus, practically speaking, it becomes difficult to compare these Evans and Andersen findings on economics and popularity to the findings in other popularity studies. It may be that the differences simply lie with the measurement, rather than with issues of modeling and analysis, to which I now turn.

## **Modeling and Analysis**

The authors argue that the economic voting effects routinely found in the analysis of cross-sectional surveys are greatly exaggerated, because of the distortions of partisanship. For example, I say the economy is doing well because the government is Conservative and I intend to vote for it, all because I am a longstanding Conservative party supporter. Their remedy is to control on past party support, which can be measured in panel data. As a first step, they construct a graphical chain model (results available on their web site appendix, http://www.journalofpolitics.org). For example, they show that the impact of sociotropic perception (respondent's evaluation of the national economy) on 1997 Conservative popularity is reduced from .18 to .11, upon inclusion of 1992 Conservative popularity (see Figure A3 in web appendix). In the full, five-wave panel, the sociotropic effect is further reduced, to .04, and is just barely significant. (See Figure A4 and accompanying text in web appendix). Thus, it appears that economics has hardly any impact.

The difficulty with this conclusion is that the graphic chain analysis requires strong assumptions. It is equivalent to path analysis of a recursive model, where all possible paths are specified, and estimated with ordinary least squares (OLS). A first necessary assumption is that the independent variables in each equation are exogenous, and thereby uncorrelated with the error term of the equation. However, the independent party popularity variable is probably not exogenous. Relevant here is the extensive research on party identification, which appears to be quite endogenous. "[P]arty identification in Britain is not the unmoved mover of Michigan lore.... Rather, the overall impression conveyed by answers to party supporter questions is one of stable partisans being the exception, not the rule" (Clarke et al. 2004, 196, 199). [But for a contrary view on the U.S. case, see Green, Palmquist, and Schickler 2002; Miller, 1999).]

A second necessary recursive model assumption, that the errors are uncorrelated across equations, is questionable, as the authors recognize. Therefore, they leave that analysis and turn to maximum-likelihood estimation of a set of structural equation models (SEM). They now observe that when 1992 Conservative popularity is introduced as a predictor of 1997 Conservative popularity, the sociotropic coefficient drops from .37 to .17 (Figure 2). Further, when Conservative popularity measures of 1992, 1994, 1995, 1996, and 1997 are all introduced, the sociotropic coefficient falls further, to .11 (Figure 3).

These SEM results form the final basis of their conclusion that economic perceptions have a much weaker impact than commonly reported. Setting aside measurement issues, that may or may not be a valid inference. It is difficult to say, because the reader does not have all the details about the structural equation modeling procedures employed. They appear to assume a covariance structure model, with single indicators and without measurement error, estimated LISREL-style which, at least at the start, mimics twostage least squares, 2SLS (Long 1983, 46). Unfortunately, we know neither the exact mathematical model (the set of equations), nor what variables are exogenous or endogenous. It is especially important that the exogenous variables are truly so, otherwise the estimation procedure does not really "work." With survey data exogenous variables would have to be mostly demographic, given the difficulty of justifying such a status for attitudinal variables. Further, they do not fully address the issue of identification, although input decisions must have been made on this, in order to estimate. In addition, certain variables had to be assumed directly linked causally, others not directly linked. Finally, assumptions had to be made about the error terms and their correlation.

The last point, on correlated errors, deserves further emphasis, given the data are panel. Perhaps the biggest estimation problem plaguing panel data analysis is autocorrelation over time (see Finkel 1995: chapter 5). A variable measured at time 1 is likely to have the same ongoing determinants at time 2. Suppose  $Y_2 = b_0 + b_1 Y_1 + b_2 X_2 + e_2$ , where  $Y_2 = 1997$ Conservative Popularity, Y<sub>1</sub> = 1992 Conservative Popularity, and  $X_2$  = Sociotropic Perception. It is highly likely that other forces (represented by  $e_2$ ) determining  $Y_2$  are correlated with other forces (represented by  $e_1$ ) determining  $Y_1$ . Given this correlation of error terms, estimating with OLS would tend to bias the Y<sub>1</sub> slope upward, and the X<sub>2</sub> slope downward, falsely suggesting weaker sociotropic effects than in fact exist. A possible solution might be to exogenize  $Y_1$  by the instrumental variables method, before estimating a la 2SLS. In that case, the reader would want to know the exogenous variables used to construct the instrument, in order to give proper consideration to the quality of the 2SLS estimates.

Any structural equation estimation has a built-in set of assumptions-about exogeneity, endogeneity, and error. Taken together, these things largely define the theory the analyst is offering. SEM as applied here may be useful in panel analysis, because of the opportunity to apply coefficient equality constraints, and to correlate errors across some but not all equations. But such initial conditions need to be laid bare, since different assumptions make for different conclusions. As Long (1983, 51) notes, some may be justifiable, some not. Upon full inspection, it might well be that the authors' assumptions are reasonable. Looking at Figures 2–4 it is difficult to tell. For example, in none of the models (A, B, C, or D) do we observe a direct path from 1992 Conservative popularity to 1997 Conservative popularity, which seems to contradict discussion in the text about the influence of past party support.

## Do Economic Perceptions Reflect the Economy?

The jury remains out on the provocative conclusions of Evans and Andersen (2006). Meantime, it is possible to bring important evidence to bear on their motivating hypothesis: economic perceptions are largely a function of partisanship. If that is so, they do not reflect macroeconomic reality and have little in themselves to do with vote choice. For a number of reasons, this has been a hard proposition to accept. In democracies around the world, macroeconomic performance is found highly correlated with incumbent support (Wilkin and Norpoth 1997). For the United States, economic growth (six months before the election) correlates .6 with presidential party vote, 1948-2004 (Campbell 2005). For Great Britain, a misery index (unemployment plus inflation, measured six months before the election), also correlates .6 with governing party vote share, 1955-97 (Lewis-Beck, Nadeau, and Bélanger 2004, 282). These strong macroeconomic connections routinely serve as anchors in leading, and accurate, election forecasting models in both countries (see, respectively, the PS: Political Science and Politics special forecasting issue, October 2005; and British Journal of Politics and International Relations, special forecasting issue, April 2005.) In these forecasting models, the economy is always measured months before the election itself, which reinforces its status as a truly exogenous variable.

Nevertheless, as we know, these aggregate level links do not necessarily mean that individual voters accurately perceive the state of the economy, and then reward or punish rulers accordingly. To avoid that fallacy of ecological inference, we must look at actual perceptions, and see how they match up. Sanders, after extensive time-series study of U.K. popularity functions, concluded that "Unemployment perceptions track 'real' unemployment and inflation perceptions track 'real' inflation very well" (2000, 290). We can also draw on results from the U.S. case. Available evidence suggests that national economic perceptions there strongly reflect the real economy. In a recent Journal of Politics paper, Nadeau and Lewis-Beck (2001) relate a sociotropic item, the National Business Index (NBI), to national Real Disposable Personal Income Per Capita (RDI). For each presidential election, the NBI score equals the percentage saying business conditions are "better" minus the percentage saying business conditions are "worse." They find that the "business index generally tracks the income index" (2001, 161).

Indeed, NBI and RDI correlate (r) at an impressive .88 (2001, 161). From this result, citizens' subjective perception of the economy closely mirrors the real economy.

Of course, this is an aggregate result. Hence, Nadeau and Lewis-Beck do go on to examine individual voter responses, in a pooled survey analysis of the 1956–96 American National Election Studies (ANES). They show that NBI has a significant, strong effect. In particular, a standard deviation change in NBI is expected to produce a 5.5 percentage point change in the incumbent party vote (Nadeau and Lewis-Beck 2001, 165). An immediate charge is that there is simultaneous equation bias, inflating the impact of NBI, a bias of the sort Evans and Andersen are worried about. For example, a Democratic party identifier supports the Democratic incumbent and also sees the economy as better than it really is. This bias might persist even with the party identification control variable in place, supposing an errors-in-variables problem. Therefore, in addition to controlling on party identification, Nadeau and Lewis-Beck (2001, 167) exogenized NBI, using an instrumental variables approach. They found the NBI coefficient estimate unchanged. In addition, they ran further tests, including directly purging the original NBI measure of partisanship, and still found its coefficient basically unchanged.

The implication is that voters accurately perceive the macroeconomy and are even able to weigh effectively its multiple indicators.<sup>2</sup> That economic perception strongly impacts vote. And, that impact is not influenced by an endogeneity bias from partisanship.

#### Conclusion

Evans and Andersen argue that economic perceptions are highly endogenous to partisanship, causing their apparent political impact to be highly exaggerated. My look at the evidence suggests that their measures and analysis may be flawed and that the impact of economic perceptions have not, after all, been seriously distorted through political conditioning. This is not to say that an endogeneity bias does not exist. It may operate on the effects of partisanship, inflating its impact on the vote (and diminishing the economic impact on the vote). For example, suppose voters perceive the economy is doing better, attribute that good performance to the Labour government, and so strengthen their identification with the Labour party. In this case, party identification is endogenous, with the arrow running from sociotropic perception to party attachment. By this scenario, to estimate properly the effects of party, it is necessary to exogenize it.

Panel data are especially valuable here, as Evans and Andersen recognize, for partisanship can be made more exogenous by measuring it at a prior point in time. But lagging partisanship is generally not enough. What is needed as well is for the lagged partisanship measure to be made exogenous, presumably by some instrumental variables-type procedure. This is what Fiorina (1981, 170) recognized some time ago, when modeling the 1976 presidential vote, using the 1974–76 ANES panel. An instrumental variable was created for 1974 party identification, and it was used as a control in predicting the 1976 presidential vote. In that analysis, various economic perceptions were found to have a statistically significant effect.

In sum, usual measures of partisanship may act as an overcontrol in economic voting models, thereby deflating estimates of the economic effect. In future analyses, researchers should strive to make partisan measures, such as party identification, as exogenous as possible. The various panel studies that exist for both the BES and the ANES would seem especially fertile testing ground here. Analysis of such data sets would permit economic variables to show their full effect. As Evans and Andersen sagely suggest, there is a potential endogeneity problem in many economic voting models. But the problem may well lie more with the partisan measures than the economic measures. In any case, Evans and Andersen have set the stage for a vigorous, healthy debate in the economic voting literature, and are to be commended for it.

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<sup>&</sup>lt;sup>2</sup>NBI picks up several economic indicators, and weights them. For example, home-buyers may pay more attention to interest rates, weighing them more heavily in their overall economic assessment. This differential weighting is not necessarily a bias, as Duch, Palmer, and Anderson (2000, 635–38) might have it. Rather, these individual assessments, when aggregated, appropriately select and weigh the matters of real economic concern to the voters.

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Michael S. Lewis-Beck is F. Wendell Miller Distinguished Professor of Political Science, University of Iowa, IA 52242.